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W. W. TRACY, JR.

1905

W. W. TRACY, JR.
ESTABLISHED 1863

Wm. Eber & Son's
CATALOGUE

OF
HIGH-CLASS

SEEDS
BULBS

Garden Implements, Etc.
QUINCY, ILL.

ESTABLISHED 1863

TO THE PUBLIC

NOTHING for which money is expended makes so large a return as SEEDS, if they are GOOD. And NOTHING causes greater vexation than WORTHLESS seeds. If you wish to avoid disappointment, don't rely upon seeds peddled over the country and sold on commission. The chances are against their vegetation.

The steady growing volume of our business for a GREAT MANY YEARS is the best proof of the reliability of our seeds, which we select and procure WITHOUT REGARD TO COST; and, indeed, we cannot afford to sell poor seed, as our customers' interests are identical with our own. We wish, and expect, to supply them with seeds every coming year, and the only way to accomplish this end, is to offer pure and reliable stock.

All progressive farmers and gardeners are well aware that changing seed is of the greatest importance and value, while others planting their own seeds continually, year after year, will see the crops run down to a minimum.

We feel assured in saying that the seeds we offer can not be surpassed by ANY, and will give entire satisfaction if proper treatment is bestowed. It sometimes happens that seeds of unquestionably good quality fail to germinate or grow to perfection for want of timely and proper treatment or unfavorable weather, and it must be distinctly understood that we give no warranty, express or implied, as to description, quality, productiveness, or any other matter of any seeds, bulbs or plants we send out, and we will not be in any way responsible for the crop. If the purchaser does not accept the goods on these terms, they are at once to be returned.

WM. EBER & SON,
234-236 Sixth Ave. N., QUINCY, ILL.

To Our Friends and Customers

NOW, after two scores of years, we come again to present our Annual Catalogue to our numerous friends and customers, and it affords us great pleasure in thanking them for the liberal patronage bestowed upon us for so many years, and we would assure them as well as all others who may favor us with their patronage that we shall at all times endeavor to gain and maintain their entire satisfaction and good will.

We would also respectfully suggest to give the **Reading Matter** of this Catalogue a careful perusal, rather than look at the pictures, as we are giving the purchaser the value in seed, and not in pictures as many do. It is interesting and useful reading for the **Farmer**, for the **Gardener** and **Amateur of Flowers**. Should you, however, not be interested, please hand it to your neighbor, who may be. No doubt, most any one will find something of interest.

In the rush of our busy season, it sometimes may happen that mistakes will occur. In such a case, please report immediately and we will cheerfully correct them.

HOW TO ORDER.

With every Catalogue we always send an order sheet and addressed envelope. This order sheet will be found much more convenient than an ordinary sheet of paper, and by using the addressed envelope there will be no danger of your remittances being miscarried.

Always be careful to have your Name, Post Office, County and State written distinctly. Numbers of times we receive orders with the money enclosed, without any address, and then the sender wonders why he does not get his goods or an answer. All orders, large or small, receive prompt attention.

SEEDS BY MAIL.

Our prices include postage on all **Vegetable and Flower Seeds**, by the packet, ounce and pound, except **Peas, Beans** and **Corn**, where 15 cents per quart and 10 cents per pint must be added to catalogue price.

PRICES.

Our first consideration and constant aim is to offer the highest class Seed procurable, and the next to put our prices as low as good, reliable seed can be sold.

TO DEALERS AND COUNTRY MERCHANTS

We would offer special inducements—particularly on **Paper Seeds**. As we do not send out any Seeds on commission, you are sure to get fresh stock every time and have the satisfaction of selling the best and freshest to your customers, while this cannot be said of Commission Seeds, which are often of doubtful quality, besides you derive better profits and larger sales in handling our Seeds. Our papers contain nearly twice as much fresh reliable seed than common seed trade packages. There is no need of keeping over any stock, as you can buy in quantities when and as you need them. Correspondence invited.

MARKET GARDENERS

And other large growers of Vegetables we supply at the most reasonable terms, and are especially invited to call for prices. We do not send out any agents, believing that our Catalogue, carefully read, is of more and lasting benefit than unwarranted talk.

From unknown parties remittances should be sent in with order, either in the form of Money Order, Bank Draft, Express Order or Registered Letter.

DIRECTIONS

—FOR THE—

Cultivation of Vegetables.

TO SECURE a good crop of vegetables three things at least are necessary, viz: A SUITABLE SOIL, PURE SEED, and CLEAN CULTURE, to which may be added, as equally necessary, an abundant supply of good BARN-YARD MANURE, supplemented, when this runs short, by artificial fertilizers. The exposure for a vegetable garden should be preferably south or southeast or nearly so. The soil should be naturally rich and friable, a sandy loam being always the best. If the soil be stiff, it should be gradually mellowed by the free use of barn-yard manure, or, if convenient, by the addition of sand. If wet, or inclined to hold an excess of moisture, it should be underdrained, preferably by tile; but if possible, a location should be selected that is naturally dry and free from surface water.

A dark colored soil, or one supplied with a goodly portion of decayed vegetable matter, will produce the earliest crops. If the soil is shallow, it should be deepened gradually by plowing or spading an inch or two deeper each year, and not all at once by trenching or subsoiling, unless manure and money be both abundant. A sandy soil may be greatly improved by adding more or less vegetable mould from the woods. To produce the best and uniform results, the vegetable garden should have at least one foot of good rich soil. The roots of large trees should not be allowed to encroach any part of the garden, though large trees, especially evergreens, sufficiently far off, afford a valuable protection from the north and west.

Mark the garden off into squares, or beds of convenient size, to facilitate the practice of rotation of crops, which is an important matter. As a rule, never let the same crop or kind of vegetable occupy the same bed or spot two years in succession. Potatoes and a few other things may form an exception to this rule, but is nevertheless better to keep up the rotation. Every year these beds must be warmed up by a liberal coat of manure which should be thoroughly mixed with the soil. Grow everything in drills or straight lines, not even excepting corn and potatoes. Larger crops from a given surface are grown in this way, and cultivation becomes simple and comparatively easy. The space between the drills and other special information are given in the body of this Catalogue. The least distance is named in order to economize space. It might be increased in some cases with advantage. The ground should be frequently hoed to kill the weeds and keep the soil mellow; and the proper time to hoe is just when the weeds appear above the ground. Briefly, the proper way to kill weeds is NEVER TO LET THEM GROW. If the weeding be done at the time suggested, it can be effectually and quickly done by the use of a sharp-toothed steel rake.

The Freshest Seeds of some kinds often fail from unseasonable and improper management in sowing and other circumstances affecting their vegetation. When sown too early or too deep, while the ground is cold, wet and heavy, they are apt to rot; when sown too shallow, in dry time and late in the season, there may not be sufficient moisture to sprout them, or they may be dried up by dry winds or a hot sun after they have germinated. Sometimes insects destroy them before or immediately after their appearance above ground, so that the complaints occasionally made by the inexperienced are not always to be attributed to the quality of seed. Instructions in this book are ample, and when they are read and followed up, ninety-nine out of one hundred have no reason to blame the seed.

Soaking Seed in Warm Water twenty-four to forty-eight hours, and then rolling in plaster or ashes, will very much hasten the germination and growth of hard and dry seeds. It will give the plants a start on the weeds, and lessen a good deal the labor of cultivation. Very hard shelled seeds should be treated with boiling water and left to cool.

Sowing Seeds—Warmth and moisture are essential, and seclusion from light is favorable to germination. The first care in sowing seeds should be to choose suitable ground, the proper season and state of earth, and then to place them at such depth beneath the surface as will insure the requisite supply of moisture. In general, all seeds should be covered more or less according to their size and the advance of the season; late sowing requiring to be covered the deepest. The smallest seeds should be sown very shallow, in fine earth, and rolled or beaten firmly with the back of the spade.

Thinning Out—Next to errors of too deep or too shallow sowing of seeds are the errors of thick seeding without corresponding thinning and not let the plants get too large.

It is far better to thin out a row of Beets, Lettuce, Carrots or Parsnips so as to obtain good specimens at proper distances, than miserable abortions crowding together at half an inch apart, as is often seen in the gardens of the inexperienced. So clearly evident is the advantage of thinning out that we will not waste space dwelling upon it, other than to give the following table of suggestive distance to which vegetables in the private garden should be thinned:

- 1 inch—Radishes.
- 2 inches—Beans, Carrots, Peas, Salsify, Corn, Salad.
- 3 inches—Leeks.
- 4 inches—Beets, Kale, Onions, Parsnips, Spinach, Turnips.
- 5 inches—Endive, Parsley.
- 6 inches—Lettuce, Okra.

Transplanting is an important feature in gardening operations, and one often improperly done. It is a great mistake to select a rainy day for this important work. Transplant in a clear day, either in the morning or toward night, make a hole sufficiently large to hold the plant; fill with water and puddle the plant in, then press the soil firmly around the plant; afterwards cover with dry soil and the plant will never droop, it matters not how warm or sunny the day may be. It may be urged that this is not practicable with large fields of cabbage, cauliflower or tomatoes, but the best way is always the most practical, consequently the cheapest. It is economy to devote a day to a work and have the plants all thrive and live, than to put them out in one fourth of the time and have a large portion die and the remainder only half live.

In Dry Weather it is of great importance to FIRM and TREAD the soil after the seed is put in. Seed sown in this manner will readily germinate and grow, while otherwise the result will be doubtful. This precaution should not be overlooked in sowing very small and light seed. Moist ground needs no firming.

Insects of All Kinds are troublesome and sometimes very destructive. Plaster of Paris, snuffs, ashes, or soot sifted on Cucumbers or Squashes, when wet with due, is very useful against the striped bug. Lime, road-dust, ashes or snuffs scattered over young Cabbage and Turnips will sometimes prevent the ravages of the black fly. Rolling the ground after sowing answers a good purpose; but the best preventive is a thorough sprinkling of the plants in the evening with whale oil soapsuds, in proportion of one pint of soap to seven and a half gallons of water. This will kill cabbage lice and all other aphides. It is sure death to all tender insects, when forcibly applied with a garden syringe or rubbed on with a brush. For the want of the whale oil soap, strong soft soapsuds may be used. Salt is sometimes sown in the drills with Onion seed to drive away the grub. Fine salt or Slug Shot strewn broadcast over Cabbages is the best application we know of for destroying the little green cabbage worm and maggots.

Cutworm—To destroy them take wet bran with some molasses; adding a little Paris Green, and place the mixture at various parts, where worms are at work, rather on ridges than on lower places.

French Bordeaux Mixture, in Pulp—Ready for immediate use by dilution. It works freely without clogging in any spraying machine. The uniformity of its consistence permits of very fine spray, and consequently large economical distribution of a small quantity evenly over a large area of surface. It sticks effectively.

The great prominence given to Bordeaux Mixture for use against all manner of plant diseases has caused a demand for it in convenient form for use. To prepare Bordeaux Mixture is troublesome, and to make a perfect chemical precipitate requires skill and facilities.

THIS PREPARATION IS THE NORMAL FORMULA. For use on Potatoes, Tomatoes, Grapes, Apples, Pears, Roses, add 1 gallon to 24 gallons of water; for Peaches, Plums, Cherries, Melons, Vegetables, Berries or Flowers, use the rate of 1 gallon to 50 gallons of water. Whenever leaf-eating insects are attacking or will soon attack, four ounces Paris green should be added to fifty gallons of Bordeaux Mixture.—Price, per gallon can, 90c.

Paris Green—As an insecticide for the destruction of leaf-eating insects, this is the old reliable. Paris Green will not dissolve readily and it is best to add a little fresh lime to the mixture before application; this will prevent any damage to the foliage. Before putting on the water, make a paste of both the Paris Green and lime. Four ounces Paris Green to 50 gallons of water, or an even teaspoonful to a bucket of water, will not injure the foliage.

Kerosene Emulsion—This is a perfect reliable and safe concentrated Emulsion that does not separate and can be reduced by adding thirty or more parts of cold water; it is ready at all times for use. It will kill suctional—or leaf-eating—insects, plant lice and all true bugs, as tree bugs, squash bugs, etc. For plum curculio spray just before the blossom buds open, and the second time two weeks after the petals fall; adding a little Paris Green at this time will kill leaf lice, aphides, bugs and other insects injurious to fruit and foliage.

San Jose Scale, two or three sprayings during the summer are effective.

Do not go without this valuable remedy, or waste time trying to make something like it. YOU CAN'T.—Price, per gallon can, \$1.00.

For many other insecticides we have in stock, see page 35.

Force Pumps—In order to apply any one of the above named insecticides it is absolutely necessary to use a force pump if a complete success is desired. There are many kinds, of different construction, but they all do good and effective work, unlike old and more expensive machines; they are simple, light and handy, besides taking much less spraying material on account of the exceedingly fine spray, which saturates every part of the plant thoroughly. Any one can handle them with ease.

For applying dry powder use Bellows. For prices see page 37.

SEEDS OF SPECIAL MERIT.

Beans—*Bohnen*.

Wood's New Bush Lima Beans—This Bean is a great improvement over the Henderson's Bush Lima; it is nearly double the size, of finer quality, more prolific and of stouter stem to hold the beans from the ground.

Stringless Green Pod—About a week earlier than the Valentine; absolutely stringless and of fine quality. A valuable acquisition in the bean line.

Old Homestead, or Kentucky Wonder—The most popular large podded Pole Bean; it bears in clusters and pods, is 7 to 8 inches in length, unusually prolific and very tender.

Kentucky Wonder Pole Wax—This bean possesses all the good qualities of the "Old Homestead," but it is of a beautiful transparent yellow color. It commences to bear when scarcely higher than the average bush varieties and keeps producing until killed by frost.

Beets—*Rothé Rubeen*.

Crosby's Improved Egyptian—An improvement on the Early Egyptian. More globe-shaped and of unsurpassed eating quality.

Columbian (New)—A round, smooth-skinned variety, deep blood flesh; early and finest quality.

Detroit Dark Red—One of the best red turnip-shaped varieties. Has small, upright tops; splendid shape; color of skin is dark blood-red; flesh deep, bright red. Very crisp, tender and sweet; matures early and keeps in good condition for a long time.

Cabbage—*Kraut, Kopfkohl*.

Stein's Early Flat Dutch—Earliest flat-headed Cabbage; succeeds the Jersey Wakefield. A remarkably fine strain; a sure solid header, weighing ten to twelve pounds each; very best quality and most valuable for market; has a most excellent reputation.

Thorburn's Colossal—Largest and finest of all for fall and winter use.

St. Louis Market—This is the finest and best Late Cabbage ever put on the market. Stands longer on the field after maturing without bursting. An excellent keeper and shipper.

Danish Bald Head Winter—The heads are very hard and round, of good size and fine for keeping, shipping and kraut.

Houser Cabbage—Originated by Mr. George W. Houser, a well known market gardener, who, after twenty years' careful selection, succeeded in producing this phenomenal Cabbage. It is a large, fine shaped Cabbage, surpassing all others in quality and is a good header.

Cauliflower—*Blumenkohl*.

Gilt Edge—Large and heavy sort; undoubtedly the best and surest of all sorts now in cultivation.

Large Early Snowball—Short stem; finest strain. It is one of the best for forcing under glass or for open ground.

Celery.

Thorburn's Fin de Siecle—We consider this the largest, hardest, solidest, crispest, best keeping and best shipping Winter Celery we know of.

Thorburn's Schumacher—Immense size; solid and crisp; firm, golden yellow heart; a fine keeper; highly recommended.

Cucumber—*Gurke*.

Cumberland—The best pickling sort yet introduced, being very handsome and productive, with flesh firm but crisp and tender at all stages of growth; shape very straight and symmetrical.

Kale.

Emerald Isle—A new and quite distinct variety; handsomely curled; half-long Emerald green Kale.

New Era Cow Pea.

Valuable on account of earliness and a great yield. See page 21.

Melrose Sweet Corn.

A new sort obtained by intercrossing the best early varieties and selecting for seed the earliest and largest ears. This process was kept up for several years, and the result is a Sweet Corn as early as the Early Cory Corn and with ears twice as large, and producing two to three ears to stalk. On account of its sweetness, earliness, size of ears and productiveness, this is the best of all for market purposes.

Premo—Extra early, large and fine quality.

Potatoes.

Noroton Beauty—It is the earliest Potato ever grown, being 16 days earlier than the Early Rose, and fully as productive as any main late sort. Eating quality unexcelled. It is the most valuable Potato ever introduced.

Lettuce—Salat. **New Boston, or Hothouse Lettuce**—This new variety is especially adapted for growing in greenhouses; a sure header, not liable to rust, and very valuable for market gardeners.

Thorburn's Maximum—It is the largest and solidest of all our Head-Lettuce, and its table quality is simply perfect as to tenderness and crispness; flavor butter-like; it is also heat-resisting.

Onion—Zwiebel. **Prize Taker**—Light, yellow, of enormous size.
Mammoth Silver King—Large, white.

Both sorts highly recommended for hot-bed culture.

Australian Brown—Medium size, hard, solid; very early; originally from Spain, but since acclimatized to this country became a better keeper.

Pepper **Chinese Giant**—Of recent introduction, is undoubtedly the largest and sweetest Pepper ever offered.

Water - Melons. **Sweet Heart**—A fine oval; very heavy, light green Melon. Has no equal as a shipping melon.

Jones' Jumbo—Grows to fine, large size; tough rind; flesh red; very sweet; ripens early.

Monte Christo, or Kleckley Sweet—The skin is too tender to admit shipping; most desirable, however, for home market. The shape is long and it is decidedly the sweetest of all Water-Melons.

Musk-Melons. **Improved Rocky Ford**—This is by far the most popular sort on the market and commands higher prices than any other variety; it is very sweet and has a most delicate flavor with exceedingly fine, smooth grained and light green flesh.

Long Island Beauty—Round shaped, green flesh and densely netted. The earliest, finest quality and most beautiful of Musk-Melons.

Tip-Top—Slightly oval; grows to good size; sweet, juicy, yellow flesh.

Defender—New—Of regular, even size and finely netted; about 7 inches in length; flesh bright orange, thick, crisp, melting and of splendid flavor.

Peas—Erbsen. **Nott's Excelsior**—A splendid extra early, wrinkled new sort; dwarf and very prolific.

Gradus—Without doubt the finest Extra Early Pea yet introduced; it ripens almost as early as our Extra Early Market. The pods are large, and well filled with large wrinkled deep green Peas of the finest quality; height three feet.

Horsford Market—One of the best second early Market Pea.

Radishes. **Triumph**—New, turnip-shaped; white, with red stripes.
New Icyle—The name is given in allusion to the shape and the transparent whiteness of the root. The leaves are short; flavor exceedingly fine, and very early. It is the first long white forcing Radish yet introduced.

Crimson Giant Forcing—An entirely new type, growing more than double the size of other forcing varieties without becoming pithy or hollow. The Radishes run from 6 to 7 inches in circumference, and yet remain firm and crisp. It is equally well adapted for forcing or outdoor cultivation.

Round Scarlet China—The very best for summer and fall; matures in 6 to 8 weeks.

Tomatoes. **Thorburn's Earliest**—The earliest Tomato ever grown. It is five days earlier than Atlantic Prize, of a fine, rich scarlet color, a vigorous grower, very productive. The fruits are very large for so early a sort, smooth and of the finest quality. It is especially suitable for growing under glass.

Spark's Earliana—The earliest large, smooth Red Tomato; handsome shape and good flavor.

New Stone Dwarf—Has the same good characteristics of the Stone Tomato, but valuable for its dwarf habits.

Chalk's Early Jewel—Very fine; large, solid, smooth, bright red; similar to the Stone, but early.

Dahlias. The finest collection ever brought to this city. See page 32.

Rudbeckia. The habit of this plant is most elegant; the flower, golden yellow, blooms in greatest profusion by August and September—stems from 3 to 4 feet high and a hardy perennial. It is certainly an ornament to any garden. Price from 15 to 20c per clump.

Paeonias In all colors. Price 20c per root.

Select List of Vegetable Seeds.

We have ONLY ONE QUALITY and that is the BEST. Neither the Private nor the Market Gardener will be disappointed on that point.

BEANS.—Bohnen.

DWARF OR BUSH.

GREEN POD SORTS.

Bean crop very short and of some sorts almost a failure. About the first of May select a warm, dry, sheltered spot, dig and manure slightly; make drills an inch deep and two feet apart, drop beans two inches apart and cover not more than one inch deep. Keep hoed when not wet; keep the weeds killed, and plant every two weeks in succession.

Early Valentine—Cleveland's Improved—Productive and of excellent flavor, round pods.....25c 1 60 qt. pk.

Early Six Weeks—Early and prolific.....25c 1 50

Early Mohawk, Improved—Productive, hardy and of good quality.....25c 1 50

New Stringless Green Round Pod—The coming market garden bean (See page 4).....30c 2 00

Extra Early Refugee—It is similar in every respect to the ordinary Refugee, but it is nearly two weeks earlier. It is enormously prolific, and from its earliness is almost certain to produce a crop, no matter how unfavorable the season. In quality it is unexcelled, being exceptionally free from string and meltingly tender at all stages of its growth. Price—quart, 25c; peck, \$1.50.

California Prolific Tree—For field culture—peck, \$1.00; quart, 20c.

DWARF BUSH LIMA.

Henderson's Bush Lima.....35c qt.
Burpee's Bush Lima.....35c
Thorburn's Bush Lima.....35c
New Wonder.....35c
Wood's Improved Lima (See page 4).....40c
English Dwarf Beans—Große Bohnen—plant early.....25c

WAX PODDED SORTS.

Golden Wax—Early and very valuable, a well known standard.....30c \$2 00 pk.

Wardwell's Dwarf Kidney—Extra early, purely wax pod, long, flat and remarkably free from rust.....40c 2 50

Bismarck Black Seed—A long, round pod variety, a great favorite.....30c 2 00

Thorburn's Refugee Wax—With long, round yellow wax pods. The earliest wax bean in cultivation. Suitable for early or late sowing. An immense yielder. (See page 4).....40c 2 50

Davis' White Kidney Wax.....40c 2 50

POLE BEANS.

Sow as soon as the soil becomes warm and dry, from first part of May (for all except Limas) in hills four feet apart each way. *Limas should not be planted until warm weather has fairly set in. In wet and cold soil beans will rot and not come up.* One quart of Limas will plant one hundred hills.

King of the Garden—Large in pod and qt. bean; prolific.....35c

Small Lima, or Sieva—Small, but good quality.....35c

Horticultural—Excellent, either as snap or shell bean.....35c

Case Knife—Pods long and flat; for shell and snap beans.....35c

Cut Short—A fine cornfield bean.....35c

Old Homestead—We regard this far ahead of any other green pole bean. It is early, stringless, very tender and enormously productive. The round silvery pods hang in great clusters from top to bottom.....35c

Kentucky Wonder—Wax (See page 4).....35c

To the price of Beans, Peas and Corn 15c per quart should be added if ordered by mail.

SWEET CORN.

CORN.

(Fifteen cents per quart extra if sent by mail.)

CULTURE—Plant in hills three feet apart each way and five or six kernels in a hill. Hoe often and draw soil up to the stem; break off side shoots. Make the ground rich with well rotted manure. Sown in drills, a greater yield from a given surface will be obtained. By sowing successive lots and properly selected varieties, the supply of Sweet Corn can be kept up until hard frosts kill the plants.

	Ready for market in	qt.	pk.
Premo —World's Earliest Sweet Corn. (See page 4).....	55 days	20c	\$1 25
Peep O'Day —Very early.....		20c	1 25
Thorburn's Melrose —(See page 4).....	60	20c	1 25
Extra Early White Cory	55	15c	75
Early Minnesota	65	15c	75
Early Crosby	65	15c	75
Perry's Hybrid	70	15c	75
Improved Evergreen	70	15c	75
Egyptian	80	15c	75
Country Gentleman	85	15c	75
Black Mexican	85	20c	1 00
Extra Early Adams —This is no true Sweet Corn, but it is the earliest of all corn.....	50	15c	75

PEAS.—Erbſen.

(Fifteen cents per quart extra if sent by mail)

Light, dry soil, not over rich, suits the Pea. Plant as early as the ground can be worked and again every two weeks in succession throughout the season. Plant in single or double rows, from four to six feet apart, according to height, about an inch apart in the row, and four inches deep. In the summer plant four to five inches deep, hoe often; tall sorts can be made to bear more freely by pinching in.

Those marked with a * are wrinkled varieties which should not be planted till the ground is warm, otherwise they will rot and never come up.

Thorburn's Extra Early Market —	qt.	pk.
Best strain, extra early, prolific and well filled pods; height 2½ feet; in sealed bags.....	25c	\$1 25
Rural New Yorker —Early and uniform in ripening, height 2½ feet.....	20c	1 00
Alaska —The best early green seeded Pea; dark green pods; a good shipper, very early and uniform grower; first-class in every respect; height 2½ feet.....	20c	1 00

DWARF EXTRA EARLY.

*American Wonder —Vigorous, productive; most desirable early Pea for private gardens; height 12 inches.....	30c	2 00
*Nott's Excelsior —Pods one-third longer than American Wonder; height 12 inches.....	30c	2 00
*Premium Gem —Extra early, most productive, and for that reason the best Dwarf Pea for market gardener; height 12 inches.....	30c	1 75

Second Early and Medium.

*Horsford's Market Garden —A favorite for market gardeners and home use; pods are large and well filled; height 2½ feet.....	25c	1 50
*Everbearing —Peas large, fine for family use; plant thin; height 2½ feet.....	25c	1 50
*Gradus, or Prosperity Pea —(See page 5).....	50c	2 50
Thomas Laxton —(See page 5).....	50c	2 50
Daisy, or Dwarf Telephone —Productive, large peas and pods; height 1½ feet.....	30c	2 00

General and Late Crop Varieties.

*Champion of England —Standard tall variety, excellent for home use; height 4 feet.....	25c	1 50
*Telephone —Gardeners prefer this Pea to any other on account of its sterling qualities, producing an abundance of large pods filled with enormous tender peas; height 4 feet.....	30c	1 50
*Stratagem —Large pods and a heavy cropper for market and private gardens; height 2 feet.....	30c	1 50
Pride of the Market —Very large green pods; a most excellent market pea; height 2 feet.....	30c	1 50
White Marrowfat —An old standard sort; height 4 feet.....	20c	90
Blackeyed Marrowfat —Height 3½ feet.....	20c	90
Melting Sugar Pea —One of the best edible pod sorts; height 4 feet.....	50c	

ASPARAGUS.—Spargel.

(Eight ounces to 100 yards of row.)

CULTURE—Sow the seed thinly in rows one foot apart in April or May and keep down all weeds. To secure strong, healthy plants, thin out the seedlings to three or four

Palmetto Asparagus.

inches in the rows, saving only the strongest. The one-year old plants should be set out in spring in a rich, sandy loam, dug eighteen inches deep, into which has been worked plenty of well rotted manure. If a stiff clay soil is all that can be had, add plenty of sand

and sift coal ashes to loosen it up and see that it is well underdrained. In planting for private use, set out in beds five feet wide, three rows in a bed, the outer being each one foot from the edge, and allow twelve inches in the row. Set the plants on little mounds in order to allow rootlets to fall naturally around the sides, so they are about six inches below the surface. Select a southern exposure if possible. If set out in autumn, top-dress with six inches of manure. For market on a large scale set out 4 by 1 foot.

Every fall a good dressing of coarse manure should be applied after the tops have been cut and in the spring forked in. Never cut too closely. The roots need the benefit of some foliage during the year, else they will weaken and die. A slight dressing of salt in spring is beneficial and keeps weeds down.

	oz.	lb.
Colossal —The most approved standard sort	10c	\$0 50
Palmetto —Very desirable bright green	10c	75
Columbian Mammoth White	10c	75
Barr's Mammoth	10c	75
Asparagus Roots —Two years old, per 100, 75c; per 1000.		5 00

BEETS.—Rothé Rüben.(Five ounces seed to 100 yards of row.) *Paper, 5c.*

Turnip Beets.

Sow in April for early, for a succession till last of June; about middle of May for general crop. The soil should be deep, rich light loam, dry rather than moist. Rows should be 18 inches apart, and the plants thinned out to 8 inches in the rows. If you wish to raise sweet and tender beets, stir the soil often and kill the weeds.

Eclipse Beet.

Crosby's Imp'd oz.	1b.
Egyptian —(see page 4).....	10c 65c
Columbian —New (see page 4).....	10c 65c
Eclipse Turnip —Early, dark, blood red.....	10c 65c
Egyptian Turnip —Best for early forcing.....	10c 60c
Edmand's Blood Turnip —Best strain, fine shape, dark flesh and best for general crop.....	10c 60c
Detroit —Dark red (see page 4).....	10c 65c

Mangel-Wurzel.—Runkelrüben.

(Six pounds to an acre.)

CULTURE—As all mangels require a deep soil in order to grow well, **PLOW** and **SUB-SOIL** if possible in autumn, at least a foot to eighteen inches, and apply plenty of rich manure. The attention of farmers to the growing of roots for feeding stock has increased rapidly, judging from the increased sales of our selected seeds. The wonderful results are plainly shown in the health and general condition of the animals and the increased yield of milk in cows.

Golden Tankard Beet.

The seed should be sown in April and May in drills two feet apart, and afterwards thinned out to stand one foot apart in the rows. Keep well cultivated and you will have an abundant crop of roots for winter use. Through the winter keep them from freezing. If convenient, two sowings should be made.

	oz.	lb.
Mammoth Mangel, or Norbiton Red	5c	35c
Golden Tankard —Superior for dairy and stock feeding.....	5c	35c
Giant Feeding Sugar —This variety is quite an improvement on the above sorts, richer in sugar, better form, more prolific, and feeders pronounce it the most satisfactory feeding Beet.....	5c	40c

SUGAR BEETS.

Improved Klein Wanzleben	1b. 40c
Improved Vilmorin	" 40c
White Imperial —Best for poor soil.....	" 40c
Danish Improved	" 40c

CABBAGE.—Kraut, Kopffraut.

(Sow half an ounce in hot bed 6 by 4 feet.)

Package, 5c.

Jersey Wakefield Cabbage.

Sow early sorts in hot-beds during February and March, and transplant middle of April. Sow later crop in April and May. They should be sown in shallow drills, four to six inches apart. When the plants are six inches high, transplant into *richly* manured ground; the early kinds two feet apart and later kinds three feet. The ground must be deeply loosened and worked thoroughly to grow large and good heads. Hoe often to kill weeds, and draw some earth upon the stems. If troubled by the cabbage flea, sprinkle the plants with Slug Shot, soot, wood ashes, lime or Scotch snuff. Either of the above will drive them away. One ounce of saltpetre, dissolved in twelve quarts of water, will destroy the green worm. Set plants deep in the ground. Use sprayer; see page 3.

Our Cabbage Seed is of the best Long Island growth. There is no better stock grown, and should not be confounded with cheap, Imported Stock.

Extra Early Spring—Small, flat, solid head.....	oz. ¼lb.	30c
Early Jersey Wakefield—Finest American, select stock, grown almost to the exclusion of all others by market gardeners.....		75c
Charleston Wakefield—Very large and finest strain of the above.....		85c
Early Winningstadt		20c 50c

Stein's Early Flat Dutch Cabbage.

Stein's Early Flat Dutch—(See page 4).....	oz. ¼lb.	25c \$0 75
Fottler's Improved Brunswick.....		20c 65
Improved Early Summer, or Excelsior—The finest best second early		25c 75
Selected All Seasons, or Succession Cabbage—One of the best second early or late, growing to a large size quickly and sure to head.....		25c 75
Surehead—Fine quality, large head.....		25c 75
LATE.		
Thorburn's Colossal—(See p. 4).....		30c 1 00
St. Louis Market—A fine late sort, (See page 4).....		30c 1 00
Houser—(See page 4).....		30c 1 00
Autumn King, or Worldbeater.....		30c 85
Large Flat Dutch—American.....		20c 65
Large Flat Drumhead—American.....		20c 65
Danish Ball-Head—(See page 4).....		25c 75
Improved Drumhead Savoy.....		30c
Improved Red Stone Head.....		30c

CAULIFLOWER.—Blumenfohl.

Gilt Edge Cauliflower.

CULTURE—This is the same as for Cabbage, except that extra manure and plenty of water will pay upon this. If the soil be dry, water frequently; and if the plant could have a heavy mulch of hay or straw, it would keep the soil moist, and the plants would not suffer from drouth. The early kinds should be strong enough to plant out not later than the middle of April; the late kind may be planted out the same time as for cabbage. To destroy the Cauliflower maggot, it is recommended to take one ounce of sulphuret of potassium and dissolve in one gallon of water. Heat the liquid to about 100 degrees, take a large spoon, or something that will hold a 100th part of a gallon, and pour the liquid against the stalk of the plant just above the ground.

Henderson's Early Snow Ball—One of the best for forcing or open ground; sure header.....	pkg. ¼oz.	20c 75c
Thorburn's Gilt Edge—Large, heavy sort; undoubtedly the best and surest of all sorts now in cultivation.....		20c 75c

☞ The above two kinds are the best and most successful for this climate.

SLUG SHOT is sure death to Green Worm on Cabbage and Cauliflower.

USE THE LIGHTNING POWDER BELLOWS.

CARROTS.—Möhren.*Per Package, 5c.*

Carrots.

Sow as early as the ground can be worked, or, for late crops, until latter part of July. For main crop sow from the middle of May to the first of July. Thin out early crop to five inches in the row, main crop six to seven inches apart. Hoe often and deeply between rows. Soil light, sandy loam, richly manured and deeply dug. Sow at the rate of two pounds to the acre. Deep culture secures quick growth and clean root, while otherwise roots become wormy and ill-shaped.

- Guerrande or Oxheart**—Half long, oz. $\frac{1}{4}$ lb. stumprooted. Thick, short, bright orange color and of excellent flavor when young10c 25c
- Early Scarlet Horn**—Very thick roots10c 25c
- Half-Long Pointed**—A very popular strain; productive, early and valuable standard sort10c 25c
- Chanteney**—Half-long, stump rooted; fine for garden and field.....10c 25c
- Half-Long, Stump Rooted, Nantes Strain**—A popular market sort.....10c 25c
- Half-Long Danvers**—Thick, of good quality, exceedingly productive.....10c 25c
- Long Orange**—For late planting and best for stock10c 25c

CELERY.—Sellerie. Package, 5c.

(One ounce to one hundred feet of row.)

Golden Heart Celery.

blanch their stems. Care should be taken not to let the earth get into the heart of the plant. Never trench while wet from dew or other causes, otherwise it has a tendency to rot and rust badly. Our Celery Seeds are all of American growth.

Sow seeds in hot-bed or in a box in the house, or in open ground as soon as can be worked. If seeds are sown in bed care should be taken to keep the surface moist so that the ground does not bake, otherwise the seed will not come up.

When the plants are two to four inches high make trenches a foot deep and four to five feet apart.

Enrich thoroughly the bottom of the trenches and transplant to six or eight inches in the rows, and as the plants grow haul fine earth up about them to

Golden Self-Blanching—A fine oz. lb. solid variety, similar to the White Plume, except that it is a golden yellow, where the Plume is white40c

Giant Pascal—Larger and later than the above and of best quality20c \$1 65

Perfection Heartwell—The largest and finest of the winter varieties, either for family or market gardeners; the heart is golden yellow, and is of superior quality.....25c 2 00

Golden Heart—The best for market gardeners.....20c 1 75

Boston Market—Medium, solid, tender and crisp, Boston favorite.....25c

White Plume—Requires but little blanching.....25c 2 00

Schumacher—(See page 4)30c

Fin de Siecle—(See page 4)35c

Celeriac or Turnip Rooted Celery—Very large and superior quality.....25c

CUCUMBERS.—Gurken.*Package, 5c.*

(One pound per acre for pickles.)

White Spine Cucumber.

In February and March plant seeds in hot-beds, and when night frosts are gone, plant out in rich and newly dug ground, in hills and ridges, from four to five feet apart. Stop the leading shoots continually as the fruit shows; or plant the seed in open ground as soon as the weather becomes settled and warm. Use a shovelful of warm manure to each hill, and cover with an inch or two of earth; scatter eight or ten seeds in a hill, cover half an inch and press it down. Hoe often, and when out of danger from insects, thin the plants to four in a hill. For pickles plant from June to July. To destroy all insects use KEROSENE EMULSION. (See page 3.)

The New Cumberland—Best pick- oz. lb. ling cucumber known10c \$1 00

Thorburn's New Everbearing—Small, very early, enormously productive, bears until frost.....10c 75c

Early Cluster—Fruit small, early and prolific.....10c 75c

Early White Spine—Best for early market and also good for pickles.....10c 75c

Chicago or Westerfield—One of the best pickling varieties10c 75c

Long Green Giant Perra—Best for table use.....10c 1 25

Nichols' Medium Green—One of the best for pickling, dark green, very productive and uniform small size.....10c 75c

Japanese Climbing.....25c

Livingston's Evergreen—(See p. 4).....10c 1 00

CORN SALAD.—*feld-Salat.**Package, 5c.*

Sow during August, early September, or early spring, in drills, a quarter of an inch deep and six inches apart. If dry weather, tread in the seed lightly. Keep down the weeds with hoe. Just before winter sets in, cover thinly with clean straw.

Corn Salad.....oz., 10c.; lb., 75c

CRESS—*Gartenkresse.*

Sow in drills six inches apart; cover very slightly.

Fine Double Curled—Desirable for salad
and garnishingoz
..... 15c

EGG PLANT.—*Eierpflanze.**Package, 5c.*

New York Improved Egg Plant

CULTURE—Sow in well heated hot-beds, very early in spring, and transplant when two inches high into a second bed or into small pots. If that is not done, thin to four inches apart. Do not plant out till the weather becomes perfectly settled and warm. Cool nights or wet

weather will check them. Keep some back in frames for second planting, in case of weather changing unexpectedly. Keep plants watered for a few days, if the sun is hot when put out. Set out plants three feet by two.

Improved New York Purple—The best; large, oval in shape and of deep purple color; grown very much more extensively than any other sort; both for private use and market.....oz. 35c

ENDIVE.—*Bindsalat.* *Package, 5c.*

From May to July sow thin and cover slightly. When up, thin out to eight inches apart, and give a good watering afterwards when dry. When leaves are eight inches long, blanch them by gathering the leaves in the hand and tying them together near the top with yarn or bast; this must be done when quite dry or they will rot. Excluding light will blanch them.

Green Curled—Very hardy, best
adapted for winter use.....oz. ¼lb.
..... 15c 50c

White Curled—A splendid early sort.....15c 50c

New Self-Blanching.....20c

De Ruffec—Large, green curled,
broad ribs, fine for fall and winter.....15c 50c

KALE, or BORECOLE.

Curled Scotch Kale.

Kraus- oder Blätterkohl.*Package, 5c.*

(Sow one ounce to 100 feet in the row, and four pounds to the acre.)

Requires the same treatment as the cabbage. It gets most delicious after being touched by frost.

oz. ¼lb.

Improved Siberian, or

Dwarf German Greens—Best and hardiest; for fall sowing; beautifully curled and crimped; cover with straw; per lb., 65c.....10c 20c

Dwarf Green Scotch Curled—This sort is still more curled, but not as hardy as the Siberian; per lb. 85c.....10c 25c

Emerald Island—New half long variety; fine. (See page 4).....20c 40c

Tall Green Scotch Curled.....15c 40c

Brown Dutch.....15c 40c

KOHL-RABI.—*Kohlrabi.**Package, 5c.*

Vienna Kohl-Rabi.

(One ounce to 100 feet in row.)

May be sown from April to July, and the plants afterwards treated the same as cabbage, only be careful not to hoe too much soil around the stem. Plant out in rows ten inches apart.

oz. ¼lb.

Early Vienna—

Flesh white
and tender.....25c 75c

LEEK.—*Poree,lauch.* *Package, 5c.*

(Two ounces to 100 feet in the row.)

Sow very early in the spring, in drills six inches apart and one inch deep; thin out to one inch apart. When seven inches high, plant out in rows eight inches apart and as deep as possible, so as not to cover the young center leaves. Water thoroughly, if dry weather when planted out; draw earth up to them as they grow; requires very rich soil.

Large Rouen—A very large growing
sort.....oz. 20c

Large Musselburg—For winter use.....oz. 20

MUSTARD.—*Senf.* *Package, 5c.*

Sow thickly during April and early May in shallow drills.

White English.....lb.
..... 5c 50c

Black.....5c 40c

Giant Southern Curled.....10c 60c

LETTUCE.—Salat.

Per Paper, 5c.

Curled Lettuce.

Sow in frames in February and March, and in the open ground as soon as the ground can be worked, and thin out or transplant in rows nine inches to a foot apart. Sow every three weeks in succession during spring and summer. In September and October sow the winter varieties in hot-beds. Lettuce requires good ground and moisture in abundance; hoe carefully and keep weeds down. Often Lettuce under glass is affected by green flies—three or four applications of Aphis Punk smoke will kill them, especially if the plants are not too large. If under glass sow some tobacco dust with the seed.

Thorburn's Maximum Butter Lettuce —(See page 5)	25c	oz. ¼ lb.
St. Louis Market —(See page 5)	20c	
Glass House —For forcing under glass	20c	
New Boston Head —Especially adapted for greenhouse culture. (See page 5)	20c	
Early Golden Stone —Best head Lettuce for forcing	15c	40c
Early Simpson's —White Seed, good for forcing and open ground	15c	40c
Early Simpson's Improved —Black Seed; the very best for forcing	15c	40c

Hanson Lettuce.

Market Gardener's Private Stock —A selected strain, solid large heads; resisting the sun for a long time before shooting up; good for early or late	25c	75c
Trianon Self-Closing Cos —Finest of all Cos; stands the warm weather well. Do not fail to try it	20c	60c
Hanson's —Heads very large, solid, tender and crisp	15c	40c
Buttercup —Beautiful yellow, solid heads; good for forcing	15c	40c

MELONS—WATER. Package, 5c.

Kolb's Gem Water-Melon.

CULTURE—Form large and well-drained hills of rich earth, avoiding the use of fresh manure in such a way as to cause the plant to dry out under the hot sun. On this hill plant the seed as soon as the ground is warm and dry, and carefully protect the young plants from insects, and hasten their growth by the use of liquid manure.

Phinney's Early —Very early, flesh deep red and of superior quality	10c	\$0 55
Mountain Sweet —Oblong, dark green, flesh red and solid	10c	55
Kolb's Gem —Largest, most productive and best shipping melon in cultivation	10c	55
Gipsy, or Rattlesnake —Oblong striped, flesh scarlet and of good quality	10c	55
Peerless —The best for private garden	10c	55
New Triumph —A handsome dark green melon; very large size; flesh remarkably solid and of best flavor	10c	55
Monte Christo, or Kleckley's Sweet Prince of all melons. (See page 5)	15c	75
Dixie —Choice, very large, solid red flesh and early	10c	55
Florida Favorite —Improved Rattlesnake, superior strain	10c	55
Duke Jones —Early, extra large; fine flavor; it is a favorite for shipping and home use	10c	55
Jones' Jumbo —Large, good shipper, medium early. (See page 5)	10c	55
Sweet Heart —Very large; light green skin; fine quality—(Page 5)	10c	55
Black Diamond —A cross between Kolb's Gem and Hoosier King. Its prominent point of merit is its extreme size and productiveness. Melons weighing from 75 to 90 lbs. are frequent. Form somewhat oval; skin dark green, almost black. Quality equal to Sweetheart.		55

Special Prices in Large Quantities.

SLUG SHOT and spraying with **KEROSENE EMULSION** destroys Bugs and Lice on Cucumbers, Melons and Squash with certainty. When spraying with Dry Powder, use Bellows. See page 38.

MELONS—Musk—Zuckermelonen.

(One ounce to seventy hills; two pounds for one acre.)

Package, 5c.

Long Island Beauty.

Plant late in the spring, in hills five feet apart; ten seeds in a hill; and thin out to four plants in the hill; draw soil up around the stems and top their points to make them branch when they begin to run. A warm, light, but rich sandy soil, suits them best. Dust a little soot or recently burned wood ashes on the plants when up.

	oz.	¼lb.
Defender —(See page 5.)	10c	35c
Rocky Ford —(See page 5.)	10c	30c
Paul Rose —(See page 5.)	10c	30c
Tip-Top —(See page 5.)	15c	40c
Long Island Beauty —The earliest and finest in quality, green flesh	15c	50c
Hackensack —Extra early, large round, green flesh, productive and of good quality	10c	30c
Montreal —Large, round, very thick, green flesh	10c	30c
Chicago Market Nutmeg —Large, round, green flesh and fine quality	10c	30c
Bay View —Large size, oblong, green flesh	10c	30c
Emerald Gem —Small, extra early, smooth ribbed, dark green skin and orange flesh, quality first class	15c	50c
Improved Christiana —Round, flesh dark rich yellow, very thick and of delicious flavor; one of the best	15c	40c
Osage —Light green skin, cocoanut shaped, salmon flesh, very fine	15c	40c
Banana —Long, slender, salmon flesh and good quality	15c	

Use **INSECT EXTERMINATOR**, it saves your Melons. See page 3.

MUSHROOM SPAWN.

Planting directions on application. —
20c per pound.

PARSNIPS—Pastinafen.(Five or six pounds to the acre.) *Package, 5c.*

Sow during spring in drills one inch deep, and when three inches high, thin out from six to eight inches apart in the row; hoe often; soil should be rich and deep. May be left in the ground over winter and dug in the spring, as required. Even fresh seed is sometimes hard to germinate. Have soil well firmed after sowing.

	oz.	lb.
Abbott's —Of excellent quality, smooth and quite large	10c	65c
Long Sugar —Standard variety	10c	65c
Hollow Crown —Best for general use	10c	65c

PEPPER—Pfeffer*Package, 5c.*

Sow in hot-beds in March, or in open ground in a seed-bed the latter part of April, in light, warm ground; when three inches high, transplant to eighteen inches apart each way; hoe frequently. Seed is slow to germinate, and requires a good, warm hot-bed.

oz.

New Chinese Giant—

The largest, sweetest of all peppers (See page 5.)

Mountain Sweet—

Large, mild flavor, used for pickling

.25c

Ruby King Pepper.

Ruby King—Mild and one of the best, 4 to 6 inches long and 3 to 4 inches thick

Large Bell, or Bull Nose—An early variety; rind thick and fleshy

Giant Emperor—Scarlet, large and thick

Golden Down—Yellow, mild flavor, fine for stuffing

Cayenne—The variety of commerce, pods small, cone shaped

Coral Gem—A wonderful productive and handsome pepper; it is covered with small, bright, coral red fruits, which are splendid for seasoning

Celestial—A Chinese pepper; at first fruit is yellow, and after fully matured becomes a deep scarlet

ORKA—Gombo. Package, 5c.

Sow late in spring after the ground has become warm, in drills three feet apart, in rich manured land. Thin out from six to nine inches.

	oz.	lb.
Dwarf White —Early and productive	10c	75c
New White Density —Very tender; long pods	10c	75c

PARSLEY—Peterfilie. Package, 5c.

Moss Curled Parsley.

Soak the seed a few hours in warm water. Sow in spring in drills one foot apart. To preserve in winter, transplant in a light cellar or cold frame.

	oz.	¼lb.
Moss Curled —Fine for garnishing	10c	30c
Hamburg, or Turnip Rooted —The roots used for flavoring soup	10c	35c
Plain Parsley	10c	20c

ONIONS—Zwiebeln.**CHOICE AMERICAN-GROWN SEED,
TO RAISE LARGE BULBS.**

All Our Onion Seed is of Last Year's Eastern
Growth, and Should Not be Confounded
With Cheap and Old Seed.

Package, 5c.

(Two ounces to 100 feet in row; four pounds to the acre.)

Extra Early Red Onions.

HOW TO RAISE THEM.

Any land that will raise a good crop of corn, except stiff clay or gravelly soil, is suitable for onions. Select a sandy loam with a light mixture of clay; it is easier to work and produces good crops. Land that has been worked two years previously in hoed crops, and kept entirely free from weeds, would be in a desirable condition to commence with. Gather off any refuse that may be on it, and in October apply about fifty cart loads of manure to an acre. The manure should have been turned during the previous summer, and well fermented, to destroy any weed seeds that may be in it. Spread the manure evenly on the land, and plow it under, taking a narrow furrow, which will mix the manure more thoroughly with the soil. This will be all the preparation needed in the fall. As early in the spring as the ground can be worked without injury, give it a thorough dragging, first with an iron drag, then with a brush drag, after which rake the entire piece with steel hand rakes. Stretch your line perfectly straight in making your rows.

The sowing and growing of this valuable and remunerative crop used to be an extremely tedious and laborious business, but since the introduction of the Hand Drills and Cultivators—of which we have the latest and most improved patterns—it is comparatively easy to raise a large crop at a moderate expense. After the seed is up it is of great importance to keep the weeds down; if that is not done at an early stage, when weeds appear, the crop will surely be a failure. Procure good seed at whatever price, for without it all your labor will be lost. It requires three to four pounds of seed to the acre. If large onions are wanted, sow thin.

When the tops die and fall, the crop should be pulled and spread evenly on the ground to dry; in about a week after being pulled, turn, or rather stir them with a wooden rake, and when the tops have become perfectly dry, cut them off one-half inch from the bulb. When the crop is designed for market, it should not be exposed to the weather longer than necessary to cure the crop as the onions will lose their bright color by exposure.

	oz.	½lb.	1b.
Silver King—(See page 5)-----	20c	60c	\$2 00
Large White Portugal — Mild and delicious flavor, flat.-----	20c	60c	2 00
Large White Globe—Southport strain-----	20c	60c	2 00
Excelsior White Pickling — Best for pickling-----	20c	50c	1 75
White Silver Skin-----	20c	60c	2 00
Large Red Wethersfield — A good keeper.-----	10c	30c	90
Large Red Globe—Southport strain; a good keeper-----	15c	40c	1 25
Yellow Danvers — Standard sort; a good keeper; oval-----	10c	30c	90
Large Yellow Globe—South- port; extra fine strain-----	15c	35c	1 25
Yellow Globe Spanish, or Prize Taker—(See page 5)-----	20c	50c	1 50
Australian—Brown (See p. 5).-----	15c	50c	1 25
<i>Special Prices on large quantities.</i>			
Above Varieties All New Crop and Reliable.

ONION SETS.

Red Bottom Onion Sets, raised from seed	} Market Price
Yellow " " " " " "	
White " " " " " "	
Red Top Onions	
Shallots	
Garlic	

Of late eastern onion growers employed a new way of raising large crops of onions with success. This mode is to sow the seed carefully, from March 1st to 15th, in warm beds, in drills one inch deep and three inches between the rows. In about four weeks the plants will be about the size of a lead pencil and ready to be set out in well prepared soil, as fully described above, in straight lines from three to four inches apart and twelve inches between the rows. Have the tops and roots somewhat shortened by cutting so you get a stiff plant. In this way plants are easier to handle and stand more erect in the row.

It looks as if there were a great deal of work, but it is not nearly as much as to keep the weeds out of a patch of sown onions, besides gaining from four to five weeks earlier ripening of the product, which is of the greatest importance, as it is a well known fact that the earlier the onions are planted the better is the result. Prize Taker is particularly adapted for this manner of cultivation.

POTATO.—Kartoffel.

CULTURE—In order to have the best success in growing Potatoes, and to secure a healthy, vigorous growth, and a crop free from rot, it is necessary to plant as early as the ground can be made ready. Select a rich soil, and plant in rows three feet apart, and the sets one foot in the rows. To kill the young weeds, run a light steel-tooth harrow over the field lengthwise of the rows. This will allow the crop to get the start of the weeds, besides breaking up all lumps and leveling the ground ready for the cultivator. If wood ashes and plaster can be procured, sow a good dressing over the field after the potatoes are up. If a *very early* crop is desired, it will be necessary to *sprout* the potatoes before planting. Cut the potatoes into pieces of any size desirable, and place in a warm, light room, from four to six weeks before required for planting in the open ground. During this time shoots will start out strong and vigorous, so that, as soon as planted, they will send out roots and grow much more rapidly than those treated in the ordinary way. Another method is to place the sets in a hot-bed two weeks before they are wanted, and then lift carefully and set out on fresh horse-dung, so that the heat will cause them to start at once. If the Colorado potato-beetle makes its appearance, the vines must be dusted with Paris Green mixed with about eighty parts of plaster; or, what is better, mix the Paris Green in water, one small tablespoonful to a pail, and apply with small broom, brush or sprinkler. Take care to stir the mixture often, or else the Paris Green will settle to the bottom. Two or three applications during the season will usually suffice to clear off all the beetles.

Directions for Treating Potatoes to Prevent Scab.

Dissolve corrosive sublimate (bichloride of mercury) in water at the rate of one ounce to eight gallons of water (1 to 5000), and soak the seed potatoes from sixty to ninety minutes. Dry them before cutting.

Red River Early Ohio.—This earliest of all varieties justly belongs at the head of the list; because no other variety will mature as early. Some very good early sorts will give eatable size potatoes about as early, but their tops will be green for days after Early Ohios have died. It is the most profitable early market variety.

Everett's Six Weeks.—If planted early they grow so rapidly and mature so early that potato bugs have no chance at all, the crop being made before the young bugs become numerous.

POTATO.

Norton Beauty.—The most valuable potato ever introduced. See page 4. Price, per pound, 75c. Post-paid.

The New Bliss Triumph.—This variety is quite popular; tubers of moderate size; color beautiful red. One of the best sorts for early market. Some growers claim that these are the earliest of all.

Rural New-Yorker No. 2.—Very few and shallow eyes; pure white skin and flesh; immense yielder; fine table quality.

Carman No. 3—One of the best late potatoes; the greatest yielder ever introduced; very large tubers; of handsome form, few and shallow eyes.

And Many Other Good Sorts at Market Prices.

SWEET POTATOES.

Of which we make a SPECIALTY and are supplying a large territory. The most popular varieties are the

**Yellow and Red Nansemond,
Yellow and Red Jersey,
Red Bermuda,
White Southern Queen and
Vineless.**

Directions Furnished HOW TO RAISE PLANTS.

We furnish plants of all the above varieties of our own raising. Send for prices.

PUMPKIN—Feldfürbiß.

Kentucky Field —Large, round, salmon colored, especially for stock feeding.....	1b. \$0 25
Large Cheese —Flat, best for family use.....	50
Improved Cushaw —Flesh, solid and thick, fine grained, excellent for pies and does well planted among corn....	50
Cushaw —Crookneck, fine grained and sweet.....	75
Japanese Pie —Finest late variety....	75
Mammoth Tours —Growing to immense size.....	1 50

RADISH—Rettig. *Package, 5c.*

(Six pounds to an acre.)

Sow in a sheltered spot as early as the ground can be worked, and every two weeks until summer; then commence planting the summer varieties. The winter sorts should be sown in August. A light, rich soil suits best. It should be borne in mind that Radishes must have plenty of room otherwise they will be tough and

wormy. Slight sprinkling of salt is beneficial.

New Triumph—(See page 5).....per paper, 10c

New White Icicle—(See page 5).....10c 1 00

New Crimson Giant Forcing—(See page 5).....15c 1 50

Early Scarlet Turnip—French.....10c 65

French Forcing Deep Scarlet—Crisp and beautiful; matures in 25 days.....15c 85

French White Tail.....10c 65

Scarlet Gem White Tip—(New) Forcing; matures in about 25 days.....15c 85

Early White Turnip, or Box—French pure white and sweet.....10c 75

Deep Scarlet Turnip—French, for forcing, and best for open ground.....10c 75

Yellow or Golden Summer Turnip—Popular as a market gardener's sort.....10c 65

New Round Scarlet China—(See p. 5).....15c 1 00

Early French Breakfast.....10c 65

Half-Long Deep Scarlet.....10c 75

Early Long Scarlet—Short Top; the standard variety.....10c 65

Wood's Early Frame—Half long; red.....10c 65

Delicacy—White, half long.....10c 85

White Strassburg Summer—Half long.....10c 65

Chartier—Long scarlet, white tipped.....10c 75

White Stuttgart—Large, round, white sort.....10c 75

All above varieties are best suited for Market Gardeners.

China Rose—For fall and winter.....10c 1 00

Black Spanish—For winter.....10c 1 00

California Mammoth.....10c 1 00

SALSIFY—Haferwurz. *Package, 5c.*

Sow early in spring in drills, one foot apart, one inch deep, and thin out to four inches in the row; keep clean and cultivate the same as parsnips. Being left in the ground during the winter will not injure them.

Salsify, or Oyster Plant—French.....15c 40c

Mammoth Sandwich Island—A large and a much more superior variety than the above.....20c 50c

New Thorburn Improved—Thick rooted.....25c 75c

RHUBARB, or PIEPLANT.**Linneus**.....oz., 25c

In order to save time and labor, we would advise to plant the Roots of which we have a good supply at reasonable prices every spring.

SPINACH—Spinat. *Package, 5c.*

(Twelve pounds to an acre.)

Sow half an inch deep and a foot between the rows; thin out to eight inches; as soon as frost is out of ground hoe frequently to prevent the plants from running to seed. For winter crop, sow later part of August or September. Lay straw between the rows at approach of winter, and very thinly over the leaves.

Round Leaf—Generally preferred for spring sowing.....oz. 1b. 5c 20

Prickly—This is the hardest variety best for fall sowing.....5c 20c

Bloomsdale, Savoy-Leaved—A productive variety, quite hardy.....5c 20c

Long Standing—The longest standing before running to seed, and consequently one of the best varieties.....5c 20c

Victoria—Fine variety for spring sowing.....5c 20c

SQUASH—Speisefürbisse.

Plant in hills in the same manner and at the same time as melons, the bush four feet, and the running kind six to eight feet apart.

Squash cannot be planted with any degree of safety in the Middle or Northern States before the middle of May, as they are extremely tender and highly sensitive to the action of bad weather.

White Bush, or Scallop Summer.....oz. 1b. 15c \$1 00

Improved Large Summer Crookneck.....15c 1 00

Boston Marrow—Oval, bright orange; flesh yellow and fine.....15c 1 00

Essex Hybrid—This variety is one of the finest grained and sweetest of the squash family.....15c 1 00

Hubbard—A general favorite for late use, and of superior quality.....15c 1 20

Sibley's, or Pike's Peak—One of the finest winter varieties; thick, bright orange flesh.....15c 1 00

Ford Hook—Early, excellent keeper through the winter, of finest quality and full meated.....15c 1 20

TOMATOES.—Siebesäpfel.

(One-half ounce in hot-bed 6x4 feet.)

Buckeye State.

Our Tomato Seeds are unequalled for their purity and fine quality; are saved from choice, selected fruit.

Sow in hot-beds in February and March, and transplant in open ground when the weather becomes warm and settled, or sow in open ground in May, and transplant when plants are six inches high, four feet distant from each other; soil should be made light and rich. By transplanting plants into pots fruit may be had several weeks earlier, and by pinching off the small tips will hasten the ripening considerably. The plants, before setting out, ought to be hardened until the stalk gets to be red. Should the plants be long and slim put them in slanting. Old manure should be used for soil.

	Oz.
Spark's Earliana —Claimed by the introducer to be the earliest large tomato in the world. Color bright red. The seed we offer is grown from the original stock.....	40c
Thornburn's Earliest (See page 5).....	40c
New Dwarf Stone (See page 5).....	40c
Dwarf Champion —Distinct foliage; grows compact and upright; fruits early and is quite popular among gardeners....	30c
Chalk's Early Jewel —Very fine new sort; large, solid, smooth, bright red; similar to Stone, but earlier.....	35c
Buckeye State —Purple, very large, solid	25c
Acme —Early, smooth, purple and one of the finest.....	25c
Livingston's Magnus —It is distinct and has the color of Livingston's Beauty and Acme, but more solid than either. Fruit in clusters; matures quickly for early market.....	25c
Livingston's Beauty —Purple, regular in form, good shipper.....	25c
Livingston's Favorite —Solid and large	25c
Livingston's Perfection —Smooth, productive.....	25c
Honor Bright —Fruit bright red, finest flavor, solid and especially good shipper	25c
The Stone —One of the best introduced for years. It is very large, perfectly smooth and of a fine, bright scarlet color	25
Ponderosa —The largest variety in cultivation.....	50c
Matchless —Bright red, solid; immense yield; one of the best for canning....	25c

TURNIPS.—Weiße Rüben.

Purple Top Milan Turnip.

For early use sow as early as the ground can be worked. Rutabaga and other kinds for winter, sow in July and August. Much larger crops are obtained, particularly of the Rutabagas, by cultivating in drills 18 inches apart.

	Oz.	Lb.
White Model —Perfectly globular, snow white.....	10c	\$1 00
Extra Early White Milan —A new and valuable variety	15c	1 00
Extra Early Purple Top Milan —One of the earliest variety.....	15c	1 00
Purple Top Strap-Leaf —One of the best varieties for general use.....	10c	55
Red Top Globe-Shaped —A standard late sort for market.....	10c	55
Improved Rutabaga —Good for table or stock; hardy and prolific.....	10c	65
Snowball —Small and of rapid growth.....	10c	75
Rutabaga, Thorborn Family —Fine grained and best quality.....	10c	65
Seven-Top —For greens.....	10c	75

HERBS.—Kräuter.

Herbs are available for culinary and medicinal purposes. They are easily grown, and when preserved by drying are ready for use at any season of the year. Sow in spring, as soon as the weather is warm, and thin out as the plants grow up; or, the seed may be sown under glass and the young plants afterwards transplanted to their respective beds. The perennial kinds should occasionally be divided and transplanted in spring. Those marked with a * are perennial, and when once obtained in the garden may be preserved for years. As most of these seeds are small and fine they should be covered very slightly.

ANISE,	MARJORAM,*
BALM,*	MARSHMELLOW,
BASIL,	ROSEMARY,*
BORAGE,	RUE,*
CARAWAY,*	SAFFRON,
CORIANDER,	SAGE,
DILL,	SAVORY,
FENNEL,*	TANSY,*
HYSOP,	THYME,
HOREHOUND,*	TARRAGON ROOTS,
LAVERDER,*	

Price per paper, 5c; per root, 25c.

MISCELLANEOUS SEEDS.

PRICES ON APPLICATION.

- Beans**—California Tree and Navy Beans.
Bird Seed—Hemp, Canary and Rape.
Buckwheat.
Cotton Seed.
Flax Seed.
Tobacco Seed—Havana and many others sorts.

Selected Farm Seeds.

To our Farmer Friends we would particularly impress the fact that our Field Seeds are thoroughly cleaned by new and improved machinery. Our customers are well aware of that and always give us the preference. They know that pure and clean Seeds give satisfaction to both buyer and seller.

On account of Fluctuation of the Market Values, Prices cannot be given in Grass Seeds, Clover, Grain, Etc.—Prices on Application.

GRASS SEEDS.

The best means of improving meadows, pastures and lawns is to sow a sufficient variety of grass seeds, and we trust our customers will give

Rye Grass.

some of the kinds a trial in connection with Timothy, which by many is believed to be about the only grass to be sown for hay.

Timothy—Decidedly the best grass for hay. Sow one peck per acre.

Orchard Grass—Valuable for grass and hay; grows in all dry and shady places; sow from 15 to 20 pounds per acre.

Red Top—A valuable permanent grass for meadows and pastures; grows in almost any soil, moist or dry; sow 10 lbs. per acre, clean seed.

Kentucky Blue Grass—Best pasturage grass for our soil and climate. It is most valuable for lawns, yards, etc., combined with some White Clover. For pasture, sow 20 pounds, and for lawn, 50 pounds of clean seed per acre.

English Rye Grass—Is the staple grass of Great Britain, entering largely into the composition of many of the richest meadows and pastures. Its natural adaption to almost all cultivated soils, and its early maturity are the reason it has hitherto been so extensively cultivated in preference to many other equally nutritious sorts.

Italian Rye Grass—One of the most valuable grasses in Europe, being equally suited to all climates.

Bromus Inermis—A perennial, recommended for dry, arid soil.

Tall Meadow Oatgrass—Most valuable for an early pasture grass.

CLOVER SEED.

Clover, and in fact all Leguminous Plants, such as Cow Peas, Soja Beans, Vetch, &c., is a Blessing to Recupérate Worn-out Land, which Needs Nitrogen Furnished by the Air.

In purchasing Clover, as well as any other Seed, always buy the best quality that is possible to procure; although the price may seem high, it is much cheaper than buying a poor quality at a low price. The low price Seeds are usually badly cleaned, of poor germination and very often contain weed seeds of other plants.

Red Clover—Will succeed in any soil; sow 6 to 8 lbs. per acre.

Mammoth or Sapling Clover—Is used mostly to plow under for fertilizing; sow 6 to 8 lbs. per acre.

White Dutch Clover—Usually sown for cow and sheep pasture; also very fine for lawns. Sow 5 to 6 lbs. per acre.

Alfalfa, or Lucerne Clover—Is perennial and lasts from 8 to 10 years; the roots penetrate from 10 to 15 feet into the ground. For a permanent meadow it does best on alluvial soil. Sandy loam with a porous underground, so the water passes off readily, is preferable. *Hard pan and wet underground is fatal to the plant.* As a hay crop it has no equal, and the feeding value of number one Alfalfa is equal to bran at \$17.00 per ton. It should be sown here from the 15th of August to the 10th of September. Plow the ground some time previous, making a fine but not too deep seed bed. Sow from 15 to 20 lbs. per acre, and run the smoothing harrow over once or twice. In spring it may be sown in April after severe frost is past, but in doing so you will have weeds to contend with, and which may smother the young plants. In this case mow the weeds when they are 6 to 8 inches high and not remove them, but let them lay on the ground. A thick stand is desirable, otherwise hay will be too coarse. Cure the Alfalfa hay as you would Red Clover, and save all the leaves if possible. It may be cut three times during the season. It is claimed by many agriculturists that Alfalfa does best on a former Red Clover field on account of containing the needed bacteria.

Alsike, or Swedish Clover—Perfectly hardy, does not heave in winter or spring from frost; stands drouth well, and is in many respects superior to common red clover. It affords a large return of hay; is excellent for soiling and unsurpassed for the honey bee. When the plant is once established it will remain for many years in full vigor. It is at its best in a moist situation and alluvial bottom soil. It is much liked by cattle, and well suited for land liable to wash, for the reason of its long and spreading roots holding the soil. It certainly would pay any farmer to try it. Alsike also produces a valuable crop of seed. Sow 5 to 6 pounds to the acre.

Crimson Clover (*Trifolium Incarnatum*)—An annual with bright scarlet flowers, largely grown in our southern states for improving the soil by turning under. It makes a very valuable crop for soiling and pasturage. Sow 20 pounds per acre in late summer or early fall.

Vetches, SAND WINTER OR HAIRY (*Vicia Villosa*)—This variety thrives on poor, arid, sandy soils. It is sown either in fall or in spring, and generally mixed with rye, which serves as a support to the plants. It grows to a height of from three to four feet, and can be cut twice for fodder, first as soon as the bloom appears, and then it can be again cut for the seed. The plant is perfectly hardy, and the product is recommended as most nutritious. Per lb., 15c; per 100 lbs., \$10.00.

GRASS MIXTURES

FOR PERMANENT PASTURES.

Most of our western farmers have not as yet learned the value of using mixtures of permanent grasses, which is far superior to clover and timothy sown alone. This fact is accepted by all authorities.

Our Permanent Mixture is a selection of fodder grasses, with a view of succession. Some of these mature so early and others so late that from the beginning of spring until winter sets in there is not a time when one or the other specie is not at its best, and they improve from year to year.

Sow 20 pounds to an acre in early spring. Price, \$2.50 per 20 pounds.

Wild Rice—Put the rice in coarse linen or cotton bags and sink them in water for twenty-four hours; sow in September in soft mud bottom—as much out of the current as possible. 10 lbs., \$2.25.

Speltz—A grain of wonderful hardness and productiveness; it grows like rye and matures as early as barley. Sow early in spring, 75 lbs. to the acre. Price, 2c per pound.

Mammoth Russian Sunflower—A large yielder and an excellent food for fowls. Per quart, 5c.

Teosinte—A valuable stooing fodder plant resembling Indian Corn. 75c per pound.

Spring Barley—Price, \$1.00 per bushel.

MILLET.

Millet.

German Millet—This variety is not so early as the common Millet, but yields much larger crops. Sow 25 lbs. per acre.

Common Millet—Sow from May 1st to June 20th for seed, or until the last of July for hay. Sow 25 lbs. per acre.

Hungarian—A valuable forage plant; cultivate same as Millet. Sow 25 lbs. per acre.

Sorghum—Is a wonderful plant. It can be grown to provide cane for making syrup in every state of the Union. It is one of the best soiling foods we have. It furnishes fodder of an excellent quality for live stock, such as cattle, sheep and swine, when fed in autumn or winter. It is one of the best forage plants that we shall ever have.

The seed also can be turned to good account as food for all kinds of domestic animals kept upon the farm. It

is principally best adapted for summer pasture; it strikes its roots deep, thus furnishing an abundance of succulent pasture at a time when it can not be obtained from any other source. After being cut off, it has the power of sprouting up again. The fattening or milk producing properties are of high order. It is sown right after corn-planting, or as late as middle of July for pasture. It takes from 40 to 50 lbs.—broadcast—per acre; and if drilled, half that amount; for molasses, four to six pounds.

Kaffir Corn (Non-Sacharine)—Has an upright habit of growth, not quite as high as sorghum, hence, it is more easily handled in the sheaf. The leaves are large, long, fairly numerous, and they usually retain much of their greenness for some time after the maturing of the seed, which is in abundance. It succeeds well in ordinary corn land, and even prevailing drouth does not hinder to harvest a good crop of great value, or feeding and grazing. Like sorghum, it is continually sprouting up again. The seed is much liked by poultry. It takes about 20 lbs. seed drilled in, which is preferable to broadcast-casting. *This is particularly the fodder for dry seasons.*

Broom Corn—It requires similar soil and culture as corn, but should be planted later, in drills 3½ feet apart. Per peck, 50c.

Pencilaria—A wonderful forage plant of great value to all stock farmers. It is unexcelled, if equalled, for its quick growth, immense size and splendid quality. Sow 2 to 3 lbs. per acre drilled. 30c per lb. post-paid; 10 lbs., \$1.50, not prepaid.

...SEED CORN...

There is a commendable movement among Farmers and Agriculturists to change their Seed Corn; planting New, Pure Stock of known merit. The outlay is but a trifle more, but the crop result is manifold, as well in quantity as quality.

We are procuring our Seed Corn from a section of country best suited to produce not only a fine quality, but by means of clean culture Corn that is pure and true to the name, and we are warranted to say that no better Seed Corn could be got, no matter what price you pay.

Average Price about \$1.25 Per Bushel.

New Grain Bags at Market Price.

King of the Earliest—The earliest Dent variety, ripening in eighty-five days, and can be grown as far north as any other variety of Dent or Flint corn. Stalks small, with broad leaves. Ears short, twelve to sixteen rows well filled. Grain long, yellow, making an extra quality of meal.

Pride of the North—This famous Dent corn still retains its popularity; it is an exceedingly prolific variety, kernels large and deeply set; thin red cob, and matures within ninety days. It is a safe corn for any section of country, never disappoints the grower by maturing too late. Should be more appreciated on account of its good and valuable points.

Improved Leaming Corn

—The Improved Leaming is considered the earliest Yellow Dent in cultivation. The ears are large and handsome, with deep grain of deep orange color and small red cob. Stalks grow to medium size (not large) with few suckers, tapering gradually from root to top, producing two good ears to each stalk; husks and shells easily. One hundred and thirty-six bushels shelled corn have been grown to the acre on good corn ground. It is also adapted to a greater variety of soils than any other variety, producing unusually well on light or heavy land, where other varieties would not thrive.

Iowa Gold Mine—It is early, ripening in about 100 days; ears are of good size and symmetrical; color a bright golden yellow; grain is very deep; cob small, and therefore dries out very quickly as soon as ripe. Extremely productive.

CORN.

Reid's Yellow Dent—A very good Yellow Dent Corn. In size, shape of ear and color of kernel it is similar to the Leaming. This is one of the Yellow Dents classed as distinct and having an established standing as such by the Illinois Corn Breeders' Association. It is very popular and is considered a most profitable variety in many of our best corn growing sections.

Boone County White—This excellent white variety is probably the best of that class to which Silver Mine and White Superior belong. It is the most popular white variety for Illinois, and would undoubtedly prove superior to all other White Dents wherever tried. The Illinois Corn Growers' Association class it as among the best White Dents.

Iowa Silver Mine—The ears are very uniform in size and shape, with sixteen to twenty straight rows of deep, pure white kernels on a small white cob. It matures in about ninety days, being about one week earlier than Champion White Pearl. *It is one of the heaviest yielders we know, having yielded over 100 bushels to the acre.* It is entirely distinct and will give satisfaction.

Champion White Pearl—The handsomest and one of the most popular White Dent Corn; very productive, ripens in 100 days.

Thoroughbred White Flint—Of spreading habit; not more than one kernel should be left to grow in a hill. Its great suckering habit, breadth of blade and smallness of stock recommend it as the most valuable both for fodder and ensilage. **Per bushel, \$2.50.**

Golden Beauty—Long, handsome and extra large ears, containing twelve to sixteen rows; small cob and bright yellow grain.

Early Evans or Bloody Butcher—A red corn, popular for its earliness.

Forage and Miscellaneous Seeds

Dwarf Essex Rape—Is beyond all question one of the most useful fodder plants that has yet been introduced into the United States, and so it is likely to continue through all time. It is easily grown and possesses remarkable fattening properties for sheep, swine and cattle. Rape requires a rich, moist, loamy soil, such that will produce good crops of turnips, cabbage, wheat and corn, will suit the rape. If the seed is sown the latter part of June it can resist the drought, and the crop can be ready when it is most needed. It also does well when sown with oats. After the oats are cut the rape grows rapidly. It is especially adapted for a catch crop, succeeding well when for any cause other crops have failed. It is like the turnip, making its growth late in the season. It can be sown in the stubble and will make excellent pasturage in the fall. In putting in cattle or sheep precaution should be taken to prevent them eating too much and getting bloated. After they get used to it there is no further danger. It may be sown from April to August. Any farmer may find a corner to sow some for experiment. Sow from four to six pounds per acre.

We sell the genuine imported article, 10 lbs., 65c.; 100 lbs., \$5.50.

The Cow Pea—Is proving a blessing to the agriculturists of the United States. It is grown for forage, for enriching the soil and for winter fodder. But its greatest value lies in its power, first to grow in worn and poor soil, and second, to renovate it. This recuperating power arises first, from the ability of this plant to gather the much needed nitrogen from the air by means of nodules or tubercles on the roots, and store it in the soil; second, from the large amount of vegetable matter which it brings to the soil in its roots, and also in the vines when plowed under.

Without a doubt the cow pea will produce more forage to the acre than any other plant; and for fattening sheep and hogs it has no equal. They do not touch corn as long as the pea vines last. Cow peas grow on land too poor for red clover, and are not affected so easily by heat or drouth. It makes poor land rich and good land more productive. If wanted for forage, plant in drills $3\frac{1}{2}$ feet apart, or in corn after it is laid by; cut when forming peas and cure like clover; and if for fertilizer, one foot apart; turn under when in bloom. It is a sure cropper, much more so than clover. Have your soil well pulverized and sow from one to two bushels per acre about May 15th.

There are many kinds of cow peas: New Era, Whippoorwill, Clay, Blackeye, etc., but the first named, *New Era*, is fully two weeks earlier than the popular Whippoorwill variety; a very great advantage to the farmer. In size it is one-third smaller than the Whippoorwill—another great advantage. It is a so-called Bunch Pea, similar to the Whippoorwill in growth. In sections of Missouri and Illinois, the *New Era Pea* is planted after the wheat crop has been cut, and matures early enough in the fall to harvest in time to sow winter wheat on the same field. This cannot be said of any other variety of cow pea. They produce more seed than Whippoorwill, and where known are used exclusively. This is the second season we have been in position to offer inducements on this variety, which we have no hesitancy to recommend as being the coming Pea for the Central and Northern portions of the United States. Prices on application.

Canada Field Peas—Sow at the rate of one and one-half bushels per acre by themselves; or sown with oats, one bushel peas and three-fourths of a bushel of oats per acre. Sowing with oats is a decided advantage, as the oats help to hold the peas off the ground, enabling them to make a better growth, and as they both mature together they make a splendid food, which cures admirably as hay or dried forage. Price, \$2.00 per bushel.

Soja Beans—The haulm is stiff and the pods are produced in clusters. Thrives well in hot and dry weather. It is planted at the rate of one-half bushel to the acre, in drills $2\frac{1}{2}$ to 3 feet apart and cultivated like corn. It is highly recommended for green fodder, and is an excellent soiling plant. It contains more protein and nitrogen than any other plant known. In point of nutritive value it is unequalled and makes, in connection with corn, as a number of our customers state, a "balanced ration" grown upon the farm, saving the farmer from paying out cash for oil meal, bran, etc. Soja Beans should unquestionably be one of the staple crops with every farmer.

One of the farmers said: "I seed the Soja Beans in alternate rows with corn, seeded thickly for fodder late in June; cultivated both crops shallow frequently and harvested them together. They cured very nicely put up in the shocks with corn, and I am now feeding the fodder and beans with very satisfactory results."

When sown broadcast Soja Beans should be sown at the rate of one bushel per acre. Sowing them thickly will prevent the stalk from growing too coarse and enable them to be cut and turned under to better advantage. Price per bushel, \$2.50.

FORMATION OF LAWNS FROM SEED.

THE ground should be thoroughly drained and well prepared. The soil ought not to be too rich, as a rapid growth is not wanted in the grasses of a lawn; but the surface should be as much alike in quality as possible. After sowing, the ground should be rolled, in order to press the seed firmly into the soil. The proper time to sow grass seed is from March 15 to April 15. Seed also may be sown in the fall providing it is done early enough to secure a good strong growth before winter sets in. The sowing should be done when the ground is moist, or before an expected rain; cover lightly with soil and a subsequent rolling or firming the ground with a roller or a heavy board, is always advisable. Rolling and dragging, however, should not be done when the soil is very wet.

ROLLING.—As soon as the frost is out of the ground in the spring, the land should be gone over with a heavy roller. Winter frosts loosen the soil, and rolling is necessary to compress it again. If grass seed is to be sown, this should be done first and the rolling immediately afterwards. Frequent rollings are recommended.

Mowing.—All turf-forming grasses are improved, both in vigor of root-growth and in fineness of texture, by frequent mowings, but not before the grass is strong and firmly rooted. It is impossible to say just how often the grass should be mown, as that depends upon the rate at which it grows. Too close cutting should be guarded against, however, especially during the hot summer months, when the roots require some top-growth to protect them from the burning sun. A good top-growth is also necessary to protect the roots from severe winter frosts. Mowing should therefore be discontinued in time to let the grass grow pretty long before the winter sets in. If watering is needed do it thoroughly.

OUR LAWN GRASS

Contains, besides Bluegrass, a composition of the finest perennial or lasting grasses which will in the shortest time possible, produce a beautiful, compact turf, enduring the summer heat and insure a rich, deep green sward throughout the season.

This mixture is absolutely free from obnoxious weeds, and no better can be offered by any Seed House.

Bluegrass sown alone *perfects* itself the second year after being sown.

Do not be sparing of seed. From 50 to 75 pounds to the acre, or one pound for 20x20 feet, is little enough. More seed is needed on poor soil than on that which is rich.

For Shady Places.—We have a special mixture for this purpose.

Dock, Dandelion and Plantain, natural to the soil, spring up spontaneously; are most troublesome and should be watched and exterminated on appearance.

Sour Ground.—Sometimes the soil of a lawn gets sour by too much shade, in this case an application of one-half lawn fertilizer and one-half lime is one of the best remedies.

OUR SPECIAL LAWN FERTILIZER

Never fails to produce a rapid and rich green growth, and is much more preferable than barn-yard manure, which is the principal source of dock plantain and all sorts of obnoxious weeds. In early spring sow at the rate of ten pounds to 15x20 feet. It should be applied annually. **Price, 10 pounds for 40c; 25 pounds for 75 cents.**

FLOWER SEEDS.

Encouraged by the Many Flattering Testimonials from our Customers, we are offering a Particularly Large and Fine Assortment of

Choice and Reliable Flower Seeds and Bulbs.

Mostly of our Own Importation and adapted to our Climate.

NO OLD SEED OFFERED

BRIEF HINTS ON SOWING AND CULTIVATING.

READ CAREFULLY.

THE GENERAL RULE for sowing flower seeds, as well as any other seeds, is to sow them at the proper depth; and the depth at which they are sown should in every instance be governed by the size of the seed itself. As the sprouts of small seeds are naturally small, if sown as deep as large seeds they will be either unusually long in starting, or more likely perish in the ground after starting, from want of sufficient strength in the young sprouts to force a passage through the soil. **Very Small seeds, such as Portulacca, Campanula, Digitalis, etc.,** should be merely sprinkled over the surface of the ground after making quite smooth with the back of a spade, and barely covered with finely sifted, light mellow soil, and afterwards protected from the scorching sun and heavy rains by a cloth, mat, or some green branches stuck around it.

Another great object to be considered is the soil into which the Flower Seeds are to be sown. The soil best adapted for flowering plants generally is a light, friable loam, containing a sufficient amount of sand to render it porous. Deep digging and enriching with thoroughly decayed manure, is the least that should be done. If the weather, after sowing, should be dry, it will be necessary to water the places where the seeds are sown, with a fine watering pot, regularly but slightly every evening, as it is essential that the seeds, during the process of germination, should be kept constantly moist. From a neglect or oversight of this arise most of the failures. As the process of germ-

ination is shorter or longer in the different kinds of seeds, the patience of the cultivator is often sorely tried with seeds of a slowly germinating character. The patience of a devoted florist, however, never exhausts in these manipulations, and the certainty of his final success repays him fully for the little trouble.

Afterwards, when one or two inches high, the young plants can be removed on a rainy or cloudy, damp day to permanent positions; here the earth must be carefully prepared for their reception, being especially enriched by a previous application of very short, well rotted stable manure or compost.

In the after culture the most important matter is to keep the clumps well thinned, for crowding will defeat all other preparations, while space, which at first seems four times too much, will serve to develop robust plants, which by their ample leafage and well developed flowers, will amaze people not familiar with the conditions necessary to successful plant culture.

In transplanting plants it is important to cut back branches and leaves, in order to secure thrift and good shape.

If **Worms** are found on the roots of **House and Pot Plants**, take half pound of fresh lime, dissolve it in one gallon of water. As soon as the lime is dissolved and its sediment settled, pour off the clear water and apply same to the plant to saturate all the soil and repeat as often as necessary.

Too much and too little *watering* are both injurious to the plant. The only rule is, when the soil in a pot looks dry on its surface apply milk-warm water enough to saturate all soil in the pot, then wait until the soil looks dry again before applying more.

Lookout for **Insects**, such as *aphis, red spider, scales, etc.* They multiply fast. For remedies and fertilizer, see page 37.

LEAF MOULD IS AN EXCELLENT MATERIAL FOR SOWING FINE SEEDS SUCCESSFULLY.

Choice Flower Seeds.

PRICES:

Unless special marked, price for each paper Flower Seed, 5 cents; per dozen papers, 50 cents.
POSTAGE PAID.

Directions for SOWING are Printed on the Different SEED PACKAGES.

EXPLANATION OF THE MARKS.

"a" represents "annual," lasting but one year; "p" represents "perennial," three or more years. A large number of Biennials and Perennials, if sown early, flower the first season and are marked "†;" "h" represents hardy; "h h" represents "half hardy;" "t" represents "tender."

ASTER.

Aster (h h a)—Seeds are imported from Germany and saved from the finest double sorts. There is nothing finer than a bed of these in autumn. They need cool weather with a touch of frost in the air to bring out their colors. Seed should be sown in open ground in May to bloom finely in September and October, when the flowers are seen at their best. For earlier blooming sow under glass, or special hot-beds in March or April. Sow seed one-half inch deep in rich, light soil. Transplant two or three times, eighteen inches apart each way. Do not use fresh manure. A small portion of unslacked lime or wood ashes keeps insects from the roots.

VICTORIA—It produces the most beautiful and perfectly formed flowers and is also the best for pot culture. Per paper, 10c.

QUEEN OF THE MARKET—Early and of graceful spreading habit. Per paper, 10c.

COMET—The most artistic in size and beauty. Per paper, 10c.

Antirrhinum or Snap Dragon († h p)—This is one of the finest border perennials; plants are free flowering, succeeding in all kinds of enriched soil, and should be in all gardens.

AGERATUM
PRINCESS PAULINE.

Ageratum (h h a)—Exceedingly charming, free blooming bedding plants, and planted among Geraniums and Alyssums. For early blooming sow under glass. It is one of the few blue flowers which blossoms all summer. Cover seed slightly.

Adonis (h a)—Very pretty deep red; self-seeder.

Amaranthus (h a)—Ornamental leaf plant, valuable for bedding and pot culture.

Agrostemma (h a)—Rose Campion—Free blooming rose, white and exceedingly pretty; should be more largely cultivated.

Acroclinium (h h a)—One of the most beautiful Everlastings, much used for winter bouquets.

Alyssum.

Alyssum (h a)—For borders, edgings, baskets, pots, rock-work and for cutting, we recommend a liberal use of this dainty little flower. In borders sow thickly so as to form masses, and quite early in spring or even the previous autumn. For winter bloom sow late in August, and thin the seedlings to about a dozen for a good sized hanging basket. Cut back after the first flowers fade and others will come.

Brachycome.

Balloon Vine (h a)—A pretty white climber, with green fruit.

Bartonia (h a)—Very showy; blooms yellow; fragrant in the evening. Sow it where it is to bloom, as it will not bear transplanting.

Canterbury Bell (h p)—Large bell-shaped flowers; very ornamental for gardens. They bloom all season, and should be grown extensively.

Campanula, or Cup and Saucer—Per paper, 10c.

Calendula.

Calendula (h a)—Hardy annuals about a foot high. The seed may be sown in open ground quite early in spring, and the plants will be in bloom early in summer, and continue until late in the autumn. The flowers exhibit every shade of yellow from ivory to deep orange, are produced in great profusion, and are strongly effective in beds, borders or backgrounds.

Calempelis († h p)—Fine for trellis.

Clarkia (h a)—Very pretty, especially the double, universally grown and admired; of easy culture.

Calliopsis.

Calliopsis, or Golden Glow (h a)—Fine showy plant; abundant in bloom and of bright colors; fine for cut flowers. Do not fail to have this beauty in your garden.

Catchfly—Bright colored, free flowering annuals, need rich, light soil.

Centranthus—Very pretty for flowering annuals, suitable for rockeries and vases.

Brachycome (h a)—Swan River Daisy—A continual bloomer; should be started in hot-beds.

Balsam (h h a)—Most magnificent annual, producing masses of rich colors; transplanting has the tendency of making flowers double.

Candytuft (h a)—The Candytufts are among our best white flowers for edgings, for bedding or massing, for rockeries and for cutting. Several of the varieties are fragrant, and all are profuse in bloom. Sow outdoors in April, where they are to bloom, and thin well when the plants grow about an inch. Sow again in a month, and late in July for flowers.

Candytuft.

Clematis Flamula—Virgin's Bower—A climber, 12 feet; white flowers.

Canary Bird Flower—A firm climber (h h a).

Columbine (h p)—They are fine, early, free flowering, hardy border plants; showy and ornamental. Every garden should have them.

Cowslip—Primula Veris—A favorite spring flower (h p). 10c.

Cosmos (h a)—Showy autumn bloomers, literally covered with large single flowers, resembling Single Dahlias; colors range through shades of rose, purple, flesh and white; much admired. Ought to be in every garden on account of their being easily raised and making so grand a display; they are very popular.

Cosmos.

We are offering the latest improved sorts.

BACHELOR'S BUTTON

Centaurea—Cornflower (h a)—*C. cyanus* is also known as "Blue Bottle," "Ragged Sailor," "Kaiser-Blumen," and sometimes as "Bachelor's Button." These are bright-flowered plants of hardiest nature and simplest culture, yet esteemed among the most attractive and graceful of all the old-fashioned flowers. When placed in water the flowers increase in size.

MARGARITÆ—Pure white, 2½ inches across; exquisitely lacinated and delightfully scented; forms stocky, well-budded little bushes. A garden treasure; 1½ feet. Paper, 10c.

Margaret Carnation—This grand, new strain of Carnation surpasses all others for the great beauty and loveliness of its fine, large double, rich colored flowers and incessant bloom. The advantage of having carnations that will grow from seed and afford a great profusion of bloom the whole year round can well be appreciated by all lovers of this beautiful flower. Seed sown in early spring will bloom in early autumn, and the plant will increase in size and beauty until frost. Taken up and potted they make beautiful house plants, blooming freely through the winter. The stalks grow eight or ten inches high, and are always covered with a mass of buds and bloom. It is highly prized for window ornaments, also for cut flowers. The colors range through all shades. Highly scented.

Cobea Scandens.

Cobea Scandens († t p)—A fine, rapid growing climber, dark foliage, purple, bell-shaped flowers; will run from twenty to thirty feet in one season. Plant seed where wanted in early part of May. Most satisfactory for porches and trellises.

Cockscomb.

Cockscomb (h h a)—The bright red and crimson varieties are most effective, both in gardens and in winter bouquets, for which they are cut before fully ripe and dried in the house. The dwarf varieties make novel and

attractive borders; the tall ones form striking groups. Transplanting into rich soil about the time the combs begin to form makes these flower-heads much larger.

Chrysanthemum—

The annual Chrysanthemums are showy free-bloomers, and should be grown in gardens in large beds, where they will show their bright colors finely. Perfectly hardy and very desirable. A multitude of fine colors and shapes. Tobacco dust will destroy the black flea if attacked,

Chrysanthemum.

Canna, or Indian Shot—Half hardy perennials; are very ornamental and much employed in sub-tropical gardening for groups and masses. With rich soil and sheltered situation they will flower freely through the summer and late in the autumn. Soak seed about twelve hours in hot water; sow in hot-bed and plant out when the ground is warm. They are excellent pot plants for the house.

For Canna Roots see page 33.

Cypress Vine.

Cypress Vine—Tender annual climber, graceful foliage, with small red and white star-shaped flowers. For early flowers sow in hot-beds, pots or boxes, under glass, and transplant to deep and rich soil as soon as danger of frost is over, when sowing may be made in the open ground for later blooming. The seed is hard and horny and should be soaked in hot water before sowing.

Datura (h h a) — Very showy and large trumpet-shaped flowers.

Daisy († h p) — The poet's favorite; very popular; very fine for edging and borders; prefer a cool, shady place.

Delphinium or Larkspur (h a) — Handsome for any garden; of easy culture; a rich loam will produce its finest plants and flowers of various colors.

Digitalis or Fox Glove (h p) — Beautiful, showy border plants, very ornamental, particularly when planted among shrubs.

Eschscholtzia.

The state flower of California. An annual incomparably bright and rich in its pure tints of yellow and orange. The plants average about a foot in height, have beautiful silvery foliage, and produce their large, poppy-like flowers quite lavishly from early spring until frost. These sowings may be made early in spring or late in the autumn; for earlier germination and bloom the next spring. Also very useful as a pot-plant, and for cut-flowers.

Evening Prime Rose (h p) — Shining white flowers.

Feverfew or Matricaria — Free flowering, hardy plants, succeeding in any garden soil; a fine bedding plant, or for pot culture, blooms until frost; hardy biennial; 18 inches.

Four O'Clock.

Four O'Clock (t a) — Handsome, free flowering, fragrant, blossoms variegated, striped and of various colors.

Forget-Me-Not (h h p) — Beautiful and well known, delicate flowers. Grows best in a moist situation.

Godetia.

plant seedlings to stand about a foot apart in rather thin soil.

Eschscholtzia (h a) —

The state flower of California. An annual incomparably bright and rich in its pure tints of yellow and orange. The plants average about a foot in height, have beautiful silvery foliage, and produce their large, poppy-like flowers quite lavishly from early spring until frost. These sowings may be made early in spring or late in the

Gaillardia.

Gaillardia († h h p) — Showy and free bloomers; they are good bedders, very beautiful, fine for bouquets, and should be more generally cultivated.

Gilea (h a) — Free bloomer; fine for beds; look well on lawn rockery, and can be planted at any season.

Gomphrena (h a) — Globe Amaranthus, or Bachelor's Button; an old timer; for winter bouquets.

Gypsophila (h p) — Fine for bouquets; free bloomers; for rockwork or shrubbery, and will grow in any soil.

Golden Feather (h p) — Pyrethrum — Fine for edgings.

Gourds (t a) — Excellent for covering verandas or trellis work, and for training over arbors, fences, etc.; cultivated like squashes, and should be started in hot-bed or house.

SUGAR TROUGH OR SAP BUCKET — Holding from four to ten gallons; strong, durable and light.

NEST EGG GOURD — Resembles in color, shape and size a hen's egg.

DISHCLOTH OR LUFFA GOURD — A natural dishcloth, and a most admirable one

Gourds.

is furnished by the peculiar lining of this fruit, which is sponge-like, porous, very tough, elastic and durable. Many ladies prefer this dishcloth to any other. The fruit grows about two feet in length and the vine is very ornamental, producing clusters of large yellow blossoms in pleasing contrast with the silvery shaded, dark green foliage. In the north this variety should be started in a hot-bed.

Heliotrope — Highly valued for their delightful fragrance. If sown in open warm ground it flowers in August.

Hollyhock.

Hollyhock—A hardy perennial, and should be in every garden. The *Everblooming Allegheny* and *Charter's Superb* are particularly fine and most desirable. May be sown as late as August to flower the following year.

Hyacinth Beans (t a)—A fine climber; plant seed where desired to bloom.

Hibiscus, or Rose of Sharon (h a)—Showy flower.

Helichrysum (h a)—Desirable for beautiful winter flowers.

Ice Plant (t a)—Curious dwarf trailing plants, which have the appearance of being covered with ice; invaluable for hanging baskets.

Lobelia (h h a)—Fine for beds, edgings, ribbon, borders and hanging baskets; of easy culture.

Mignonette (h a)—A well known favorite; highly scented and flowering freely. If wanted in winter, seeds should be sown in July.

Moonflower (t a)—*Ipomœa Noctiflora*, or *Grandiflora, Alba*. This is a variety of which plants have been so extensively advertised the past few years. For covering walls or porches, or trellises, particularly the latter, when over paths, their beautiful pure white moonlike flowers (which are often six inches in diameter) are seen to great advantage. It is an exceedingly rapid grower. In rich ground, in a sunny situation, the plants readily grow 25 feet high in a season. Soak seed for twenty-four hours. Scrape off the pointed end with a penknife before planting. Paper, 10c.

Morning Glory.

Morning Glories—The surpassing charm of this JAPANESE MORNING GLORY, entrancing beauty and gigantic size of the flowers; they measure from four to six inches across. The colors of the flowers, shadings and markings are limitless. Paper, 10c.

TALL MORNING GLORY—The well known old-fashioned climber. It is

easy to grow and should be planted early.

DWARF MORNING GLORY—For growing in clumps of beds well adapted for rockeries and hanging baskets.

MIRABILIS—See Four O'clock.

ELDORADO MARIGOLD.

Marigold (h a)—These, like the *Calendulas*, are valuable because they light the garden with such a grand glitter of yellow far into the frosts of autumn. The dwarf varieties make a fine border for taller sorts, and both are effective when planted in groups or in garden borders.

FRENCH DWARF—Yellow and striped.

TALL AFRICAN—Large, double, lemon color.

ELDORADO—Large, quilled, perfectly double; brilliant shades of yellow.

Mourning Bride, or Scabiosa (h a)—The Mourning Bride is a showy border plant, with beautifully variegated flowers. It succeeds in ordinary garden soil. Minor Aurea is a beautiful golden yellow; new variety.

Maurandya (t p)—A beautiful climber for training on trellises, verandas, etc.; abundant bloomer. Paper, 10c.

Mimulus—Monkey-flower (*Maskenblume*). Extremely handsome flower of brilliant colors; fine for flowering in pots or baskets. Cover seed slightly. See Page 23. Paper, 10c.

Musk Plant—A well known, tender, biennial plant of musky odor. Paper, 10c.

Nemophelia (h a)—This genus consists of very pretty annuals of easy growth; they deserve extensive cultivation; are good in pots and for edging, in rockeries, or in the garden.

Nierembergia (h p)—Handsome flowers; fine for hanging baskets and edgings.

Nicotina—Decorative and fragrant.

Nolana—A showy border plant; a fine trailer.

Nigella, or Love in a Mist (h a)—Curious and ornamental; fennel-shaped leaves; easily grown and hardy.

Nasturtium.

Nasturtium, or Kapuziner Cresse (h a)—Beautiful bedding plants. Planted in poor soil, they flower profusely and for a long time. The color of flowers cannot be excelled. Dwarf varieties should be planted, so that they will contrast with white and blue flowers. We have a large variety of the choicest sorts. The Dwarfs are among the most useful and beautiful annuals for bedding and massing, while the tall sorts are admirably adapted for rock work, covering trellises and rustic work. Soil needs not to be rich. Choice mixed, 10c per ounce; in separate colors, in white, yellow, gold, orange, pink, red, crimson, brown and spotted, 15c per ounce.

Chameleon Nasturtium—Tall and dwarf. When in full bloom you can find every shade of color and form of markings known in Nasturtiums. No matter what color a flower may be when it opens, it changes color continually until it fades. The Chameleon Nasturtium is always curious, handsome and attractive. 15c per ounce.

Lobb's Nasturtium—Brilliant colors and flowers; a trifle smaller than other sorts; height 6 feet. 15c per ounce.

Pansies.

what shaded from the sun and furnished with a good supply of water, but in almost any situation will give fine flowers in spring and autumn. Pansy seed may be sown in the hot-bed or open ground; if sown in the spring, get in as early as possible, so as to have the

Pansies—The Pansy is a popular flower with both florist and amateurs, giving abundance of bloom until frost, enduring our hard winters with safety when covered, and greeting us in the earliest spring with a profusion of bright blossoms. It will flower better in the middle of the summer if planted where it is some-

plants in bloom during the early rains. Seeds sown in a cool place in June or July and watered until up, will produce fall flowering plants; if sown in October they will flower in early spring. To have good flowers the plants should be vigorous and make a rapid growth. Young plants give the largest flowers. Pansy seed is a specialty with us, and is the best that can be had. **Giant Trimardeau and Cassiers**, per paper, 10c.

Pink.

which for color and fragrance cannot be surpassed. Pinks succeed well in any fairly rich soil, but when the production of large flowers is aimed at, a richer soil should be prepared.

Petunia (h h p)—Highly ornamental; easy in cultivating; beautiful flowers of all colors, continuing to bloom until frost. The double flowering and Star Petunias, per paper, 10c. Cover seed slightly. See Page 23.

Perilla (h h a)—Ornamental leaved; for ribbon gardening and beds.

Petunia.

Ricinus, or Castor Oil Bean (h h a)—Very ornamental and quite tropical in appearance, much used for center plants of flower beds. An entirely new variety is the 'Zanzibarian-sis', which surpasses in size and beauty all varieties hereto known. The leaves are light green with whitish ribs and measure from two to two and one-half feet across; for large groups or single specimens it is an exceedingly striking and effective ornamental foliage plant.

Phlox Drummondii.

Phlox Drummondii (h a)—A bed of these will be highly prized for unrivaled richness and brilliancy of color and profusion of bloom. By making several sowings they will bloom until frost. Also fine for pot culture. The Star of Quedlinburg per paper, 10c.

Poppy.

Poppy—Very showy and free flowering. For beds or borders with a background of green they are beautiful; admirable for naturalizing in woody spots; they are also fine for cut flower use; should be kept from forming seed to secure continuous flowering.

They are easily cultivated;

the most suitable soil being sandy loam. Cover seed very lightly. Deserves a place in every garden.

CARNATION FLOWERED—Large, double.

PEONY FLOWERED—Large, very double.

RANUNCULUS—Small double flowers.

SCARLET—Single field poppy.

DANEBOG—Single flowers of a brilliant scarlet, bearing a silvery white spot on each petal.

THE SHIRLEY—Is a magnificent variety, unsurpassed for beauty and color.

TULIP POPPY—Resembling the Scarlet Duc Van Thol Tulip. Single.

CARDINAL—Compact, of robust habit and brilliantly variegated in scarlet and white.

AMERICAN FLAG—Double, red and white.

Portulacca—Should be in every garden. There is scarcely any flower in cultivation that makes such a dazzling display of beauty as a bed of many hued, highly colored Moss Flowers. They are in bloom from about the 1st of July until killed by the frost in autumn. Sow in open ground after it has become warm

Portulacca.

in light, sandy soil, and in a dry situation. After they appear, withhold water, and if the bed has a full exposure to the sun, the

ground will be covered with the plants, and the effect will be beautiful. Tender annual, nine inches high. They will stand any amount of dry weather. The double varieties of this plant are most beautiful. The blossoms are about one and a half inches across, perfectly double and of many colors. Not all the plants will be double, but the single ones can be pulled out. Cover thinly. Double Portulacca, paper, 10c.

SWEET PEAS.

Our Collection This Year Cannot be Excelled by Any House. It is the Cream of the Sweet Peas.

Nothing can be finer than a hedge of Sweet Peas. The variety of color and the sweet-scented flowers make them desirable for every garden. To bloom early, seed should be planted very early in the spring. For a succession some should be planted every few weeks. Sweet Peas succeed best in deep, rich soil. The most approved method of cultivation is to sow in a trench five or six inches deep, covering them at first with *only one inch* of soil; then as the plants grow up, fill in the earth about them *one inch at a time*. After the plants are well grown up they should be watered copiously, and bone meal worked into the soil about the roots is recommended. Proper trellis or other support should be provided.

Below Find the Names of Only a Few of the Leading Varieties.

BORLATTON—Crimson Purple; very dark, very large flowers.

BLANCH BURPEE—Pure White.

EMILY HENDERSON—Best White.

GOLDEN GLEAM—Yellow.

PRIMA DONNA—Pink Shaded.

KATHERINE TRACEY—Brilliant Pink.

MARS—Crimson.

NEW COUNTESS—Mauve.

NAVY BLUE—Blue.

SHAHSADA—Dark Maroon.

BLANCH FERRY—Deep Rose Pink.

MR. JOSEPH CHAMBERLAIN—White and Rose Striped.

And many more NEW AND BEAUTIFUL varieties.

(All the above, 5c. per paper or 10c. per ounce. Special prices by the pound.)

Sweet William—(h p)—A bed of these can hardly be surpassed in color and habit; producing large heads of beautiful colored flowers in great profusion; very effective for bedding. Admired by all.

Salpiglossis—These annuals have very showy, large, funnel-shaped flowers, mottled, veined and self-colored; fine for beds. They require a rich soil, and will well repay liberal treatment.

Salvia Splendens—Flowering sage. A standard and well known bedding plant that keeps the garden bright for their brilliant scarlet flower spikes until late in the fall. No plant could be finer for bedding. *We recommend it highly.* Per paper, 10c.

Schizanthus (h h a)—Elegant and blooming very freely; large, beautiful flowers of many colors; fine for bedding.

Sensitive Plant (t a)—A very curious and interesting plant; leaves close when touched or shaken.

Stocks (h h a)—German Ten Week Levkoyen—The finest German varieties, unsurpassed for brilliancy, variety of color and fragrance. Transplanting several times in the early stages of growth tends to give them a more compact and dwarf habit. Seed should be sown middle of March in a hot-bed or in shallow boxes in the house; and when one inch high transplant; they can be planted out-doors when three to four inches high. Keep plants moist.

Swan River Daisy—(See Brachycombs.)

Verbena.

Verbena—All of this genus are extremely beautiful and ornamental, flowering profusely, either as pot plants or in the garden. Our seeds are saved from fine named varieties, and will produce healthy plants, with flowers of fine colors.

Plants raised from seed are much more vigorous than those grown from cuttings, and continue strong and healthy until destroyed by frost. They flower perfectly well from seed sown in spring. If started in the house in pots, during the winter, they will bloom sooner, but if sown in open ground in May, they will bloom in August. Each plant will require a space of one foot. Tender perennial trailer, one foot high.

The assortment we offer this season cannot be excelled: *Pure White, Scarlet, Auricula, Italian Striped, Purple and Fordhook*; the latter in brilliant mixed colors.

Whitlavia.

Whitlavia—Pretty annuals, with beautiful white and blue bell-shaped flowers; free flowering.

Tassel Flower or Cacalia—A pretty annual, with neat flowers; easily grown.

Violets (t p)—Sweet-scented; possess great beauty and fragrance; seed takes a long time to germinate. Per paper, 10c.

Virginia Stock (h a)—Early flowering and fine.

Wallflower (t p)—Favorite, sweet-scented, double flowers of fine colors; useful as spring bedders. Per paper, 10c.

Xeranthemum—Showy, everlasting, retain their color and form longest of all; much prized for winter bouquets.

Zinnia (h h a)—Fine bedding and border plants, blooming long and abundantly. Beds of these are greatly admired. The colors are varied and bright, and plants easily grown. It should be more extensively cultivated, as the varieties have been much improved of late. The collections offered will be found very choice, and are sure to give satisfaction. Zinnias succeed best in rich, deep and loamy soil, and in a sunny situation.

Zinnias.

Passion Flower.

Passion Flower (h h p)—A most interesting and beautiful climber, requires a sunny position in open ground. Roots are hardy; although the vines die down to the ground in winter, but come up luxuriantly in the spring.

Double Dahlias—The Dahlia is the grandest autumn flower we have. Nothing is its equal in any respect in September and October. It is in its glory when everything else is faded or fading, and surrenders only to the King Frost. Plant tubers when the season becomes warm, covering the neck three inches. If many shoots start, thin them out.

Dahlias.

As the Dahlia is a fall flower, there is no need of planting before about the beginning of May, or later.

These Dahlias of recent introduction are in our estimation, the finest in cultivation.

KRIEMHILDE—Shell pink cactus. Most beautiful Dahlia in cultivation. Price, 25c.

EUREKA—Very large rose colored flowers. Per root, 25c.

OLYMPIA—Large pink flowers. Per root, 25c.

POMPON OR BOQUET DAHLIAS.

GUIDING STAR—Pure white; a great favorite.

SNOW CLAD—The best white pompon.

ALETA—A lovely bright pink, absolutely full to the centre.

LITTLE BEAUTY—Delicate pink; full round form, long graceful stems; fine for bouquets.

MIGNON—Brilliant carmine; one of the best.

KATHERINE SCHORR—Best yellow pompon; blooms profusely until frost.

SUNSHINE—Bright scarlet, very fine.

PHILIP PFREUD—Exceedingly fine; bright orange; profuse bloomer.

All above at 10c per root or \$1.00 per dozen.

DOUBLE SHOW AND FANCY DAHLIAS.

MRS MAY LOMAS—Very large; lavender and white.

OBAN—Fine, large lavender and pink flowers.

QUEEN VICTORIA—Fine, large, yellow flowers.

CLIFFORD BRUTON—The finest, pure, large, yellow, decoration Dahlias.

A. D. LEVONI—Clear soft pink; finest pink Dahlia known.

GLOWING COAL—Carmine.

MARTIN—Beautiful large vermillion flowers.

RED HUSSAR—A grand, new variety with flowers of regular form. The flowers are of the purest cardinal red.

ZULU—Rightly named the Black Dahlia. Jet black, changing to maroon as flowers fully expand, and should be in every garden for its beauty and masses of fine flowers; a cactus variety.

All above at 10c per root or \$1.00 per dozen.

CALADIUM ESCULENTUM.

Elephant Ear—Caladium Esculentum.

The Caladium is one of the handsomest of the ornamental leaved plants. There is nothing as good as the Caladium Esculentum for a grand bed of foliage in the garden or in the lawn.

Good roots, each 10c; per dozen, \$1.00.

Flowers for Constant & Brilliant Show

All of the below named Flowers, marked with a *, are suitable for Bouquets.

*Abronia.	*Adonis.	*Asters.
*Alyssum.	*Balsam.	*Candytuft.
*Canterbury Bell.	*Columbine.	Cockscomb.
*Gaillardia.	*Chrysanthemum.	Four O'Clock
*Mourning Bride.	*Mignonette.	*Larkspur.
*Pinks.	*Pansy.	*Foxglove.
*Snapdragon.	*Poppy.	Petunia.
*Nasturtium.	*Stocks.	*Phlox.
	*Zinnias.	Salpiglossis.
		Calendula.

FLOWERS FOR MASS OF COLORS.

WHITE—Sweet Alyssum, Candytuft, *Cosmos, Daisy.

BLUE—Ageratum, Forget-Me-Not, *Cornflower, *Gilia, Nemophila, *Lobelia, Whitlavia, Larkspur, Nolana.

SHADES OF RED—Pinks, Portulacca, Phlox, Petunia, Stocks, Zinnia, Nasturtium.

YELLOW—*Calliopsis, Bartonia, *Calendula, Portulacca, Eschscholtzia, Marigold, *Tasselflower, Cannas, Nasturtium.

FOR SUMMER HEDGE AND FOLIAGE.

Amaranthus.	Perilla.	Castor Beans.
Sweet Peas.	Cannas.	Zinnia.
Hollyhock.	Euphorbia.	Nasturtium.

CLIMBERS.

Balloon Vine.	Nasturtium.	Passion Flower.
Hyacinth Beans.	Callemellis.	Morning Glory.
Balsam Apple.	Maurandya.	Japan Hops.
Thunbergia.	Cobea Scandens.	Moonflower.
Canary.	Sweet Peas.	Cypress.
	Bryonopsis.	Gourds.

ROCKERY.

Alyssum.	Liaum.	Godetia.
Nemophila.	Catchfly.	Gilia.
Linaria.	Gypsophelia.	Leptosiphon.

HANGING BASKETS.

Clarkia.	Dwarf Nasturtium.	Lobelia.
Abronia.	Ice Plant.	Dwarf Morning Glory.
Nierembergia.		

EVERLASTING.

Acroclinium.	Bachelor's Button.
Xeranthemum.	Ornamental Grasses.

SPRING BULBS

GLADIOLUS BULBS IN MIXTURES.

Gladioli.

soil, commence blooming in July, and by successive planting every two weeks, can be had in flower the entire season. We keep the finest collection only.

This magnificent family contains hundreds of varieties, comprising all imaginable colors, shades and variations. For cutting they are invaluable, the flowers lasting in water a week. They can be planted at any time from May to June 15th, and never fail to flower the same season; they grow in any garden

	Per doz.	Per 100
White and light, extra fine.....	50c	\$4 00
Striped and varigated	40c	3 00
Groff's new Hybrid, first selection	40c	3 00
Childs, large flowers.....	40c	3 00
Lemoine's, fine bright colors and odd markings	40c	2 75

If by mail, add 10c a doz. to pre-pay postage.

TUBEROSES—DOUBLE.

The Tuberose is a semi-tropical bulb and as it requires a warm and sunny situation, it should not be planted outdoors until May. In cold latitudes, obtain tubers early, plant them in pots or boxes of earth and keep them in a warm place in the house; when warm weather, transplant to the garden. Previous to potting, every little side bulb should be broken off and the old roots cut back close to the parent bulb, as they are practically of no value. Water should be given sparingly at first until they begin to form leaves, when the quantity can be increased.

When leaves are about six inches long and begin to droop over they should be cut back half their length so as to force a quicker development of the flower spike.

Tuberose.

	Doz.	Each.
Tall Double —Extra size bulbs	50c	5c
“ “ —Second size	35c	

Pearl—Grows only twenty to twenty-four inches high; flowers are imbricated like a double Camilla..... 50c 5c

Dwarf French Cannas.

CANNAS.

But few plants are more easily managed than the Canna when propagation and cultivation are understood. The tubers will grow almost anywhere and under nearly all conditions, but prefer a very rich soil with plenty of moisture. The tubers should be planted singly, at least two feet apart; at this distance, in soil suited to them, they will form a complete mass.

The new French varieties give the best satisfaction; the large size and brilliant coloring of the flowers, embracing every shade of color, beautifully marked, mottled and spotted; dwarf compact habit of growth, and luxuriant foliage. These improvements are so decided as to make of the French Cannas one of the grandest novelties of the day. Without any exception there is no plant that makes a more grand, a more continuous show through the summer and autumn and less expensive than French Cannas.

We have an especially good and large assortment of the latest varieties to offer this season. Below find a few of the leading sorts; no better and cheaper to be had anywhere.

Emil Wieland—This new Canna is an orchid type, the flowers are large and borne in immense trusses, the color is intensely bright orange scarlet. It is a vigorous grower and profuse bloomer, leaves are bluish green, height three to four feet, price, 15c each.

Burbank, Austria, Italica—They are all large orchid flowered varieties, of latest introduction and grow from five to seven feet in height.

Florence Vaughan, Queen Charlotte—Color of flowers is yellow, some spotted or striped with crimson.

Kate Gray, Chas. Henderson, *J. C. Vaughn, Mad. Crozy—Flowers ranging from orange to bright carmine in color.

***Egandale, Alphons Bouvier, *Rubin**—Flowers dark currant red color.

10c each, \$1.00 per dozen.

***Bronze or dark red foliage.**

ROSES AND CLIMBING VINES.

We are taking orders from one of the largest and most reliable nurseries. All plants well rooted and securely packed, sent by mail, at prices quoted. Orders for climbing vines should reach us not later than fifth of April; for roses as late as first part of May.

Dorothy Perkins.

Dorothy Perkins—A splendid new climbing rose. The most valuable Rose Novelty since *Crimson Rambler*. Each, 20c.; 3 for 50c.—Postpaid.

The New Japanese Rambler Roses—All the different colors: the *Crimson*, the *New Helena*, *New Pink*, *New White* and *New Yellow*, each, 15c; 6 for 75c.—Postpaid.

Hybrid Perpetual Roses—Price of all Roses under this class (except as otherwise noted), each, 15c; any three for 35c; any six for 60c; twelve for \$1.00.—Postpaid.

Alfred Colomb—Bright carmine.

American Beauty—Rich, rosy crimson; exquisite form and delicious fragrance.

Anna de Diesbach—Brilliant shell-pink.

Caprice—Striped with white and pink.

Clio (New)—Flesh color; very fine.

Coquette de Alps—Light shell-pink.

General Jacqueminot—A grand old Rose; rich crimson, fine form.

Helen Keller (New)—Brilliant rosy color; has all points of a Sterling Rose.

John Hopper—Brilliant colored rose.

Madam Gabriel Luizet—Clear coral rose, large and beautiful.

Mme. Plantier—White; continuous bloomer.

Magna Charta—Rosy red.

Marchioness of Lorne (New)—Rich, shining rose color; a fine garden rose.

Margaret Dickson (New)—White and of all around Sterling qualities.

Marshall P. Wilder—Scarlet crimson.

Mrs. R. G. Sherman Crawford (New)—Hardy and constantly blooming; deep rosy pink.

Mrs. John Laing—A constant bloomer, very large; bright pink.

Paul Neyron—Largest and finest rose.

Prince Camille de Rohan—A magnificent crimson rose.

Ulrich Brunner—Cherry red.

Victor Verdier—Bright rose.

Our Collection of Hybrid Perpetual Roses consists of fourteen of the Choicest ROSES of all colors, at \$1.25. Postpaid.

Ever-Blooming Bedding Roses—(TEAS AND HYBRID TEAS)—Prices, by mail, postpaid, each, 15c; three for 30c; six for 55c; twelve for \$1.00.

Varieties marked * are of exceptional hardness.

* **Agrippina**—Deep crimson.

Bride—White, for forcing.

Bridesmaid—Clear dark pink, most popular for cut flowers.

* **Burbank (New)**—A perfectly hardy ever-blooming; color, cherry-crimson.

* **Champion of the World**—Deep pink.

Caroline Marniesse—Absolutely hardy; pure white; a continuous bloomer.

* **Etoile de Leon**—One of the best yellow roses; hardy, both to cold and heat.

* **Hermosa**—Blooms in clusters; pink.

Kaiserin Augusta Victoria—White; elegant pods; rich perfume.

* **La France**—The old favorite silvery rose; should be in every garden.

* **Mme DeGraw**—A good bedder; rich pink; a fine garden rose.

* **Marion Dingee**—Deep crimson.

Meteor—Moderately hardy; crimson.

* **Mosella**—Yellow; superb.

* **Pink Souper**.

Papa Goutier—Color, rich cherry.

* **Safrano**—Bright apricot yellow.

* **Souvenir de la Malmaison**—Rich flesh color.

Collection of Ever-Blooming Bedding Roses.

The all-colors, ever-blooming collection consists of sixteen of the choicest roses. Price, \$1.50.—Postpaid.

Hardy Climbing Roses.

Baltimore Belle—Pale blush.

Empress of China—Dark red.

Mary Washington—Pure White.

Queen of the Prairie—Bright pink.

Russell Cottage—Dark crimson.

Tennessee Belle—Rosy blush.

PRICE—Three for 40c; collection of seven, 75c.—Postpaid.

Moss Roses—Pink, White and Crimson.

Each, 15c; for the three, 40c.—Postpaid.

Clematis—The best four large blooming; **Madame Veillard**, **Jackmanni**, **Henry I.** and **Madame Edward Andre**—Each, 15c; four for 50c.—Postpaid.

Paniculata—One of the most valuable Clematis and hardy. Flowering vines. It is of exceedingly rapid growth; blooms in August and September, and fairly covers the plant with a sheet of fleecy white clusters. Each, 15c, three for 40c.—Postpaid.

Ampelopsis Veitchy—Boston Church—Vine, three for 30c; dozen, \$1.00.—Postpaid.

Hydrangea Paniculata Grandiflora—Entirely hardy; produces a mass of white flowers in August and September. Each, 15c; three for 35c.—Post paid.

COLLECTION OF VEGETABLE SEEDS

The following sorts can be replaced by others of the same value if specially wished. PAPERS ARE WELL FILLED WITH HIGH CLASS SEED.

Collection For One Dollar—One Package Each.

FREE BY MAIL.

BEANS—Dwarf or Pole.
CABBAGE—Early Wakefield.
CABBAGE—Late Flat Dutch.
CARROTS—Early Horn.
CELERY—Boston Market.
CELERIAC—Large Erfurt.
CORN SALAD—Large-Leaved.
CUCUMBER—Early Spine.
ENDIVE—Green Curled.
KOHLRABI—Early Vienna.
LEEK—Large.
LETTUCE—Curled Simpson.
LETTUCE—Improved Hanson.
MELONS—Rocky Ford.
ONIONS—Red Wethersfield.
ONIONS—White Globe.
PEAS—American Wonder.
PEAS—First and Best.
RADISH—French Scarlet.
RADISH—White Strassburg.
BEETS—Early Egyptian.
SPINACH—Bloomsdale.
TOMATO—Livingston's Perfection.
TURNIP—Early Milan.

COLLECTION OF FLOWER SEEDS FOR ONE DOLLAR.

ONE PACKAGE EACH.

<i>Alyssum</i> , Sweet.	<i>Asters</i> .
<i>Balsams</i> .	<i>Candytuft</i> .
<i>Cornflowers</i> .	<i>Forget-Me-Not</i> .
<i>Gaillardia</i> .	<i>Larkspur</i> .
<i>Lobelia</i> .	<i>Marigold</i> .
<i>Mignonette</i> .	<i>Musk Plant</i> .
<i>Nasturtium</i> .	<i>Pansies</i> .
<i>Petunia</i> .	<i>Phlox</i> .
<i>Pinks</i> .	<i>Poppy</i> .
<i>Portulacca</i> .	<i>Ricinus</i> .
<i>Stocks</i> , Levkoyen.	<i>Sweet Peas</i> .
<i>Verbenas</i> .	<i>Zinnias</i> .

Twelve Papers of above for 50c. Free by mail.

* RAFFIA *

For making Indian Baskets, Hats, Etc.
It attracts a good deal of attention;
the work is taught in public schools,
art classes, etc. Natural color,
price, 25c per pound; five
pounds, \$1.00.

Colored, in 15 colors and shades, 65c
per pound; 5c per ounce.

RATTAN or REED.

For making Baskets, all sizes, from 60c
to \$1.00 per pound; 5c per coil.

☞ If by mail, add to any of the above
16c per pound.

INSECTICIDES.

HAMMOND'S

SLUG-SHOT.

Its efficacy is conceded by all who make thorough tests.

It is an infallible insecticide; it is not poisonous; kills Potato Bugs, Cucumber, Melon and Squash Bugs; Currant, Cabbage, Tomato and Cutworms; Rose and Raspberry Slugs, and a good many other insects injurious to plants, shrubbery, etc. For further information send for a little pamphlet on Slug Shot.—Price per 10 lbs., 50c; per 100 lbs., \$4.00.

Hammond's Cattle Comfort.

To protect Cows, Oxen, Mules, or Horses against Horse Fly, Gnats, Mosquitos, etc.

PARIS GREEN.

Is sure to kill Potato Bugs; dissolve one teaspoonful in four gallons of water. Absolutely pure.—Per lb., 20c.

FOSTITE.

Death to all kinds of insects. Mildew and Blackrot on grapes and vegetables.—Package of 2 lbs., 50c.

LONDON PURPLE.

As destructive to insects as Paris Green, and is more easily dissolved.—Per lb., 25c.

HELLEBORE.

Destroys Rose Slugs and Currant Worms. A few applications only are necessary. Spray in early spring when leaves make their appearance. Per lb., 25c.

WHALE OIL SOAP.

For washing trees and destroying all insects on the bark. Mix at the rate of one pound to four gallons of water. It will rid cabbage, rose bushes, peach trees, etc., of the aphides that so often infest them.—per lb., 20c.

FIR TREE OIL SOAP.

It destroys all plant insects without injuring the plant. Mix at the rate of one ounce to a gallon of water and apply with a syringe.—Per ½-lb. can, 25c.

APHIS PUNK.

A special preparation of nicotine for the extermination of Green and Black Fly, etc., in green-houses and conservatories.—Per box, 60c.

Concentrated Kerosene Emulsion.

See page 3. Price, per gallon can, \$1.00. Per quart, 30c.

French Bordeaux Mixture.

In pulp. See page 3. Price, gallon can, 90c. Per quart, 25c.

Be sure to read how to use the Bordeaux Mixture and Kerosene Emulsion. Page 3.

FERTILIZERS.

Commercial Fertilizers are sure to come into more general use as fast as they are tried. Their quick and direct action commend them to the gardener. A customer who once buys, almost invariably continues its use. The enormous quantities sold annually give the best evidence of its utility and value to the GARDENER and FARMER. The quantity to use per acre depends upon the crop to be cultivated and condition of soil.

We are Agents of the Different Celebrated "Horse-Shoe Brands."

PURE GROUND BONE.

This article we guarantee to be strictly genuine and an excellent fertilizer for grass land, as well as other crops not requiring potash. It does not, however, give as quick results as Bone Phosphate, but the effect is more lasting. Harrow or drill in, using 400 or 500 pounds per acre. Price per bag of 200 lbs., \$4.50; 100 lbs., \$2.50; 25 lbs., \$1.00.

Pure Dissolved Bone Phosphate

Stands without a rival as the largest crop producer at the smallest outlay. If applied with a drill, 400 lbs. will give excellent results the same season; if applied broadcast, use 500 lbs. Price per bag of 200 lbs., \$3.75.

CORN AND WHEAT GROWER.

The requirements of the crops named are fully met by this high grade article, and as it contains in a promptly available form the elements required to produce perfect grain, it will be found superior in every way. Drill in at seeding time 200 lbs., and broadcast 300 lbs. per acre. Price per bag of 200 lbs., \$4.00.

OUR LAWN FERTILIZER

Never fails to induce a rapid and rich green growth and can be applied either in the spring or fall as top dressing. Stable dressing for lawns is objectionable in appearance, odor, weed seed and cost. Our lawn fertilizer overcomes all this. Ten pounds are sufficient to go over an area of 15x20 or 300 square feet. Price, 10 lbs. for 40c.; 25 lbs. for 75c.

PLANT FOOD.

An excellent fertilizer for house plants, clean to handle, without odor; produces rich green growth and profusion of flowers, if used according to directions which accompany each package.

Florist Plant Food.....per 25 lbs., \$1.00
Florist Plant Food.....per package, 15

ALBERT'S PLANT FOOD.

Best fertilizer ever introduced for all kinds of house plants, palms, ferns, rubber plants, with full directions how to use. Price 15c. per box.

NITRO CULTURE.

Professor Hopkins, of the University of Illinois, says in Bulletin No. 68: "The fertility of Illinois soils ought not, and need not, be reduced below its original productive capacity, and there was no necessity of having poor and unproductive land by using the proper fertilizers."

It is claimed that alfalfa and clover can be grown most anywhere, as well as any other leguminous plants, such as cowpeas, soja beans, vetch, &c., by using special bacteria, with which to inoculate the seed to be sown. These germs, when put in the soil, fasten themselves to the roots and form nodules, drawing the much needed free nitrogen from the air to feed the plant and soil.

Bacterias differ somewhat in their composition, as for alfalfa, red clover, cow and garden peas, beans, etc., but all have the same effect, forming nodules or tubercles.

Price, per package, containing the bacteria, is \$2.00—sufficient to inoculate one acre, with full directions and instructions.

Perfect Chicken Feed.

Composed of about 15 different kinds of recleaned Grain, Seeds, Bone, etc. A perfect egg producer. None better. Price per 100 lbs., \$1.85; 25 lbs., 50c.

Perfect Chick Feed.

Just the thing for young chicks. Per 100 lbs., \$2.00; 25 lbs., 55c.

SAMPLES ON APPLICATION.

ACME POULTRY FOOD

Contains all the elements to make hens lay and keep them healthy.

Do not fail to try it. Price, 15c a package.

GROUND OYSTER SHELLS

GRANULATED BONE,

MICA GRIT, BONE MEAL,

BLOOD MEAL, MEAT MEAL,

MILLET, ETC.

...PRICES ON APPLICATION...

The Olmsted Improved Reliable Mole Trap...

If you have moles in your garden, lawn or field, do not fail in getting this trap. It will surely catch your moles and save you a great deal of annoyance.—Each, \$1.25.

Out O' Sight.....each, \$1 00

Climax Lawn Weeder.

A simple and easy working device for removing obnoxious weeds and plants from the lawns. Price, 75c.

Lang's Hand Weeder.

Undoubtedly the best hand weeder in the market. Price, 25c.

TROWELS.

Of cast steel and solid shanks. Price, from 35 to 50c.

Garden Dibbles.

Of best steel, for transplanting, 35c.

Hand Seeders.

Premier—A crank seeder; the seed is fed to the fan wheel through an adjustable slide in such a manner as to insure an even distribution. Price, \$1.00.

Lightning—A hand sower—simple, durable and no repairs; does twice the work of any other sower, spreading the seed from 30 to 40 feet. Price, \$1.00.

Excelsior Weeding Hook.

Does good work among small and tender plants. Price, 15c.

Corn Shellers.

Black Hawk—Guaranteed to give satisfaction.....\$2 25
Same, for pop corn.....1 50

Garden Reels.

Price.....75c

Rubber Sprinkler.

Or Atomizer.

Price.....90c

BELLOWS.

Excellent for applying powder insecticides in the green house, garden or field. The powder can easily be distributed in any direction without waste. Price, \$1.00.

This sprayer is best adapted for house-plants. Also for washing windows, sprinkling clothes and floors. For killing insects on garden plants it has no equal. It throws a powerful spray, which is accomplished by squeezing the rubber bulb as shown in cut. The operator can produce a light or heavy spray at will, and can spray in any direction. It will spray from five to twenty-five feet high. It is durable and there is nothing to get out of order. It is easy to operate and very useful in every household.—Price, 90c.
If by mail 15c extra.

Hotbed Covers.

FROST PROOF.

Made expressly for winter covering of the beds and cold frames. INDESTRUCTIBLE, CHEAP AND WARM. Will not harbor mice or vermin. Easily handled. Dry out quickly after rain. Cost less than old fashioned straw mats and entirely take their place.—Price, 6x6, \$1.00 to \$1.50, according to quality.

Frost's Anti-Rust.

Will prevent rust anywhere. Use it on your plows, tools, stovepipes, guns, bicycles—any metal, bright or plain. Absolutely safe from rust. Every can sold with a guarantee.—Price, per box, 25c.

**THE
"RAPID EASY"**
(Lipe's Patent.)

GARDEN and FIELD WEEDER.

A new hand implement which for speed and easy work at killing weeds and loosening the soil eclipses everything of the kind, or for the purpose that has ever been offered. Price, 65c.

A SPRAYER

Nowadays is just as much needed as any other tool on the farm or in the garden.

No household should be without one.

INSECT EXTERMINATOR

FOR SPRAYING INSECTICIDES.

See pages 3 and 35.

No. 2, Copper, Double Tube.....\$1.00

" 1, Tin, Single "50

The Lightning Compressed Air Sprayer No. 21

This sprayer holds four gallons and works automatically. It is provided with a strainer so that no sediment can pass through—preventing clogging. It can be charged by a few strokes and will hold its pressure for many hours (even days), and throwing a fine, continuous spray thirty feet high. Full directions accompany each machine. **Price, \$4.00.**

No. 30, holding two gallons and of same construction as above. **Price, \$2.25.**

Lightning All Brass Spray Pump No. 26

This pump is constructed entirely of brass, and is unexcelled for spraying fruit trees, shrubbery and vines, washing windows, etc. It is provided with large air chambers, holding a constant pressure and throwing a solid stream of fifty feet. **Price, \$3.25.** Three foot extension pipe, 40 cents extra.

Lightning White = Wash Sprayer and Force Pump No. 28

This pump is constructed of heavy galvanized iron and is the only pump that will white-wash without clogging. Full directions sent with the pump. **Price, \$2.25.**

Garden Tools

Any Person Cultivating Vegetables for Market Cannot Afford to be Without Labor-Saving Tools in Order to Make it Profitable.

"PLANET JR." Tools.

NOTHING IS EQUAL TO THEM.

New "Planet Jr." No. 3 Single Wheel Hill-Dropping Seed Drill—(Sows either in hills or continuous rows.)—This Seed Drill has been offered widely by the manufacturers of the celebrated "Planet Jr." goods. It has been thoroughly tested by careful gardeners and nurserymen during several seasons, and the manufacturers guarantee it to give entire satisfaction.—Price, \$10.00.

"Planet Jr., " No- 4 Hill-Dropping Seed Drill, Hoe, Cultivator, Rake and Plow.

Combines conveniently in a single garden implement a capital hill-dropping and continuous row seeder, with the most perfect and complete single-wheel hoe, cultivator, rake and plow that the most practical can desire. Designed by a practical man, it is light, compact, durable and easy running and does all its great variety of work with a thoroughness and perfection that has never before been attempted, much less equalled.—Price, complete, \$10.00; as a drill only, \$8.00.

The "Planet Jr." No. 2 Drill—Holds two and one-half quarts. Is the old reliable drill, equally as good as the new, except that it does not drop in hills.—Price, \$7.00

"Planet Jr." Double-Wheel Hoe

"Planet Jr." Combined Drill.

The "Planet Jr." Combined Drill, Wheel Hoe, Cultivator and Plow No. 1. This most popular tool is suitable for either the farm or garden. As a drill it is exactly similar and equal to the No. 2, except in size. It holds one quart. As a plow, it opens furrows, covers them, hills, plows to and from, etc. As a hoe it works safely and closely to and from both sides of the row at once, when plants are small; between rows as plants grow larger, working all rows from 8 to 16 inches wide at one passage.—Price, \$9.00.

"Planet Jr." Double-Wheel Hoe, Cultivator, Rake and Plow Combined No. 12. — Has the invaluable feature of tending both sides of the row at once. The wheels can be set four, seven or ten inches apart. It has a pair of plows, two pairs of cultivator teeth and a pair of leaf lifters, making it capable of every variety of gardener's work.—Price, \$6.50.

The Fire-Fly Wheel Garden Plow — This little plow is very useful in opening furrows, covering seed and hilling growing plants.—Price, \$2.25.

The "Planet Jr." Horse Hoe No. 8 — Has the patent lever expander to open and shut the sides, and also a lever close at hand for raising and lowering the wheel, thus controlling the depth of working. The side levers are also changed in pattern and are now reversible and have patent plowshare points, which can be sharpened. Price, complete with lever expander and lever wheel, \$8.00; No. 7, \$7.50.

Send for illustrated "PLANET JR." Book.—FREE on application.

PLANET JR.

Single Wheel Hoe, Cultivator and Plow.

No. 17—Single Wheel Hoe—Greatly improved. It is the latest and best in every particular, and we recommend it as superior in many respects to any of the old styles. This is a cheap cultivator for the money and should be used more extensively.

Price, \$4.75

THE PLANET JR.

Twelve-Tooth Harrow and Pulverizer Combined.

A new tool for fine cultivation, deep or shallow. It has a new lever wheel and lever expander—Prices, plain, \$5.50; with wheel, \$6.50; complete, with pulverizer, \$8.00.

"FARMERS" No. 19.

High Single Wheel Hoe, Cultivator and Plow. Price, \$3.50.

This new and attractive implement is especially designed for the Farmers' garden work, though it offers to every one with either field or garden a cheap and effective tool for all hand wheel hoe operations. The tools are as follows: A large garden plow, 10-inch sweep, 6-inch sweep, 4-inch cultivator tooth

and a 2-inch tooth. The great variety and fine shape and quality of the tools make the implement valuable for many kinds of work. It is strong, well made and can be quickly set so as to be useful, whether in the hands of a man or woman, boy or girl. Strength, variety of tools and cheapness are its great virtues.

Iron Age Cultivator Harrow.—This is a new and valuable harrow. The teeth can be changed so that it can be made a Perfect Smoothing Harrow. It pulverizes thoroughly and leaves the ground in the best possible condition.—Price, \$4.50.

Single and Double Wheel "GEM" Hand Cultivators.

These are, without doubt, very popular and practical Hand Cultivators. They are made of the best material and give entire satisfaction.

Price—Single Wheel.....\$4.50
Single and Double Wheel Combined.....5.50

The Acme Garden Plow.

This is one of the strongest and most substantial hand plows made, it has a wheel 20 inches high, one plow with land slide, one cultivator blade, hoe and rake—made of best steel and does very good work. Price, \$3.00.

THE "EASY."

Handy, simple and easy running SINGLE WHEEL HAND GARDEN PLOW.

Price, \$4.00.

"Our" Garden Hoe.

This is an exceedingly neat, compact and useful hand tool, designed for use in garden cultivation. The frames and handles may be adjusted so that a child can use it. The blades can be set for plowing at various depths, and with the different attachments it can be used for nearly every kind of work in a small garden. It has a substantial steel wheel. The plow, as listed below, comprises cultivator blade, hoe, moldboard shovel and rake; a very complete outfit. The blades are made from the best spring steel. Price, \$2.50.

Fruit Box Material AND BASKETS,

OF EVERY DESCRIPTION.

WRITE FOR PRICES.

Useful Reference Table.

This Table gives the Amount of Pure Clean Seed ONLY and which Every Farmer ought to buy. Good Fresh Seed will Grow and is always the CHEAPEST.

	£s. to Bushel.	£s. to Acre		£s. to Bushel.	£s. to Acre
Clover—Red	17	5-10	Southern Cow Peas	60	60-90
Alsiike	60	4-6	Soja Beans	60	60-90
Alfalfa	60	15-20	Canada Field Peas	60	60-90
White Dutch	60	4-6	Kaffir Corn, broad cast	50	50
Timothy	45	10-15	Sorghum broad cast	50	50
Millet and Hungarian	50	25-35	Buckwheat	50	15-20
Red Top, free from chaff	40	10-15	Dwarf Essex Rape	50	4-7
Blue Grass, free from chaff	24	24-50	Grass Mixture	—	20-25
Orchard Grass	15	20-25	Flax Seed	56	50
White Beans	60	15-30	Sweet Corn, in hills	—	8 quarts

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Flowers	Peppers	Whale Oil Soap
		Wild Rice

Our Select Latin Grass Seed

IS THE BEST—NOTHING BETTER.

No Matter What You Pay or by Whom it is Offered—Price, 25c per lb.

In Making Up Your Flower Beds Do Not Forget to Include the Following:

Dwarf French Cannas.

DAHLIAS—In great profusion and in all colors.

CANNAS—The latest and most brilliant shades.

RUDBECKIA—One of the finest golden yellow perennials and should be in all gardens. (See page 5.)

TUBE ROSES.

PAEONIA.

ASTERS—Victoria and Branching.

CALENDULA—Prince of Orange.

CENTAUREA—Margaritae, white, sweet, scented; fine for cutting. Emperor William, dark blue cornflower.

COSMOS—Extra large flowers, in many colors.

NASTURTIIUM—Lobb's and Chamelion.

PETUNIA—Star and fringed.

POPPY—Magnificent colors and shades.

SWEET PEAS—Fifty varieties to select from.

VERBENA—Scarlet Defiance and Mammoth White.

ZINNIA—In most brilliant colors.

IN CONCLUSION WE WOULD SUGGEST TO BUY
GOOD RELIABLE

Seeds, Seed Drills, Cultivators and Sprayers.

We have Them All First-Class; They will Save
You MONEY and TIME, in Fact You Can-
not be Without Them to be Successful.