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ESTABLISHED 1863.
WM. EBER & SON'S

CATALOG

OF

1901.

High-Class

SEEDS

BULBS,

Garden Implements, Etc.

QUINCY, ILL.

READ THIS CATALOG!
YOU WILL FIND IT ATTRACTIVE AND USEFUL!

ALSO SEE INDEX.
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.

We feel assured in saying that the seeds we offer cannot be surpassed by ANY and will give entire satisfaction, if proper treatment is bestowed. It sometimes happens that seeds of unquestionably good qualities 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 SELL NO SEEDS WITH WARRANTEE, EXPRESSED OR IMPLIED IN ANY RESPECT, AND WILL NOT BE IN ANY WAY RESPONSIBLE FOR THE CROP.

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

FRIENDS AND CUSTOMERS!

IN PRESENTING our compliments with this new edition of our Descriptive Catalogue to our numerous friends and patrons, it is with feeling of pleasure that we express our thanks for the liberal patronage bestowed upon us for many years, and would assure them, as well as all others who may favor us with their orders, that we shall at all times endeavor to gain and maintain their entire satisfaction.

We would also respectfully suggest to give the Reading Matter of this Catalogue a careful perusal, rather than to 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, almost 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 printed 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. Number 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.

SEEDS BY MAIL AND EXPRESS.

We will forward a General Order of Garden and Flower Seeds, either by mail or express, Free to Destination, at Catalogue Prices—excepting only orders for Beans, Peas and Corn.

Postage is eight cents per pound.

TO DEALERS AND COUNTRY MERCANTS

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. There is no need of keeping over any stock, as you can buy in quantities 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.
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 the land is inclined to hold an excess of moisture, it should be under-drained, 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 a 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 it 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 the 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 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 of the seeds, 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 the 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 make the plants growing 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 distances 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 clear day, either in the morning or toward night; make a hole sufficiently large to hold the plant; fill with water and paddle 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, cauliflowers 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 and Squashes, when wet with dew, is very useful against the striped bug. Lime, road-dust, ashes or snuff 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 preventative is a thorough sprinkling of the seeds on 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 strewn broadcast over Cabbages is the best application we know of for destroying the little green cabbage worm.

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

Bordeaux Mixture—This substance is used in killing fungi by spraying fruit trees, grape vines, potato vines, and any vegetable crops suffering from fungus growths as Apple-scab and mildew. Pear-scab, Grape black-rot and mildew, leaf-bleight of Cherry, Plum and Quince, Potato blight and rot, blight in Lettuce, Eggplants, Tomatoes. Take four pounds fresh unslacked lime, six pounds copper sulphate powdered, forty-five gallons of water, or in same proportions.

Slack the lime, making a creamy whitewash; pour into a barrel, straining it through a sack; fill up with water and stir. The mixture will cost to a gallon. A third mixture must be applied in the form of fine spray, applied with force by an effective pump or syringe. To fruit trees it will be safe to make four sprayings: First, just as the flowers are opening; second, ten days later, and so on at intervals of ten days. Sometimes six or seven sprayings are beneficial. Potato vines may be sprayed every two weeks.

Whenever leaf-eating insects are attacking or will soon attack, four ounces Paris Green should be added to fifty gallons of Bordeaux Mixture.

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 is used against all sucking insects. The emulsion is prepared as follows: Boil one-half pound of whale oil soap in two quarts of water until dissolved, then take it from the stove and add one pint of coal oil; emulsify by shaking and stirring till thoroughly mixed; use one pint of this emulsion or mixture to ten pints of water. This emulsion, however, was never very generally used, owing to the difficulty in its preparation and in order to overcome this difficulty, we have in stock PERMOL KEROSENE SOAP, containing twenty-five per cent kerosene oil. Dissolve one pound in one gallon of hot water as a stock solution, and add, when you are ready for spraying, 30 gallons of water. This application is simple, cheap and effective in saving your Melons, Pickles, etc.

Liquid Lice Killer.—An effective insecticide for use against lice on poultry and domestic animals, especially mites in poultry houses. It may be prepared as follows: One part each of Chloro Naphthooleum, Bisulphide of Carbon, Crude Carbolic Acid and eighteen parts of Kerosene.

For many other insecticides we have in stock see page 30.

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 for the gardener’s use we never found anything better and more effective than the LIGHTNING INSECT SPRAYING MACHINES. It does better and more work than any of the old and costly machines; it is simple, light and handy; it takes much less material on account of the exceedingly fine spray which saturates every part of the plant thoroughly. Any lady can use it and will find it very convenient to sprinkle house plants, also clothes for ironing. It has no equal.

For cut and price see page 33.
Novelties and Seeds of Special Merit.

BEANS.—Bohne.

Wood's New Prolific Bush 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.—Two weeks earlier than the Valentine; absolutely stringless and of fine quality. A valuable acquisition in the bean line.

Vineless Marrow.—This is a variety of field bean which is wonderfully vigorous and productive; very compact and free from runners. The beans are very large, white and handsome, and of the finest quality for baking.

Thorburn's Refugee Wax.—A Refugee, with long, round, yellow wax pods, one of the earliest wax beans in cultivation. Suitable for early or late planting, and an immense yielder. It is absolutely free from rust, and in dry seasons withstands drought quite effectually; the dense foliage insuring the plant protection from the scorching midsummer sun, and at the same time retaining abundant moisture around the roots, which keeps the plants continually vigorous. Don't fail to try them.

CELERY.

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

SPINACH.

Victoria (New)—Extra dark black-green color. Two or three weeks later than the ordinary "Long-Standing." A fine variety for spring sowing.

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 and with ears twice as large and producing two or three ears to the stalk. On account of its sweetness, earliness, size of ear, and productiveness, this is the best of all for market purposes.

SOJA BEANS. Experience with this Bean, for the past several seasons, fully confirms its great value to the Farmer, both as A FORAGE CROP and SOIL IMPROVER.

For particulars see page 21.
CABBAGE.—Kraut, Kopfschopf.

Stein's Early Flat Dutch — Earliest flat-headed Cabbage; succeeds the Jersey Wakefield. A remarkable fine strain; a sure, solid headed, 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.

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

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.

Denmark — Very fine large sort.

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 our Head-Lettuce, and its table quality is simply perfect as to tenderness and crispness; it is also heat resisting.

St. Louis Market Lettuce — It is the best forcing lettuce and also very valuable for summer on account of its slowness to shoot to seed. It is very hardy, requiring only a slight protection, produces fine, large, white heads, superb quality and remarkably early. No market gardener should be without this valuable variety.

ONION.—Zwiebel.

Prize-Taker — Light yellow, of enormous size.

Mammoth Silver King — Large, white.

Both sorts highly recommended for hotbed culture.

WATER-MELONS.

Sweet Heart — A fine oval, very heavy, light green Melon. Has no equal as a shipping Melon.

New Triumph — A handsome dark green Melon; very large size; flesh remarkably solid and of best flavor.

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

Monte Christo — Good medium size, oval, a vigorous grower and exceedingly sweet; flesh rich red.

MUSK-MELONS.

Rockyford — This is by far the most popular sort on the market and commands higher prices than any other variety; it is very sweet and most delicate flavor with exceedingly fine smooth grained and light green flesh.

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

Melrose — Medium size, oval; deep granulated, rich salmon flesh; one of the best.

Paul Rose — New handsome variety; rich orange flesh and in quality ranks next best to Emerald Gem.

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

PEAS.—Erbsen.

Nott's Excelsior — A splendid early extra, 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 very finest quality; height three feet.

RADISHES.

New Icicle — 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.

Deep Scarlet — For forcing; matures by good cultivation in three weeks. The very best sort for market gardeners.

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

TOMATOES.

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.

Thorburn's Rosalind — Beautiful rose color; large and of uniform round shape; smooth, solid, fine flavor, medium early and very productive.
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.

The Bean crop has been exceedingly short for the past several years.

**DWARF OR BUSH.**

**GREEN POD Sorts.**

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 the beans two inches apart and cover not more than an 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 $1.50
- **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. 30c 1.75

**Extra Early Refugee**—It is similar in every respect to the ordinary Refugee, but 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. 25c 1.50

**Vineless Marrow**—(See page 4). 20c 1.00

**DWARF BUSH LIMA.**

- **Henderson's Bush Lima**.............. 35c
- **Burpee's Bush Lima**.................. 40c
- **Thorburn's Bush Lima**.............. 40c
- **Wood's Improved Lima**—(See page 4)..... 50c

(To the price of Beans, Peas and Corn 1c per quart should be added if ordered by mail.)

**WAX PODDED SORTS.**

- **Golden Wax**—Early and very valuable, a well known standard. 30c $1.75
- **Wardwell's Dwarf Kidney**—Extra early, purely wax pod, long, flat and remarkably free from rust. 30c 1.75
- **Bismarck Black Seed**—A long round pod variety, a great favorite. 30c 1.75
- **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) 30c 1.75
- **Davis' White Kidney Wax**—(See p. 4) 30c 2.00

**ENGLISH DWARF BEANS.**

- **Windsor Beans—Deutsche große Bohnen**—Plant very early in spring. qt. 25c

**POLE BEANS.**

- **King of the Garden**—Large in pod and 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 pod pole bean. It is early, stringless, very tender and enormously productive. The round silvery pods hang in great clusters from top to bottom. 40c
- **Schaetzle's French**—Exceedingly prolific, very tender and finest for pickling. 40c
CORN.
Mais.
(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 stems; 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.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Days to Harvest</th>
<th>Height</th>
<th>Quart</th>
<th>Peck</th>
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<tbody>
<tr>
<td>Extra Early Adams</td>
<td>55</td>
<td>15c</td>
<td>85</td>
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<tr>
<td>Melrose</td>
<td>57</td>
<td>15c</td>
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<tr>
<td>Extra Early Cory</td>
<td>57</td>
<td>15c</td>
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<td>85</td>
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<tr>
<td>Marblehead</td>
<td>60</td>
<td>15c</td>
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<tr>
<td>Minnesota</td>
<td>65</td>
<td>15c</td>
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<tr>
<td>Shaker's Early</td>
<td>65</td>
<td>15c</td>
<td>85</td>
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<tr>
<td>Early Crosby's</td>
<td>70</td>
<td>15c</td>
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<tr>
<td>Perry's Hybrid</td>
<td>70</td>
<td>15c</td>
<td>85</td>
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<tr>
<td>Improved Evergreen</td>
<td>85</td>
<td>15c</td>
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<tr>
<td>Country Gentleman</td>
<td>85</td>
<td>15c</td>
<td>85</td>
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<tr>
<td>Large Egyptian</td>
<td>90</td>
<td>15c</td>
<td>85</td>
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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,

Height qt. pk.
Thorburn’s Extra Early Market—Best strain, extra early, prolific and well-filled pods; in sealed bags 21 25c 81 25
Landrith’s Extra Early 21 25c 1 15
Alaska—One of the earliest Blue Peas 21 25c 1 25
Rural New Yorker—Very early, prolific and uniform in ripening 21 20c 1 00
First and Best 21 20c 85
Laxton’s Alpha—An extra early, wrinkled and of best flavor. Sow thick 3 30c
(Thes first named sorts are in sealed bags.)

MEDIUM EARLY PEAS.
Gradus—Also called Prosperity Pea; the largest, earliest and best wrinkled Pea out. (See Novelties, page 5) 3 50c 83 00
Everbearing—Long pods and large peas; sow thin 21 30c
Pride of the Market—Very large pods, green peas; a good market pea; sow thin 2 30c 2 00
Yorkshire Hero—A spreading variety; very productive; sow thin 21 30c
Champion of England—A standard variety; sow thick 4 20c
Shropshire Hero 2 30c
Melting Sugar—One of the best edible pod sorts 4 50c

For Later Crop.
Strategem—Very large pods and peas; of excellent flavor, 2 30c 2 00
John Bull—Delicious pea for main crop 2 30c
Telephone—Enormous pods, first-class quality 4 30c 1 75
White Marrowfat—A standard sort 4 15c 85
Black-eyed Marrowfat—Hardy and prolific 3 15c 85

Dwarf Varieties.
Nott’s Excelsior—(See page 5) 1 30c 1 85
American Wonder—Early and productive 1 30c 1 85
McLean’s Little Gem—Early straight pods 1 30c 1 50
Premium Gem—Extra Early 1 30c 1 50
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 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 sifted coal ashes to loosen it up and also 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 rows; set the plants at least six inches below the surface. If set out in autumn, top-dress with six inches of manure. For market on a large scale, set out 4 by 1½ feet.

Every fall a good dressing of course 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.

Colossal—The most approved standard sort. 10c 80 50
Palmetto — Very desirable bright green 10c 75
Columbian Mammoth White 10c 85
Barr’s Mammoth 10c 85
Asparagus Roots — Two years old, per 100, 75c; per 1000, 5.00

BEETS.—Rothe Rüben.

(Five ounces seed to 100 yards of row.)

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.

Crosby’s Improved Egyptian — (See page 4) 10c 75c
Columbian — New (See Novelties, page 4) 10c 75c
Electric — (See Novelties, page 4) 10c 75c
Eclipse Turnip — Early, dark blood red 10c 75c
Egyptian Turnip — Best for early forcing 10c 65c
Edmand’s Blood Turnip — Best strain, fine shape, dark flesh and best for general crop 10c 65c
Improved Half-Long Black Queen 10c 60c

MANGEL-WURZEL.—Runtel—Rüben.

(Six pounds to an acre.)

CULTURE.—As all mangels require a deep soil in order to grow well, plow and subsoil 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 constitution of the animals and the increased yield of milk in cows. 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.

Mammoth Mangel, or Norbiton Red, 5c 40c
Golden Tankard — Superior for dairy and stock feeding 5c 40c

SUGAR BEETS.

In view of the increasing interest in the culture of Sugar Beets, which are subjected to same culture as given above, we will enumerate a few of the choicest and most improved varieties. Experiments should be made in order to substantiate whether or not the Sugar Beet can be raised with advantage in this vicinity.

Improved Klein Wanzleben 40c
Improved Vilmorin 40c
White Imperial — Best for poor soil 40c

CALL FOR PAMPHLETS ON SUGAR BEET CULTURE
CABBAGE.—Kraut, Kopfföhl.  
(Sow half an ounce in hot-bed by 4 feet.)

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, seat, 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.

Drumhead Cabbage.

Early Jersey Wakefield — Finest American, select stock, grown almost to the exclusion of all others by market gardeners 30c $0 90
Charleston Wakefield — Very large and finest strain of the above 30c 1 00
Extra Early Etampes, or Express 20c 65
Stein’s Early Flat Dutch — (See Novelties, page 5) 25c 85
Early Winningstad 20c 50
Fottler’s Improved Brunswick 25c 85

Improved Early Summer, or Excel- 1/4 lb.  
(or) — The finest best second early......... 25c $0 85

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 85

CAULIFLOWER. — Blumenkohl.

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 plants could have a heavy mulch of hay or straw, it would keep the soil moist, and the plants would not suffer from drought. 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 potas- sium 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 ........................................... 20c 65c
Thorburn’s Gilt Edge — Large, heavy sort, undoubtedly the best and surest of all sorts now in cultivation .................. 20c 65c
Denmark — A very fine, large sort .............. 15c 50c

There are many other varieties. The above three kinds are the best and most successful for this climate.

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

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; the rows ten inches apart for early crop, fourteen for main and late crop. 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.

Guerande or Oxheart—Half-long, stump rooted. Thick, short, bright orange—color and of excellent flavor when young .................................. 10c 25c
Early Scarlet Horn—Very thick roots.... 10c 25c
Half-Long Pointed—A very popular strain; productive, early and valuable standard sort .................................. 10c 25c
James’ Intermediate—A very productive half-long pointed strain; quite popular for late planting .................................. 10c 25c
Half-Long, Stump-Rooted, Nantes
Steele—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 stock .................................. 10c 25c

CELERIES—Sellerie.

(One ounce to 100 feet of row.)

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 enrich their stems.

Golden Self-Blanching—A fine, solid variety, similar to the White Plume, except that it is a golden yellow, where the Plume is white........ 40c $
Giant Pascal—Larger and later than the above and of best quality........... 25c 2 00
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 ............. 30c 2 50
Golden Heart—The best for market gardeners........................................... 25c 2 25
Boston Market—Medium, solid, tender and crisp, Boston favorite........... 25c
White Plume—Requires but little blanching ........................................... 30c 2 50
Fin de Siecle—(See Novelties, p. 4). 35c
Celjeriac, or Turnip-Rooted Celery—Very large and superior quality........... 25c

CUCUMBERS.—Gurken.

(One pound per acre for pickles.)

In February and March plant seeds in hot-beds, and when night frosts are gone, transplant 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 show-erful 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 SOAP. (See page 3).

Thorburn’s New Everbearing—Small, very early, enormously productive, bears until frost........... 15c 8 75
Early Cluster—Fruit small, early and prolific ........................................... 10c 65
Early Frame, or Short Green—Productive and a fine pickler ........... 10c 65
Early White Spine—Best for early market, and also good for pickles...... 10c 65
Chicago, or Westerfield—One of the best pickling varieties ........... 10c 65
Nichols’ Medium Green—Mostly used for pickles ................................ 10c 65
Long Green Giant Perra—Best for table use ........................................ 10c 65
Green Prolific Pickling—One of the best for pickling, dark green, very productive and uniform small size .......... 10c 65
Thorburn Commercial Pickle—A new and valuable sort of the White Spine type, retaining its dark green color long after pickling .......... 10c 75
Japanese Climbing ........................................... 25c
Arlington—(See page 4) ................................ 10c 85
Livingston’s Evergreen ........................................... 10c 1 00

White Spine Cucumber.
CORN SALAD—Feld-Salat.
Sow during August, or 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 the first winter sets in, cover thinly with clean straw.
Corn Salad ........................................ oz. 10c, lb. 75c

CRESS—Gartenfres.sc.
Sow in drills six inches apart; cover very slightly.
Fine Double Curled — Desirable for salad and garnishing ........................................ 15c
True Watercress — Pleasant and pungent taste; sow near a living spring ..................... 50c

EGG PLANT.—Eierpflanze.
 Cultivation.—Sow in well heated hotbeds, 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. 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. 30c

ENDIVE.—Bindsalat.
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 a strong string; 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 ........................................ 15c 50c
White Curled—A splendid early sort ........................................ 15c 50c
New Self-Blanching ........................................ 20c

KALE, or BORECOLE.
Krauskohl.
(Sow one ounce to 100 feet in the row, and four pounds to the acre.)
Green Curled — Requires the same treatment as cabbage. It gets most delicious after being touched by frost.
Improved Siberian, or Dwarf German oz. 1/2 lb. 25c
Greens—Best and hardiest; for fall sowing, beautifully curled and crimped; cover with straw; per lb. 85c .......... 10c 25c
Dwarf Green Scotch Curled—This sort is still more curled, but not as hardy as the Siberian; per lb. 85c .......... 10c 25c
Tall Green Scotch Curled .......... 15c 40c
Brown Dutch .......... 15c 40c

KOHLS-RABI.
Kohlrabi.
(One ounce to 100 feet in the 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 drills one foot apart and ten inches in the drill.
Early Vienna—Flesh white and tender .......... 25c 75c

LEEK.—Poree, Lauch.
(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. 20c

MUSTARD.—Senf.
Sow thickly during April and early May in shallow drills.
White English .......... 5c 50c
Black .......... 5c 40c
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 for early spring use. 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—(See page 5)...30c
St. Louis Market — (See Novelties, page 5).........................25c
Glass House—For forcing under glass..25c
New Boston Head—Especially adapted for greenhouse culture. (See page 5)...25c
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

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.........................25c 60c
Hanson's — Heads very large, solid, tender and crisp.......................15c 40c
Buttercup — Beautiful yellow, solid heads; good for forcing...............15c 40c

SLUG SHOT and spraying with Permol or Kerosene Soap destroys Bugs and Lice on Cucumbers, Melons and Squash with certainty.

MELONS—WATER.

Wassermelonen.

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 55c
Mountain Sweet—Oblong, dark green, flesh red and solid................. 10c 55c
Kolb's Gem—Largest, most productive and best shipping melon in cultivation, 10c 55c
Gipsy, or Rattlesnake—Oblong striped, flesh scarlet and of good quality.....10c 55c
Peerless—The best for private garden, 10c 55c
Seminole — Large, moderately early, very productive and of delicious flavor, 10c 55c
Monte Christo—(See Novelties, page 5) 75c
New Triumph—(See Novelties, page 5), 10c 75c
Pride of Georgia—Round, large, crisp, bright red flesh ......................10c 55c
Dixie — Choice, very large, solid red flesh and early ......................10c 55c
Florida Favorite — Improved Rattlesnake, superior strain ..................10c 55c
Duke Jones — Early, extra large, fine flavor; it is a favorite for shipping and home use ......................10c 55c
Jordan's Gray Monarch — Largest grown; crimson flesh; late ..........10c 50c
Jones' Jumbo — Large, good shipper, medium early. (See page 5)...........10c 55c
Sweet Heart—Very large; light green skin; fine quality ..................10c 55c
MELONS—MUSK.

Zuckermelonen.

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

Plant late in the spring, in hills five feet apart, ten seeds in a hill; and thin out to four plants in a 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 soil, suits them best. Dust a little soot or recently burned wood ashes on the plants when up.

Rocky Ford—(See page 5) .................. 10c 10c $1.25 10c
Paul Rose—(See page 5) .................. 10c 10c 1.00 10c
Melrose—(See page 5) .................. 10c 10c 75 10c
Tip Top—(See page 5) .................. 10c 10c 75 10c
Long Island Beauty—The earliest and finest in quality, green flesh, 10c
Hackensack—Extra early, large, round, green flesh, productive and of good quality .......................... 10c
Montreal—Large, round, very thick green flesh ..................................... 10c
Chicago Market—Large, round, green flesh and fine quality .......................... 10c
Bay View—Large size, oblong, green flesh ......................................... 10c
Emerald Gem—Small, extra early, smooth ribbed, dark green skin and orange flesh, quality first-class .......................... 10c
Improved Christiana—Round, flesh dark rich yellow, very thick and of delicious flavor; one of the best 10c
Princess—Round, heavily netted, salmon flesh, flavor sweet and delicious beyond description; early and good size ..................................... 10c
Osage—Light green skin, cocoonat shaped, salmon flesh, very fine ..................................... 10c
Surprise—Early, with rich orange flesh, of delicious flavor .......................... 10c
Banana—Long, slender, salmon flesh and good quality .......................... 10c

Use INSECT EXTERMINATOR, it saves your Melons. See page 4.

PARSNIPS.—Pfaffinafen.

(Five to six pounds to the acre.)

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 sometimes is hard to germinate. Have soil well firm after sowing.

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

PEPPER.

Pfeffer.

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.

Ruby King Pepper.

Mountain Sweet—Large, mild flavor, used for pickling ...................................... 25c
Ruby King—Mild and one of the best, 4 to 6 inches long and 3 to 4 inches thick ...................................... 25c
Large Bell, or Bull Nose—An early variety; rind thick and fleshy ...................................... 25c
Giant Emperor—Scarlet, large and thick ...................................... 25c
Golden Dawn—Yellow, mild flavor, fine for stuffing ...................................... 25c
Cayenne—The variety of commerce, pods small, cone-shaped ...................................... 25c
Coral Gem—A wonderfully productive and handsome pepper; it is covered with small, bright, coral red fruits, which are splendid seasoning ...................................... 25c
Celestial—A Chinese pepper; at first fruit is yellow, and after fully matured becomes a deep scarlet ..................................... 25c

OKRA.—Bombo.

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.

Dwarf White—Early and productive ...................................... 10c 15c
New White Density—Very tender; long pods ..................................... 10c 75c

PARSLEY.—Petersilie.

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.

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 Old Seeds.

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

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 hard crops, and heavily manured for those crops, and kept entirely free from weeds, would be in 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 twice 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 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 of an 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.

<table>
<thead>
<tr>
<th>ONION SETS.</th>
<th>Market Price.</th>
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<tr>
<td>Red Bottom Onion Sets raised from seed</td>
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<tr>
<td>Yellow &quot; &quot; &quot; &quot; &quot; &quot; &quot;</td>
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<td>White &quot; &quot; &quot; &quot; &quot; &quot; &quot;</td>
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<tr>
<td>Red Top Onions</td>
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<td>Shallots</td>
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<td>Garlic</td>
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NEW MODE OF ONION CULTURE.

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 this 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.

Silver King—(See page 5)..... 25 85
Large White Portugal—Mild and delicious flavor, flat.....$0 25 80 85 $2 75
Large White Globe—Southport strain............................................. 25 85 2 75
Excelsior White Pickling—Best for pickling....................................... 20 75 2 00
White Silver Skin.......................................................... 20 75 2 50
Large Red Weathersfield—A good keeper.......................................... 10 40 1 35
Large Red Globe—Southport strain, a good keeper............................ 20 75 2 00
Giant Rocca—Of large size and sweet.............................................. 20 60
Yellow Danvers—Standard sort; a good keeper, oval,........... 10 40 1 35
Large Yellow Globe—Southport, extra fine strain......................... 15 45 1 65
Yellow Globe Spanish, or Prize Taker—(See page 5) 20 60 1 85

ABOVE VARIETIES ARE ALL NEW CROP AND RELIABLE.
POTATO.—Kartoffel.

Culture.—In order to have the best success in growing Potatoes, and to secure 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 a 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.

EXTRA EARLY OHIO.

This earliest of all early varieties justly belongs at the head of the list; because no other variety will mature as early. 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.

Our stock is of the purest strain, raised in the most northern part of Dakota, and all those who bought of us for the last several years had the best results.

Directions for Treating Potatoes to Prevent Scab.

Dissolve corrosive sublimate (bi-chloride of mercury) in water at the rate of one ounce to eight gallons of water (1 to 1000), and soak the seed potatoes from sixty to ninety minutes. Dry them before cutting.

The New Triumph, Carman No. 1, Rural New Yorker No. 2, Carman No. 3, Freeman, Beauty of Hebron, The Thorburn, Irish Cobbler, Early Rose, Irish Daisy, Early Sunrise, Maggie Murphy, Snowflake, Early Northern, And Many Other Good Sorts at Market Prices.

SWEET POTATO.

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.—Feldfürbijn.

Large Yellow—Very productive 80 25
Large Cheese—Flat, best for family use. 30
Improved Curia—Flesh solid and thick, fine grained, excellent for pies and does well planting among corn 75
Mammoth Tours—Growing to immense size 1 00
RADISH.—Rettig.
(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. A slight sprinkling of salt is beneficial.

New White Icicle—(See page 5) ...paper 10c.
Early Scarlet Turnip—French......... 10c $0 75
French Forcing Deep Scarlet—Crisp and beautiful; matures in 20 days, 15c 85
French White Tail .................. 10c 75
Scarlet Gem White Tip (New Forcing), matures in about 20 days ...... 15c 85
Early White Turnip, or Box—French, pure white and sweet .......... 10c 75
Early Carmine Turnip—French, for forcing, and best for open ground 10c 85
Yellow or Golden Summer Turnip—Popular as a market gardener’s sort .................. 10c 75
New Round Scarlet China—(See Novelties, page 5) .................. 15c 1 25
Early French Breakfast .............. 10c 65
Early Long Scarlet—Short top; the standard variety .................. 10c 65
Wood’s Early Frame—Half long, red 10c 75
Delicacy—White .................. 10c 85
White Strassburg Summer—Half long 10c 75
Chartier—Long scarlet, white tipped 10c 75
White Stuttgart—Large white sort 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

RHUBARB, or PIEPLANT.

Sow seed in cold frame in a fine, rich, sandy loam about first of March, in drills four inches apart. Keep the frame covered during night and cold days, so that the soil will not freeze, and in six or eight weeks it will be large enough to be transplanted in open ground. Plants ought to be transplanted several times and further apart.

Linneus ................................ oz. 25c

Every spring and autumn we have on hand a good supply of Rhubarb Roots at reasonable prices.

SALSIFY.—Häferwurzel.

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.

oz. $ lb.
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

SPINACH.—Spinat.
(Twelve pounds sows an acre.)

Spinach.

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 latter 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 .................................. 5c 25c
Prickly—This is the hardest variety; best for fall sowing .................................. 5c 25c
Bloomsdale, Savoy-Leaved—A productive variety, quite hardy .................. 5c 25c
Long Standing—The longest standing before running to seed, and consequently one of the best varieties .... 5c 25c
Victoria—(See page 4) .................. 5c 25c

SQUASH.—Speisekürbiss.

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 .......... 10c 75c
Improved Large Summer Crookneck .... 10c 75c
Boston Marrow — Oval, bright orange range; flesh yellow and fine .......... 10c 75c
Essex Hybrid—This variety is one of the finest grained and sweetest of the squash family; flesh very solid and thick; rich colored; a good keeper .................................. 10c 75c
Hubbard—A general favorite for late use, and of superior quality .......... 10c 75c
Sibley’s, or Pike’s Peak—One of the finest winter varieties; thick bright orange flesh ...... 10c 75c
TOMATOES.—Liebesäpfel.

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

Our Tomato Seeds are unequalled for their purity and fine quality; are all 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.

Dwarf Champion — Distinct foliage grows compact and upright, fruits early and is quite popular among gardeners.......................... 25c
Atlantic Prize.................................................. 25c
Buckeye State—Purple, very large, solid 25c
Thornburn's New York—.................. 50c
Acme—Early, smooth, purple, and one of the finest.................. 25c
Livingston's Beauty—Purple, regular in form, good shipper........ 25c
Livingston's Favorite—Solid and large 25c
Livingston's Perfection—Smooth, productive .................. 25c
Mikado—Large, purple, potato-leaved foliage, and much liked........ 25c
Honor Bright—Fruit bright red, finest flavor, solid and especial 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 .......................... 25c
Purple—The largest variety in cultivation.......................... 60c
Long Keeper—Bright red, early, very productive, and the longest keeper of all tomatoes.................. 30c
Matchless — Bright red, solid; immense yielder; one of the best for canning.......... 25c

TURNIPS.—Weiße Ruben.

For early use sow as early as the ground can be worked. Rutabaga and other kinds for winter, sow in July and August.

oz. 2.

Early Dutch—

Purple Top Milan

A good variety for first crops........ 10c 80 75

Extra Early White Milan—A new and valuable variety.................. 15c 1 00

Extra Early Purple Top Milan—One of the earliest varieties........... 15c 1 00

Purple Top Strap-Leaf—One of the best varieties for general use........ 10c 65

Red Top Globe-Shaped—A standard sort for market.................. 10c 65

Improved Rutabaga—Good for table or stock, hardy and prolific........ 75

Snowball—Small and of rapid growth.................................. 10c 75

German Tellow—Small, early and of distinct flavor.................. 10c 75

Cow Horn—Early and good-shaped, like Nantes Carrot........ 10c 75

Seven Top—For greens.......................... 10c 75

HERBS.—Kräuter.

Herbs are avaliable 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 occasion-ally be divided, and transplanted in spring. Those marked with * are perennial, and when once obtained in the garden may be preserved for years.

Anise.......................... Marjoram.*
Balm *.......................... Marshmellow.
Basil.......................... Rosemary. *
Borage.......................... Rue. *
Caraway. *.......................... Saffron.
Coriander.......................... Sage.
Dill.......................... Savory.
Fennel. *.......................... Tansy. *
Hyssop.......................... Tarragon.
Horehound. *.......................... Thyme.
Lavender. *

PRICE PER PAPER FIVE CENTS.

Miscellaneous Seeds.

PRICES ON APPLICATION.

Beans—California Tree and Navy Beans.
Bird Seed—Hemp and Canary.
Buckwheat.
Cotton Seed.
Flax Seed.
Tobacco Seed—Havana and other 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 old 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.

GRASS SEEDS.

PRICES ON APPLICATION.

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 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 hay, sow 1 bushel, and for lawn, 3 bushels of clean seed per acre.

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

Italian Rye Grass (Lolium Italicum)—One of the most valuable grasses in Europe, being equally suited to all climates. In England it is considered the best known grass to cut green for soiling, affording repeated large and nutritive crops. We recommend it here for use in pasture mixtures. Forty pounds to the acre.

Agrostis Canina (Rhode Island Bent Grass)—Resembles Red Top (A vulgaris, described below, but is of dwarfer habit, with shorter and narrower leaves. It makes a beautiful, close, fine turf, and is one of the very best grasses for lawns. It adapts itself to almost any soil, rich and moist, or dry, sandy and sterile. It is a native of Europe, but has been cultivated in our eastern states for many years, being valuable for permanent pastures. Of late years we have been unable to obtain true and pure seeds of it here, the meadows from which it is saved, having run largely into the freer seeding Red Top. We now import it from Europe, where it has been more carefully cultivated. Fifty pounds of seed to the acre is recommended for lawns. Height, 1 to 2 feet. (12 pounds to the bushel.) Per lb., 30 cts.

Bromus Inermis (Awnless or Smooth Bromegrass)—An erect perennial, 3 to 5 feet high, native of Hungary, where it is considered one of the best hay grasses, yielding a good return in the arid and silicious soil. The nutritive quality of its hay, however, is much inferior to that of our standard native sorts, so that we should recommend it only for dry, arid soils, where the better and more delicate grasses would not grow. It has been found to do well in the semi-arid regions of the west and northwest on account of its remarkable drought resisting powers, while its extreme hardiness recommends it for the colder sections of Canada. It is strongly stoloniferous, its creeping rootstocks spreading rapidly under ground and giving out new plants. It is on this account undesirable for temporary meadows, being difficult to eradicate when once established. Sow 35 or 40 lbs. to the acre. Per lb., 20 cts.

Tall Clover (Trifolium Pratense)—Most valuable for pastures on account of its early and luxuriant growth; it produces an abundant supply of foliage, which is relished by cattle early and late. Fifty pounds to the acre. Thirteen pounds to the bushel.

Hard Rye Grass (Secale Durum)—Not very productive, but it is of a very fine quality, and thrives well in dry situations, where many other grasses would fail, thus making it a very desirable pasture variety. Thirty pounds to the acre.
**CLOVER SEEDS.**

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

**Mammoth, or Sapling Clover** — Is used mostly to grow 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** — It lasts from eight to ten years as the roots penetrate from ten to fifteen feet in the ground; but it requires a deep, porous soil, and the ground must be rolling to enable the water to pass off readily, for wet underground is fatal to the plant. The second year it may be cut two or three times, but the stand will not yet be dense. In the third year, however, it will be in its full vigor. Alfalfa may also be sown with oats. 15 lbs. per acre.

**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 the common Red Clover. It affords a large return of hay; is excellent for soil ing 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 certainly would pay any farmer to try it. Sow 5 to 6 lbs. to the acre.

**Crimson Clover** (Trifolium incarnatum). — Is an annual, and if allowed to mature to cut for hay or seed, never starts again, but when sown early in the fall, it will make a good growth and can be pastured without harm during the fall and winter and still make a good crop of hay or seed at the usual time. It is a very rank grower, some stools counting as many as 120 to 140 blossoms from one seed. It grows to the height of 20 to 24 inches, roots deep, even in poor soil, from 4 to 5 feet. It will grow and make a heavy crop of hay or seed on land so poor that the common clover would do but little. It grows late in the fall, early in the spring and in warm spells in winter, when Red Clover will not think of starting. The quantity of seed is from 10 to 15 lbs. per acre.

**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 soil ing food which 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 eaten or 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 pasturage. It takes from 40 to 50 lbs. — broad cast — 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 drought does not hinder to harvest a good crop of great value for 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 broad casting.

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**GRASS MIXTURES FOR PERMANENT PASTURES.**

We also keep a mixture of permanent pasture grass, containing many sorts of fodder grasses. Some of these mature so early and others so late that from the beginning of spring until winter sets in there is no time when one species or another is not at its best.
SEED CORN.

The increase of New Foreign Markets for Corn means Higher Prices and it is certainly to the Interest of the Farmer to Renew and Improve his SEED STOCK, in order to raise Larger and Better Crops. The outlay is but a trifle more, but the repay will be manifold.

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—One of the best Yellow Dent Corn grown, can be planted in this section as late as July 10th, and it will fully mature before frost. Ear is from seven to ten inches in length and one to two inches in diameter; grain is deep yellow in color, and of long, narrow shape, but thick; cob is very small and red. A fine corn to grow.

Waterloo Extra Early Dent—Originated in Nebraska, where it is noted for its great earliness; ripening in ninety days. The ears are small, but it is a great yielder, and will shell sixty pounds of corn from seventy pounds of ears every time.

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.

Early Butler—This has been one of the leading early varieties for a few seasons past. We cannot too highly recommend it for planting in northern latitudes or late planting. The ears are of good size, with very deep grain of beautiful golden color and small cob. It ripens very early and cures quickly.

Early Mastodon Corn—An early Dent variety, originated in Ohio. The ear is very large and grain deep. It grows strong, rank, rapid and makes the finest appearing shelled corn, being purely Dent, of two shades of white and yellow.

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 the heaviest yielder we know, having yielded over 200 bushels to the acre. It is entirely distinct and will give satisfaction.

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

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.

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

Legal Tender—Pure yellow, uniform, ears very large and productive, deep grain and small cobs, maturing in 115 days.

Longfellow—Flint Corn; remarkable long ears, quite thin cob and deep grain; sometimes two and three ears grow on one stalk.

PRICES ON APPLICATION.
Forage and Miscellaneous Seeds.

On account of the fluctuation of some articles, prices cannot be given at present, but we will be pleased to quote them on application.

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. Sow the seed the latter part of June. It can then resist 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 furnish 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 are getting used to it there is no further danger. As there is over two months’ time to sow rape in, any farmer may find a corner to sow some for experiment. Sow from four to six pounds per acre.

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 them. This recuperating power arises, first, from the ability of this plant to gather nitrogen from the air and to 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 grow on land too poor for red clover, and are not affected so easily by heat or drought. It makes poor land rich and good land more productive. If wanted for forage plant in drills 3½ feet apart; 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. The Whippoorwill variety is the most popular.

Mammoth Russian Sunflower—A large yielder and an excellent food for fowls. Per peck 40c.

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 feed, which cures admirably as hay or dried forage. Price, $1.35 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 2½ to 3 feet apart and cultivated like corn. It is highly recommended for green fodder, and is an excellent soilifying 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 seeded the Soja Beans in alternate rows with corn, seeded thickly for fodder late in June; cultivated both crops frequently shallow 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.

New Velvet Beans—Seed should be planted about May 20th. In southern states it is extensively grown for forage or enriching the soil. When in bloom the flowers are most beautiful. Per peck, $1.00.

Sand Winter, or Hairy Vetches—They are hardy and grow well on poor and sandy soil. Plants are cut before setting seed and a second good crop will follow. Per peck, $1.50.

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

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.
Formation and Treatment of Lawns.

NOTHING is more essential to external beauty and attractiveness of the home than a smooth, green, velvety lawn. To secure this it is important that we begin right. Neglect at the beginning must lead to disappointment in the end. Mistakes at the start are not easily remedied afterwards.

The best time to begin operations is in autumn. The ground should be graded till the surface is such as the eye demands. If seepy, it should be underdrained. The soil should be made uniform; that is, it should be made of the same texture and richness over the entire lawn to the depth of six or eight inches, so as to secure a uniform growth and color of the grass, both in wet and dry weather. The soil need not be very rich, but should be such as would yield good field crops, such as corn and potatoes.

After the grading is done as above, make the entire surface fine and smooth by free use of the harrow or rake; then apply a heavy roller or board to compact the soil thoroughly.

The following spring, as soon as the ground is in proper condition, smooth the surface again with the harrow or rake, and with a flat board drawn over it, if necessary, to make it perfectly even.

Then sow the grass seed, rake lightly, but thoroughly, so the seed which is light, is well covered, and again pass a heavy roller over it.

The rolling or dragging, however, should not be done when the soil is very wet. This would cause it to bake and become very hard in dry weather.

In favorable seasons good results are usually obtained by sowing early in autumn; say about the first week in September.

Do not be sparing of seed. From three to five bushels to the acre, or one pound for 20 x 20 feet, is little enough. More seed is needed on poor soil than on that which is rich.

Keep down weeds by frequent mowings. Dig up all perennial weeds by hand. Give them no quarters from the start. Dock, dandelions and plantain are the most troublesome, and should be closely watched.

Annual seeds, natural to the soil, are certain to spring up before the young grass becomes established, and an inexperienced person is likely to conclude that the weeds spring from weed seed in the grass seed. But all soils, as well as stable manure, contains weed seeds, and upon tillage they are certain to vegetate.

Many, after scattering a little seed raked in with some fertilizer, expect to see a green mat in three or four weeks. But in this they are unreasonable, as the better varieties of grass are slow to produce effect, and when an effect is quickly developed, it is at the expense of adaptability and permanency.

When the lawn has become established mow at least once a week during the growing season—oftener if the growth is very rapid. Set the mower to cut at a height of about one and one-half inches from the ground. Most mowers cut too close for the good of the lawn. The clippings should not be raked off but left to settle around the roots of the grass and form a mulch which will serve to protect it from drought in summer and from severe cold in winter, as well as to enrich the ground by its gradual decay. Laws thus treated not only look better, but are more agreeable to walk on, yielding under the feet like a soft velvet carpet. If the mowing is repeated often enough so that the clippings are short they will disappear as soon as they become dried in the sun.

With the most skilful treatment and best seed, grass in some seasons will fail to "catch." The only course is to make repeated sowings, each spring and autumn, until success is attained.

Our Mixed Lawn Grass Seed
Contains besides Blue Grass a mixture of the finest quick growing grasses, which will make a Lawn in the first year, while Blue Grass alone perfects itself the second year after being sown.

All of the different seeds are re-cleaned and absolutely free from obnoxious weeds.

FOR SHADY PLACES—We have a special mixture for this purpose.

Our Special Lawn Fertilizer
Never fails to produce a rapid and rich green growth and is much more preferable than barnyard manure, which is the principal source of dock, plantain and weeds.
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.

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 Portulaca, Campanula, Digitalis, etc., should be merely sprinkled on the surface of the ground after making quite smooth with the back of a spade, and barely covered with finely sifted, light, mealy 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. A great many varieties will live in almost any kind of soil, except it be extremely dry, sandy, calcareous, or of a stiff, heavy character; still, to give them a fair chance for development, some little pains should be taken in adding to the soil as much as possible, what may be wanting in it. 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 germination 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.

The best results will generally be obtained by the beginner by concentrating the crop or sowing all the varieties in one pot or bed, or a portion of ground, whatever its size may be, sufficiently large to hold all sorts placed in parallel rows at one foot apart, and this concentrated plantation can be carefully weeded, and otherwise attended to during the early stages of growth.

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.

JADOO FIBRE IS AN EXCELLENT MATERIAL FOR SOWING FINE SEEDS IN SUCCESSFULLY,
Choice Flower Seeds.

**PRICES:**

Unless specially 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;" "††" represents "tender."

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

**Ageratum (h h a)—**
Free flowering bedding plant, in clumps or masses, used for bouquets; should be planted among Geraniums.

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

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

**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.

**Brachycome (h 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.

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

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

**Calendula (h a)—**
It is very showy, and makes excellent pot plants; a continuous bloomer. Don't fail to have it in your garden.

**Candytuft (h a)—**
Showy annuals, for beds or edging; can be sown at any time in the house or open ground; blooms more freely if transplanted.
Calliopsis, or Golden Glory (h a) — Fine showy plant; abundant in bloom and of bright colors; fine for cut flowers.

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

Centaurea Cyanus—(h a)—Blue Corn or Blue Bottle Flowers.

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.

New Mammoth—Per paper, 10c.

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

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.

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

Cockscomb (h h a)—Highly ornamental and very attractive.

Margaret Carnation—This grand new strain of Carnation surpasses all others for the great beauty of loveliness of its fine, large, double, rich colored flowers and incessant bloom. The advantage of having Carnation 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 to 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.

Calampelis († h p)—Fine for trellis.

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 water; sow in hot-bed and plant out when ground is warm. They are excellent pot plants for the house.

Dwarf French Crozy Sorts—Per paper 10c.

For Canna Roots see page 28.

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

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

Cowslip—(primula veris)—A favorite spring flower (h p) 10c.
Cobe Scandens († t p)—A fine rapid-growing climber, dark foliage, purple, bell-shaped flowers; will run from twenty to thirty feet in one season; start in the house. — Paper, 10c.

Cypress Vine—Tender annual climber, graceful foliage, with small red and white star-shaped flowers.

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.

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 garden; of easy culture; a rich loam will produce its finest plants and flowers of various colors.

Digitals, or Fox Glove—Beautiful, showy border plants, very ornamental, particularly when planted among shrubs.

Evening Prim 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.

Eschscholtzia (h a)—Free bloomers for borders and bedding; their bright flowers are desirable in every garden.

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

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

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

Godetia—A profuse bloomer; hardy annual; beautiful colors; can be grown in pots; good for bedding.

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 hotbed or house.

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

HEN EGG GOURD—Resembles in color, shape and size a hen’s egg.

DISHCLOTH, or LUFFA GOURD—A natural dishcloth, and most admirable one is furnished by the peculiar lining of this fruit, which is spongelike, 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 silver 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—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.

Marygold (h a) — Highly ornamental in the fall. Dwarf varieties are useful for bedding.

GRAND SULPHUR—Large double flowers.

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) — (Ipomoea 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.

Mornina—Decorative and fragrant.

Nolana—A showy border plant; a fine trailer.

Nasturtium, or Kapuziner Cress (h a)—Beautiful bedding plants. Planted in poor soil, they flower profusely and for a long time. The colors 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 Dwarf 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. Choice mixed, 15c per ounce; in separate colors, 20c per ounce.

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

Mourning Bride, or Scabiosa (h a)—A showy border plant; fine flowers; of many colors.

Mimulus—Monkey-flower (Maskenblume). Extremely handsome flower of brilliant colors; fine for flowering in pots or baskets. Paper, 10c.

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

Nemophila (h a)—Dwarf growing; of easy cultivation; fine delicate flowers; are good for pots, edgings, rockeries or beds.

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

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

Pink (Dianthus)—Beautiful and ornamental genus, for beauty and sweetness contains some of the most prized flowers we possess. The leaves of the hardy perennials are green all winter. Many can be grown in pots and kept in the house. No garden should be without some of the varieties of the Dianthus family, 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.
Pansies—The Pansy is a popular flower with both florists 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 somewhat 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 hotbed, or open ground; if sown in the spring, get in as early as possible, so as to have the 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 Trimaerdeau and Cassiads; per paper, 10c.

Petunia (h h p)—Highly ornamental; easy in cultivating; beautiful flowers of all colors; continuing to bloom until frost. The double flowering, per paper, 25c.

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—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.

GOLDEN GATE—Fine single.
CARNATION FLOWERED—Large, double.
PEONY FLOWERED—Large, very double.
RANUNCULUS—Small double flowers.
SCARLET—Single field poppy.
DANEBROG—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.

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

Portulaca—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 later of July until killed by the frost in autumn. Plant in open ground after it has become warm 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. Double Portulaca, per paper, 10c.
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.

Ricinus, or Castor Oil Beans (h a)—Very ornamental and quite tropical in appearance, much used for centre plants of flower beds. An entirely new variety is the Zan- zibar-jan-sis, which surpasses in size and beauty all varieties hitherto 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.

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 (t a)—Well known for their brilliant color, and no plants can be finer for bedding; beautiful spikes of scarlet flower.

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 Levkojen. 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. In this latitude Stocks should be sown from the middle of March to the first part of May, on a spent hotbed, or in pots or shallow boxes, in a frame or in the house; and when an inch high, they should be transplanted into fine soil, which should be spread over a discarded hotbed, whence they can be bedded out when three or four inches high; this should be done before or during showery weather.

Tasselflower, or Cacalia—A pretty annual, with neat flower.

SWEET PEAS.

Our Collection This Year Cannot be Ex-celled by Any House.

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 spring. For a succession some should be planted every few weeks. Sweet Peas succeed best in a 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.

ADONIS—Bright rosy Carmine.
COUNTESS RADNOR—Delicate lavender, wings dark mauve.
APPLE BLOSSOM—Bright pink, beautifully shaded.
BUTTERFLY—Pale gray edged porcelain.
BLANCHE FERRY—Large pink and white, very early.
BOREATTON—Rich bronzy crimson, very large.
EMILY HENDERSON—Pure white.
PRINCESS BEATRICE—Pink, marked with deeper shades.
QUEEN OF ISLES—White and red striped.
SPLENDOUR—Coppery crimson, very rich.
WAVERLY—Pale blue and rosy claret.
VENUS—Salmon buff, delicately shaded, rosy pink.
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 beautifully colored flowers in great profusion; very effective for bedding. Admired by all.
Zinnias

**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, in 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.

**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.

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

**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 a rich, deep loamy soil, and in a sunny situation.

**Thunbergia** (h h a)
Very ornamental climber, of rapid growth and an abundant bloomer; flowers white, buff and orange.

**Verbena**—All of this genus are extremely beautiful and ornamental, flowering profusely, either as pot plants or in the garden.

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

**Zinnias**

**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.

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

**Finest Collection**—In all colors, tall and dwarf. .... per dozen, $1.00; each, 10c.

**Flowers for Constant and Brilliant Show.**

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


**FLOWERS FOR MASS OF COLORS.**

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


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

**YELLOW**—Calliopsis, Bartonia, *Calendula, Portulaca, Eschscholtzia, Marygold, *Tas- sellflower, Cannas.

**FOR SUMMER HEDGE AND FOLIAGE.**


**CLIMBERS.**


**ROCKERY.**


**HANGING BASKETS.**


**EVERLASTING.**

GLADIOLUS BULBS IN MIXTURES.

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 soil, commence blooming in July, and by successive plantings every two weeks, can be had in flower the entire season.

Yellows and Lemoines’........... $0.75 $1.00
Yellow and Lemoine’s............. 75c 1.00
White and Light Colored........... 60c 1.00
Striped Variegated Varieties...... 50c 1.00

If by mail, add 10c per doz. to prepare postage.

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 doz., $1.00.

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.

Tall Double—Extra size bulbs.............. 50c 5c
Pearl—Grows only twenty to twenty-four inches high; flowers are imbri- cated like a double Camilla............. 50c 5c
Variegated Leaved—Flowers single but very large and of exquisite frag-rance............................... 50c 5c

SPRING BULBS

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 any-where 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 flower plant that makes a more grand, a more continuous show through 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.

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

Eldorado, Florence Vaughan, Mad. Alphons Bouvier, M. Messnier, Queen Charlotte, Capt. Suzzoni—Color of flowers yellow, some spotted or striped with crimson.

*J. D. Cabos, Paul Bruant, Paul Marquant, "J. C. Vaughan, Leonard Vaughan, Midway, Columbia, Chicago, Mad. Crozy—Flowers ranging from orange to bright carmine in color.


10c each, $1.00 per dozen.

*Bronze or dark red foliage.
INSECTICICES.

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 Cut-Worms; Rose and Raspberry Slugs, and 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.

PARIS GREEN.

Is sure to kill Tomato Bugs; dissolve one teaspoonful in four gallons of water. Absolutely pure.—Per lb., 25c.

FOSTITE.

Death to all kinds of Insects. Mildew and Blackrot on grapes and vegetables—Package of 2 lbs., 25c.

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.

POWDERED SULPHUR.

Valuable for protecting against mildew in grapes and roses.—Per lb., 10c.

The above six articles may be effectually applied in dry state by our insect exterminator. See page 31.

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.

PERMOL KEROSENE SOAP.

Is found the most convenient and most satisfactory preparation ever made. It contains 25 per cent of kerosene oil.—See page 3. Per lb., 25c.

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 4-lb. cans, 25c.

APHIS PUNK.

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

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 GAR- DENER and FARMER. The quantity to use per acre depends on the crop to be cultivated and condition of the 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 phosphate. Harrow, 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, summer or fall, as a top dressing. Stable dressing for lawns is objectionable in appearance, odor, weed seed and cost. Our lawn fertilizer overcomes all this. Ten lbs. are sufficient to go over an area of 15 by 20 or 300 square feet.—Price, 10 lbs. for 50c; 25 lbs. for $1.00; 100 lbs. $3.50.

NITRATE OF SODA.

Valuable for the nitrogen it contains; it is a stimulant used in addition with other fertilizers and hastens the maturity of crops fully two weeks. Being extremely soluble it should not be used before the plants are above ground. Mix with wood ashes and sow broadcast 100 pounds of Nitrate of Soda per acre.—Price per 100 lbs., $4.00; 25 lbs., $1.25.

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, 10
Bonnell's..................15
Bowker's..................25
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.

Alyssum, sweet. Balsams.
Balsams. Cornflowers.
Cornflowers. Gaillardia.
Gaillardia. Lobelia.
Lobelia. Mignonette.
Mignonette. Nasturtium.
Nasturtium. Petunia.
Petunia. Pinks.
Pinks. Portulaca.
Portulaca. Stocks, Levkoyen.
Stocks, Levkoyen. Verbenas.
Verbenas. 

Twelve Papers of Above for 50c, Free by Mail.

Plants and Roots.

Pflanzen und Wurzeln.

(Prices on Application.)

Strawberry Plants—In season we keep a limited stock of the leading varieties; but if large quantities, or certain new rare sorts are wanted, we would invite timely correspondence.

Sweet Potato Plants—As we have our own beds where they are grown, we can supply the freshest stock in any variety at short notice; also:

Tomato Plants, Cauliflower Plants, Cabbage Plants, Egg Plants, Celery Plants, Kohlrabi Plants.

ROOTS.

Jerusalem Artichokes—Remarkable for their fattening properties, great productiveness and ease with which they can be grown. They are a great preventive of cholera in hogs and a great milk producer. Can be kept like potatoes.

Asparagus, Rhubarb. Horseradish.

DR. JOSEPH HAAS’

Hog and Poultry Remedy.

Endorsed and recommended by the leading swine breeders of the United States and Europe.

Prevents Disease, Arrests Disease, Stops Cough, Destroys Worms, Increases Flesh, Hastens Maturity, Saves Feed.

PRATT’S FOOD

For Poultry and Stock.

WILBUR’S

POULTRY FOOD.

Ground Oyster Shells, Granulated Bone, Beef Meal, and other Poultry Supplies.

Fruit Box Material AND BASKETS.

Every Description. Write for Prices.

JADOO—Fibre.

A New Potting Material, in which Every Plant Thrives.
Insect Exterminator.
Kills, exterminates and drives away every living thing obnoxious to your animals, or your plants, shrubs, etc., by using the insecticides described on page 3. A handy instrument for many purposes and no household should be without it. Double tube No. 2, copper, $1.00; single tube No. 1, tin, painted, 50c.

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 OLMS TED 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.
REDICK'S IMPROVED..........................each, 90c.
OUT O' SIGHT..............................................$1.00

Lang's Hand Weeder..............................$0.25
Bellows—For blowing Insect Powder........1 00
Best Steel Garden Dibbers.....................35
Corn Shellers—The Black Hawk, guaran-
tanteed to give satisfaction...............2 50
For Pop Corn........................................1 50
Garden Reels and 100 ft. best solid Braided
Hemp Garden Line, complete..................1 50
Pruning Shears—Wiss', made of very
best steel........................................$1.50 and 2 00
Levin's, the most powerful Hand Shear
extant, cuts 1-inch dry oak....................1 00
Rubber Sprinklers—Scollay's No. 1........85
Scollay's No. 2......................................70
Scollay's No. 3......................................45
Lenox Patent........................................30
Extra Rubber Bulbs.................................15
Trowels—Best solid steel, very strong...30-50
Ordinary..............................................10-25
Weeders—Hand—Excelsior......................20
Lang's..................................................25
Seeders—Fiddlebow.................................1 75
Crank....................................................2 00
Lightning.............................................1 25

THE LIGHTNING SEED SOWER!
Guaranteed to Sow from 50 to 80
Acres per Day (either Horseback or
Foot), of Clover, Timothy, Millet, Flax
and all Seeds of same
nature.

Will be sent to any Postoffice on receipt of $1.50. If not satisfied, money refunded. Circulars Free. AGENTS WANTED.

FRANZEN & BUSS,
GOLDEN, ILL.
REFERENCE: GOLDEN BANK.
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 in Continuous Rows.)

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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 | 
| Clover, Red | .60 | 8–10 |
| ' Alsike | .60 | 4–6 |
| ' Alfalfa | .60 | 15–20 |
| ' White Dutch | .60 | 4–6 |
| Timothy | .45 | 10–15 |
| Millet and Hungarian | .50 | 25–35 |
| Red Top, free from chaff | .40 | 10–15 |
| Blue Grass, free from chaff | .24 | 24–50 |
| Orchard Grass | .14 | 20–25 |
| White Beans | .60 | 15–30 |

| Southern Cow Pea | .60 | 60–90 |
| Soja Beans | .60 | 60–90 |
| Canada Field Peas | .60 | 60–90 |
| Kafir Corn, broad cast | .50 | 50 |
| Sorghum, broad cast | .50 | 50 |
| Buckwheat | .50 | 15–20 |
| Dwarf Essex Rape | .50 | 4–7 |
| Grass Mixture | .20 | 20–25 |
| Flax Seed | .50 | 50 |
| Sweet Corn in Hills | .8 | quarts |

INDEX

| Asparagus | 8 |
| Alfalfa | 19 |
| AIsike | 19 |
| Anti-Rust | 34 |
| Beets | 6 |
| Beets | 8 |
| Bordeaux Mixture | 3 |
| Bulbs | 30–31 |
| Blue Grass | 18 |
| Broom Corn | 21 |
| Cabbage | 9 |
| Cauliflower | 9 |
| Canada Field Peas | 21 |
| Carrots | 10 |
| Celery | 10 |
| Cucumbers | 10 |
| Clover | 19 |
| Corn Salad | 11 |
| Cress | 11 |
| Crimson Clover | 19 |
| Cow Peas | 21 |
| Collection of Vegetable and Flower Seeds | 33 |
| Drills | 35–36 |
| Egg Plant | 11 |
| Endive | 11 |
| Fertilizer | 32 |
| Field Corn | 20 |
| Flower Seed—Sowing and Cultivation | 23 |
| Flowers | 24–30 |
| Fruit Boxes and Baskets | 33 |
| Force Pumps | 34 |
| Grass Seed | 18 |
| Grass Mixture | 19 |
| Hungarian | 19 |
| Herbs | 17 |
| Hog and Poultry Itemedy | 33 |
| Hotbed Covers | 34 |
| Insects | 3 |
| Insecticides | 3–32 |
| Implements—Garden | 35–36 |
| Jadoo—Fibre | 33 |
| Kale, or Borecole | 11 |
| Kohlrabi | 11 |
| Kafir Corn | 19 |
| Kerosene Emulsion | 3 |
| Lawn—Formation of a | 22 |
| Lawn Grass | 22 |
| Lawn Fertilizer | 32 |
| Lawn Mowers | 36 |
| Leek | 11 |
| Lettuce | 12 |
| Mustard | 11 |
| Mangel-Wurzel | 8 |
| Melons—Musk | 13 |
| Melons—Water | 12 |
| Millet | 19 |
| Mole Traps | 34 |
| Miscellaneous Seeds | 17 |
| Novelties, Specialties | 45 |
| Onions | 14 |
| Okra, or Gumbo | 13 |
| Orchard Grass Seed | 18 |
| Oyster Shells | 33 |
| Parsnips | 13 |
| Parsley | 13 |
| Peas | 7 |
| Peppers | 13 |
| Potato | 15 |
| Potato Scab | 15 |
| Pumpkin | 15 |
| Plants | 33 |
| Poultry Food | 33 |
| Radish | 16 |
| Rape—Dwarf Essex | 21 |
| Reference Table. 3d p. cover | 33 |
| Roots | 33 |
| Rhubarb | 16 |
| Salsify, or Vegetable | 16 |
| Oyster | 16 |
| Soaking Seed | 2 |
| Seed—How to sow | 2 |
| Seed Sowers | 34 |
| Sweet Corn | 7 |
| Sweet Potato | 15 |
| Sorghum | 19 |
| Soja Beans | 21 |
| Spinach | 16 |
| Squash | 16 |
| Sweet Peas | 29 |
| Sugar Beet | 8 |
| Sunflower | 21 |
| Timothy | 18 |
| Thinning Out | 2 |
| Tomato | 17 |
| Transplanting | 3 |
| Turnips | 17 |
| Velvet Beans | 21 |
| Vetches—Sand | 21 |
| Weeder | 34 |
| Wild Rice | 21 |
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