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MIDDLE WEST SEEDS

ROSS BROTHERS SEED CO.
WICHITA, KANSAS

MID-WEST SEED

for Mid-West Farmers

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THERE is always a demand for the necessities of life. People must live, and to live they must eat, and what they eat must be grown. The demand for food stuffs the world over will be greater in 1920 than it has ever been before. There can be no over production. Therefore, with your market assured, this is no year for hesitation or doubtful experiments. Every farmer, whether his farm is a ten foot plot or a thousand acre ranch must make every inch of ground produce to the limit of its ability. The cereals of the Middle West must feed the world, and the products of the gardens of the Middle West must feed its own people.

Ross Brothers realize that their responsibility is great, for they supply the seed for a million acres. It is their aim to supply acclimated seeds for these acres, seeds that were produced from the best of successful crops, seeds that have proven their ability in the Middle West. There can be no question of success with seeds of this kind.

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JAN 30 1920

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JAN 30 1920

Ross Brothers

Complete Gardens

COLLECTIONS

The only way to save is to spend less than you make. Every year sees the cost of living going higher. The immediate future promises nothing but higher prices. Due to the labor shortage, strikes, and all of the other items that enter into production costs, this year has seen an enormous advance in the price of canned goods, and in this matter the City Farmer or any Farmer with a plot of ground of only a few square feet can reduce the cost of living materially by growing his own vegetables. The collections we have worked out below will furnish the average American home with enough vegetables during the season to

supply the family table and enough surplus, if canned, to carry them through the winter.

Ross Brothers service includes directions and advice concerning the planting and care of the garden and complete information regarding the canning of any vegetable mentioned below. Any one of the three garden selections below will save many dollars in actual cash, besides giving the home fresh vegetables from your own garden, and you may be sure that they are served on your table within a few hours after they are pulled from the ground.

Complete Garden No. 1, 5 ft. by 10 ft. 25c Postpaid

This Garden is intended for the city dweller with a very limited space. It requires but very little time to attend to, and will produce a surprising amount of Vegetables and there is no one who cannot find both the time and room for this profitable little garden.

- 1 pkt. Beets, Detroit Dark Red.
- 1 pkt. Corn, Golden Bantam.
- 1 pkt. Chard, Giant Lucullus.
- 1 pkt. Tomato, Chalk's Early Jewel.
- 1 pkt. Lettuce, Early Curled Simpson.
- 1 carefully drawn plan showing the best arrangement for each vegetable.

Complete Garden No. 2, 10 ft. by 20 ft. 50c Postpaid

This Garden will fit the requirements of many people living in the edge of town with a good sized backyard but not enough space or possibly not enough time to attend to a full size garden.

- 1 pkt. Beets, Detroit Dark Red.
- 1 pkt. Corn, Golden Bantam.
- 1 pkt. Beans, Burpee's Stringless Green Pod.
- 1 pkt. Chard, Giant Lucullus.
- 1 pkt. Lettuce, Early Curled Simpson.
- 1 pkt. Radish, Scarlet Button.
- 1 pkt. Tomato, Chalk's Early Jewel.
- 1 pkt. Cabbage, Selected Early Jersey Wakefield.
- 1 pkt. Turnips, Early White Flat Dutch.
- 1 pkt. Onions, Prizetaker.
- 1 carefully drawn plan for the whole garden.

Complete Garden No. 3, 20 ft. by 30 ft. \$1.00

This is the most complete small garden ever designed. We have worked it out very carefully and are including only the varieties that have proved their worth through the whole of the middle West. This garden will supply the average family with an abundance of fresh vegetables throughout the entire summer and will provide a large surplus for the canning and storage for the winter. Purchased separately these vegetables would cost \$2.50.

- 1 pkt. Beans, Henderson's Bush Lima.
- 1 pkt. Beans, Burpee's Stringless Green Pod.
- 1 pkt. Beans, Improved Rust Proof Golden Wax.
- 1 pkt. Beets, Detroit Dark Red.
- 1 pkt. Cabbage, Early Jersey Wakefield.
- 1 pkt. Carrots, Oxheart.
- 1 pkt. Chard, Giant Lucullus.
- 1 pkt. Corn, Stowell's Evergreen.
- 1 pkt. Corn, Golden Bantam.
- 1 pkt. Lettuce, Early Curled Simpson.
- 1 pkt. Muskmelon, Delano Pink Meat.
- 1 pkt. Peas, Ross Brothers Extra Early.
- 1 pkt. Pe Tsai, or Chinese Cabbage.
- 1 pkt. Onion, Prizetaker.
- 1 pkt. Radish, Scarlet Button.
- 1 pkt. Radish Icicle.
- 1 pkt. Salsify, Sandwich Island.
- 1 pkt. Squash, Giant Summer Crook Neck.
- 1 pkt. Tomato, Chalk's Early Jewel.
- 1 pkt. Turnips, Early White Flat Dutch.
- 1 careful plan for the garden.
- 1 Ross Brothers Planting Guide, a complete book on the care of the garden for the whole year.

Middle West Flower Seed Collection 35c Postpaid

These are the varieties that we have found best suited to the hot dry seasons of the middle west. We have selected only those sorts that are of easy culture and can be raised by any gardener whether in the city or in the country. They come into bloom a few weeks after sowing and continue blooming until killed by a heavy frost, with a few other exceptions they are the only ones that will give the middle West gardeners a profusion of bloom during the mid summer.

- 1 pkt. Alyssum, Little Gem.
- 1 pkt. Calliopsis, Mixed.
- 1 pkt. Bachelor's Button, Corn Flower.
- 1 pkt. Cosmos, Early Flowering Mixed.
- 1 pkt. Marigold, African Mixed.
- 1 pkt. Zinnia, Giant Mixed.
- 1 pkt. Ornamental Castor Bean.
- 1 pkt. Phlox, Drummondii, Mixed.
- 1 pkt. Calendula, Mixed.
- 1 pkt. Petunia, Mixed.

Your Vegetable Garden

Many volumes have been written on the care and management of the Vegetable Garden and it is difficult for us to give many points of value in these few short paragraphs.

This page then can but serve as a reminder and if further and a more detailed information is desired we shall always be glad to supply it.

Planning

Do not plant a larger garden than you can take care of. It is better to work a small spot intensively than to fail with a big one. Draw a plan for the garden and decide what is to go in it and exactly where it is to go. Get your seeds, tools, and fertilizers on hand before the spring opens up.

Soil

The garden is always intensive farming consequently the soil must be rich. A good application of stable or barn yard manure is of excellent value, in lieu of this a good high grade commercial fertilizer, (such as Helmet Brand 282) should be applied.

Plow or spade the ground in the fall or early spring. Harrow or rake it until the earth is fine and all the clods are removed.

Watering

During dry weather it is essential that the plants have an abundant supply of water. Great care must be taken, however, that when water is applied it must be watered so that the ground

is thoroughly soaked. A light watering tends to bring the roots to the surface and is worse than none. The hose should be allowed to play with a fine spray on every part of the garden for at least one hour in each place.

Succession Planting

Do not think that one crop a year is all that the garden will yield. With a proper planning two or three crops can be raised from most of the gardens.

Ross Brothers Services Are at Your Disposal

This means that if you find a new "bug" on the Cabbage, an unknown pest on the Potato, or if you have doubts how to can Tomatoes, let us help you. We are more than glad to do all that we can to make your garden a success. We want to make every garden planted with "Acorn Brand" Seeds a bright spot in its locality. We will supply Seeds that will do it and are ready to help you all that we can in the subsequent, necessary care of the garden.

We wish you all possible success.

The Ross Brothers Seed Co.

JANUARY 1, 1920

WICHITA, KANSAS

ASPARAGUS

(*Esparrago*, Sp.)

THE idea that Asparagus should be grown only by the large market gardener is rapidly disappearing. If there is a space ten feet by twenty-five to spare it should be filled with this delicious early spring vegetable. It is not correct to suppose that it takes an expert to grow good asparagus. A little patience, coupled with the ordinary care that every successful gardener uses, will bring the desired results.

CULTURE. As this is a perennial plant more care should be exercised in the selection of the location than with the annual plants. The most desirable place is a well drained sunny slope, but nearly any spot in the garden will do that is not damp and sour.

Soak the seeds in warm water for twenty-four hours before sowing, to insure rapid germination. Sow in the open ground in the early spring in drills two to three feet apart, scattering about one inch apart in the drills. Cover with one inch of soil; cultivate freely. The following spring set out the roots to a permanent bed in rows two to five feet apart, 13 inches apart in the rows. Cover with two inches of soil. After the plants are well up, give frequent and thorough cultivation. The next year the bed should be given a thorough dressing of manure, and the year following the plants will be ready for light cutting. Heavy cutting should not be permitted

till the year after that, however. Every fall when the tops are ripe and yellow they should all be cut and burned.

1. Barr's Mammoth—The large green stalks of this variety are tender and delicious, and are ready considerably before the common sorts. The delicacy of its color distinguishes it from the other green varieties. We strongly recommend this middle west asparagus for home gardens. Pkt. 5c; oz. 10c; ¼ lb. 25c.

OTHER GOOD VARIETIES

2. Columbian Mammoth White. The best white sort.

4. Palmetto. An early green type.

Price of either of the above, Pkt. 5c; oz. 10c; ¼ lb. 20c.

ASPARAGUS ROOTS

For the City Farmer, who desires to raise asparagus, one of the earliest of the spring vegetables, we suggest the purchase of asparagus roots. These are ready during March, but to be sure of getting them you should reserve your stock now by sending us your order. The City Farmer naturally does not wish to wait three or four years for the development of asparagus seed and for his benefit we are offering selected two-year roots, which can be grown with very little trouble. See page 53.

Barr's Mammoth Asparagus

BEANS

(*Habichuela*, Sp.)

EVERYBODY eats beans and yet few realize how easy they are to raise. Bush or pole, snap or Lima, they are all good in almost any stage of growth, and during their season they are found on the tables of practically every home several times each week. We will be glad to assist anyone both in the planting of his garden, and in the canning of the abundant supply which he will raise. These plants furnish a continuous supply, fresh, from early June until frost, and dried throughout the winter.

CULTURE. Sow when the apple is in bloom and the ground has become dry and warm, and repeat every two weeks until within fifty days of frost. In field culture sow in drills 3 feet apart. For garden use, where the cultivation is to be done by hand, the rows may be only 2 feet apart. Plant 2 inches deep and thin out to 6 inches apart. One pound will plant 100 feet of drill.

9. Burpee's Stringless Green Pod—The first on the market and the best. The sturdy erect bushes bear heavily from early June until late, when other less hardy sorts barely survive. The large, light green pods are absolutely stringless, attractive in appearance for canning and of delicious taste. This variety was introduced twenty-seven years ago and is still the leading green bean the country over. Pkt. 10c; lb. 30c; 17 lbs. \$2.50.

22. Improved Rust Proof Golden Wax—The flavor of the wax, or butter bean is quite distinct from that of the green sorts. It is a splendid idea to alternate the plantings to give variety to the table. The Improved Rust Proof Golden Wax is the sort most in demand of this type as the flavor is unexcelled, the productivity high, and the plant is resistant to rust to a remarkable degree. The flat yellow pods contain an attractive white seed, marked with brown or black. Pkt. 10c; lb. 35c; 10 lbs. \$2.50.

20. Black Wax Improved Prolific—This is exceptionally productive, hardy and of the best quality. It is extensively used as snaps in the home garden. The vigorous plants bear the medium sized pods well up. The seeds are small and black, the round pods yellow and fleshy. Pkt. 10c; lb. 35c; 10 lbs. \$2.50.

Beans are priced f. o. b. Wichita in quantities larger than packets. See Page 63 for shipping instructions.

Stringless Green Pod Beans

BEANS—Continued

23. Wardwell's Kidney Wax

The strong vines yield straight, broad, creamy-white pods. They are of fine flavor and a fine variety for the market gardener. Matures a little later than the Golden Wax. Seed large, kidney shaped, white with dark markings about the eye. Pkt. 10c; lb. 40c; 10 lbs. \$3.00.

OTHER GOOD VARIETIES

- 8. **Giant Stringless Green Pod.** A very good stringless.
- 6. **Bountiful.** Withstands wet weather well.
- 10. **Hopkin's Valentine.** The leading red bean, extremely early.
- 13. **White Seeded Stringless.** Good either green or dried for winter use.
- 16. **Round six Weeks.** Plants are stocky and pods fleshy.
- 25. **Round Pod Kidney Wax.** One of the best round pods.

Prices of any of the above: Pkt. 10c; lb. 30c; 10 lbs. \$2.25.

POLE OR RUNNING BEANS

30. Kentucky Wonder Wax—

Eight or nine inches is an average length for this bean. The long pods are broad, very fleshy, and as stringless as Snap beans. Its earliness and hardness commend it as a Pole Bean, well adapted to the middle west and southern latitude. Its golden yellow pods are very large, delicious for eating and of beautiful appearance when canned. In quality they are not excelled by any wax podded bean of its class. Pkt. 10c; lb. 40c; 10 lbs. \$3.50.

31. Kentucky Wonder or Old Homestead —

This is the best of the green podded pole beans for snaps. The vigorous vines are good rapid climbers and bear the showy pods in large numbers. These are ten inches in length, crisp when young though they become quite tough if allowed to remain on the vines too long. We are glad to be able to offer our carefully selected stock of this variety. Pkt. 10c; lb. 35c; 10 lbs. \$2.50.

Henderson's Bush Lima Bean

Beans are priced f. o. b. Wichita in quantities larger than packets. See Page 63 for shipping instructions.

OTHER GOOD POLE BEANS

- 29. **Burger's Stringless Green Pod.** Stringless, tender and mild in flavor. Pkt. 10c; lb. 35c; 10 lbs. \$3.00.
- 33. **Scarlet Runner.** Beautiful scarlet flowers; beans of a fine quality. Pkt. 10c; lb. 50c.
- 37. **Yard Long.** A curiosity, and a fair table bean. Pkt. 10c; lb. 60c.
- 41. **Lazy Wife.** One of the best of the late sorts. Pkt. 10c; lb. 42c.

FIELD BEANS

The farmers of today are realizing the value of a few rows of Field Beans. There is no vegetable that is used more often in a home than the Field Bean. The care of these is the same as for green beans, except that the pods are allowed to mature on the vines, but are picked before a damaging frost can hurt them and stored in a dry place away from mice.

45. **Navy or Pea Bean**—This is the bean that made Boston famous. It is a sure cropper and best for family use. The plants are large and spreading and mature their small, well filled pods quite early. Baked, they make one of the most wholesome and delicious dishes on the tables of the country today. Pkt. 10c; lb. 25c; 10 lbs. \$1.50.

44. **Tepary**—The dry weather bean, more prolific than the Navy and matures quicker. Sixty-five days, from seeding to harvest. This variety is of superior flavor and great productiveness. It is not subject to the common diseases of beans and can be used when other sorts fail. Pkt. 10c; lb. 25c; 10 lbs. \$1.50.

46. **Pinto**—From Santa Fe, New Mexico, to Brownsville, Texas, this variety is unexcelled. In the higher altitudes, or lower places, where it is too dry for ordinary beans, this variety is a sure yielder. Its average yield runs from eight hundred to one thousand pounds to the acre and we have seen yields of nineteen hundred pounds to the acre. Pkt. 10c; lb. 20c; 10 lbs. \$1.25.

LIMA BEANS

(Frijole Vestago, Sp.)

The home of the Lima is in the tropics and consequently it must not be sown until after the ground is thoroughly warm in the Spring and there is no danger of additional cold weather. Lima Beans should always be sown eye down. Lima Beans are even richer in food value than Green Beans and are entirely too delicious and easily grown to be left out of either city or country gardens. Separate sorts are not needed for winter use. Just ripen and dry the surplus on the vine and store in a dry place until wanted in the winter.

36. Henderson's Bush Lima

Always early on the market and therefore, sure of a good price. This is the earliest variety, being fully two weeks ahead of any other sort in maturing. The City Farmer, anxious for an early taste of fresh butter beans on his table, and the Country Farmer keenly alive to the high prices paid for early vegetables, will both appreciate this bean. This is one of the few varieties that acclimates itself to both north and south. The beans are small and very fine for canning. Pkt. 10c; lb. 35c; 10 lbs. \$2.50.

OTHER GOOD BUSH LIMAS

- 27. **Burpee's Bush Lima.** Beans large and early.
- 28. **Fordhook Bush Lima.** One of the most popular. Pkt. 10c; lb. 40c; 10 lbs. \$3.50.

Improved Rust Proof Golden Wax Bean

POLE LIMAS

43. King of the Garden Lima

A vigorous grower and very prolific. Pods are from 5 to 8 inches long. On account of its immense pods it is a favorite with market gardeners. Pkt. 10c; lb. 40c; 10 lbs. \$3.00.

Kentucky Wonder Bean

Crosby's Egyptian Beet

47. Crosby's Egyptian—This is the earliest of the large turnip shaped beets, being only a few days later than the small extra early varieties. This is the best bet for the city garden and the best beet for the home table. It is attractive, vermillion in color, delicate in flavor and of particular interest to the country farmer and one of the surest sellers on the market. Pkt. 5c; oz. 10c; ¼ lb. 35c; lb. \$1.00.

SUGAR BEETS

THE Department of Agriculture and sugar dealers are saying today that sugar will be scarce all through the coming year. Many will want to supplement their sugar allowance with some syrup that is home made. If you are not familiar with the extraction of syrup from sugar beets, write to Washington for their pamphlet on the subject. We shall always be glad to help you if you have any trouble.

CULTURE. For the home garden follow the same methods as for garden beets, except that they should be thinned to six or eight inches in the row. For field culture, grow the same as Mangels.

62. Klein Wanzleben—This is the variety so extensively planted for Sugar factories. The roots are a little larger than most varieties, as well as hardier and more easily grown. Yields from twelve to eighteen tons per acre. Pkt. 5c; oz. 10c; ¼ lb. 35c; lb. 90c; 5 lbs. \$4.00.

A Simple Practical Recipe Swiss Chard Loaf

This is a particularly dainty dish, and yet it is very easily prepared. The rule, as given, is sufficient to serve six or seven people.

Wash thoroughly 4 pounds of Chard, using the entire leaf, boil for twenty minutes and chop fine. Prepare a thick white sauce by melting four tablespoons of oleomargarine or butter, and mix with four tablespoons of flour, add this to one cup of skimmed milk and stir over a fire till it thickens; add one teaspoon of salt. This sauce should then be mixed with four cups of boiled rice, one chopped sweet pepper, and the Chard.

Form the whole into a loaf and bake twenty or thirty minutes.

BEETS

(*Remolacha, Sp.*)

EVERY country and city housewife appreciates the value of beets. No boiled dinner is complete without beets. Many salads and dressings are made from them. Canned or pickled beets furnish a delicate dish all through the winter and early spring, and in addition to this there is no vegetable more easily raised. The beet grows in hot dry weather or in cold wet weather, or in weather in between. If you use Acorn Brand middle west seed there is no excuse for not raising a good crop.

CULTURE. Sow as early in the spring as the ground can be worked, and every two weeks after for a succession, up to the first week in August. The soil should be light, sandy loam, well enriched with stable manure, and plowed and harrowed until very fine. Sow in drills 1 foot to 18 inches apart for garden culture, and when well up thin out plants to 3 or 4 inches apart. The young beets pulled out of the rows are excellent when served as Spinach.

48. Detroit Dark Red—For canning, the attractive color and tenderness makes this a most desirable variety. The smooth medium sized roots are a dark blood color, firm fleshed with lighter shaded zones. The tops grow straight up allowing for close rows which is a big advantage in small gardens. Pkt. 5c; oz. 10c; ¼ lb. 35c; lb. \$1.00.

OTHER GOOD BEETS

50. Edmond's Improved Blood Turnip. The best sort for winter use.

51. Eclipse. A small extra early beet.

52. Extra Early Egyptian. A dark red, very early sort.

Price of either of the above: Pkt. 5c; oz. 10c; ¼ lb. 30c; 1 lb. 85c.

MANGEL WURZELS

STOCKMEN will find this variety very rich in Carbo-hydrates for feeding to stock. These yield from 20 to 30 tons to the acre and in many cases far greater yields than this have been grown under favorable conditions. Mangel Wurzel not only serve as a nutriment but make a succulent roughage to supplement the heavier dry rations. It is of especial value to milch cows and increases the supply of milk from 10 to 25 per cent.

CULTURE. Mangels require a deep soil to grow well; plow and subsoil at least 16 to 18 inches and apply stable manure, or complete fertilizer. Sow in May or June (5 to 6 pounds to the acre), in rows two feet apart and thin out the plants 9 or 10 inches apart in the row. Young plants may be transplanted to fill up vacancies. The use of complete fertilizers will prove of great benefit to the crop, if applied when the plants are 3 to 5 inches in height. The quantity per acre should be determined by the character and condition of the soil. Dig the crop after the first heavy frost. Store in a well ventilated root cellar.

64. Mammoth Long Red—

A truly mammoth variety for stockfeeding purposes. A single root often weighs 30 or 40

pounds, and occasionally more. In yield it is enormously productive, 30 tons per acre being nothing uncommon. It grows well above the ground and on account of its shape is easily pulled up. Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. 85c; 5 lbs. \$3.75.

OTHER GOOD MANGELS

60. Giant Sludstrup. Roots are reddish yellow. A heavy yielder.

61. Golden Tankard. The most nutritious variety.

Prices of either of the above: Pkt. 5c; oz. 10c; ¼ lb. 30c; 1 lb. 75c; 5 lbs. \$3.25.

SWISS CHARD

(*Blada, Sp.*)

A SUMMER, winter green. Both city and country farmers should plant at least one row of this dandy green. It takes only a short time from the planting until the white ribbed leaves are ready for a mess of greens and you can pick, pick all summer. Swiss Chard will furnish greens for you from early spring until late frost from the same plants. A hard frost in the fall will probably crumple up outer leaves but if warm weather should follow, inner shoots will come out and give you greens until real winter sets in. The leaves are used as boiling greens and are superior to the best of Spinach for this. The large white stalks may be served like Asparagus and are fully as tender and tasty. We have a number of splendid recipes which we will be glad to furnish upon request.

Giant Lucullus Swiss Chard

58. Giant Lucullus—The stalks of this are as thick as those of Rhubarb, being one and one-half inches broad and about 10 to 12 inches long below the leaf. The large heavy leaves are of fine flavor. A distinct advantage of this sort is the rapidity with which it sends out new leaves after a heavy picking. Pkt. 10c; oz. 20c; ¼ lb. 60c; lb. \$1.75.

59. Large Ribbed White—

The leaves are not so large as those of Lucullus, but the ribs are large and white and make an excellent dish. Pkt. 5c; oz. 15c; ¼ lb. 45c; lb. \$1.50.

BROCCOLI

(Brocoli, Sp.)

CLOSELY resembles the Cauliflower, but is harder. Like cabbage and cauliflower, it succeeds best in deep, rich, moist soil and in cool weather. Seed should be sown at the same time and plants receive the same general culture as cabbage. Completes its growth from seed in from 120 to 140 days. Five to ten degrees of frost will not injure the plants when they are approaching maturity. One ounce of seed will produce about 1500 plants.

66. White Cape—The leading sort for the home and market garden. The large creamy white heads are easily grown and are always liked. Pkt. 10c; oz. 50c; ¼ lb. \$1.50.

BRUSSELS SPROUTS

(Berza de Bruselas, Sp.)

A delicious vegetable that is becoming very popular in all large markets. It should be more largely grown in private gardens, as it affords fresh green sprouts in the late fall and winter when other vegetables are gone. It is cultivated like cabbage. Sow the seed in the open ground in May and set out the plants the middle of June 2½ feet apart. The sprouts that grow along the stem are picked off and cooked like cabbage or cauliflower and are very delicate and fine flavored. One ounce of seed will produce 2,000 plants.

67. Dwarf French—This low growing sort is the Paris favorite, as well as the most popular in this country. The plants are from 18 to 24 inches tall and produce compact, rounded, grayish green sprouts of good size and fine quality. Pkt. 10c; oz. 25c; ¼ lb. 75c.

CHICORY

(Achicoria, Sp.)

CULTURE. Sow seed in early spring just as for carrots, in rows 12 to 16 inches apart, and thin the plants to 2 or 3 inches. To blanch the leaves for salad in winter, dig the roots in the fall, cut the leaves off a little above the root crown and place them horizontally in layers, alternating with layers of sand or loam in a dark cellar, the tops all pointing outwards from the sloping heap. One ounce will plant about one hundred feet of drill.

95. Large Rooted—The dried roots are roasted and mixed with coffee, or used as a substitute. Pkt. 10c; oz. 50c; ¼ lb. \$1.50.

COLLARDS

(Cabu, Sp.)

This is a type of cabbage grown for winter use in the Southern States, both to furnish a large amount of green forage for stock and also fine boiling "greens" for table use. The young leaves at the top of the stalk form a loose head and furnish the portion for table use, being very tender and delicate in flavor when boiled. For garden culture seed may be started in a regular seed box or hotbed during March or April and transplanted to the garden like cabbage. For field culture the seed is sown thinly in drills 3 feet apart, requiring 2 to 3 pounds per acre. When well started, the plants should be thinned out to stand 5 or 6 inches apart in the row.

106. Southern or Georgia—This variety is the old-time favorite. Very hardy, standing winters as far north as Tennessee. In many places where the soil is too poor to grow cabbage, Collards grow easily and make a good substitute for Cabbage. Pkt. 5c; oz. 15c; ¼ lb. 40c; lb. \$1.00.

CORN SALAD

(Canonigos, Sp.)

Used for "greens" like Spinach or as a salad. Can be sown in the spring and fall. Succeeds best when sown in the early spring and in August. Can be sown in September and wintered like spinach if given a little protection.

107. Large Round-Leaved—The best variety. Matures in four or five weeks. Pkt. 5c; oz. 10c; ¼ lb. 35c; lb. \$1.25.

CRESS

(Mastuerzo, Sp.)

108. Extra Fine Curled—(Also called "Peppergrass") Leaves finely cut and curled. very handsome and of a pleasant pungent flavor. Used largely in salads, Pkt. 5c; oz. 15c; ¼ lb. 40c.

CELERY

(Apio, Sp.)

CELERY can be grown by the City Farmer from plants without very much difficulty. It is generally believed that celery is a very difficult vegetable to raise, but from actual experience, we can say that Ross Brothers celery plants have proved very successful in many city back yards.

The conditions necessary for successful Celery cultivation are good seed, plenty of manure or complete fertilizers, moisture and cultivation. The most suitable soil is rich loam finely pulverized and highly enriched with 30 to 40 loads to the acre of good stable manure. Sow seed in boxes for early planting; later plants may be produced from seeds sown in frames or open ground. Transplant 4 inches apart, when three inches high; water and protect until well rooted, then transplant into rows for garden culture 18 inches to 2 feet apart; for field culture, in rows 4 to 6 feet apart; set the plants from 8 to 12 inches apart; supply plenty of moisture and see that plants receive thorough cultivation. They may be set either on the surface or in well manured trenches 1 foot in depth. To blanch, draw earth around the plants, being careful not to cover the tops of the center shoots. It cannot be emphasized too strongly that celery, in the dry sections of the middle west must not be set out till late in the summer. In this vicinity that means between July 25 and August 5.

102. Giant Pascal—One of the best varieties for fall or winter use. The stalks grow about sixteen inches high, thick, solid and stringless, and almost as brittle as glass. It is surely a vigorous grower and of most excellent quality. A good market sort. Pkt. 5c; oz. 15c; ¼ lb. 50c.

103. Golden Self-Blanching—The choicest sort of delicious celery; it excels all other yellow varieties. More dwarfed, larger bunches with broad, heavy stalks, which blanch into a rich appetizing, golden yellow, make this the most popular golden celery on the market. Though the stalks are broader and heavier than the white varieties, the quality in sweetness, tender crispness, delicious flavor and absence of strings, make it a most delightful table necessity. Pkt. 10c; oz. 50c; ¼ lb. \$1.75.

104. White Plume—A mighty fine variety. No other celery naturally turns white upon reaching maturity. All others require blanching with boards or with earth. The Golden Self-Blanching turns yellow, but this one turns white. Not only does the stem whiten, but the leaf itself, especially every inner leaf, assumes the attractive white color. Pkt. 5c; oz. 35c; ¼ lb. \$1.00.

CELERIAC

(Apio-Nabo, Sp.)

Turnip Rooted Celery

This vegetable deserves much wider cultivation, it has real merit; cooked and prepared as a salad it is very desirable; it has a rich, meaty, distinct celery flavor. It may also be cooked as are turnips and parsnips. People who like celery flavor will approve Celeriac.

105. Giant Prague—Excels in quality, size and appearance; not like common sorts, which are often crooked and have a lot of useless roots. Giant Prague Celeriac is the main crop variety, nearly globe shape and only a few rootlets at bottom. Pkt. 10c; oz. 35c; ¼ lb. \$1.00.

EGG PLANT

(Berengena, Sp.)

Owing to their extreme tenderness, egg plants should not be set out in the garden much before the middle of June. This vegetable may well be planted in soil heavily manured for some earlier crop such as radishes. Sow in a hotbed about April first. transplant into another bed, and later shift into 4 or 5 inch pots. In warm, settled weather transfer to the garden, setting the plants 2 by 3 or 3 by 3 feet. Conservation of moisture is important. One ounce of seed will produce about 1,000 plants. We are glad to supply well grown plants during May and June. See page 53.

151. Black Beauty—The best of all. Fruits large, handsome shape and of a rich glossy black. It is as early as any, very productive and thornless. Pkt. 10c; oz. 35c; ¼ lb. 60c; lb. \$2.00.

152. Improved New York Spineless—Plants stocky and low branching, stalks entirely free from spines, and produce continually handsome, deep purple fruits of largest size and most perfect symmetry. The plants usually bear eight to ten immense fruits of the finest quality before being killed by frosts. Pkt. 10c; oz. 35c; ¼ lb. 60c; lb. \$2.00.

CABBAGE

(*Col repello, Sp.*)

WE have been handling Cabbage Seed for thirty-six years and feel safe in saying that the thousands of satisfied customers of this seed constitute a good assurance that we are able and do handle only the best seeds that can be produced. We wish to remind our friends that with no other crop is the quality of the seed shown as much as with cabbage. The best expert in the world cannot tell from an examination whether a sample of cabbage seed is worthless or is the best that grows. Buyers must rely entirely on the reputation of the seller. Ask anyone who has grown Ross Brothers Cabbage Seed, there are several in your locality, about the quality of Acorn Brand Cabbage Seed.

CULTURE. Soil for cabbage should be a rich heavy loam, with good drainage. Such a soil when supplied with a liberal quantity of stable manure and complete fertilizers will produce excellent crops. For early spring transplanting, seed should be sown in boxes in the house between December 25th and January 25th, and should be transplanted into other boxes as soon as the plants are 2 inches tall. They should again be transplanted into cold frame and then set in open ground about March 10th to 20th. The two transplantings are necessary to produce strong plants that will grow vigorously after set in the open ground. Second

early varieties of cabbage should be started in boxes about February 1st, and transplanted twice and set out in open ground during first half of April. If late varieties are planted they should be ready to set out in open ground during the month of May. The plants of early varieties should be set in rows 2 feet apart and 18 inches apart in the row; medium and late varieties in rows 3 feet apart, and from 18 to 24 inches apart in the row, depending upon growth of the variety. Sow one ounce for 2,000 to 3,000 plants, 4 ounces to an acre.

69. All Head Early—A reliable early header with a deep flat head, solid and uniform in color, shape and size. In tenderness it is unsurpassed. Pkt. 10c; oz. 40c; ¼ lb. \$1.25.

80. Selected Early Jersey Wakefield—The first early cabbage for home and garden. It is the surest heading of the early cabbages and for this reason brings a good price on the market. The plants are very hardy and will resist cold weather and other unfavorable conditions. The heads are of medium size, solid, uniformly pointed and of good quality. Pkt. 10c; oz. 40c; ¼ lb. \$1.25.

78. Premium Late Flat Dutch—As a variety for winter market this cabbage has no superior. The heads are large, round, solid, broad and flat on top, often tinted with reddish brown after being touched by frost. They open white and crisp, are tender and well flavored. It is a fall and winter variety and one of the best keepers. With good cultivation on moist rich ground, 95 per cent of them will head up. Decidedly one of the best varieties for late cultivation. Pkt. 10c; oz. 35c; ¼ lb. \$1.00.

OTHER GOOD VARIETIES

72. Danish Ballhead. A splendid early sort. Pkt. 10c; oz. 65c; ¼ lb. \$2.00.

74. Early Dwarf Flat Dutch. The most reliable for early planting.

75. Enkhuizen Glory. The largest of the early sorts.

76. Large Late Drumhead. The plants upright and compact. Heads are large.

77. Mammoth Red Rock. The best and largest red cabbage. Used for pickling.

86. Charleston or Large Wakefield. Popular with market gardeners.

90. Surehead. Dependable in the worst of seasons.

Price of any of the above, unless otherwise noted:

Pkt. 10c; oz. 40c; ¼ lb. \$1.25.

Early Jersey Wakefield Cabbage

Copenhagen Market Cabbage

71. Copenhagen Market—The heads are nearly round or slightly flattened, very hard and heavy. The growth is compact, there being few outside leaves, so the plants may be set close together. Copenhagen Market heads as soon as Jersey Wakefield cabbage. The most remarkable point about this cabbage is its uniformity—every plant under normal conditions will produce a good, solid head, and every head is as like another as two peas in a pod. The heads mature all at the same time so the crop can be cleaned up within a short time after the first heads mature. This is a very profitable cabbage to grow for market and an excellent early variety for the home garden. Pkt. 10c; oz. 75c; ¼ lb. \$2.50.

CELERY CABBAGE

(Pe-Tsai) Or Chinese Cabbage

FOR both the city and the country farmer this variety is especially appealing, because the heads grow close together and therefore take up the smallest possible space. The tender well blanching leaves are more delicious and allow for a greater variety of serving than any other kind. For salads this variety is unexcelled. It is also delicious when served creamed or boiled like cabbage. Ross Brothers' service includes many recipes for excellent dishes which are yours for the asking. Pe-Tsai will not thrive in hot weather so that planting should not be made until after the first of August. The seed is then sown in frames and transplanted like cabbage, or it may be sown directly where it is to be raised. The heads resemble those of well formed Cos Lettuce. As a rule it is not necessary to tie it up, but this should be governed by the growth of the plant. The inner leaves blanch quite easily. The large mid-ribs are crisp and blanch much like celery. We strongly recommend it to our customers. Pkt. 10c; oz. 35c; ¼ lb. \$1.25.

CAULIFLOWER

(*Coliflor, Sp.*)

For the information of those who desire to raise from the seed, one fourth ounce produces about five hundred plants, two ounces to set out an acre. Heads mature in ninety days from planting. For the City Farmer who desires to raise this vegetable, for table use and for making chow-chow, we wish to advise against any attempt to raise from the seed. For the especial benefit of the City Farmer, and for those in the country as well, we have a supply of healthy, sturdy plants. Growing cauliflower from plants is not a difficult matter. See page 53.

CULTURE. Cauliflower will grow on soils well adapted to cabbage, and the same methods of cultivation will answer, varying with the different climatic conditions. The seeds are sown in boxes or hotbeds. The plants must be put out in the open ground just as early as danger of freezing has passed. Rapid cultivation is necessary to bring the plants to head before hot weather. The heads will be improved if the leaves are tied over them when beginning to form.

93. Early Snowball—There is no finer Cauliflower than our first-class strain of this variety. The heads are large, heavy and close grained, with no leaves growing through them. Pkt. 15c; ¼ oz. \$1.00; oz. \$3.00.

CARROTS

(Zanahoria, Sp.)

CARROTS are said to be a beauty food. We should not like to suggest that you need to grow any for that reason, but we are quite sure that it will be of more service in this way to grow and eat a few carrots than to use a quart or so of beauty tonic.

There is no vegetable more wholesome than the carrot. It is easily grown and easily prepared for the table. The City Farmer will appreciate a row or two of carrots in his garden. The country farmer or the gardener know well the market demands for carrots.

CULTURE. For the best results the soil should be thoroughly worked to a good depth. For early use sow the seed in rows 15 inches apart as early in the spring as the soil can be worked, being careful not to cover the fine seeds too deeply, using 4 pounds to the acre. The seed is a slow germinator and many gardeners like to mark the row with a radish seed here and there. These come up quickly and allow for cultivation long before the carrot seeds are started. The seed should be well firmed in the ground after planting. The small home gardener finds an easy way to do this is to shuffle along the row thus treading on every spot of earth. For the main crop sow about 4 pounds to the acre or one ounce to one hundred feet of drill. Make the rows 2 feet apart to allow for horse cultivation. Keep free from weeds and cultivate frequently until the roots are large enough for table use, and if grown for commercial uses they may be cultivated with profit throughout the season. When the plants are 3 inches high, thin to 2 inches apart in the row.

100. Early Scarlet Horn—This variety is the first crop ready for the table in the home garden. The earliness of it makes it very valuable for growing under glass. The tops are small, dark green. The orange-red roots are short and top-shaped, and when picked while young they are very tender. Pkt. 10c; oz. 20c; ¼ lb. 65c; lb. \$2.00.

OTHER GOOD CARROTS

96. Chantenay. A medium early, larger than Early Scarlet Horn.

99. Improved Long Orange. Long rooted sort for a field crop.

Price of either of the above: Pkt. 5c; oz. 15c; ¼ lb. 40c; lb. \$1.25.

Oxheart Carrots

101. Oxheart or Guerande—The flesh of this variety is bright orange, fine grained and sweet. They are very fine for table use. This fine and popular carrot is intermediate between the oblong varieties and the scarlet horns, but is much thicker than the latter, being 2½ inches in diameter at the top. Another advantage of this variety is the small amount of time and inconvenience required in digging. It is easily pulled, making it particularly desirable for stiff soils. Pkt. 5c; oz. 15c; ¼ lb. 40c; lb. \$1.25.

97. Danvers Half Long—Yields more heavily than any other variety and will grow in all soils. Of good size, stump-rooted and cylindrical shaped. Much more easily harvested than any long rooted variety. The Acorn Brand strain of this valuable vegetable is selected with great care and is sure to give entire satisfaction. Pkt. 5c; oz. 15c; ¼ lb. 40c; lb. \$1.25.

PLANTING TABLE

	Seeds required for 100 feet of row	Distance apart in the row (in inches)	Distance between rows (in feet)	Depth of planting (in inches)	Time of planting for Latitude of Wichita	Days till maturity
Asparagus Seed	1 oz.	4-6	1½-2	1½-2	Spring	3-4 years
Asparagus Roots	60-80 roots	4-6	1½-2	3-5	March-April	1-2 years
Beans, Green	1 lb.	2-4	1-2	1-2	April-August	45-75 days
Beans, Lima	½ lb.	6-8	2-3	2	May-July	70-100 days
Beets	2 oz.	1-2	1-1½	1-2	March-August	60-70 days
Cabbage, early	¼ oz.	12-18	2-2½	½	Jan.-Feb.	90-100 days
Carrots	1 oz.	2-4	1½-2	¼	March-June	60-85 days
Cauliflower	¼ oz.	14-18	2-2½	½	January	100-120 days
Celery	¼ oz.	4-8	1½-3	½	March-April	125-150 days
Chard, Swiss	2 oz.	6-8	1-1½	1-2	March-June	60-80 days
Chinese Cabbage	¼ oz.	12	1½-2	½	March and July	60-90 days
Corn, Sweet	½ lb.	20-36	2½-3	2	April-July 15	60-100 days
Cucumbers	½ oz.	3-5 feet	4-6	1-2	May 15-June 30	60-80 days
Egg-Plant	¼ oz.	18-24	2-2½	½	March	100-140 days
Endive	1 oz.	8-12	1½	½	July-August	75-100 days
Kale	¼ oz.	18-20	1½-2	½	March-April	70-100 days
Kohl-Rabi	¼ oz.	4-8	1½-2	½	March-May	60-80 days
Lettuce	½ oz.	4-8	1-1½	¼	March-September	45-70 days
Melon	½ oz.	6 feet	6-8	1-2	April-May	90-120 days
Watermelon	1 oz.	10 feet	8-12	2	April-May	100-125 days
Onions, Seed	1 oz.	3-4	1-1½	½	March-April	120-160 days
Parsley	¼ oz.	3-6	1-1½	½	March-May	90-120 days
Parsnips	½ oz.	3-4	1½-2	½	March-April	100-150 days
Peas	1 lb.	1-2	2½-3	2-3	March-June	50-80 days
Peppers	½ oz.	15-18	1½-2	½	March	100-140 days
Pumpkins	½ oz.	6-10 feet	8-12	1-2	May 15-July 15	100-130 days
Radish	1 oz.	1-2	1-1½	½	Feb.-Sept.	20-40 days
Salsify	1 oz.	24	1½-2	½	March-May 15	100-150 days
Spinach	1 oz.	1-2	1-1½	1	Spring and Fall	60-80 days
Squash	1-2 oz.	3-6 feet	3-6	1-2	April 15-June 30	50-90 days
Tomato	— oz.	24-36	3-4	½	Feb.-March	100-140 days
Turnip	½ oz.	1-2	1½-2	½	Spring-Fall	60-80 days

SWEET CORN

(Maiz, Sp.)

THERE is probably no vegetable that gives a larger amount of satisfaction than Corn on the Cob. In the Acorn Brand Sweet Corn the city and country farmer will find the most profit and pleasure. Corn, like anything else well worth having, takes a little care to produce. A few rows of corn will supply the average home with plenty of fine roasting ears and enough over for canning and drying to last through the winter. With the price of canned corn advancing, a few rows of Acorn Brand Corn, means a saving of many dollars through the roasting ear season and curing the winter.

CULTURE. Plant upon arrival of settled warm weather in rows three to four feet apart according to variety, placing the seeds 2 inches deep and 8 inches apart in the row, or 6 grains in a hill 3 to 4 feet apart each way. Cultivate and keep free from weeds and when the plants are well established thin to 4 stalks in the hill. Plant early varieties in succession or plant early, medium and late varieties at one time which will continue the season for several weeks. One bushel of seed will plant from 3½ to 5 acres.

109. Extra Early Adams—

A money saver for the table is this early white table corn variety. The stalks of this Acorn Brand Corn are about four feet high with a small tassel and very few leaves. The short ears are nearly as broad as they are long. The kernels are white and smooth. An extremely hardy variety, very much in favor with city farmers, as it can be grown close together and thus conserve space. This sort can be planted as early as the middle of March as a rule, in this latitude. Pkt. 10c; lb. 25c; 10 lbs. \$2.00.

114. Golden Bantam—

The sweetest and hardiest of them all. Ears of this delicious corn are from six to seven inches long, eight-rowed, filled with broad, sweet, golden yellow kernels of a delightful flavor. It may be planted with perfect safety from ten days to two weeks earlier than most other varieties. The dry seed is quite free from rot. Pkt. 10c; lb. 30c; 10 lbs. \$2.50.

110. Bantam Evergreen—A rapid seller on any market because of the size of the ear and its fine quality. This variety is a cross between Golden Bantam and Stowell's Evergreen, and it contains all of the good qualities of both kinds. Of beautiful color, large ears with flat kernels and a flavor that is all its own and found no where else. Our stock of this middle west producer is the finest. Pkt. 10c; lb. 35c; 10 lbs. \$3.00.

122. Stowell's Evergreen—A successful and popular variety with middle west farmers. It is of strong growth, with large well formed ears and one of the best growers to be had. The ears will retain their freshness and be suitable for cooking for a long time. This is an acclimated variety and our seed has been carefully selected from stock that has proven its productiveness and large ears. Pkt. 10c; lb. 30c; 10 lbs. \$2.50.

112. Country Gentleman—This splendid late or main crop variety is the result of a cross of the Ne Plus Ultra with Stowell's Evergreen, producing the large ear of the former, but retaining its productiveness, fine quality, and irregular shoe peg arrangement of the crowded, slender, deep grains. Pkt. 10c; lb. 30c; 10 lbs. \$2.50.

OTHER GOOD VARIETIES

115. Golden Cream. A cross of Golden Bantam and Country Gentleman.

123. White Evergreen. Somewhat earlier than Stowell's.

124. White Mexican. Popular through the South.

125. Early Minnesota. The best second early.

Price of any of the above: Pkt. 10c; lb. 30c; 10 lbs. \$2.50.

Stowell's Evergreen Sweet Corn

POP CORN

132. Queen's Golden—A smooth yellow variety that is very prolific and of excellent quality. Grains pop perfectly white and large. Ears six inches long and well filled. Kernels smooth and of a rich golden color, cob white. Usually bears two ears to a stalk. Lb. 20c; 10 lbs. \$1.40.

OTHER GOOD SORTS

130. White Pearl. Round white kernels.

131. White Rice. Sharp pointed kernels.

Price of either of the above: lb. 20c; 10 lbs. \$1.40.

Golden Bantam Sweet Corn

Corn is priced f. o. b. Wichita in quantities larger than packets. Please see Page 63 for shipping instructions.

CUCUMBERS

(Cohombro, Sp.)

Arlington White Spine Cucumber

ENDIVE

(Endivia, Sp.)

This plant furnishes an attractive and appetizing salad for the fall and winter months, or by repeated sowings a supply may be had nearly all the year around. Useful in flavoring soups, stews, etc. Makes delicious greens if cooked like spinach.

Cultivation same as for lettuce. The blanching of Endive is brought about by drawing the leaves together into a head and tying them and this should be done a month before it is wanted for table use. One ounce of seed required for 100 feet of row.

153. Broad Leaved Batavian Leaves are broad or less twisted and waved with white mid-ribs. It forms large hearts, which, when blanched, form one of the best winter salads. Crisp, tender and fine flavor. Pkt. 5c; oz. 20c; ¼ lb. 65c.

154. Green Curled Leaves finely cut. Pkt. 5c; oz. 20c; ¼ lb. 65c.

155. White Curled Very beautiful. Leaves need no blanching. Pkt. 5c; oz. 20c; ¼ lb. 65c.

KALE OR BORECOLE

(Berza, Sp.)

CULTURE. More hardy than cabbage and makes excellent greens. Improved by a touch of frost. Sow in May and June; cultivate same as cabbage.

156. Dwarf Curled Makes excellent greens for winter and spring use. The leaves are curly, bright green, very tender and delicate in flavor. Sow seeds in May or June, transplant in July and cultivate same as cabbage. For early spring use sow in September; protect over winter with a covering of straw or litter. Pkt. 10c; oz. 25c; ¼ lb. 75c.

157. Tall Green Curled Grows up to 3 feet high, bearing long, light green leaves, finely curled at the edges. Extremely hardy, being improved rather than injured by a moderate heavy frost. Pkt. 10c; oz. 25c; ¼ lb. 75c.

KOHL-RABI

(Ccl rabano, Sp.)

CULTURE. Sow the seed in the spring in drills ¾ of an inch deep and 2 feet apart and when the plants are a few inches high thin to 15 inches. Cultivate same as for beets.

158. Early White Vienna For forcing. Very early small, handsome, white bulb. Pkt. 10c; oz. 35c; ¼ lb. \$1.00.

159. Purple Vienna A little later than the white, color bluish purple. Pkt. 10c; oz. 35c; ¼ lb. \$1.00.

TO obtain the largest yield of cucumbers, the soil should be well enriched with well-rotted manure, but an abundance of good fruit can be raised on any rich garden soil. Plant the seed not over an inch deep in hills 4 to 6 feet apart each way, dropping 15 to 20 seeds in a hill. After the plants begin to crowd and danger from the striped beetle is pretty well over, thin to three plants to the hill. Give frequent but shallow cultivation until the plants make runners so long that this is impracticable. In field culture, plow furrows 4 feet apart and similar ones at right angles to the first. At each intersection drop a shovelful or more of well-rotted manure which should be well mixed with the soil, forming a broad, flat hill 4 to 6 inches above the surface. Many growers omit every fourth row, thus forming plants for the distribution of manure and gathering the fruit. In many sections where earliness is very important, market gardeners start

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

133. Arlington White Spine—Is early, and a heavy yielder; it is a beautifully symmetrical, straight type cucumber, 7 to 10 inches long. Throughout its entire length the skin is an attractive, glossy dark green; the flesh firm but tender, with delicious flavor, these surpassing qualities have made it a great favorite. In the southern country it is universally planted and is the standard for both home and market gardens. For northern markets it may be a trifle small but for the home garden it has no superior and is indeed very popular. Cannot be too strongly commended, because its fine appearance and splendid quality gain popularity everywhere. Pkt. 5c; oz. 20c; ¼ lb. 60c.

137. Early Fortune—The vines make a strong and vigorous growth, producing abundant crops of cucumbers, which are slightly longer than Arlington White Spine, more cylindrical in shape and have a very dark green skin. The flesh is thick, seed cavity relatively small and the quality is excellent, either when sliced for use at the table, or for making pickles. This variety is one of the best introduced in years and will become one of the most largely used. Pkt. 10c; oz. 25c; ¼ lb. 75c.

OTHER GOOD VARIETIES OF CUCUMBERS

136. Davis Perfect. A white spine sort good for forcing.

138. Everbearing. The best sort for pickling.

139. Improved Long Green. Used mostly for slicing.

140. Japanese Climbing. A rapid grower.

145. Early Cluster. Hardy and productive, with short fruits.

134. Chicago Pickling. A popular pickling type.

150. West India Gherkin. Small, spiny fruit, excellent for pickling.

Price of any of the above: Pkt. 5c; oz. 20c; ¼ lb. 60c.

DO YOU KNOW

How to care for your garden in hot, dry weather?

How to tell when cabbage plants are large enough to transplant?

How to store the surplus of the garden so it will keep?

Our Garden Guide answers these questions, and its 336 pages are filled with mighty valuable information for the gardener. It gives well worked out plans for sowing the garden, and carries the reader thru every operation including harvesting and storing the vegetables. The vegetable section is only a part of this book. We are not in the book business, and are not issuing this book for profit, but to give our customers the best thing of its kind that we know of. We offer the Guides at 75c, postpaid.

LETTUCE

(*Lechuga, Sp.*)

WHETHER you grow lettuce for your table or for market, it is one of the most used of all vegetables and brings a good price on the market for the country farmer, or it means the city farmer will have to pay a good price for it if he does not raise it, for housewives must have it for their salads, garnishings and for its own good eating qualities. Lettuce is not difficult to grow and no garden is complete without it.

CULTURE. For early spring plants sow the seed not over a quarter of an inch deep in hot beds or flats during February or early March. In the absence of any frames keep the flat on a sunny window-sill, being careful that it does not dry out. When the seedlings are about an inch tall, prick out carefully and transplant 2½ inches apart each way. The plants should be set out in the garden as soon as the ground is warm and well prepared. Set out in rows fifteen inches apart and the plants a foot apart in the row. For succession plants sow seed in the open ground and set the seedlings out as soon as they begin to crowd. Sowing should be made every two weeks from early spring until fall. One ounce of seed produces about 3,000 plants. The plants are ready for eating in thirty to seventy days from sowing, depending on the variety.

CURLED LEAF CUTTING VARIETIES

Every garden should contain at least a row or two of cutting lettuce which is ready for the table much sooner than the heading type. The crisp leaves with their firm veins and ribs give a delightful spring touch to the dinner table very early in the season, and it is perfectly safe to count on having leaves large enough for salad in 40 or 45 days after sowing.

179. Grand Rapids—This is pre-eminently the home garden cutting lettuce. You should not fail to start a flat early this spring and enjoy the delightful salads within a few weeks after transplanting out of doors. While this was originally considered an exclusively forcing lettuce, recent years have shown its value out of doors particularly in the spring and fall. Grand Rapids is a good keeper when picked, but the matured plants shoot quickly to seed if left in the ground. Pkt. 10c; oz. 30c; ¼ lb. 85c.

OTHER GOOD VARIETIES OF CUTTING LETTUCE

178. Early Curled Simpson. A good early dwarf forcing variety.

177. Black Seeded Simpson. Large and well adapted to hot climates.

161. Denver Market. Very crisp. Sometimes classed as a head lettuce.

Price of any of the above: Pkt. 5c oz. 15c ¼ lb. 45c.

Wayahead Lettuce

Grand Rapids Lettuce

BUTTER HEAD VARIETIES

This type of lettuce is not of such rapid growth as the loose leaf sorts, but the delicious buttery flavor of the tender leaves make it well worth waiting for. For use during the hot dry months of mid summer it far surpasses the other sorts.

164. Wayahead—An acknowledged top-notch. It is impossible to find lettuce with a sweeter or more delicate flavor than that of this variety. Has large firm heads. The first outdoor planting should be made as soon as cherry blossoms are open. Long dry summers do not affect this Acorn Brand of lettuce and you can count on a good supply all summer if proper precautions are taken. Keep sowing every two weeks until the end of September. If there are cold frames or hot beds available there is no end to the Wayahead season. Pkt. 10c; oz. 30c; ¼ lb. 85c.

OTHER GOOD VARIETIES OF HEAD LETTUCE

165. Iceberg. Good for forcing or outdoor use.

162. Improved Hanson. Withstands extremes of weather

163. May King. Exceptionally early.

160. Big Boston. The popular large heading sort.

168. Early Prizehead. Popular for home and market gardens.

Price of any of the above: Pkt. 5c oz. 20c ¼ lb. 50c.

COS LETTUCE or ROMAINE SALAD

Of delightful, fresh crispness and mild flavor. A distinctly upright growth. The heads when well developed should be loosely tied with light string, or preferably old strips of rags. The inner leaves in this way are delicately blanched, very crisp and sweet.

175. Paris White Cos—A variety that is of large size and splendid flavor and which has been found the most satisfactory in the middle west. Pkt. 5c; oz. 20c ¼ lb. 60c.

HEALTH HINT

As a health food lettuce has no superior. Your system requires a large amount of green vegetables all the year. After the winter season, in which we all eat too much of heavy meats and starch foods, lettuce comes like a prescription from a well advised doctor. You should plan to have lettuce coming on all season, it needs little care to produce and can be sown every two weeks. The city farmer will certainly appreciate the fact that lettuce can be picked an hour before dinner, washed and put on ice and produce one of the daintiest and healthiest of foods or salads.

Our garden guide gives helpful information on growing Lettuce in cold frames. The guide is invaluable to the gardener. We are able to issue it for \$.75.

MUSKMELONS

(Melon, Sp.)

Delano White Meat Muskmelons

180. Delano Pink Meat—A silvery netted variety with solid pink flesh of excellent flavor and small seed cavity. An acclimated cantaloupe produced in Delano Township, Kansas, from the crossing of carefully selected stocks. An unusually fast seller which commands a premium on any market. Sizes run largely to standards and jumbos. An Acorn Brand variety which has given satisfaction in the middle west. Pkt. 10c; oz. 30c; $\frac{1}{4}$ lb. 85c; lb. \$3.00.

181. Delano White Meat—A green meated melon, well netted, slightly ribbed and has very small seed cavity. One of the very best green-meated sorts on the market. Pkt. 10c; oz. 30c; $\frac{1}{4}$ lb. 85c; lb. \$3.00.

185. Edwards Perfecto—This produces about 50 per cent Standard, 35 per cent Jumbo and 15 per cent Pony melons. We consider its table quality equal to any cantaloupe on the market and superior to 97 per cent of all melons offered. The large pink-meated fruit was originated by one of the leading growers of Rocky Ford, Colorado, and this season was marketed through one grocer in each city—the demand was larger than the supply. Edwards Perfecto is pink-meated, deliciously sweet, deep flesh with very small seed cavity, the melon almost round, covered with deep silvery netting, shallow ribbed. It will make money for the market gardener and will command the respect and admiration of the home gardener who appreciates good things to eat. Pkt. 10c; oz. 30c; $\frac{1}{4}$ lb. 85c; lb. \$3.00.

189. Honey Dew—“Some better than the best, a whole lot better than all the rest.” We might stop right there with our description of the Honey Dew Muskmelon. It is a wonderful production, a cross of an African Casaba and the Rocky Ford cantaloupe. We have taken from the Daily Chicago Trade Bulletin the market on various melons at different times, and without exception the Honey Dew was selling at from fifty cents to one dollar and fifty cents higher per crate than any other melon on the market. You can eat it in September or keep it until Christmas, it simply gets better all the time. The average size of the melon is 8 to 10 inches in diameter and 8 to 12 inches in length, weight 9 to 12 pounds. The creamy, white skin is very smooth with an occasional net. The flesh is an emerald green, very thick, with fine grain. Can be eaten to the extreme rind. The melon is not very easily bruised and is a splendid shipper. Pkt. 10c; oz. 25c; $\frac{1}{4}$ lb. 75c; lb. \$2.50.

193. Netted Rock—The heaviest meated melon of the Rocky Ford type. It produces melons of uniform standard size, 90 per cent of which are completely covered with a beautiful gray, lace-like netting which, with the small seed cavity, are the most essential points in the carrying and keeping qualities of the cantaloupe. The flesh is green, tinted with a delicate salmon-pink around the seed cavity, which is the smallest of any strain of Rocky Fords. The flesh is firm. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 40c; lb. \$1.25.

OTHER GOOD MUSKMELONS

- 182. **Baltimore or Acme.** A good early green sort.
- 183. **Burrell's Gem.** A prolific pink meated sort.
- 186. **Emerald Gem.** Melon small with salmon flesh.
- 188. **Gold Lined Rocky Ford.** A green melon splendid for shipping. Pkt. 10c; oz. 20c $\frac{1}{4}$ lb. 60c 1 lb. \$2.00.
- 195. **Paul Rose or Petosky.** Cross between Netted Gem and Osage.
- 198. **Banana.** Fruit is long, salmon fleshed, with banana-like aroma.
- 205. **Rocky Ford.** Delightfully sweet green flesh.
- 207. **Green Nutmeg.** An early melon with green flesh.
- 191. **Montreal Market.** A giant muskmelon.
- 203. **Extra Early Hackensack.** An early, large, heavily ribbed sort.

Prices of any of the above, except where otherwise noted: pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 45c; lb. \$1.50.

A Typical Crate of Netted Rock Muskmelons

CASABAS

THE Casabas are a late variety of muskmelon, classed in a family by themselves. They are as saleable as muskmelons, there being a growing demand every year. In the countries south of where frost occurs September 20th, the country farmer will find casabas a very profitable crop.

CULTURE. Casabas should be planted between May 15th and July 15th, then they begin to ripen about the close of the cantaloupe season and continue until frost. At the first sign of frost all melons, even half-grown, should be put in a dry, frost-proof place where they will ripen gradually.

210. Improved Hybrid—(Winter) "Acorn Brand."

This valuable melon will keep two to three months after it is matured, and picked the first of October and stored in a dry, cool place, will keep until Christmas. The quality is very good, and a large demand is growing up in the eastern markets. This is the sort most extensively grown in California. Pkt. 10c; oz. 25c; $\frac{1}{4}$ lb. 65c; lb. \$2.25.

211. Golden Beauty—(Winter) Begins to ripen in July and continues bearing

and ripening all summer and fall, or until frost comes. The later fruits can be stored in a cool house or cellar and will ripen slowly so that they can be eaten or marketed from time to time until late in the season. The color is a beautiful golden yellow, even before it ripens, its color commands a ready sale. Pick when bright yellow and put away until slightly soft. You make no mistake when you plant this wonderful Casaba melon. The quality will more than please you. Pkt. 10c; oz. 25c; $\frac{1}{4}$ lb. 65c; lb. \$2.25.

212. Winter Pineapple—This is the first of the Casabas introduced into

America. We have carefully maintained the purity of types so that it is now just as distinct as when introduced nearly forty years ago. This and the Golden Beauty are identical in all except color, which when mature is light green. The Winter Pineapple is more profitable as a late melon. Our type of melon is round, selected for its good shipping qualities. Pkt. 10c; oz. 25c; $\frac{1}{4}$ lb. 65c; lb. \$2.25.

WATERMELONS

(*Sandia*, Sp.)

ALL through this part of the Arkansas River Valley last summer the roads were lined for miles with Watermelons at almost every farmer's gate, which were in great demand by automobile parties, who often made special trips from the cities to buy the fresh country melons. It is mighty good business training to teach the farm youth the value of a dollar and how to get it, by allowing him a space in the field in which to grow melons and establish him by the side of the road in front of his farm with a pile of melons of his own raising to sell to the city automobile parties.

CULTURE. To make sure of raising good watermelons, it is essential that the plants have a good start and to this end it is important to prepare hills about eight feet apart, by thoroughly working into the soil an abundance of well-rotted manure, hen manure, guano, or other forms rich in nitrogen, being most desirable. Over this highly-manured soil put an inch or more of fresh earth and plant the seeds on this, covering them about an inch deep.

It is important that the seeds should not be planted before the ground becomes warm and dry, as the young plants are very sensitive to cold and wet. Put ten or twelve seeds in a hill. When the plants have formed the first pair of leaves, they should be thinned so as to leave two or three of the strongest and best to each hill.

Frequent watering of the place with liquid manure will hasten the growth, thus diminishing the danger from insect pests. If

Alabama Sweets Watermelon

the striped beetle appears use fine road dust freely. The best protection against blight and insect pests is to maintain a vigorous and continuous growth. It is desirable to change the location as often as practicable.

221. Halbert Honey—An early melon, and can be successfully raised in the Northern States. The melons are quite long with blunt ends. The color is deep green. The rind is very thin, the rich, deep, red, sugary flesh extending to within an inch of the outside shell. The rind is too thin for a good shipping melon, but for home use or nearby market this is a superb variety. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 45c; lb. \$1.35.

223. Kleckley's Sweet—"Acorn Brand." A combination of sweetness, earliness and size. It is an ideal melon for home use and local market, but the rind is so thin and crisp that it will not stand shipping. The melons grow very uniformly, about 20 inches long, with dark green skin, extremely thin rind, bright scarlet meat and solid heart. The flesh is crisp, sugary, and melting to the highest degree, and entirely free from stringiness. For the home garden we cannot recommend it too highly. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 45c; lb. \$1.25.

225. Tom Watson—A long, deep green melon with bright red flesh of high quality; resembling Kleckley's Sweets, but has a tougher rind and grows much larger than that variety. It is an excellent variety for shipping and has become very popular in the south within the last two or three years. The seed we offer is of a very fine strain. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 45c; lb. \$1.25.

235. Alabama Sweets—A very large, long melon of excellent quality. Popular in the middle West and South, where it is grown extensively for shipping. Color is dark green with darker irregular markings. The rind is thin but very tough. The flesh is bright red, fine grained and sweet. The fruits are of good size and the seeds nearly white. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 45c; lb. \$1.25.

OTHER GOOD WATERMELONS.

218. Citron. Small, red seeded, white fleshed. Used for pickling. Pkt. 5c; oz. 20c; $\frac{1}{4}$ lb. 50c; lb. \$1.75.

219. Dixie. Large striped fruits, excellent for shipping.

220. Fordhook Early. An extra early, medium sized, round melon.

222. Kansas Stock or Pie Melon. Large, very popular thru the Middle West. Pkt. 5c; oz. 20c; $\frac{1}{4}$ lb. 50c; lb. \$1.75.

228. Sweetheart. Vigorous grower, fine for shipping.

236. Georgia Rattlesnake. Very sweet, fine for the long seasons of the south.

224. Phinney's Early. Early, oblong, bright red, and sweet.

227. Cuban Queen. Large and sweet. Rind thin but tough.

229. Florida Favorite. Large, oblong, faintly striped.

230. Peerless, or Ice Cream. An oblong melon, dark green skin.

232. Black Spanish. Long, very dark, fair quality.

237. Seminole. A hybrid, good for home use.

238. Blue Gem or Iceberg. An improved Kolb Gem.

Price, except where otherwise noted, Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 35c; lb. \$1.00.

LEEK

(*Puerr*, Sp.)

247. Ross Brothers Strain—One ounce of seed will sow 150 feet of row;

Leek is a kind of onion that does not form a bulb, but grows a long stem, which is blanched by drawing earth around it. When blanched in this way it makes an appetizing salad, or is eaten like green onions. Seed is sown in the spring and the leek is ready for use in the fall. Pkt. 10c; oz. 30c;

ONIONS

(*Cebolla*, Sp.)

ONIONS are one of our leading staple foods and are easily raised and can be kept during the winter by anyone who will use ordinary precaution. No special cellar or rack is needed, so long as there is a cool dry place where there is no danger of freezing. If you have had trouble in the past or do not feel sure of the best means of storage, write us and we shall be glad to help you.

ONION CULTURE. Onions are raised in two ways, from seed and from sets. Seed sown in early spring produces ripe onions in the fall, while sets planted at the same time make green "bunching" onions in a few weeks and dry ripe onions in July or earlier. Sets may be put out in the fall and will produce green onions much earlier than when set out in the spring.

To raise good onions from seed the land must be rich and in fine condition. Sow the seed as early as possible in rows 14 inches apart. Weed as soon as the onions appear and keep well cultivated all through the season. Seed may also be sown in a hotbed or greenhouse in February or March and the onions transplanted to the open ground when warm enough. The finest onions are raised in this way.

Prizetaker

White Globe

252. Prizetaker—This variety produces very large and handsome onions of good, bright yellow color and mild flavor. Single bulbs grown under favorable conditions often weigh 2 pounds each, and heavier weights have been attained. The onions are globe-shaped and of very mild, pleasant flavor. While these onions can be grown by sowing the seed in the ordinary way in the open ground, yet the largest and finest specimens are obtained by sowing the seed in shallow boxes in February or March and transplanting to the open ground as soon as the weather is warm enough. The Prizetaker requires two weeks longer to mature than Yellow Danvers. Our American-grown seed is much superior to imported seed for use in this country. Pkt. 10c; oz. 35c; ¼ lb. \$1.00; lb. \$3.00.

250. Denia—"Acorn Brand". Introduced from Spain. It is generally conceded that this is the parent type of the well-known Prizetaker, of which however, it is a far superior strain. Denia runs more uniform in size and is a more characteristic Globe, the bulb is more compact, and its rings or layers of growth are thinner, the neck is generally smaller than Prizetaker and seems to ripen down somewhat earlier. Pkt 10c; oz. 40c; ¼ lb. \$1.25; lb. \$4.00.

251. Large Red Wethersfield—This is a standard variety and a favorite onion everywhere. The bulb is large and somewhat flattened, oval-shaped, skin deep purplish red, flesh purplish white. Moderately fine grained and stronger flavored than any other kind. Very productive, the best keeper and the most popular for general cultivation. It is more inclined to form large sets, if planted on unsuitable soil, than some others, but it is the very best variety on poor or dry soil. Pkt. 10c; oz. 25c; ¼ lb. 75c; lb. \$2.50.

OTHER GOOD VARIETIES OF ONIONS.

- 254. Southport Red Globe.** A popular red type that is a good keeper. Pkt. 10c; oz. 30c; ¼ lb. 85c; lb. \$3.00.
- 255. Southport White Globe.** Thin skinned, mild and of high merit. Pkt. 10c; oz. 35c; ¼ lb. \$1.00; lb. \$3.50.
- 256. White Portugal or American Silver Skin.** Fine for pickling or bunching. Pkt. 10c; oz. 35c; ¼ lb. \$1.00; lb. \$3.50.
- 257. Yellow Globe Danvers.** The best yellow onion on the market. Pkt. 10c; oz. 25c; ¼ lb. 75c; lb. \$2.50.
- 263. Mammoth Silver King.** The bulbs average from 2½ to 4 pounds each. Pkt. 10c; oz. 30c; ¼ lb. 85c; lb. \$3.00.

ONION SETS

To the market gardener working for an early market and the city or country farmer growing for his own table, our onion sets are just the thing. The sets eliminate a lot of hard work and weeding. They can be put out early, are hardy, staunch and fast growers and you can have green onions within a few weeks after your garden is workable in the spring, by using our sets. Just stop and think of the money you spent last year for green onions, and in all probability they will be higher this year. By raising your own, you can not only save money, but get fresher onions and of better taste. See Page 53.

264. Garlic (Ajo, Sp.)—A hardy onion-like plant, used extensively, thru the southwest for flavoring. It is particularly well known in "Chili" houses. Only a very little is needed, as it is much stronger than onions. Some friends of ours have raised, in their small back gardens, \$50 and \$75 worth of this vegetable. Plant and care for the same as onions. Oz. 15c. ¼ lb. 35c; lb. \$1.00. Garlic Bulbs—50c per pound.

OKRA or GUMBO

(*Gombo*, Sp.)

Used for thickening and flavoring soup. The pods contain a large amount of gum, which imparts a thickness and softness as well as flavor to the soup.

The pods should be picked before the seeds are developed. The seed should be sown in the open ground when the ground is thoroughly warm. In this latitude about the 1st of June. Sow in rows 2½ feet apart and thin the plants to 18 inches apart. The pods should be picked and dried while young and green.

248. White Velvet—The pods are large, round and smooth, almost pure white, and of excellent quality. The plant grows 3 feet high. Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. 75c.

249. Perkins' Long Pod—This variety is now used almost exclusively by the soup canners, as the pods are of a deep green color and of fine quality, and the plant is very prolific. The pods are long, and somewhat ribbed or corrugated. Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. 75c.

Green Onions

PUMPKINS

(*Calabaza totanera*, Sp.)

THIS vegetable requires less attention than any other in your garden. Plant some in with the corn or along a low fence at one side of the garden. Give the plants a little manure or fertilizer of some kind and plenty of room to grow. You will not be sorry for the slight trouble taken. The hills should not be closer than 8 feet. It is well to start several seeds in each hill and thin later to the one best plant in each. As all Pumpkins are very tender the seed should not be sown until all danger of frost is past. The fruit should be gathered and stored in a warm dry place before they are touched by frost. According to the variety, one ounce of seed will plant from 25 to 50 hills.

272. Japanese Pie—Very meaty and solid, and in general appearance resembles the Cushaw, but it is earlier and larger. Flesh very thick, rich salmon color, fine grained, dry and sweet. Seed cavity small. Of medium size, early and a splendid keeper. Highly desirable as a pie or cooking pumpkin. Pkt. 10c.; oz. 20c; ¼ lb. 50c.

274. Kentucky Field or Large Cheese—A very large flat pumpkin averaging about two feet through. When ripened the skin is a rich cream color, flesh yellow, and of fine quality. It is grown more largely than any other kind because of its keeping qualities and it is also popular for canning. It is probably less susceptible to attacks by the squash bugs than any other sort. Pkt. 5c; oz. 15c; ¼ lb. 35c; lb. \$1.00.

280. Tennessee Sweet Potato—This delicious, long-keeping pumpkin is pear shaped, medium sized and slightly ribbed. Color creamy-white, sometimes slightly striped with green. Flesh light colored, fine grained, dry and of superior quality. When cooked resembles the Sweet Potato in flavor. Pkt. 10c; oz. 20c; ¼ lb. 50c; lb. \$1.50.

MUSTARD

(*Mostarda*, Sp.)

THE leaves of Mustard make excellent greens of sharp, pungent flavor, and are cooked the same as Spinach or beet leaves. Sow the seed in drills early in the spring and at frequent intervals throughout the summer to secure a constant supply of fresh greens. Mustard is hardy and is easily grown. One ounce will sow fifty feet of row.

243. Chinese Mustard—This is a good variety, with light green leaves. In quality and flavor it is superior to Giant Southern Curled, and will stand longer before going to seed. Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. \$1.00.

244. Giant Southern Curled—This is the standard variety. The leaves, which are beautifully curled, often measuring 14 inches, are ready for use about six weeks from sowing. Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. \$1.00.

246. White Mustard—Seed is light yellow. Used principally for seasoning and for grinding to make commercial mustard. Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. \$1.00.

OTHER GOOD PUMPKINS

- 271. Cushaw or Crookneck.** Shaped like a crookneck squash. Fine for stock.
 - 273. King of the Mammoths.** Often measures two feet in diameter, weighing 100 to 200 pounds.
 - 277. Mammoth Tours, or Jumbo.** Enormous variety, good for stock feeding.
 - 279. Sweet or Sugar.** Small, good for pies.
- Price of any of the above: Pkt. 10c; oz. 20c; ¼ lb. 60c.

PARSLEY

(*Perejil*, Sp.)

One ounce to 100 feet of drill; seven pounds to acre.
CULTURE. Soak seeds a few hours and sow early in spring and continue until early autumn. If for horse culture, the rows should be 3 feet apart; if for hand culture, 18 inches.
 To preserve during winter, transplant to light cellar or cold frame.

265. Champion Moss Curled—Extra dark. Leaves crimped and curled, giving a most beautiful decorative appearance. Pkt. 5c; oz. 20c; ¼ lb. 50c; lb. \$1.50.

266. Emerald or Dwarf Extra Curled—Leaves tender, beautifully crimped, handsome bright green color; very ornamental. Pkt. 5c; oz. 20c; ¼ lb. 50c; lb. \$1.50.

PARSNIPS

(*Chirivia*, Sp.)

This delicious vegetable is not used half enough. The large tender roots make a most appetizing dish. It can be served in many ways. Write us for the recipes that we have found to be very good, if you are not familiar with the cooking of it. Parsnips also make an excellent stock food as they yield enormous crops and the roots are much more nutritious than turnips or most other root crops used for cattle.

CULTURE. Sow the seed early in the spring before the ground becomes too thoroughly dry and warm. The seed is rather slow to germinate so that the gardener finds it a help to mark the row with a radish seed here and there as with carrots. The rows should be 12 or 18 inches apart, depending on the type of cultivation to be used. Thin out the plants to 5 or 6 inches apart.

269. Improved Hollow Crown—The most popular and best for all purposes. A variety with a hollow or cup-shaped top where the leaf begins. The skin is smooth and white and the flesh tender. The roots grow 18 to 20 inches long. The best part of it is contained in the first eight inches from the top. Our selected strain of this is particularly smooth and fine grained. Pkt. 5c; oz. 15c; ¼ lb. 45c; lb. \$1.50.

268. Improved Guernsey—More easily harvested than the Hollow Crown and somewhat shorter. Pkt. 5c; oz. 15c; ¼ lb. 40c; lb. \$1.25.

PEAS

(Guisante, Sp.)

THERE is as much difference between home grown Peas and canned Peas as there is between butter and butterine. They may look alike, feel alike, but they certainly do not taste alike. Home grown peas are much better and sweeter than any which can be bought. Peas can be raised very successfully and easily by both the city and country farmer. A medium sized space will yield enough to supply the table and allow for a goodly quantity to can. If you are not sure about how to can Peas, write our service department and they will be glad to furnish any information you may need. Our Seeds are the acclimated Middle-west variety and carefully picked and carefully selected. We have an unusually fine stock of seed Peas this year, but we strongly urge early purchasing.

CULTURE. Peas of the extra early smooth class are the very first thing to be planted in the garden in spring. The wrinkled sorts follow a little later, as they are not quite so hardy. Tall, late varieties need brush or other support. By selecting sorts that do not grow much over two feet high, the necessity of using brush may be avoided. Judicious selections of varieties and planting frequently for succession will give a full supply of the choicest green peas almost during the entire season, with the possible exception of the hottest part of the summer. Open furrows three or four inches deep and three feet apart; scatter the seed peas into them and cover with hoe or plow. Cultivate like corn or beans. The late tall sorts may be planted in double rows and brush stuck in between for support. All garden Peas, however, require good, strong and fertile land. Very dwarf sorts of the American Wonder type will succeed only on the richest garden soil and may be planted in rows 1 foot apart.

Gradus Peas

Ross Bros. Extra Early Peas

EARLY SORTS

290. Ross Brothers Extra Early—Earliest and most even in maturity of all the white seeded varieties. A super-fine Pea that has produced great results for gardeners all over the middle west, who want to get their peas on the market early. The vines are of medium height, 2½ feet and are literally covered with well filled pods containing remarkably sweet peas for an extra-early variety. We introduced this superior variety over 12 years ago, and have yet to see or hear of any early sort that is its equal. If there was a finer variety we would sell it. Pkt. 10c; lb. 40c; 10 lbs. \$3.00.

285. Gradus—The earliest of the wrinkled seeded sorts, maturing only a few days after the extra early type and much sweeter. The vines are heavy and bear well filled pods in large numbers. This variety requires a light, warm, rich soil, being disappointing under unfavorable conditions. Pkt. 10c; lb. 50c; 10 lbs. \$4.00.

OTHER GOOD EARLY PEAS.

- 281. **Alaska.** In great demand for canning. Pkt., 10c; lb., 30c; 10 lbs., \$2.50.
- 284. **Extra Early Premium Gem.** Not so early as R. B. Extra Early, but larger. Pkt. 10c; lb. 40c; 10 lbs. \$3.50.
- 288. **Peter Pan.** A very dwarf, splendid, extra early. Pkt. 10c; lb. 45c; 10 lbs. \$4.00.
- 303. **First and Best.** A prolific early type. Pkt. 10c; lb. 30c; 10 lbs. \$2.50.

SECOND EARLY AND MAIN CROP VARIETIES

286. Little Marvel—The most satisfactory pea for the home garden. The big point in its favor, is that it remains in prime picking condition a week longer than the old sorts, which last only a few days. Afterwards they become hard and lose their sweetness. Very productive, hardy and quality lucious and sugary. Vines 19 inches, pod 3½ inches, dark green and well filled. Pkt. 10c; lb. 4c; 10 lbs. \$4.00.

296. Telephone—A large podded pea for general crop. Vines are very strong in growth and average 18 to 20 pods per stalk. The peas are of large size containing 6 to 7 peas each, which are a pale green color closely packed in the pod, and a delicious flavor. Height 3½ feet; needs support. Pkt. 10c; lb. 45c; 10 lbs. \$4.00.

OTHER GOOD LATE SORTS.

- 282. **American Wonder.** Prolific, dwarf, desirable for the home garden.
- 287. **Nott's Excelsior.** Later than the American Wonder, but larger.
- 292. **Bliss Everbearing.** A fine late crop sort.

Price of any of the above. Pkt. 10c; lb. 45c; 10 lbs. \$3.50

EDIBLE PODDED VARIETIES

299. Dwarf Grey Sugar—This is the finest tasting pea of the edible podded varieties. Vines grow only 15 to 18 inches in height with purplish blossoms. Sugar peas are not shelled before cooking, but are prepared in the same manner as green beans and are certainly delicious. Pkt. 10c; lb. 45c;

300. Mammoth Melting Sugar—This large late variety grows 4 or 5 feet high and bears large pods 4 to 4½ inches long, often curved and twisted. If the pods are picked when the peas are only half developed there is absolutely no stringiness but are sweet, brittle and appetizing. Pkt. 10c; lb. 45c.

Peas are priced f. o. b. Wichita in quantities larger than packets. Please see Page 63 for Shipping Instructions.

Chinese Giant Pepper

PEPPERS

(*Pimiento, Sp.*)

THERE is an increasing demand all over the country for the chili variety of peppers. The last year has seen a big increase in the sale of chili. It is fast becoming an American dish, and the wise gardener will do well to grow for this strong market.

CULTURE. The pepper plant is tender and should be started under glass. Warm, moist soil is best, with plenty of well-rotted manure plowed under. The plants should be set 1½ feet apart in rows 2½ to 3 feet apart. Sow seed in hotbeds in March. The plants may be transplanted into small pots and then when the ground is warm the peppers will make rapid growth as soon as set out. The city gardener needing only a few plants in his garden will probably do well to buy well grown plants rather than attempting to raise his own from seed. We are glad to offer our excellent stock of these plants for this purpose. See page 53.

310. Chinese Giant—An enormous variety, double the size of Ruby King, averaging 12 to 15 inches circumference. Notwithstanding its large size, it is early and very prolific. Plants are healthy, well branched, about 2 feet high and carry an enormous load of fruit, often having the appearance of being bunched together. Flesh is thick, tender, mild and sweet, and is unexcelled for salad or stuffed mangoes. They can be sliced and eaten like tomatoes. When ripe the peppers are a rich glossy scarlet, making them of unusually fine appearance. *Pkt. 10c; ½ oz. 40c; oz. 75c; ¼ lb. \$2.50.*

318. Royal King—This valuable scarlet-red pepper is of the Ruby King type. Very uniform in shape and size; sweet and delicious and entirely free from pungency. Very productive, yielding heavy crops until entirely cut off by frost. An excellent shipper. Thick-meated, averaging much thicker than Ruby King, and other peppers of the bell type. This is one of the best sweet peppers for the garden. *Pkt. 10c; ½ oz. 40c; oz. 75c; ¼ lb. \$2.50.*

315. Long Red Cayenne—A well known medium early variety having a slender twisted and pointed pod about four inches long. Color deep green when fruit is young, bright red when ripe. Extremely strong and pungent flesh. A favorite with many people of foreign birth. *Pkt. 10c; ½ oz. 40c; oz. 75c; ¼ lb. \$2.50.*

OTHER GOOD PEPPERS.

312. Tabasco. Used in the famous Tabasco Sauce. *Pkt. 10c; ½ oz. 50c; oz. 90c.*

314. Large Bell or Bull Nose. One of the hardiest and earliest.

316. Pimiento. Delicious for many table uses.

317. Red Chili. Small, very hot and pungent.

319. Ruby King. A popular prolific and large fruited pepper.

Price of any of the above except where otherwise noted: *Pkt. 10c; ½ oz. 35c; oz. 60c; ¼ lb. \$2.00.*

RHUBARB

(*Ruibarbo, Sp.*)

One ounce of seed to one hundred and twenty-five feet of drill.

CULTURE. Sow seed in cold frame, in a fine rich sandy loam, about the first of March, in drills 4 inches apart. Keep the frames covered at night and cold days so that the soil will not freeze. Use the sprinkler daily, being careful not to apply an excess of water at any time, and in 6 or 8 weeks the plants will be large enough to set in the open ground. Transplant to a rich soil and set in rows 12 inches apart each way. Transplant again early the next spring to permanent location, setting roots 4 to 5 feet apart each way in rich soil. Rhubarb is ready to use the second year from seed. Rhubarb is a gross feeder and will make good use of strong manure, either fresh or well-rotted. Top-dress liberally in the fall and spade the manure into the ground in the spring. Pull the stalks as long as demand continues.

348. Victoria—A very large, thick red-stalked, late variety of fine quality. *Pkt. 5c; oz. 20c; ¼ lb. 50c;*

349. Linnaeus—An early variety, stalks green, large and tender. *Pkt. 5c; oz. 20c; ¼ lb. 50c.*

RHUBARB ROOTS

The city farmer who desires to raise Rhubarb and finds he cannot get a start easily from the Rhubarb Seed should plant the roots and grow from them. Our Rhubarb Roots are selected with special attention to their strength and hardiness. We will be in position to supply Rhubarb Roots during the month of March. We advise purchasers to place their order with us before that time. Orders filed early will be certain of being filled. Those which come later, we can only promise to do our best to serve. See page 53 for prices.

SALSIFY or VEGETABLE OYSTER

(*Salsify blanco, Sp.*)

This plant received its name of Vegetable Oyster from the delightful oyster like taste that is the joy of those that live inland, away from the ocean and fresh sea foods. If you do not know this vegetable you will have a pleasant surprise when you try it. We will be glad to send you our recipes for the many dainty dishes it will afford.

CULTURE. One ounce for fifty feet of drill. Sow as early as the ground can be worked in the spring, in drills 12 inches apart, and one inch deep. After plants are up 3 inches high, thin to 6 inches apart in the row. Cultivate about the same as for carrots, being certain to keep the weeds down. The roots may be used from the rows as wanted and will carry through the winter if left standing in the row.

350. Mammoth Sandwich Island—The largest and most profitable Salsify now in cultivation. Roots heavy, of agreeable flavor, white color, and a satisfactory sort in every way. *Pkt. 10c; oz. 35c; ¼ lb. \$1.00.*

ORDER EARLY

No matter what you are ordering, or where you are getting it, order early. All seed houses are more or less rushed late in the season, and some stocks become exhausted. You will be sure of getting your order filled more quickly and more completely by placing it at once. You will then have your seeds when you want them should the season open more quickly than you had expected.

RADISHES

(Rabanito, Sp.)

RADISHES are especially enjoyed, both in the raising and eating, by the city farmer. Not only that, but there is a real saving in money by raising your own. Early radishes bring a high price, which fact is of interest to the country farmer who raises them for sale. There is a snappy bite and delicious taste to a home grown radish that is never known to those who buy this delightful vegetable. The gardener should make several plantings throughout the season and have a continuous supply of radishes. They are sown early, easy to take care of and grow fast. No garden is complete without them.

CULTURE. The secret of growing good Radishes consists chiefly in the observance, on the part of the grower, of three points. First, they should be grown on light, quick soil; second, they should be given plenty of water; and last, but not by any means least, the right kind of seed should be sown. Radishes grow very quickly and if not supplied with sufficient moisture are likely to be pithy. Sow seed one-half inch deep in the early spring in rows one foot apart, and the more fertile the soil the faster they will grow. For a succession, sow every ten days throughout the season and stir the soil sufficiently to keep out weeds. One ounce of seed required for 100 feet of row, 8 to 10 pounds of seed will plant one acre.

324. Scarlet Button—An extra early, round, bright red radish. When grown from our seed these are ready for use in 18 or 20 days after sowing. The skin is a very bright scarlet. The flesh pure white, crisp, tender and mild in flavor. The top is quite small, suitable for growing under glass, however, it is not necessary to grow under glass and the city farmer who has no glass will find that this variety will be ready for his table much earlier than any other sort. Pkt. 5c; oz. 20c; $\frac{1}{4}$ lb. 60c; lb. \$1.75.

334. Sparkler—This is much like the Scarlet Button, except that it is a few days later and the tip is a pure white which makes a striking contrast with the bright scarlet top. The flesh is solid, crisp and sweet, remaining so for a long time. Pkt. 5c; oz. 20c; $\frac{1}{4}$ lb. 60c; lb. \$1.75.

Scarlet Button Radishes

327. Icicle—A very attractive pure white radish, the earliest of the long white summer sorts and of most excellent quality. The roots are about five inches long with a sloping top and point tips. The diameter is from $\frac{1}{2}$ to $\frac{5}{8}$ of an inch. It is one of the most desirable varieties for summer planting out doors, both for the home garden and the market. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 50c; lb. \$1.50.

323. Cincinnati Market—A fine extra early variety, with a long, smooth root and small top. The color is a bright red, the flesh tender and delicious, even when full grown. It is undoubtedly the best long radish for shipping to distant markets. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 45c; lb. \$1.25.

WINTER VARIETIES

The merits of Winter Radishes are little appreciated, probably because they are seldom grown and few people have knowledge of their worth. These grow to large size and keep well for winter and spring use. Sow the seed from the middle of June until the middle of September. Include some of these with your order.

342. California White Pure White, about 1 foot long and 2 or 3 inches through. Tapering regularly to the tip. The flesh is tender and crisp and keeps well through the winter. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 45c.

OTHER GOOD WINTER RADISHES

343. China Rose. Cylindrical, bright rose.

344. White Chinese or New Celestial. A splendid keeper. Price of any of the above: Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 45c.

OTHER GOOD RADISHES.

- 321. Brightest Long Scarlet.** A home garden favorite.
- 322. Crimson Giant.** Exceptionally large for an early variety.
- 328. Long Scarlet Short Top.** A rapid growing, long, bright scarlet radish.
- 329. Long White Vienna or Lady Finger.** A good, mild, white, summer sort.
- 330. Rosy Gem.** Bright scarlet with a white tip.
- 331. Sakurajima.** Often grows to be 15 pounds in weight. Pkt. 5c; oz. 20c; $\frac{1}{4}$ lb. 60c.
- 333. Scarlet Turnip White Tip.** Used extensively for early outdoor sort.
- 337. Early Scarlet Turnip.** Very crisp and of mild flavor.
- 338. White Olive Shaped.** A very early, oblong, white radish.
- 339. French Breakfast.** The top is pink, the tip is white.

Price of any of the above unless otherwise noted: Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 35c; lb., \$1.00.

RADISHES FOR THE CHILD'S GARDEN

Most children want to help Daddy plant the garden, and it is well to encourage them to have a little garden patch of their own. Radishes are one of the most suitable vegetables for the child to plant because they come up quickly, and do not give the boy's enthusiasm time to diminish; they need little care, and the crop is very soon harvested. How delighted the children are to bring in a handful of bright red radishes for Daddy's supper, long before any of the older gardener's vegetables are ready.

Start the boy (or girl) off this year with a garden of his own. Let him have a row each of Radishes, Lettuce, Beets, Chard and any other easily raised vegetable that he is fond of. Let it be a game for him. He will work all the harder at it, and it will give him the best kind of exercise and training. You will be raising a good boy and a good garden in one operation.

White Icicle Radish

SPINACH

(*Espinaca, Sp.*)

SPINACH ranks with Lettuce and Chard as the tonics of the garden. You owe it to your health to have a row of Spinach. For early summer use, sow early in the spring in a good, well-fertilized soil, in drills 1 inch deep, and 1½ to 2 feet between rows. For winter and spring use, sow in October. Requires but little cultivation. Best developed and most tender and succulent when grown in rich soil. Two ounces will sow 100 feet of drill; 20 pounds per acre. Matures for table use in about 40 days. One of the most desirable winter and spring greens, and is better liked and usually sells at much higher prices than kale or turnip salad. Is largely grown for shipping.

354. Long Standing—This excellent variety comes quickly to maturity and remains in condition for use much longer than other sorts. The leaves are smooth and very dark, rich green. In our estimation it is the best for the private garden, and it is one of the most popular and profitable with market gardeners. Pkt. 5c; oz., 10c; ¼ lb., 30c; lb., 75c.

Long Standing Spinach

Bloomsdale Savoy-Leaved Spinach

OTHER GOOD VARIETIES

- 351. Bloomsdale Savoy-Leaved.** A heavy cropper, of fine quality and very hardy.
353. Large Thick-Leaved Viroflay. A rapid grower. Plants are upright.
355. New Zealand. Distinct. Can be cut all summer. Pkt. 5c; oz. 20c; ¼ lb. 75c.
356. Round-Leaved Winter. Withstands the winters well. Price of any of the above, unless otherwise noted: Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. 75c.

SQUASH (Calabaza, Sp.)

Hubbard Squash

SUMMER varieties come into use early in the summer, but as they are tender the seed must not be sown until after danger of frost is past. The seed should be planted in hills four feet apart, using four ounces to 100 hills. The winter varieties should not be planted until the early part of June. The fruit will not mature until late in the fall, and, having a very firm, hard shell, keeps well, and with a little care squashes can be had all winter and until late in the spring. In gathering winter squashes it is important to protect the stem, if this is broken the fruit will not keep so well. Plant in hills from 6 to 8 feet apart, using two or three seeds to the hill. Use eight ounces to 100 hills, or two pounds to an acre. Moderately rich soil will grow good squashes.

359. Early White Bush—or Patty Pan—A flattened, scalloped bush squash of largest size and finest quality. Matures early and will bear throughout the season, if the fruits are kept gathered. The skin is clear white, the flesh thick and of delightful flavor. Pkt., 5c; oz., 15c; ¼ lb., 45c; lb., \$1.50.

362. Giant Summer Crookneck—Our strain of this produces far superior fruits to the common Summer Crookneck. Our variety is just as early, while the warty, deep golden fruits are twice the size. A delicious dish cooked in any of several ways. Will gladly give you any suggestions. Pkt., 5c; oz., 20c; ½ oz., 60c; lb., \$1.75.

367. Hubbard—The best of the winter squashes. The vines are vigorous and very productive. The fruits are large, heavy and moderately warted, with a very hard shell. The skin is uniformly dark green. The flesh is bright orange yellow, fine grained, dry and richly flavored. This squash can be kept in good condition till spring. We are sure that you will find Ross Brothers stocks of this superior to anything else on the market. Pkt., 10c; oz., 25c; ¼ lb., 75c; lb., \$2.00.

SWISS CHARD

(*Bleda, Sp.*)

A summer, winter green. Both city and country farmer should plant at least one row of this dandy green. It takes only a short time from the planting until the white ribbed leaves are ready for a mess of greens and you can pick all summer. Swiss Chard will furnish greens for you from early spring until late frost from the same plants. A hard frost in the fall will probably double up outer leaves but if warm weather should follow, inner shoots will come out and give you greens until real winter should set in. The leaves are used as boiling greens and are superior to the best of Spinach for this. The large white stalks may be served like Asparagus and are fully as tender and tasty. We have a number of splendid recipes which we will be glad to furnish upon request.

58. Giant Lucullus—The stalks of this are as thick as those of Rhubarb, being one and one half inches broad and about 10 to 12 inches long below the leaf. The large heavy leaves are of fine flavor. A distinct advantage of this sort is the rapidity with which it sends out new leaves after a heavy picking. Pkt. 10c; oz. 20c; ¼ lb. 60c; lb. \$1.75.

59. Large White Ribbed—The leaves are not so large as those of Lucullus, but the ribs are large and white and make an excellent dish. Pkt. 5c; oz. 15c; ¼ lb. 45c; lb. \$1.50.

Giant Summer Crookneck Squash

OTHER GOOD SQUASHES.

- 358. Early Yellow Bush.** Like the White Bush except for the yellow flesh.
363. Chicago Warted Hubbard. Productive, a fine keeper.
365. Fordhook. Will keep through the winter until June.
366. Golden Hubbard. Like the Chicago Warted Hubbard except for the color.
370. Mammoth Chili. Often weighs from 75 to 150 pounds. Pkt. 10c; oz. 20c; ¼ lb. 65c; lb. \$2.00

Price of any of the above, unless otherwise noted: Pkt. 5c; oz. 15c; ¼ lb. 45c; lb. \$1.50.

Chalk's Early Jewel Tomato

OTHER GOOD TOMATOES

376. **Bonny Best.** Early, medium sized, bright scarlet. Fine for home use. Pkt. 5c; $\frac{1}{2}$ oz. 20c; oz. 35c; $\frac{1}{4}$ lb. \$1.00.
378. **Earliana.** Early, prolific, with solid flesh. Pkt. 10c; $\frac{1}{2}$ oz. 30c; oz. 50c; $\frac{1}{4}$ lb. \$1.50.
382. **Golden Queen.** A splendid large yellow tomato. Pkt. 10c; $\frac{1}{2}$ oz. 30c; oz. 50c; $\frac{1}{4}$ lb. \$1.50.
380. **Dwarf Stone.** Can be planted close together. Fairly early. Pkt. 10c; $\frac{1}{2}$ oz. 30c; oz. 50c; $\frac{1}{4}$ lb. \$1.50.
383. **Matchless.** Large late crop sort. Splendid for shipping. Pkt. 10c; $\frac{1}{2}$ oz. 25c; oz. 40c; $\frac{1}{4}$ lb. \$1.25.
384. **Ponderosa.** The largest of Tomatoes, deep purple in color. Pkt. 10c; $\frac{1}{2}$ oz. 35c; oz. 60c;
398. **Dwarf Champion.** Much like the Dwarf Stone. Pkt. 10c; $\frac{1}{2}$ oz. 30c; oz. 50c; $\frac{1}{4}$ lb. \$1.50.
387. **Red Pear.** Used whole for salads and preserving. Pkt. 10c; $\frac{1}{2}$ oz. 30c; oz. 50c;
388. **Yellow Pear.** Used whole for salads and preserving. Pkt. 10c; $\frac{1}{2}$ oz. 30c; oz. 50c;
401. **Yellow Cherry.** Used whole for salads and preserving. Pkt. 10c; $\frac{1}{2}$ oz. 30c; oz. 50c.
402. **Red Cherry.** Used whole for salads and preserving. Pkt. 10c; $\frac{1}{2}$ oz. 30c; oz. 50c.
403. **Ground Cherry or Husk.** Used whole for salads and preserving. Pkt. 10c; $\frac{1}{2}$ oz. 30c; oz. 50c.

Kansas Standard Tomato

TOMATOES

(Tomate, Sp.)

THE name of Ross Brothers in connection with Tomato Seed is known to stand for excellence in every way. There is a good reason for it too. The experts who grow our seeds are the best in the country, and we know that our seeds are the best that can be produced. We also make sure, by a careful trial, that the varieties we sell are those best suited to the needs of our Middle-west customers. Everyone likes a good Tomato and every garden should have at least a dozen hills of Tomatoes. They may take a little more work than some other vegetables, but the occasional hoeing needed is well repaid by the constant supply of delicious fresh fruit all summer long. When the first frost comes in the fall, there are usually a number of green tomatoes left on the vines, these make an excellent pickle which will be relished the whole winter. If you are not familiar with how to put up green tomatoes, Our service department will be glad to tell you about it. We pay especial attention to raising tomato plants for the home garden. We guarantee their arrival to you in good condition, but they must be promptly planted after being received. See page 53 for prices.

CULTURE. Sow seed in a box or hotbed early, and transplant at least once to get good strong root growth. When danger of frost is over, set in the open ground 3 to 5 feet apart each way and cultivate thoroughly. Fruits may be had several days earlier by transplanting into small pots and then setting out the entire contents when the ground is dry and warm. One ounce of seed will produce from 2000 to 3000 plants. It greatly increases the quality and earliness of the fruit if the vines are tied to a trellis or stakes to keep the fruit off the ground. If this is not convenient, it will help considerably, particularly on heavy soils, to throw a little straw or litter under each vine.

377. Chalk's Early Jewel—The largest, smoothest, finest flavored, extra early, bright red tomato. The plant is of strong robust growth with dense foliage, which is quite free from blight. Fruits are bright scarlet, smooth, with a decidedly solid flesh and of remarkably sweet flavor. For general garden planting, or wherever an extra fine fruit is desired for an early market, we consider that our strain of Chalk's Early Jewel is the most desirable variety that has ever been produced. Pkt. 10c; $\frac{1}{2}$ oz. 30c; oz. 50c; $\frac{1}{4}$ lb. \$1.50.

381. Kansas Standard—A Middle-west variety of rapid vigorous growth with strong heavy stalks which stand up well. This is a potato-leaved sort, the fruit is a bright glossy red in color and is produced in clusters of four or five tomatoes. The shape of the fruit is round and ripens clear to the stem, perfectly smooth; has very few seeds, being thick and firm, of excellent flavor. It is of good size and very early. Set the plants two feet apart in three foot rows. Pkt., 10c; $\frac{1}{2}$ oz., 30c; oz., 50c; $\frac{1}{4}$ lb., \$1.50.

386. Stone—One of the largest and solidest, late or main crop, bright red varieties. It is unsurpassed for preserving or canning. The vines are large, vigorous and very productive. The fruits are bright, deep scarlet, oval and very deep, exceptionally smooth and uniform in size. The fruit grown from our selected stock has been of excellent shipping qualities. Pkt., 5c; $\frac{1}{2}$ oz., 20c; oz., 35c; $\frac{1}{4}$ lb., \$1.00.

RUTABAGA

(Col nabo, Sp.)

THE flesh of the Rutabaga is firmer and richer generally speaking, than that of the turnip, of which family of plants it is an important member. They are usually more highly prized for winter markets, whereas the turnip comes into value for the spring and early fall markets. Perhaps the most general use of the Rutabaga, however, is for the feeding of stock. In many sections it forms a valuable adjunct to the ordinary stock food, and its nutritive value has been frequently demonstrated. Because of the fact that the yield is usually very heavy a stock food is provided that is at once cheap, rich, succulent and nutritious.

CULTURE. They like a deep, rich, well-prepared soil, and should be sown in drills 3 inches apart, and thoroughly cultivated. When bulbs begin to form throw dirt to the bulbs, keeping them well covered. This prevents the objectionable neck, so often seen on Rutabagas. They should be given room to allow development and to this end should be thinned out to about 8 inches in the row.

416. Improved American Purple Top—This strain is of American origin, bred to a smaller top and short neck. The bulbs are of great size, yellow fleshed and purple crown, one of the most desirable varieties now cultivated. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 45c; lb. \$1.50.

TURNIPS

(*Nabo, Sp.*)

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

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

For winter keeping, store the turnips in a cool cellar and cover with sand or turf to keep them fresh. Another method is to put them in a pit dug in dry soil where there will be no danger of water standing and to cover with straw overlaid with earth sufficiently deep to keep out frost. When they are thus protected, turnips will keep well until spring. One ounce will sow 200 feet of drill, 1 to 2 pounds for an acre.

405. Extra Early White Milan—The earliest turnip. Tops very small, distinctly strap-leaved, and growing very erect and compact. Bulbs form earliest of any sort. The clean, white roots are smooth, flat, symmetrical and handsome in appearance. The flesh is white, tender and sweet. Pkt. 10c; oz. 25c; ¼ lb. 75c; lb. \$2.75.

408. Purple Top Strap Leaved—The most widely cultivated and best known variety. Used largely for sowing broadcast among corn and potatoes. It is round and flat, white on the bottom and reddish purple above ground, and a very quick grower. It is esteemed as a fine table variety. Pkt. 5c; oz. 15c; ¼ lb. 40c; lb. \$1.00.

409. Purple Top White Globe—Of a perfect globe shape, about six inches in diameter with smooth, white skin; flesh pure white, firm and crisp, and of quick growth. A good keeper and is fine for market. Pkt. 5c; oz. 15c; ¼ lb. 40c; lb. \$1.00.

Extra Early White Milan Turnips

OTHER GOOD TURNIPS

404. Extra Early Purple Top Milan. A very early sort of fine flavor. Pkt. 10c; oz. 25c; ¼ lb. 70c; lb. \$2.50.

406. Early White Flat Dutch. Early and flat in shape.

407. Golden Ball. A very sweet yellow-fleshed sort of medium size.

410. Tennoji. Large, uniform and a good keeper.

412. Amber Globe. A large variety, excellent for stock feeding.

Price of any of the above excepted when noted: Pkt. 5c; oz. 15c; ¼ lb. 40c; lb. \$1.25.

TOBACCO

One ounce of good seed is sufficient for an acre.

417. Improved White Burley—Well known sort of great merit. Our seed is grown on the famous limestone fields of Tennessee. For many years our grower has made selections of this variety and has it now at a stage of perfection rarely attained in tobacco. The fields on which he grows the seed receive special preparation and extra maturing. Plants are set farther apart than those grown for a tobacco crop. Only the choicest plants are set in the seed plots and special care and cultivation insures well matured seed of highest vitality. Careful handling, cleaning and curing of seeds as well as special attention to the crop throughout the season makes this strain of seed unsurpassed. Pkt. 10c; ½ oz. 20c; oz. 35c; ¼ lb. \$1.00.

HERBS

A few Pot Herbs and Sweet Herbs should have a place in every vegetable garden. A very small space will give all the herbs needed by a family. Culture is very simple; the best way is to make seedbed in the early spring and set the plants out in beds.

1000. ANISE	Used for flavoring.....	5c
1001. CARAWAY	Seeds used for seasoning.....	5c
1002. CATNIP	Leaves used for tea.....	10c
1003. CHERVIL	Leaves aromatic, for seasoning.....	10c
1004. CHIVES	Used for flavoring.....	20c
1005. CORIANDER	Seeds used for seasoning.....	5c
1006. DILL	Used for seasoning pickles.....	5c
1007. HOREHOUND	Very useful for curing coughs.....	10c
1008. LAVENDER	Leaves very fragrant.....	10c
1009. MARJORAM, SWEET		10c
1010. ROSEMARY	Leaves very fragrant.....	10c
1011. RUE	A medicinal plant.....	5c
1012. SAFFRON	Used for flavoring.....	5c
1013. SAGE	A highly aromatic herb.....	10c
1014. SAVORY, SUMMER	Leaves and shoots used for seasoning.....	10c
1015. SORREL	Used in soups and salads.....	5c
1016. SWEET BASIL	Leaves used for flavoring.....	5c
1017. SWEET FENNEL	Seeds aromatic.....	5c
1018. THYME		10
1019. WORMWOOD	Has medicinal qualities A splendid plant for poultry	10c

Purple Top White Globe Turnips

ROSS BROTHERS SUPERB LAWN MIXTURES

Mid-West Brand

No where is the need for acclimated seeds as great as in grass seeds. It is here that Mid West seeds for the Middle West are absolutely necessary. Ordinary mixtures are of little or no value in this dry section. Our thirty-five years experience with Mid West seeds enable us to work out a formula for a blended mixture that will give a soft velvety dark green all summer long. This Mid West brand is a blend of only the varieties adapted and acclimated to this part of the country. Thousands of beautiful lawns speak eloquently for Mid West Grass Seed.

The ingredients of a beautiful lawn in the Mid West are these:

Sow Mid West Grass Seed on well prepared ground early in the Spring or late in Fall, roll the ground afterwards if possible and give an occasional heavy watering, if possible, during the dry season.

(Note. The grasses in this mixture are deep rooted, and, as light watering tends to bring the roots to the surface, the lawn should be watered heavily or not at all.)

Postpaid, lb. 60c; 5 lbs. \$2.75.

By express, 5-25 lbs. @50c; 50 lbs. @48c; 100 lbs. @46c.

Ross Brothers Dry Climate Mixture

This brand is especially adapted to hot and bare places. Our grass will grow in these places when no other brand will.

Postpaid, lb. 55c; 5 lbs. \$2.50.

By express 5-25 lbs. @ 44c; 50 lbs. @ 42c; 100 lbs. @40c.

WHAT SHOULD GRASS SEED WEIGH?

Cheap mixtures of grass seed often weigh as low as 14 pounds per bushel. This means either poor seed, or chaff. Our Mid-West Brand weighs 30 pounds. This explains why it gives such superior results.

Ross Brothers Permanent Pasture Mixture

A mixture especially adapted to Mid West pastures. The summer drouths of Kansas have called for a special pasture mixture. In these days of high prices for grain and hay the farmer who is forced to feed his live stock grain and hay because of a crop failure, is put to a serious financial handicap. To meet these conditions of the Mid West, we have blended a mixture that has proven the best. Every variety included in this mixture will give an account of itself. Some are there to make a quick start. Some to keep the field growing during the hot weather. Some to fill in between the tufts of the coarser growing sorts, and each is there for a certain purpose. The result is a splendid pasture. This is a Mid West mixture for Mid West fields. It is suited for your needs. It is mixed for your field.

By express, 25 lbs. @ 42c; 50 lbs. @41c; 100 lbs. @40c.

The Care of the Lawn

The ground should be well spaded and raked so that the soil is fine and free from lumps. It is much easier to get the ground in good condition at the start than to have to dig over a well started lawn.

If the ground is poor, as is almost always the case around a building, where the excavated material is left on top, a good dressing of manure should be applied. If this is not available use Bone Meal or other high grade fertilizer. An application of hydrated lime at the rate of 25 pounds to a plot 15 by 15 feet will be a benefit.

If a thick heavy sod is wanted quickly, sow at the rate of 70 pounds to the acre, or one pound to a plot 10 by 10 feet. After sowing, the seed should be lightly raked in and the ground rolled, unless it is heavy and sticky. Keep the lawn well cut, after it is once established. The more regularly it is cut the smoother it will be. In hot dry weather it pays to give a thoro soaking once or twice a week. This does not mean a light sprinkling. Unless enough water can be applied to reach the roots of the plants it is much better not to give any. The sectional lawn sprinklers are a great help in this regard.

Ross Brothers Park Mixture

A splendid mixture for large parks or grounds where it is not so essential to have a velvet finish. The low price at which we are able to offer this will make it attractive to institutions with large grounds.

Postpaid, lb. 50c; 5 lbs. \$2.00.

By express, 5-25 lbs. @ 38c; 50 lbs. @ 37c; 100 lbs. @35c.

Ross Brothers Golf Links Mixture

We have worked out a grass mixture that is remarkably well adapted to withstand rough usage. We recommend this particularly for golf links, tennis courts, play grounds, etc.

Postpaid, lb. 60c; 5 lbs. \$2.75.

By express, 5-25 lbs. @ 50c; 50 lbs. @ 48c; 100 lbs. @ 46c.

With every lot of grass seed we send out we enclose a circular giving full instructions for the planting and subsequent care of a good lawn.

THIRTY-SIX years ago the Ross Brothers Seed Company started their field seed career. In the intervening years we have done considerable observing and learning and thinking, as well as the regular buying and selling. We have learned some several things about field seeds, not only about the crops as a whole, but particularly about field seeds as grown in and for the middle-west.

We do not boast the largest field seed business in the country. We have not had time for that; we are too busy learning about the growing and production of the **best** seed. We do believe that we have, at the present time, the most discriminating list of seed customers of any concern in the country. This, we believe, is due to the fact that we have never been satisfied with a mere sale of seeds, but have made sure that the seeds we were selling were the very best that grew and furthermore that they were best suited to the needs of our customers.

We have come to learn that there are more factors in the success of a crop than we believed at first. We have patiently studied these and are trying to help our customers with our experience, to make sure of a successful crop each year. The very success of our customers' fields, year after year, has long convinced us that our efforts have not been in vain. We know now that the farmer should carefully select the particular crop which he should plant on a certain piece of land, bearing in mind the elements contained therein, and those which must be supplied in order to insure the production of a full crop. Too often, in fact, farmers are growing a losing crop, merely because that seed happens to be the custom of that section, and because the farmer has never taken the pains to learn what he can grow most profitably.

We have been specializing in Alfalfa and Sweet Clover Seed for more than thirty years. During the past ten years we have been devoting a great deal of attention to the various kinds of Sorghum crops for hay, pasture and ensilage, and also the grain sorghums, which will produce a crop of grain, ranging from ten bushels to thirty-five bushels per acre, on land which will not produce Corn or other similar crops.

If you will give us some idea of your conditions, kind of land, what has been farmed on it before, the amount of moisture you get and so on, we shall be very glad to give you our advice as to what would be most profitably grown there. If our experience can be of service to you, it is yours for the asking.

When the farmer buys Seed, he should know it to be well matured, and seed that has been properly re-cleaned and graded and which is **free from weeds**. No farmer is ignorant of the danger and expense of having weeds in his fields, but few there are who are careful enough in securing weedless seeds. Every farmer should know how to tell good seed from poor, and to make sure that he is buying only the best.

SEED DETERMINATION: To determine the value of a sample of Seed, divide the sample into two parts. From one count out 100 or 200 seeds, taking the good and bad as they come. Test these for germination in a box of warm, moist dirt or between two damp blotters. The percentage of sprout is the germination figure. The other half of the sample should be spread out on a large white piece of paper. Divide the good plump seeds from all waste matter, that is chaff, weeds, poor grains, foreign seeds, etc. Weigh the two piles. This gives a purity test. Try this on the seed you buy. We are sure you will realize then, why it is that the users of Ross Brothers Seed have success.

It has been our practice for years to work always toward the perfection of each kind of seed which we sell. This is always the result of cleaning and re-cleaning, grading and re-grading. It is labeled "Acorn Brand" and is known, throughout the middle west, to stand for all that we say that it does. If you want the best of seeds, write for "Acorn Brand". We shall be glad to have you test according to the test described above and compare with any other seeds in the country. If you should ever find any that you think are better, we shall certainly be glad to hear about it. We have not yet seen that kind of seed.

We are fortunate enough to be located in the center of the greatest field seed producing section in the world, and we have learned in the past thirty-six years, how seed should be grown, and are so situated that we are in easy access of the leading seed growers of the world. We are thus easily enabled to examine many lots of seed that are grown and can easily select the best, and ship these without heavy expense to our seed cleaning warehouse, where they are all re-cleaned, tested and graded.

When in Wichita, stop at 228 Commerce Street and we shall be glad to show you the manner in which we clean and prepare our "Acorn Brand" Seeds.

THE SIGN OF QUALITY

This is the mark that is used on the Best, and only on the Best. We reserve for it our especially fine grades. It is as reliable as the American Eagle on a dollar bill. Protect yourself and your crops by using only Field Seeds sold under the sign of ACORN BRAND.

ALFALFA is the most profitable crop, by and large, grown in Kansas, Oklahoma, Texas, New Mexico, Colorado, Idaho, Utah, Wyoming and Nebraska. No other crop on a twenty year average produces nearly as many dollars per acre as does Alfalfa. In some parts of these states it is impossible to raise hogs at a cost that will permit selling them on the market and make a profit for the grower unless he can pasture the young pigs on Alfalfa. Alfalfa has shown incomes of more than \$100.00 per acre for the year, over a period of seven years, on the same field, when the farmer has pastured pigs and at the same time has cut two to four crops of hay off the same land. This seems unreasonable to many, but is proven by the experience of a great many farmers throughout the region of the middle-west now producing Alfalfa.

The experience of the man, as is quoted on the third cover of our catalog, is by no means unusual. We can duplicate this in many instances. We should like to ask if any of our customers know of any other crop that will produce the same results as is produced by Alfalfa.

Mr. Coburn, formerly Secretary of the State Board of Agriculture of Kansas, made the statement twenty years ago, that with good Alfalfa pasturage in plentiful supply for hogs, they could be produced for 2¾ cents per pound. Of course the added cost of labor and other items going into the cost of production increases that price somewhat, but we feel certain hogs can now be produced for 8 cents per pound.

It is not safe to pasture sheep, cows, or other cattle on Alfalfa, because it has a tendency to cause bloat with the consequent loss of cattle. Horses, mules and colts may be pastured on Alfalfa if necessary to use it for that purpose. Many horse breeders pasture their mares and colts on Alfalfa throughout the growing season. Alfalfa furnishes the cheapest feed possible for this purpose.

Poultry will also thrive on Alfalfa, and it makes a very desirable addition to their feeding ration.

Many people believe that Alfalfa cannot be profitably produced in the particular section of the country where they live. We have been shipping Alfalfa seed into thirty-six states for thirty-six years and also to several provinces of Canada, as well as to Mexico. In all of these different sections, under widely different conditions of culture, farming, etc., Alfalfa has given satisfactory performances for the farmers using it. We, therefore feel certain that Alfalfa can be grown in practically every state in the United States, and that it will prove just as profitable to the farmers in the other states as it does to those in Kansas and Oklahoma.

If you, or your neighbors have had trouble with Alfalfa in the past, very possibly it is because proper attention to all details has not been given. We shall be very glad to supply seeding directions and give you any advice that we can regarding the care of the

Alfalfa fields, if we can serve you in that way to advantage.

The reason that we feel that we are particularly well equipped to sell you Alfalfa Seed is because Kansas produces as much Alfalfa Seed each year as all the other seed producing districts in the United States combined, and we are situated as nearly as possible to the center of this Alfalfa producing district in Kansas and Oklahoma.

We should like to quote from a leading Seed Authority of the East as follows: "From the standpoint of purity and economy, everything is in favor of Kansas Seed, and Alfalfa reaches the highest point of development in that state. Alfalfa from Kansas Seed will

recover more quickly after being cut, and will have a larger yield than seed produced further north, for the reason that Kansas furnishes ideal conditions for the growth of Alfalfa and development of the Seed. It is always possible to get seed in that state that is absolutely free from weeds."

Naturally then we have the advantage of selecting the quality of Seed that we want to sell, because we are so near to so many lots of seed that are offered to us and we are able to select those which we feel conform more nearly to the high standards which we set.

We clean and re-clean all of the seed until it is as nearly perfect as machinery will make it. We test it and know that it contains the proper germination, vitality and is capable of producing a goodly stand of plants on your land.

We cannot advocate the use of a nurse crop in growing Alfalfa, unless you merely want to fertilize the land and save Alfalfa for hay purposes for three or four years in rotation. Alfalfa is a sturdy plant and has been accustomed to depending on its own ability to develop its valuable hay crops. A nurse crop will sometimes weaken the plant, and hold back the root development so that it will require full twelve months in which to recover from the stunting received. Of course, there are some fields where the soil is light and sandy, that blow considerably, that one wishes to sow down to Alfalfa. In this case we would suggest that the seed be sown alone and afterwards straw be spread evenly over the surface of the ground. The young plants will come up through the straw and make quick growth and the straw will hold the sand under control until the plants become well established.

Many soils require inoculation in order to grow Alfalfa successfully. On page 57 you will find inoculating bacteria listed in this catalog. If you have not had experience in using it we shall be glad to give you our ideas. In order to give you advice that will be valuable to you we must know something about the nature of your soil, drainage and other things necessary to put the land in condition for growing Alfalfa or the Clover crop.

Field of Alfalfa

SWEET CLOVER

SWEET CLOVER is a crop that is **hardy: defies wet and drouth; never winter kills, and will grow on land that will not produce Alfalfa!** Many wet, waxy soils are being farmed unprofitably by other crops, that would produce a large crop of Sweet Clover, and furthermore Sweet Clover will turn that poor land into land that will within four or five years, be nearly 100 percent better for any other crop that the farmer wants to put there.

Sweet Clover has long, deep roots that permit water and air to penetrate to the lower levels of the soil and thus greatly aids the mechanical condition of the soil. As Sweet Clover is a legume it increases the nitrogen content of the soil.

Wheat, Corn or Alfalfa grown on a field following Sweet Clover are greatly improved. Yields of 10, 15 and 25 percent increase are not at all uncommon.

Sweet Clover, in this latitude, should be sown, as largely as possible during the month of February, but in some seasons it may be sown as late as April the 20th. We do not recommend fall sowing in this part of the country, although in some parts it may give good results.

If you have a piece of upland or a few acres in the bend of a creek sow Sweet Clover on it. Just disk the ground and harrow the seed in. Do not cover deeply. Sweet Clover still maintains its wild nature to the extent that it is capable of taking care of itself. Many good stands of Sweet Clover in the prairie parts of Kansas were sown on the grass without any cultivation whatever and have proved very profitable to the owner.

If Acorn Brand Seed is used, eight to ten pounds to the acre will be sufficient. With the lighter and cheaper grades a greater amount will be necessary.

If the field is to be grazed, stock can be allowed on it when the plants are six inches high. Sweet Clover is a biennial and not a perennial. That is, the plant grows only two years, so that this plant must be given a chance to re-seed itself the second year. This will be accomplished if the stock is removed from the field two months before frost is expected. Or if hay is being cut, plan to have no crop cut within two months before frost the second year. When mown for hay, always mow high, as the plants do not throw up side shoots as Alfalfa does.

For hay and pasture Sweet Clover contains the same relative proportion of protein as Alfalfa does. Cattle, sheep, hogs and horses can all be pastured on Sweet Clover without danger of bloating. The hay will be coarser than Alfalfa and not as saleable on the market, but will contain just as much nutrition and just as much food value as Alfalfa.

The Sweet Clover Seed that we offer was grown in Kansas and has been graded, cleaned and re-cleaned, and if you desire we will scarify it for you. It has been tested and we know that it will give good performance on your land. When ordering, better order Acorn Brand if you want the best.

We have found in general, that for the middle-west, Alfalfa and Sweet Clover are by far the most profitable of the legumes. For this reason we have not specialized in Red Clover, Mammoth Clover or Alsike Clover and do not recommend them for general planting. We realize, however, that they have their own particular advantages for particular localities and we carry, at all times, the best grade of all of these and are able to quote favorable prices on them at anytime.

Red or Medium Clover — is most generally used in the northern and central States for a soiling crop, and also for producing hay. Most of the farmers who have been using it, plan on turning it under the second or third year after seeding as a part of a short rotation, thus keeping up the fertility of the land and insuring plenty of nitrogen being available for succeeding crops. A big draw-

Sweet Clover in Blossom

back to Medium Clover is that it winter kills easily.

Mammoth Red Clover — grows considerably larger than the Medium Red. Gives larger hay crops, particularly on light, thin land. The hay is not quite so desirable as Medium Red Clover because it is coarser, but it has the same fertilizing value. The main use of Mammoth Red is to sow it with Timothy or Red top and it matures at about the same time with these and makes a valuable addition to a field where either Timothy or Red Top are grown.

Alsike Clover — is, in our opinion, more valuable than either Medium Red or Mammoth Red Clover and can be used in combination with grass seeds for pastures or hay. A good plan is to sow it in connection with Orchard Grass, Timothy, Red Top, English Blue Grass and Kentucky Blue Grass. The Timothy and English Blue Grass will grow up quickly and protect the rest. All of the others will last for several years, making an excellent permanent pasture. Alsike is also valuable for turning under as a soiling crop in rotation.

Alsike will thrive in the wettest of soils, and is considerably hardier and more of a perennial than red clover, and the hay is of much better quality. In sowing Acorn Brand use only 5 or 6 pounds to the acre.

WHITE CLOVER

Largely used for sowing on lawns mixed with Kentucky Blue Grass and other grass seeds and is very valuable because it supplies nitrogen to the soil and increases the fertility and makes the plant root more available for the use of the grasses. It is of value to the summer pastures and should be used in all grass seed mixtures sown for either lawn or pasture.

A Plant of Virginia Peanuts

PEANUTS

THE Peanut as a feeding and fattening crop is coming to be considered of great value by farmers who have become acquainted with its feeding value. Hogs are fattened very quickly and very economically on peanuts. It is possible to cut off the top growth of peanuts and use it for cows and other livestock and turn the hogs in on the patch and let them get out the peanuts, thus doing the work of providing excellent feed at extremely low cost. For the farmer who wants to grow larger quantities of Peanuts, the Oil Mills and Peanut Butter Factories afford a market for vast quantities of this nut which will bring a nice cash income for the amount of ground devoted to the growth of peanuts. We feel that peanuts ought to be a regular crop on every farm that has sandy, light loam soil, because the tops and the roots can both be used or sold, making a two crop return from the same acre of land. The Peanut plant, being a legume, has the ability to draw nitrogen from the air and transform it into nitrates in the soil the same as Alfalfa and Sweet Clover.

The Virginia—is a very profitable sort and is planted almost exclusively in the peanut growing sections of Virginia and Carolina. It is the old standard variety used for roasting. The plants have erect stems with upright foliage and the nuts are of good size and contain large kernels. The vines furnish very excellent forage or hay.

The Spanish Peanuts—have been the most popular variety used in the middle-west and south-west, because most of the acreage devoted to peanuts has been devoted to hog feed and hay. It is the largest producer in pounds per acre, but on account of the small size pods, it costs a little more to harvest it than with the larger podded varieties. The nuts are always very sweet and finely flavored; are more free from undeveloped kernels than any other variety.

The Tennessee Red—is especially adapted to black waxy land and will also produce good crops on sandy soil. The nuts contain three to five medium sized kernels of exceptionally fine flavor and quality. It produces more nuts to the acre than any other variety than the Spanish, and we believe in most heavy soils it will produce a larger quantity per acre than that well known variety.

THE CANADA FIELD PEA

Some farmers want an early maturing pea for seed and hogs. The Canada Field Pea is not a cow pea nor does it belong to this particular family of plants. It has the character of the Garden Pea and for that reason may be planted very early. In this particular latitude a good many farmers plant it in oats and barley and they intend to cut it with those feeds and feed grain and straw together as hay. It requires about 60 pounds of Canada Field Peas to the acre when sown with Barley or Oats. When sown in rows and harvested as a hay or grain crop separate from other crops it requires about two bushel of peas per acre. In the north country or in higher altitudes of the middle-west the Canada Field Pea will probably show a larger profit per acre than any other crop that can be grown on the farm.

SOY BEANS

Are being very largely used for soiling crop in Ohio, Indiana, Illinois, Iowa, Missouri and Nebraska. Soy Beans have never been very largely used in Kansas, Oklahoma nor Arkansas, but on the thicker, clay soils of the middle-west soy Beans will prove their value as a fertilizer crop and at the same time will produce a large quantity of very excellent hay and a fair acre yield of rich beans. Soy Beans should never be planted more than 2½ inches deep nor until the ground has become thoroughly warm. If planted to greater depth or in cold land, seed will usually rot instead of growing.

On account of the more upright growth than cow peas the crop is considerably heavier and requires longer a time to cure in order to be used as hay. The best time to cut Soy Beans for a hay crop is when the upper leaves begin to turn yellow. The Beans will not be matured at that time and it is necessary to use the entire crop for forage or hay. If you want to save the Bean crop allow the beans to become thoroughly ripe. There will be some feeding value in the straw and hay after it has been threshed. The Soy Bean has the same ability to transform the nitrogen of the air into nitrates which are usually contained in the soil of cow peas and other leguminous crops. In light Kansas soils we believe the Cow Peas will be more profitable than Soy Beans. In sticky waxy soils the Soy Beans should give more profit per acre than Cow Peas.

Soy Beans may be sown in rows 3½ feet apart and cultivated two or three times or they may be sown broadcast or they may be sown at the last cultivation of corn, the latter manner will require a very small quantity of seed per acre. Soy Beans in the middle-west may be sown after Wheat, Rye and Oats have been harvested and they mature a crop of beans in about 70 to 85 days according to the variety used.

COW PEAS

Make poor land rich, and rich land more productive. Cow peas are especially valuable as a "catch crop" for forage or hay and there are many million acres of land in the middle west that could be improved in productivity by sowing cow peas after wheat has been harvested. Cow Peas require from 70 to 90 days to mature a crop of peas, and if the crop is put in the last of June or the first half of July there will be plenty of time for the crop to mature and at the same time produce a good hay crop. The same land can be used for seeding wheat again in the fall months. The grain crops following a crop of cow peas are benefited very largely and succeeding crops on the same land for the next three or four years show increased yields by reason of the fertility introduced into the soil by cow peas.

Cow Peas may be planted any time after the ground is warm, and in this part of the country they may be put into the corn field at the time of laying by or if the corn is planted during the month of May it is safe to plant cow peas along in the row with corn. A number of our farmer friends have informed us that they frequently grow 8 to 12 bushels larger corn crops per acre on land where cow peas were sown at the same time corn was planted than they do on land where cow peas were not planted. It would perhaps be a good idea to try out this experiment on your own farm. We doubt if it is possible to increase the production of corn 8 or 10 bushels per acre by growing a few cow peas, but at the same time it will certainly make you a lot of money if you follow this practice throughout your general acreage. Cow Peas possess the ability of putting nitrates in the soil in one year in sufficient quantity to not only benefit the crop produced that year, but to make the increased fertility available for following crops for two or three years. Considering the higher value of farm land throughout the middle-west it is going to become necessary to increase the production of land so that it will pay dividends on the increased valuation.

The work involved in growing a crop of Cow Peas is so small compared with the returns received that the cost of handling the crop should not enter into consideration. If one were to buy fertilizer to cause the same increase in crops, and also to benefit the next three or four crops the same as cow peas will do, it would cost at least eight or ten dollars per acre for fertilizer plus the cost of labor. Cow Peas can be sown broadcast at a cost of approximately \$4.50 per acre and you will agree with us that, considering the cost, Cow Peas will prove a valuable "catch crop" to be used on your farm. The varieties most generally planted in the Middle West follow:

Whippoorwill—A favorite early maturing variety of medium growth. The seed is reddish brown speckled.

New Era—An early, upright growing variety and is five to ten days earlier than the Whippoorwill. Will not produce as much fine growth as Whippoorwill. The seed production is quite large compared to other varieties.

Clay—A tall growing variety and will make more hay than either the Whippoorwill or New Era. The seed production will not be as large in proportion. This variety should be planted largely in corn where you intend to make ensilage corn or pasture.

Black Eye—Vines will grow between 30 and 40 inches high, in other words it is of an average height with the different varieties of cow peas. Will produce more seed per acre than any other variety of cow peas and the peas are largely used in the south for table use as well as for stock. Will be ready to harvest in about 70 days.

SUDAN GRASS

A SWEET heavy-yielding grass; absolutely drought-proof and grows successfully everywhere sorghums will grow. Livestock of all kinds eat it greedily and for a stock of cattle it will add weight more rapidly than any other variety of sorghum grasses. Yields more pasture per acre than any other annual forage crop.

Sudan Grass can be best described by saying that it has all the good qualities of Johnson Grass, with a lot more of its own added, and while it looks like an extra tall growing strain of Johnson Grass it has not a single bad quality or characteristic of the Johnson Grass, such as the creeping underground root stalks. Sudan is absolutely free from the objectionable root system which makes Johnson Grass so difficult to eradicate. Sudan Grass is an annual and requires reseeding each year. It is no more difficult to get rid of than Sorghum, Cow Peas or other similar crops, and it may be grown, either drilled in cultivated rows 3½ feet apart, or broadcast. For drilling rows 3½ feet apart it will require 3 to 6 pounds per acre, depending on the cultivation of the land. Broadcast it should be sown 15 or 20 pounds per acre. The seed should not be sown until the

Field of Sudan Grass

ground is warm in the spring, in this latitude about May 15th is the earliest practical date. The first hay crop will be ready to harvest about 45 to 50 days from date of sowing. The second crop from 30 to 35 days. The third crop from 30 to 35 days. If you wish to save a seed crop from Sudan it will require 80 to 90 days from date of sowing the seed until

the seed crop is to be harvested. After threshing, the straw will prove as nutritious as any other variety of sorghum. Sudan may be sown as far north as any other variety of the sorghum family. In many states it is going to supersede Millet as a forage crop because it produces so much more tonnage per acre and the quality of the forage is so much better.

RHODES GRASS

A wonderful hay and in southern Texas, southern Louisiana, portions of Alabama and Florida is a perennial. Further north where the frost cuts down vegetation in September or October, it seems to destroy the roots of Rhodes Grass.

Rhodes Grass is a native of central and south Africa, where it is regarded as one of the best species for pasture on dry soil. A great success on both Florida coasts demonstrates its equal ability in sections of plentiful rainfall. It is a species that does not spread by underground root-stalks, but produces running branches which root at the joints, thereby producing new grass. The runners are not so abundant where the grass is growing thickly and therefore does not materially interfere with the machinery at the time of harvesting a hay crop.

To be a very valuable hay grass a variety must possess certain important characteristics. It must be aggressive, or at least able to maintain itself for a considerable length of time against weeds and other enemies. It must furnish a profitable yield. It must be palatable and nutritious, and possess good color and general appearance, either loose or in the bale when cured.

HOW TO PLANT: When grown from seed its growth is commonly erect the first season, but when grown from roots, or the second season when grown from seed, it makes runner-like branches from two to four feet long, which root at the joints and so

cover the ground quite rapidly. It may be propagated by both seeds and roots, as above described. We think it advisable that you sow the seed at the rate of ten pounds to the acre. On soil that has a fine mellow surface, disk first, and then give a light harrowing.

WHEN TO PLANT: The proper time to sow Rhodes Grass depends upon the section and upon the seed itself. Along the coast, where there is no danger of cold weather, the sowing may be made in the fall if the soil is in good condition to make a moist seed bed. Farther inland, a short distance from the coast, where a good moist spring occurs, it should be sown in the early part of the year, between February and May.

FOR HAY: Rhodes Grass grows dense as well as tall so that the stems are not large and the hay is not coarse. In fact it is practically like Timothy Hay. Its manner of spreading is by runners, rooting at each joint, and bunching out from each joint. If sowed in drills, it will cover the ground in one season. It seems impossible to pasture to death the grass that spreads in this manner, therefore its value for steady pasture may be seen readily.

While it is a rapid spreading grass, it does not spread from root stalks as does Johnson Grass. Therefore, it can be killed out easily by deep plowing which will cut off the roots below the ground and turn the sod up to the weather for the winter.

In Oklahoma and Kansas we find that Rhodes Grass must be handled as an annual. In our part of the United States we would class it as of the same value for pasture and hay as Sudan Grass. The stalk and leaves of the Rhodes Grass are more truly a grass like Timothy or English Blue Grass, therefore it is properly named a grass instead of a sorghum. We recommend that farmers on dry land or on extremely wet soil try a small acreage of Rhodes Grass and see what it will do for them on their farms. A number of our customers have tried Rhodes Grass during the past two years and while it does not have a perennial characteristic in Kansas and Oklahoma, still it produced enough hay, in one year to make it very profitable.

Rhodes Grass

KAFIR

A good many acres of farm land well adapted to growing Kafir are now being used to grow Corn, which results in a partial or total corn crop failure to the detriment of the owner or tenant.

The uplands of Kansas, Oklahoma and Texas will give much better cash returns when planted to Kafir, because Kafir when ground for feed gives practically the same feeding value as Corn. The fodder value of Kafir is much higher than corn fodder and it produces a larger tonnage per acre. We are offering several types or varieties of Kafir.

Any of them will give good results on proper soil and under ordinary moisture conditions. For a number of years Standard White Kafir has failed to produce nearly as large grain crops as some other varieties. For this reason we would recommend our customers, who wish to grow grain, to plant either **Dwarf Blackhull White** which matures in about 120 days from planting, or **Pink Hull White**, which matures in 95 to 100 days from planting. Both of these varieties will produce fairly large yields of fodder, but if fodder is the main requirement on your farm grow Standard White Kafir or Red Kafir. Either of these varieties will produce a larger tonnage of fodder than the first two mentioned.

We realize the importance of good germinable Kafir Seed, knowing that the seed is affected adversely by damp cold ground, therefore we are growing Kafir where it matures perfectly, and where we secure the highest germination possible and after it reaches us we clean and reclean it until when shipped to you it is as nearly perfect as it is humanly possible to make it, but please remember that Kafir will not do any good at all in cold, damp ground. The ground may be damp, but at the same time it must be warm to secure a good stand of Kafir. Too many people loose their first planting by getting in a hurry to put the seed in the ground before it is ready to receive it. It does not require very much Kafir to seed an acre when drilled in rows $3\frac{1}{2}$ feet apart, 2 to 4 pounds of seed to the acre is ample and if the ground is nice and warm 2 pounds is all you will need. If you want to sow the seed broadcast or drill it with a drill for fodder, use 50 to 85 pounds per acre.

R.B.

Dwarf Black Hull White Kafir

Dwarf Blackhull White Kafir—

is the result of careful selection extending over a number of years, which has resulted in the production of a type of uniform dwarf growth. Plants range from $3\frac{1}{2}$ to 5 feet in height, depending on the soil and weather conditions. The heads are uniformly larger and of much better shape than the old types of White Kafir. Dwarf Blackhull White Kafir requires 120 to 125 days in which to mature grain crop, depending somewhat on the number of showers which favor the land during the growing period. Prices 25c per pound postpaid. At purchasers' expense, 25 pound lots 8c per pound; 50 pound lots 6c per pound; 100 pound lots or more at market price.

Pink Hull White Kafir—The earliest type of Kafir on the market at the present time. Matures grain crop in 90 to 100 days. The stalks are somewhat taller than the Dwarf Blackhull, not as heavy and will produce almost as many pounds or bushels of Seed to the acre. The earliness of this variety is very important to the upland farmers of Kansas, Oklahoma and the Panhandle of Texas, because it insures harvesting a good grain crop regardless of weather conditions. Prices: 25c per pound, postpaid. At purchasers' expense, 25 pound lots 8c per pound; 50 pound lots 6c per pound; 100 pound lots or more at market price.

Standard White Kafir—The stalks grow from 5 to 8 feet high, making a straight upright plant, rather stocky, but the size of the head is not as uniform as that of the Dwarf Blackhull White. This variety is especially valuable because it supplies plenty of ensilage. It requires 140 days to mature a seed crop. Prices: 25c per pound, postpaid. At purchasers' expense, 25 pound lots 7c per pound; 50 pound lots 5c per pound; 100 pound lots or more at market price.

Red Kafir—The growth is tall, ranging from 6 to 10 feet according to the season. In very good soil and with plenty of moisture the stalks are more slender and juicy than the other varieties of Kafir. The heads are long, compact and grow erect, usually measuring 15 to 20 inches. The seed is red, somewhat smaller than that of the White Kafir; hard and brittle. It produces a big yield of seed on poor land. Matures crops in about 125 to 130 days. Makes a larger crop of hay or ensilage than the dwarf varieties. Price: 25c per pound, postpaid. At purchasers' expense, 10 pound lots 10c per pound; 25 pound lots 8c per pound; 50 pound lots 6c per pound; 100 pounds lot or more at market price.

THE MILOS

Are extremely valuable on the higher uplands of Kansas, Oklahoma, the Panhandle of Texas, eastern New Mexico, eastern Colorado, and western Nebraska. The dwarf varieties mature grain crops in from 75 to 85 days from date of planting. The taller varieties require from 100 to 130 days to mature crop. The stalks of Milo are quite similar to Kafir, although they do not contain quite as large a proportion of foliage value as Kafir. The habit of the Milos in maturing a grain crop so early makes them especially valuable for two purposes; first, to grow grain with which to feed the hogs during the late summer; second, to be certain of having plenty of grain on hand, and at the same time a forage crop that is worth a good deal more than corn fodder.

Dwarf Straight-neck Yellow

Milo—A heavy yielding variety of Milo, 90 per cent of the heads grow erect instead of crook-neck. The stalks range from 3 to $4\frac{1}{2}$ feet high, and the seed heads often weigh $\frac{3}{4}$ pound when ripe. On account of its dwarf habit, it should be planted in rows $3\frac{1}{2}$ feet apart and eight to twelve inches apart in the row. Milo should be planted about the middle of May and cultivated the same as Kafir. Price, 25c per pound, postpaid. At purchasers' expense, 25 pound lots 10c per pound; 50 pound lots 8c per pound; 100 pound lots or more at market price.

Standard Yellow Milo

This variety of Milo should be planted in rows at least 5 feet apart and 2 or 3 seeds should be planted every 3 or 4 feet apart in the row. The crop should be cultivated the same as Corn, requiring four or five cultivations to make proper development. The stalks will grow from 7 to 10 feet tall. Suckers will break forth from a great many joints along the plant and each hill, in a favorable season with plenty of rainfall, will look like a small tree. It requires 125 to 150 days to mature grain crop. Produces an abundant supply of good quality ensilage as well as a very heavy grain crop. On account of the long number of days it requires to mature, the grain crop is not as certain as that of the dwarf types and for that reason we do not recommend the tall growing kind to farmers situated in the higher altitudes. Prices, 25c per pound, postpaid. At purchasers' expense, 25 pound lots 10c per pound; 50 pound lots 8c per pound; 100 pound lots or more at market price.

Standard Yellow Milo

MILOS

DWARF CROOK-NECK YELLOW MILO

A Dwarf improvement of the old Standard Yellow Milo. Grows 3 to 4 feet high, while the old variety grew 8 to 10 feet. Dwarf Crook-neck Milo is quite similar to the Dwarf Straight-neck Milo, but the heads all invariably bend over from the weight. It is not unusual for a head of Dwarf Crook-neck Milo to weigh one pound. The feeding value is the same as Dwarf Straight-neck Yellow Milo. This variety seems to be more popular throughout the western plains of Kansas and Oklahoma. Price 25c per pound, postpaid. At purchasers' expense, 20 pound lots, 8c per pound; 50 pound lots, 6c per pound; 105 pound lots or more at market price.

DWARF WHITE MILO

Considering the ability of White Milo to throw out suckers from the main plant, we believe our customers will secure heavier yields of grain if they will not plant the seed very close in the row. The rows should be at least three and one-half feet apart and we would prefer to plant four feet apart. The plants should not be closer than one foot apart in the row. Be certain the ground is warm before you plant the seed. The nature of White Milo seed demands warm soil in order that it may make its development without a set-back caused by cold nights or cold ground. White Milo is a heavy grain yielder, and plants grow from four to six feet high. White Milo is a non-saccharine belonging to the Durra family. It has the ability to send out a number of suckers from the main stalk, each forming a heavy head. The kernels of White Milo are soft and furnish excellent feed for all kinds of animals and fowls. The grain may be fed whole or ground.

White Milo should be cultivated and harvested the same as Kafir, except the rows should be three and one-half to four feet apart and the seed planted at least 12 inches apart in the row. Two pounds of White Milo are sufficient to plant an acre. Price 25c per pound, postpaid. At purchasers expense, 10 pound lots 12c per pound; 25 pound lots 10c per pound; 50 pound lots 8c per pound; 100 pound lots or more at market price.

HEGARI

A new grain or forage crop similar to both White Kafir and Feterita. It is more desirable for grain than either, as the bad qualities of both have been eliminated. Feterita shells out pretty badly, and Hegari will not shell.

Feterita is soft and pethy, while Hegari is solid and sound and with plenty of blades. Its dwarf habit of growth, 4 to 5 feet in height, and compact heads of large white grains make it very attractive. Hegari also produces large crops of grain. The stems are rather sweet and horses and cattle eat the stalks, fodder and grain if permitted to do so. Prices 25c per pound, postpaid. At purchasers expense, 10 pounds 15c per pound; 25 pounds 12c per pound; 50 pounds 11½c per pound; 100 pounds or more at market price.

FETERITA

Feterita grows from 6 to 8 feet high. The plant resembles Kafir but the stalks are much more slender. Feterita should be planted in rows three and one-half feet apart and the seed should be dropped from eight to fourteen inches apart in the row. When Feterita gets up about eight inches high, it branches out from four to ten sucker plants and each of these sucker plants grows up the same as the main plant. On account of this suckering habit of Feterita it should be planted thinner than Kafir or Milo. The first or main seed head ripens 15 to 30 days before the heads of the suckers are mature enough for grain. The heads are rather straight, but not as long as Kafir. The grain is white like White Kafir and about twice the size. The grain is softer than Kafir or Milo. A splendid feed for poultry and other livestock. Feterita matures in from 80 to 90 days from date of planting, therefore it is 25 to 40 days earlier than Kafir. Feterita is well adapted to high altitudes and countries with short growing seasons. Feterita can be sown after wheat crop has been harvested, and in 80 to 85 days will turn out a

One Plant of White Milo

yield of grain ranging from 15 to 40 bushels per acre, depending on the season. Feterita is a great drouth resister, and in this respect will withstand continued heat and drouth better than either Kafir or Milo. Prices 20c per pound, postpaid. At purchasers expense, 10 pound lots 10c per pound; 25 pound lots 8c per pound; 50 pound lots 7c per pound; 100 pounds or more at market price.

DARSO

In 1912 the Oklahoma Experiment Station received a heavy sorghum, for identification, from a farmer in south-west Logan County. Not being familiar with this type of grain sorghum it was planted in a variety of tests and found to be very uniform in growth, showing a type had been well established. This may have come about through either careful selection or maturation. It has been run in a variety of tests during the past five years, and in very dry years has out-yielded the grain sorghums. In the year 1914 practically all of the grain sorghums failed, yet Darso gave an average yield. In a year when there is an abundance of rainfall, Kafir has out yielded Darso slightly. Darso is low growing heavily foliaged, and has a large stalk which is usually tinged with red. It is remarkable for its uniformity in height and uniformity in shape and color of heads. The stalks are sweet and juicy, and chemical analysis of grain shows that the composition is very similar to that of Kafir. Darso matures earlier than Kafir, which fact has much to do with its drouth resistance. At the Oklahoma Experiment Station Darso has been used as a safe feed crop during years of severe and continued drouths. Darso makes excellent silage, and can be used for grain, forage or silage crop. Worms do not take the Darso in the field before harvesting as they do the other grain sorghums. Neither do chinch bugs damage Darso as they do Milo. Prices 20c per pound postpaid. At purchasers expense, 10 pounds 10c per pound; 25 pounds 8c per pound; 50 pounds 7c per pound; 100 pounds or more at market price.

Field of Black Amber Sorghum

Black Amber Sorghum—90 days. The old original early variety, grown almost exclusively for forage crop either alone or broadcasted with cow peas. Fodder quality. Prices 20c per pound, postpaid. At purchaser's expense, 25 pounds, 8c per pound; 50 pounds 6c per pound; 100 pounds or more at market price.

Red Amber Sorghum—requires 90 to 105 days in which to mature seed crop. One of the most valuable kinds of sorghums for ensilage and is practically sourless when stacked out-doors and usually can be fed as late as the Middle of May, following date of harvest, without deteriorating in any respect. We recommend this variety to growers who want good forage or ensilage. Price 20c per pound, postpaid. At purchaser's expense, 25 pounds, 8c per pound; 50 pounds 6c per pound; 100 pounds or more at market price.

Early Orange Sorghum—matures a grain crop in 115 to 120 days. It is later than either variety of Amber. The stalks are heavier and shorter than either of the Ambers. Its forage quality is first class. Is very valuable for ensilage. One of the heaviest producers of ensilage of the entire sorghum family. Price 25c per pound, postpaid. At purchaser's expense 25 pounds 10c per pound; 50 pounds 8c per pound; 100 pounds or more at market price.

Kansas Orange Sorghum—probably 5 to 10 days later in maturing than early orange, more uniform in growth. Has the ability to stand storage out doors, retain its sweetness and palatability until late in the spring. Price 25c per pound, postpaid. At purchaser's expense, 25 pounds 12c per pound; 50 pounds 10c per pound; 100 pounds or more at market price.

SORGHUM OR CANE FOR FORAGE

Every year the sowing of Sweet Sorghum in the middle-west south and south-west for hay, forage and ensilage crops becomes more general. Different parts of the country demand different varieties of Sorghum Seed. Some want it exclusively for hay, some want it exclusively for ensilage, while some want it for pasture and others want it for hay, ensilage and pasture.

There is a variation of growth of the different varieties of Sorghum. Early Amber Sorghum is a tall growing sort. Early Orange Sorghum grows a heavier shorter stalk. Red Top or Sumac Sorghum is the latest maturing variety of all and produces small stalks about 6 feet tall with more blades than either of the other varieties mentioned. Red Amber is another variety that is well known in some parts of the country, this variety seems to possess the best qualities of both the Early Black Amber and the Early Orange Sorghums, the stalks are heavy and rich in saccharine and not extremely juicy.

Then there is a variety called Sourless Cane. In some parts of the country this name is applied to certain types of Orange Cane. In other sections it applies to the Red Top or Sumac Sorghum, and in other sections Sourless Cane stands for Red Amber Sorghum and in other sections African Millet or White Seeded Cane is known as Sourless Cane.

If you want to buy Sourless Cane, please tell us the type you have been used to sowing and we will then know exactly what to send along to you. While speaking about Sorghums, we would refer again to African Millet. The seed known by this name in certain parts of Oklahoma is what other parts of the country know as Sourless Cane and other parts as the Early Orange Cane Seed. In southwestern Kansas African Millet Seed is nearly as white as Kafir. The growth of various types of Sourless Cane and African Millet range from 6 feet to 10 feet high.

Considering the importance of Sorghum or Cane as a forage crop throughout the middle-west, south-west, south and sections of the central part of the United States, not enough attention has been paid to the purity of Cane Seed.

Most of the cane seed offered on the market for sale is the afterthought of the person who grows Sorghum for forage or ensilage, therefore is it badly mixed. It will require four or five years of constant selection and breeding to create distinct types that will prove true to name and description.

For this reason the seed we are offering in this book is to be used only for fodder purposes unless we otherwise specify. We have a limited supply of selected seed of a variety of sorghums, grown in districts where other varieties of sorghums or kafirs are not produced. So if you have a small patch of ground isolated and protected, where the cane would not become mixed with other kinds of sorghum or kafir, write us about it and we will tell you what we would recommend for you to plant in the event that you want to grow pure-bred sorghum.

SHROCK KAFIR-SORGHUM

The habit of growth of Schrock is quite similar to the description of Darso. We have not been able to locate the exact origin of Schrock Kafir-Sorghum, however, tests conducted over two years shows that it will mature a grain crop in 80 to 90 days. It produces abundantly but the forage or stalks are not as valuable for hay as Darso or other types of Kafir. We are not able to tell the exact feeding value of the grain produced from Schrock Kafir-Sorghum. Many of our customers inform us that it is of equal feeding value with other varieties of Kafir. Price 25c per pound, postpaid. At purchaser's expense, 25 pounds 10c per pound; 50 pound lots 8c per pound; 100 pounds or more at market price.

ORDER EARLY

Many Field Seed Crops are short this year.
Be sure of your supply by placing your
order at once.

Red Top or Sumac Sorghum—In our opinion this is the best variety for forage or dry hay. The stalks are much smaller than either of the Amber or Orange Varieties. It requires 130 to 140 days to mature a seed crop. We do not recommend this variety for ensilage as strongly as we do the larger stalk varieties, but many of our customers say it makes very excellent ensilage. There is no better quality for forage than the Red Top. It will remain sweet and wholesome until late in May of the year following harvest. Price 25c per pound, postpaid. At purchasers expense 25 pound lots 10c per pound; 50 pound lots 8c per pound; 100 pounds or more at market price.

Sourless Sorghum—as Sorghum, or Cane for forage, is an indefinite term, in so far as market quotations are concerned, but we will be glad to submit samples and quote prices on sourless cane if you will tell us you want that variety. Price 25c per pound postpaid; at purchaser's expense 25 pound lots, 10c per pound; 50 pound lots, 8c per pound. 100 pounds or more at market price.

PRUSSIC ACID POISONING

All kinds of Sorghums, including Johnson Grass and Sudan Grass, are at times poisonous through the presence of deadly prussic acid in their leaves. Especially is this true where their growth is checked by any cause, such as frost or drouth. They are dangerous only in the green stage, and overcome this when fully cured. The grain is never poisonous, but caution should be taken in pasturing or feeding the green grain sorghum when the growth is checked either by drouth or by frost.

DWARF ESSEX RAPE

Where there are hogs there should also be Dwarf Essex Rape. Under favorable circumstances, Dwarf Essex Rape is ready for pasture in six weeks from time of sowing. One acre of good rape will carry a dozen pigs for two months. One of the experiment stations found that an acre of Rape produced as much gain on pigs when used for pasture crop along with grain as 56 bushels of corn would produce. In addition to the feeding value of Rape, the hogs are bound to be stronger and gain more rapidly on the Rape pasture than the ones which have been fed on grain alone. A plant with as great feeding value as rape should find a welcome on all farms where hogs are raised. An acre of rape in the experiment equaled much more than an average acre of corn and the cost of producing was much less, and the cost of harvesting was nothing, as it was done by the hogs. Price 25c per pound, postpaid. At purchasers expense, 10 pounds 15c per pound; 25 pounds 14c per pound; 50 pounds 13c per pound; 100 pounds or more at market price.

BROOM CORN

Broom Corn belongs to the same plant family as Cane, Kafir and Milo. It is divided in two groups, known as Standard and Dwarf. There are a good many names given to Broom Corn, which are used in localities where it is grown.

Standard—This variety grows from 7 to 12 feet high. It requires a different manner of gathering heads. The tall stalks are broken or tabled at a height of about 3 to 5 feet from the ground and two rows are brought together in V-shaped form so that the heads protrude just beyond the outside row or "table," as it is generally called. Price 25c per pound postpaid. At purchasers expense 10 to 25 pounds 16c per pound; 25 to 50 pounds 15c per pound; 50 to 100 pound 14½c per pound; 100 pounds and over 14c per pound.

Dwarf—This variety grows 3½ to 6 feet in height and the head is partly enclosed in the sheath boot of the upper leaf and it is more convenient to pull the heads than the "table" way. Price 25c per pound, postpaid. At purchasers expense, 10 to 25 pounds 15c per pound; 25 to 50 pounds 14c per pound; 50 to 100 pounds 13c per pound; 100 pounds or more 12c per pound.

Broom Corn should be planted when the soil is quite warm and then makes rather slow progress for two or three weeks. Most growers plant the seed in July, so that it will be ready for harvest at the season when dry weather is most likely to prevail. Where the acreage is large, it is best to plant the various fields at intervals of a week or ten days apart, so that all of the fields will not blossom at the same time and they may be harvested in proper condition. Late planting of Broom Corn sometimes makes it desirable for replacing wheat, corn or oats or other crops that for some reason or other have failed. It can be planted, either by surface planting or listing. Either of these methods will give good results. 1½ to 2½ pounds of well matured seed is sufficient quantity to plant an acre. The seed of the dwarf variety is usually planted in rows 36 inches apart and enough seed is used to secure a stand of one plant every 8 to 10 inches apart in the row. The standard variety is planted in the same manner, but the rows should be spaced at least 42 inches apart. Book on how to grow Broom Corn free.

THE MAKING OF A GOOD BROOM IS IN THE SEED

Broom manufacturers and broom corn dealers are unanimous in the opinion that broom corn as a crop has deteriorated very much during the past five years. It is believed that this deterioration has been brought about principally by the fact that growers have paid too little attention in the selection of seed, as it has been the general custom to go to the seed pile—thereby using seed which has not been properly matured and which cannot produce a uniform stand of plants.

When it is considered that fifty pounds of good seed will plant from 25 to 35 acres, (about 60 seed to the rod), you cannot afford to use any but the best quality seed, because the best seed will not cost more than 35c per acre, or 100 acres for \$35.00 or less.

If the grower of broom corn expects to secure profitable prices for his product, the same care must be exercised in securing broom corn seed that is used in the selection of other farm seeds, and after the best possible seed has been planted, broom corn should be given the *attention* it deserves.

There are several factors of great importance in the production of a crop of first-class Broom Corn—the matter of *good seed* is first in order, and only well matured seed of high vitality should be planted.

Seed should not be planted from broom corn *grown* for the brush, because the seed is *immature* and will not produce an uneven stand of plants. If broom corn is gathered at the proper stage to make good brush, the seed is not mature. This immature seed is stripped or cleaned from the brush in preparing the latter for market. It is largely *worthless* for planting. In spite of this fact, large quantities of just such immature seed are sold each year for seed purposes.

We sell good Broom Corn Seed—the well matured kind—the kind that was grown especially for seed, by experienced Broom Corn Growers. We pay them enough money for it so they can afford to lose the brush.

Do you want this kind of SEED? If so, ask for samples and prices.

Sorghum in Blossoming Stage

SEED CORN

PLANTING CORN

Corn is one of the grains that will bring high prices for at least the next year or two and we by all means recommend to our customers the planting of more corn. If you are not raising enough corn for your own feed and with a surplus to sell you are overlooking one of your best opportunities for profit. Our seed corn is carefully selected, and you cannot go wrong on any of the varieties we are offering.

On account of this catalog being printed early, we are unable to name prices on SEED CORN and many other kinds of Farm Seeds. Our Pink Price List will be mailed regularly to those who wish it, and your inquiry for prices and samples will receive prompt attention.

Our quotations are per hundred pounds. A bushel of shelled corn weighs 56 lbs. You can make two selections (and give us permission to ship second choice), it will probably save delay in filling your order.

Sacks cost extra at 75c each for cotton seamless and will contain 140 pounds of shelled corn when filled.

HOGGING CORN

Everyone who raises hogs knows that the relation of the price of hogs to the price of corn is very important, and constant. Careful feeding rules, with an eye on the corn market, must be observed if a profit is to be realized.

Nowadays the pasturing of hogs on alfalfa, permitting them to range at will, is considered necessary to produce vigorous healthy hogs at a minimum cost per pound. Some farmers have gone a step farther in the direction of letting the pigs do the work by planting a few acres of early maturing corn for the purpose of furnishing green pasture for the growing hogs. This is called "Hogging down corn," and it is a profitable plan to follow on well fenced farms, because the hogs do the work of gathering the crop at a season of the year when everybody on the farm is busy from sunrise to dark. For this purpose we suggest a short, rapid growing corn, such as Pride of the North, Squaw, or Hickory King. On page 9 you will find Sweet Corn varieties. These may be used with equally good results, particularly the Early Adams.

EXTRA EARLY FLINT CORN

Sanford's Early White Flint—This standard variety is considered the best flint corn on the market. The ears are of unusual length, 12 to 15 inches long, and handsome shape, flinty white color. Plants of sturdy, vigorous growth; leaves are very broad and succulent, and it is therefore of great value for fodder and ensilage, as well as for a grain crop. Stalks usually produce 2 or 3 long ears.

Squaw Corn—The well known old-fashioned blue and white flint Squaw Corn. One of the earliest corns, excellent for early feed, also ensilage. Stalks usually produce two ears of well-filled, good quality corn.

Brazilian or Stooling Flour Corn—(85 days). This corn stools like wheat, each kernel producing from five to eight stalks: each stalk bearing one to three ears, five to seven inches in circumference, nine to twelve inches in length, color beautiful white. It is the best variety for ensilage we know of, and yields to the acre four times more fodder and shelled corn than common corn. It contains a much larger quantity of starch than any other corn. Also used largely for roasting ears. Plant two kernels to the hill, thin to one, and cultivate like other corn. Three pounds will plant one acre. Shelled, 35c lb., postpaid; at purchaser's expense, 10 lbs. lot, 20c lb.

Sweet Corn and Pop Corn—are listed on page 9. Every farmer should plant some of these corns for early feed as well as for eating purposes.

YELLOW VARIETIES

Longfellow Dent—(90 days)—Most extra early sorts are of unusual length, the ears ranging from 10 to 12 inches long, well filled with small yellow kernels. Its peculiar shape, which is different from any other variety, suggests the name. This corn is a sure cropper and heavy yielder. Stalks are of medium height, strong and not easily blown down.

Gold Mine—This variety has everywhere received the most cordial endorsement as one of the best and most profitable varieties. It is early, ripening in about 100 days, ears of good size, color a bright golden yellow; grain is very deep, cob small, and therefore dries out very quickly as soon as ripe. Seventy pounds of ear corn will make about sixty pounds of shelled corn; and in hauling to market it weighs out considerably more to the wagon load than common varieties.

Kansas Sunflower Corn—(90 days)—This is the largest Early Yellow Corn we know of, ears averaging 10 inches in length and about 2 inches in diameter, weighing 1 pound and upwards. The ears are uniform in size and shape, and of a fine golden color. It is early, maturing in 90 days. Stalks grow about 8 feet high, are very leafy and furnish large quantity of fodder. We can recommend it highly to anybody who wants a large, early yellow corn.

Pride of the North—The very earliest yellow Dent Field Corn, and can be successfully grown farther north than any other Dent Variety. Matures perfectly in 90 days, and is very frequently safe from frost in less time. Very hardy, ears of good size, cob small, kernels set closely on cob, and are long and compact. This variety is planted quite largely for early crop to feed stock while yet green. If you have trouble in getting your corn to mature, plant Pride of the North.

Brazilian Flour Corn

Our Pink List quotes prices on all seeds and supplies on which the price fluctuates. May we put your name on our mailing list for it?

Leaming Corn

Leaming—(100 days)—A rich deep, golden color, slightly tapering ears well filled at the butt and tip. The ears range from 8 to 10 inches long, and from 7 to 8 inches in circumference, weighing 12 to 17 ounces each. Each ear has 16 to 24 rows of kernels which are broad, deep and thick.

Reid's Yellow Dent

This variety is medium to early, maturing in from 115 to 120 days. The stalk is medium in size, about 7 or 8 feet in height and only medium leafy.

The ears are from 10 to 10½ inches in length and from 7¼ to 7½ inches in circumference, lemon yellow in color and borne on a very small shank. The kernels are medium to narrow, slightly wedge shaped, with a tendency to round off at the tips, and of medium depth. The butts are usually well rounded out over the ends.

The tips are rather abruptly pointed, usually well covered, but the kernels over them often become more or less "shotty" and the rows somewhat indistinct. The cob is very small and of a deep blood red color. This variety matures a high percent of good marketable corn in the field and having a small shank, it is easily harvested.

Yellow Dent—(100 days)—The stalks range from 7 to 9 feet in height, well supplied with foliage. One of the earliest yellow dent varieties; the ears average 7 to 10 inches long, 7 to 7½ inches in circumference and contain 14 to 18 rows of deep kernels of orange-yellow color set on a small red cob.

WHITE VARIETIES

Boone County White—The most popular white dent corn; it has been very highly bred and is of extra large size. The stalks grow from 10 to 12 feet high with an abundance of foliage; ears measuring 10 to 12 inches long, containing 16 to 24 rows. Cob of medium size, white in color. The kernels are pearl white, moderately smooth, solid and with a large germ. Matures with us in 100 days. The corn produces a fine white meal and is a fine milling corn. We have a large supply of fine, well matured seed of this excellent variety to offer our customers at a reasonable price.

Hickory King—(100 days)—The cob is so small and the grain is so large that when an ear is broken in half, one grain will nearly cover the entire end of the cob. Nearly all of the stalks bear two ears, and we consider it one of the best white corns grown. It ripens in from 100 to 110 days from time of planting.

Johnson County White Dent—(105 days)—The shape of the ears is cylindrical to within 2 inches of the tip, then slightly tapering; white kernels and cob. Kernels uniform and wedge shape, ears averaging about 10 inches in length, circumference 7½ to 8 inches, very little space between rows and makes a very high per cent of shelled corn.

Silver Mine—(95 days)—This variety is a sure cropper, very early, deep grain; grows 7 to 8 feet high, good size ears of pure white; has heavy foliage and produces an enormous amount of fodder as well as corn.

Mexican June Corn—(100 days)—The stalks grow from 11 to 15 feet high, with considerable foliage on the upper half of stalk. The stalk is very heavy, to the ears, which usually grow about 4 feet below the tassel; fully two-thirds of the stalks will produce 2 ears each. The ears average 7 to 11 inches in length, 7 to 8 inches in circumference, with deep, thick, white kernels, closely set on small white cob. Should not be planted before the 5th of June in this latitude.

White Wonder—Is considered king of the white varieties in the southwest. Stalks grow from 10 to 12 feet high and exceedingly thick; short and heavy joints and moderately thick from ear to tassel, which enables it to withstand heavy winds. Has broad, deep, white kernels set on a medium size white cob; ears range from 8½ to 11½ inches long. The foliage is abundant and the leaves are thick and broad, and start while the corn is young, which gives an unusual amount of moisture. Makes excellent fodder as well as a large grain crop.

MIXED DENT VARIETIES

Blue and White—(90 days)—The farmers on the western plains have been able to grow this corn when other varieties have failed to produce a crop. The ears will range from 7½ to 10 inches long and measure 6 to 8 inches in circumference. The kernels are medium deep and as indicated by the name are blue, purplish and white.

Speckled Beauty—(120 days)—The color is speckled red and yellow, sometimes a red ear, and frequently a yellow one. The breeding has produced a uniformly large cylindrical ear, well filled at the butt and tip. The ears range from 9 to 11 inches long, and 7½ to 8 inches in circumference. Each ear has 19 to 20 rows of broad, deep, thick kernels. The kernels are set on red cob of medium size with rather large shank. The stalks range 9 to 12 feet high, are rather heavy, furnishing abundant foliage for fodder. Hot winds and drouth do not effect it as seriously as some other varieties.

Bloody Butcher—(90 days)—This is an excellent variety of an extra early maturing corn. Is a great favorite, and is extensively grown in North and South Dakota, Minnesota, Northern Wisconsin, Michigan, and states of high altitude, and where seasons are short and frost early. It is a large yielder among the early sorts, always making safely in 90 days or less time. It has great tenacity to resist and withstand unfavorable weather conditions, such as extreme heat, cold, wet or dry weather.

ACCLIMATED CORN

Ross Brothers have long been strong believers in the superiority of Acclimated Corn. We have preached this gospel whenever we could, and have practiced it regularly. Each section

has a certain variation in climatic conditions, and a correspondingly different type of corn is needed to give the maximum returns. There will not often be a noticeable difference, to the eye, but the difference in yields will be very marked. At the Arkansas station 233 samples of corn were collected from various states and grown in comparison for two years. The table opposite shows the results; an undeniable advantage in favor of acclimated corn.

Hickory King Corn

NAMES OF VARIETIES	Seed	Seed	Seed
	Grown North	Grown Locally	Grown South
Leaming.....	20.98	26.20	12.20
Hickory King.....	24.85	31.81	29.10
Yellow Dent.....	21.52	25.00	25.30
Champion.....	22.62	32.00	30.10
White Dent.....	24.17	34.69	34.77
Average Total.....	25.78	32.47	31.48

"Acorn Brand the Seed to Demand"

GRASS SEEDS

As prices on Grass Seeds fluctuate, we are unable to name firm prices in this book. Shall appreciate your inquiries which will receive prompt attention. Please mention quantity and variety on which you desire quotations.

ORCHARD GRASS

A most valuable grass for pasture and hay land and on account of its earliness is very valuable for permanent pastures, as it furnishes the first green bite in the spring, and the last in the fall, is quick to recover from close cropping and even thrives better the more it is cropped. Gives rich pasture till late in the fall. It will stand the drouth. It is well suited for shady places, such as orchards and groves. Will grow on almost all kinds of land. Sow 15 to 22 lbs per acre.

MEADOW FESCUE

(Also known as English Blue Grass.)

We regard this as one of the most valuable grasses for it adapts itself to different conditions of soil and climate, thriving luxuriantly in all parts of the United States and Canada. It produces a great amount of early and late feed of good quality and yields heavily. As a pasture grass it is particularly valuable, being one of the earliest in spring and latest in fall, and rarely freezes out or winter-kills. It grows well on wet or dry bottoms, hillsides and uplands, gravelly and loamy lands and clays. About 18 to 22 pounds of seed should be sown per acre.

TIMOTHY

As a crop to cut for hay, Timothy is probably surpassed by no other grass now cultivated. If sown alone it requires 12 to 18 pounds per acre. It is usually sown with other grasses about one-half to one-third of the above amount. Can be sown in either Fall or Spring. Timothy seed is one of our specialties, we sell many carloads of seed annually to other seed houses besides the great quantities required for our regular trade. Our Timothy Seed is of superior quality and will suit the most critical buyer.

BROMUS INERMIS

(Also known as Brome Grass.)

Bromus Inermis has proved a great success. It forms a leafy, compact turf and does well for pasture and hay. It makes hay of about the same quality as Timothy and yields well. It stands drouth the best of any of our cultivated grasses. It starts growth early in the spring and remains green a little longer than do most grasses. Sow 18 to 25 pounds per acre.

RED TOP OR HERD'S GRASS

Fancy Solid Seed.

This is well adapted to the Southwest. Suitable for meadow and pasture mixture, or for use in lawn making. Adapts itself to any soil, but produces best results on moist, rich soils, where it grows 2 to 2½ feet high. Often sown with Timothy and Clover, and outlasts both. Sow 20 to 25 pounds per acre for lawns. For pastures, 8 to 10 pounds per acre.

THE MILLETS

Golden Millet—Grows very rank, generally 3 to 4 feet high. Far Superior to Common Millet, both in quality and yield, but about two weeks later. Drouth resistant and 3 to 4 tons per acre. Sow 35 to 50 lbs per acre. Price will be quoted on request.

Common Millet—The earliest of the commonly-grown varieties; very drouth resistant, and will give fair returns on poorer soils. Hay produced from this variety of Millet is not as coarse as some of the other Millets and feeders prefer it on this account. Will quote price on request.

Japanese or Billion Dollar Grass—Well adapted to wet or low grounds. Produces large amounts of hay, 5 to 8 tons per acre. Will produce hay crops in 6 to 10 weeks; 4 to 7 feet high. Will quote price on request.

Siberian Millet—Regarded as one of the best varieties for general cultivation in Western states. Matures about the same as Common Millet. Its abundant growth, leafy character of stalks and drouth resistant qualities have brought it into favor in the Northwest. Will quote prices on request.

Japanese Buckwheat—This variety has been grown here with good results. It is early and very productive; the kernels are larger than any other variety of Buckwheat, of a rich, dark-brown color. Sow ½ bushel seed to the acre. Lb. 15c, postpaid. Price variable. Write for quantity prices.

Mansury Barley—It is an early six-rowed variety with strong, bright straw. Bearing long, well-filled heads of plump grain; ripens medium early. Sow two bushels to the acre. Market price variable. Will quote price on request.

Red Texas Oats—Largely grown in this state; it is a heavy yielder and sure cropper; makes a very heavy grain. Will quote prices upon receipt of inquiry.

Orchard Grass

BERMUDA GRASS

Very fine for binding loose and dry soils. The habits of this grass is to set roots at each joint that touches the ground, thereby forming a complete sod. Furnishes excellent pasture. Is **decidedly a summer grass**, as it does not start off until ground is thoroughly warm in the spring, and turns a buff color after killing frost in the fall. We believe this grass will help solve the pasture question during the hot dry summer months. Sow during May, June or July. Also valuable in some sections as a lawn grass. Sow 3 to 5 pounds to the acre.

KENTUCKY BLUE GRASS

The old standard grass for pasture and lawns. Sow 25 to 30 pounds to the acre for meadow; for lawns, 100 to 140 pounds per acre.

PERENNIAL RYE GRASS

This variety is used exclusively for pastures and lawns; succeeds well in shady places. Has given excellent satisfaction wherever tried. It is especially adapted for pastures, as it will endure close cropping, and is of strong and quick successive after growth. Perennial Rye Grass produces an abundance of foliage, which remains bright and green throughout the season, and for this reason is much used for Lawn Grass Mixtures. Sow 20 to 25 pounds per acre.

PACEY'S RYE GRASS

This is quite similar to Perennial Rye Grass, but is superior to that for lawn purposes. It makes a much more rapid growth, thus giving a heavy turf earlier in the season. It is a shorter plant, and consequently will stand the frequent cuttings a good lawn must have, without injury. Whereas other sorts must be planted very heavily to give a good turf, without bunching, this sort regularly produces a fine smooth, even stand, so desirable in lawns. The plant is not large enough to be of value in the pasture or hay field, and we do not wish to recommend it for either. For these purposes the Perennial Rye Grass should be used.

SAY IT WITH FLOWERS

NO garden is complete without flowers. No home is so beautiful but what something is lacking without flowers. The beauty of a soft green carpet of grass is enhanced by a bed of waving flowers. An old uneven walk can be made a thing of beauty if it is flanked with walls of flowers. There are flowers for every purpose. There are those used to add a beautiful touch of color to the table. There are those used to add to the beauty of the lawn. There are those which are so prolific that they furnish little bouquets for sick friends, and for friends whom you desire to remember. Flowers speak a language of beauty that is understood by all.

But there is no disappointment so great as that which follows a failure of flowers to grow after a carefully planned landscape decoration scheme. For this very reason as much or more care should be given to the selection of seeds for flowers, as to the selection of seeds for the garden. Ross Brothers seeds are of and for the Mid West. They are selected, acclimated flower seeds. The experience of thirty-five years has

gone into their selection. They represent our best judgment and pains-taking care. We have many calls each year asking us to help in the landscape flower schemes of our customers.

Our landscape gardening department is always glad to be of real service in this connection. If you will draw a plan of your yard, showing the fences and the amount and size of the ground available around your house, we will be glad to submit a landscape scheme, together with our advice as to a list of seeds. In writing to us regarding plans for flower gardening, be sure to show which is north. This is necessary to govern us in our selection of a list of seeds. There have been many flower gardens which failed to mature because of the planting of seeds without consideration to shade and sun. In many instances the seeds were blamed when really the blame should lie not with the seeds but with their being planted in the wrong place. It is to give full justice to the splendid quality of Ross Brothers seeds and to your own efforts that we suggest talking this matter over with us.

HINTS ON RAISING FLOWERS FROM SEED

PERENNIALS AND TENDER ANNUALS. These must usually be started in boxes or flats and given careful attention. Perennials are started most successfully in boxes in some partially shaded place out of doors, along about August or early September. This enables them to get a good start before they are transplanted to the bed where they are to grow. They may also be started early in the spring indoors. Tender Annuals should be started in the spring if they are wanted for outdoor use, or in the late summer if they are to be grown indoors during the winter. The method is the same for both the Perennials and the Annuals. The seed should be sown in shallow pans or boxes. These must have good drainage, which is easily produced by filling in the bottom inch with coal ashes, broken pots or other rough material. On top of this should be an inch of good rich sandy soil. The sandier the easier it will be to

work, but there must be plenty of food for the young plants. Press the soil firmly and evenly and water thoroughly the day before you wish to sow the seeds. Sow the seeds thinly and merely firm them in or cover with a very light sifting of sand. Cover with a damp cloth till the seeds have sprouted. The temperature should be as nearly constant, between 60 and 70 as possible. When they are beginning to crowd, transplant carefully to the garden.

ANNUALS. These are the flowers that produce the variety and the gorgeous colors of the garden. They last but the one season, but they are so little trouble and they come into blossom so quickly after being sown that they should never be omitted from any garden. Sow directly where they are to be grown, in well prepared soil. Thin if necessary, when they come up, and keep well weeded. No other attention is necessary.

ASTERS

THIS splendid fall favorite of our grandmother's garden still continues to beautify our garden and should be sown more generally, it being perfectly hardy and easily grown.

CULTURE—The aster is hardy and easily grown. Sow seed in the open ground in May for August and September blooms, or in March or April in cold frames for earlier bloom. The seed should be covered about $\frac{1}{4}$ inch in good, rich soil. When the plants are strong enough, transplant about 18 inches apart in deeply dug, well prepared beds. Asters must not be planted in freshly manured soil nor in soil that has been planted to Asters for two or three years previous. Unslacked lime or fresh wood ashes are beneficial if stirred in the soil a little before planting and are said to counteract the ravages of the Aster blight. A few soakings with tobacco water around the roots during the growing season is also recommended.

THREE SPLENDID NEW ASTERS

418. EARLY BRANCHING ROSY RED—This delightful dark, rosy-red Aster is absolutely supreme in the red class. The plants are more vigorous and the flowers larger than those of any other shade. While the general habit of the plant and its season of bloom is much like that of early branching asters, the flowers are larger, more closely-folded, fluffier and with a wider petal. Pkt. 15c; 2 for 25c.

419. PINK ENCHANTRESS—Immense flowers of a soft, delicate pink, are borne on strong, upright plants. The color although very delicate does not fade. In size the flowers are equal to those of the largest Branching Asters. The flowers are made up of broad petals, loosely arranged, and the effect is indescribably soft and pleasing. The plants are tall and strong. Pkt. 15c; 2 for 25c.

420. LAVENDER GEM—When first open the flower is an exquisite pale lavender, which deepens with age. In structure it is always full double, and

bears a large proportion of long, partly tubular florets, which are irregularly cut and slashed, so that it looks like a ragged Chrysanthemum. The flowers are borne in profusion on long, slender, wiry stems. The plant is erect and of medium height, branching close to the ground. It is classed with the early sorts. Pkt. 15c; 2 for 25c.

"Acorn Brand" Late Branching Asters

This grand strain is of American origin and it is especially adapted to our climatic conditions. The plants form strong branching bushes 2 to 2½ ft. high, bearing on long, strong stems, flowers which under ordinary cultivation average 5 inches across.

They are usually at their best during September and all things considered are the most valuable of all Asters, for cutting and for bedding and if only one kind of Aster is grown, this is the type which will likely give the best results.

- 461. SHELL PINK.
- 462. LAVENDER PINK.
- 463. LAVENDER.
- 464. ROSE.
- 465. ROSY CARMINE.
- 466. CRIMSON.
- 467. SCARLET GEM.
- 468. PURPLE.
- 469. DARK VIOLET.
- 470. PEERLESS PINK.
- 471. MIXED.

Pkt. 10c; 3 for 25c.

Queen of the Market Asters

Largely grown by commercial florists for cut flowers and for early market. The plants have an open, spreading habit, and for large, double flowers have a loose and graceful appearance. Seed should be sown quite early in the house.

- 436. WHITE.
- 437. PINK.
- 438. LAVENDER.
- 439. ROSE.
- 440. CRIMSON.
- 441. SCARLET.
- 442. LIGHT BLUE.
- 443. DARK BLUE.
- 444. MIXED COLORS.

Pkt. 10c.

ALYSSUM

474. LITTLE GEM OR CARPET OF SNOW. (Mid-west Brand.) The best white edging plant for the middle-west gardens. These short, dwarf plants will flower within a few weeks from seeding and will present a solid bed of white, only four to six inches high, until long after frost has killed the tender flowers of the garden. It can be sown as an edge in the garden or around the shrubbery patch or anywhere that a white border will be desirable. One ounce will sow a row 150 feet long. In sowing mix the seed with flour, sand or dust in equal parts. This prevents too heavy sowing as the seed is fine and the tendency is to plant it much too freely. Pkt. 10c; $\frac{1}{4}$ oz. 25c.

478. SWEET ALYSSUM.—Similar to Little Gem, but of longer trailing habits. Flowers are white. Pkt. 5c; oz. 30c.

ANTHEMIS

575. KELWAYI.—Perennial, two ft. A most satisfactory, hardy plant, bearing all summer, daisy-like golden-yellow blossoms. Excellent for cutting. Pkt. 10c.

MIDWEST COLLECTION

Is described on Page 1. If in doubt what to plant use this collection.

Late Branching Asters

Early Branching Asters

Quite similar to the late branching, but they blossom from ten days to two weeks earlier.

429. MIXED COLORS: Pkt. 10c; 3 for 25c.

Single Flowering Chinese Asters

Very effective in beds or borders, and offer a pleasing change to the innumerable double sorts. **472. MIXED COLORS.**—Pkt. 10c; $\frac{1}{4}$ oz. 30c. **445. MIXED ASTERS.**—All classes and colors mixed in great variety. Pkt. 10c; 3 for 25c.

AGERATUM (FLOSS FLOWER)

A grand border plant; flowers remaining in bloom through the summer. A few plants of this delightful little flower will soon cover a good-sized flower bed, as the plants when well started extend themselves rapidly and soon become a mass of dazzling flowers. We don't know of a flower anywhere better suited to the border or for window boxes than this delightful little flower. Set the dwarf sorts 10 inches apart and they soon make a low mass of charming flowers.

475. MEXICANUM COERULEUM.—One and one-half ft. Blue. $\frac{1}{4}$ oz. 10c; Pkt. 5c.

476. SWANEY BLUE MEXICANUM.—Dwarf, blue. $\frac{1}{4}$ oz. 25c; Pkt. 10c.

477. IMPERIAL DWARF MIXED.—8 inches. Pkt. 5c; $\frac{1}{2}$ oz. 20c.

AMARANTHUS

Very striking plants on account of their beautiful vari colored foliage and peculiar mode of blossom. The leaves are always largest when plants are grown on rich soil, but rather poor soil enhances coloring. The seed can be sown in the house, or in a hotbed, and transplanted to the place where wanted for effect. Half-hardy Annual.

479. CAUDATUS. (Love Lies Bleeding.) Three feet. Blood-red, drooping. Pkt. 5c.

480. CRUENTUS.—(Prince's Feather.) Dark red feathery flowers. Pkt. 5c.

481. TRICOLOR.—(Joseph's Coat.) Two and one-half feet. Leaves red, yellow and green. Pkt. 5c.

BRACHYCOME

579. IBERIDIFOLIA.—Annual. Twelve inches. Free-flowering, dwarf-growing plants, covered during the greater part of the summer with a profusion of pretty blue or white flowers; suitable for edging, small beds or pot culture. Mixed colors. Pkt. 5c; $\frac{1}{4}$ oz. 20c.

BELLIS PERENNIS

Perennial, six to eight inches. A low growing spring flowering plant, a companion to the pansy and forget-me-not. Loves a shady place and will reward the gardener with a mass of blossoms for succeeding years if left undisturbed.

576. MIXED COLORS.—Pkt. 10c; $\frac{1}{4}$ oz. 50c.

Alyssum, Midwest Brand

CALENDULA

Mid-West Brand

THIS is the "Marigold" of Shakespear's time; one of the best and showiest free-flowering hardy annuals, growing in any good garden soil, producing a fine effect in beds or mixed borders; particularly bright in late fall, continuing to bloom from early summer until killed by frost; valuable also for pot culture, blooming freely in winter and early spring.

653. **ORANGE GIANT.**—Dark, double, orange red flowers. Pkt. 5c; oz. 30c.
 654. **SULPHUR CROWN.**—A-pleasing Sulphur Yellow. Pkt. 5c; oz. 30c.
 655. **MIXED COLORS.**—Pkt. 5c; oz. 25c.

BALSAMS

(LADY'S SLIPPERS)

Magnificent summer and autumn flowering annuals. A rich sandy loam is most suitable for them. They must be kept well watered. If transplanted several times the plants have a tendency to dwarf and produce more double flowers. Seed may be started early indoors or out doors in May. Balsams are not often given room for perfect development; they will easily cover 12 to 18 inches of space each way if given fair treatment and plenty of sunshine.

497. **DOUBLE TALL MIXED.**—Pkt. 5c; ¼ oz. 20c.
 498. **CAMELLIA-FLOWERED, DOUBLE, FINEST MIXED.** Pkt., 10c; ¼ oz., 25c.

DEFIANCE BALSAMS

The flowers are of the largest size, double and full centered, with the broad petals finely reflexed, (curved outward), as in the Camellia type. The individual flowers frequently measure two and a half inches across. The plants form symmetrical, well branched, erect bushes the branches being almost covered with the magnificent double flowers. Height two feet.

492. **PURE WHITE.**
 493. **PURE PINK.**
 494. **CHAMOIS-ROSE.**
 495. **ROYAL PURPLE.**
 Pkt. 10c; 3 for 25c.

Canterbury Bells

CANTERBURY BELLS

(CAMPANULA)

Attractive and showy biennials, which succeed best in rich, well-drained soil. The bell shaped flowers are of beautiful colors and are produced in amazing profusion, a thrifty plant being literally hidden under the blooms. As the plants grow to a considerable size, branching widely, care should be taken in setting them out to allow not less than two feet each way.

509. **CARPATICA HAIRBELL.**—Nine inch. Blue. Very pretty, low growing, free flowering. Pkt. 10c.
 510. **MEDIUM WHITE.**—Pkt. 10c.
 511. **SINGLE MIXED.**—Pkt. 5c; ¼ oz. 25c.
 512. **DOUBLE MIXED.**—Pkt. 10c; ¼ oz. 40c.
 513. **PYRAMIDALIS.**—(The Chimney Bell-flower.) Four to five feet. A beautiful stately hardy plant, either for garden or pot culture. Blue flowers. Pkt. 10c; ¼ oz. 50c.
 514. **SPECULUM.**—Ten inches. Venus Looking Glass, fine for edging beds. Pkt. 5c; ¼ oz. 30c.

Calendula

BABY'S BREATH (GYPSOPHILA)

Bushy, free-blooming plants, producing great numbers of small white flowers in loose, graceful panicles. They are especially valuable in making bouquets.

482. **ELEGANS GRANDIFLORA ALBA.**—(Angel's Breath). This is an improved large-flowering, pure white, easy to grow strain. Several sowings should be made during the season to keep up a supply of beautiful blossoms. Pkt. 5c; ½ oz. 15c.
 483. **ELEGANS CARMINEA.**—Carmine. Pkt. 5c; ½ oz. 15c;
 485. **PANICULATA.**—(Baby's Breath). Perennial, two feet. Blooms in July, and August. Small flowers on branched stems, so thick as to give the plants a white lacelike effect. Pkt. 10c; ¼ oz. 25c. See page 52 for plants.

CALLIOPSIS (TICKSEED)

Mid-west Brand. A species of a very showy annual, invaluable for garden decoration and cutting. They enhance the color of the garden by the wealth of bright yellow flowers, which are strengthened by disks of rich crimson maroon and various shades of brown. We gladly recommend this flower to every one of our customers gardens. It refuses to be stopped by the hot dry weather that we know so well here.

501. **ROSS BROTHERS SPECIAL MIXTURE.**—Pkt. 5c; ¼ oz. 20c; oz. 50c.

Calliopsis

CARNATIONS

In the splendid strains of carnation we offer, a remarkably large percentage of the flowers will be more or less double. Gardeners who have been buying plants will find it decidedly to their advantage to sow seeds instead, especially now that we have such fine kinds blooming the first year from seed; these, although so much earlier than the old race of carnation, bear comparison with the best of them as to beauty, fragrance and productiveness. Carnations in the southwest rarely require any protection whatever, although it is generally worth while to throw a little loose litter around them in midwinter. Hardy Annual. One and one-half ft.

515. **MARGUERITE.**—Fine mixed. Pkt. 10c; ¼ oz. 50c.
 516. **MARGUERITE.**—White. Pkt. 10c; ¼ oz. 65c.
 517. **MARGUERITE.**—Deep Scarlet. Pkt. 10c; ¼ oz. 65c.
 518. **DAEHNFELDT'S PRIZE.**—Fine Double Mixed Carnations. Bloom the first summer. Lift and pot in September if wanted for winter flowering in the house. Pkt. 10c; ¼ oz. 75c.
 519. **CHABAUD'S EVERBLOOMING.**—A remarkable strain raised by a Carnation specialist in Southern France. Blooms in five months after being sown, and continues to flower indefinitely in the greatest profusion. Pkt. 10c; ¼ oz. 75c.

CENTAUREA

UNDER this name is included such annuals as Corn Flowers, Sweet Sultan and Dusty Miller. They are favorites in all sections of the country; are perfectly hardy and will grow and do well almost anywhere, and are much in demand as cut flowers.

486. *Centaurea Cynus Minor*, Mid-west Brand. This is popularly known as the Corn Flower, Ragged Sailor, or Bachelor's Button. This is excellent for a button-hole flower and for cutting, particularly when cut and placed with some bright yellow flower, such as Calendula or the Marigold. It will flower all through the heat of the summer. Our range of color is Blue, Rose and White. Pkt. 5c; $\frac{1}{4}$ oz. 15c; oz. 45c.

487. *Centaurea Imperialis* or Royal Queen Sultan. These are large, sweet scented and artistic flowers. Fine for cutting. Mixed colors. Pkt. 15c.

491. *Centaurea Gymnocarpa* (Dusty Miller). Foliage finely cut of silvery gray color, used extensively for bedding, vases, hanging baskets and pots. Particularly effective as edging to large dark leaved plants, such as the Canna. Sow the Seed early indoors and transplant when the weather is warm. Pkt. 10c.

Bachelor's Button (*Centaurea Cyanus*)

COCKSCOMB

(*Celosia*)

The *Cristata* sorts have become very popular for bedding; their beautifully formed, highly colored flowers are very attractive and effective. The *Plumosa* class is splendid in both foliage and flower, very suitable for vases, borders, etc.

Celosia Cristata

(Dwarf Varieties)

This showy annual is one of the most brilliant and effective of the summer and autumn bloomers. The flowers are borne in great masses of various shapes, from that of a cockscomb to that of a feather or plume. The colors are striking, from the most vivid red and crimson to the richest yellow and orange.

528. *Cockscomb*. Eight to ten inches. Mixed extra fine. Pkt. 10c; $\frac{1}{4}$ oz. 50c.

529. *Dwarf Mixed Cristata*. Extra fine, first quality. Pkt. 5c; $\frac{1}{4}$ oz. 30c.

Celosia Plumosa

(Tall Varieties)

Hardy annual. These plants are extremely valuable for formal bedding. The flowers appear in the shape of cockscomb, out of a rosette of green or brown leaves. Make fine border plants and are attractive for pots. Seed can be sown under cover in early spring, transplanted out in May, or can be sown out of doors in May where they are to remain. 530. *Pyramidalis Plumosa*. (Ostrich Plume) Two feet. Feathered varieties in all colors. Pkt. 5c; $\frac{1}{4}$ oz. 25c.

COLUMBINE

(*Aquilegia*)

This family is one of the most beautiful and popular among hardy perennials. The different varieties present an unusual wealth of color and form. For growing in borders or filling up bays in shrubbery they are unsurpassed. Seed sown in the house in March will frequently produce bloom the same year. It is best, however, to sow seed out of doors when the ground warms up. Any ordinary garden soil is suitable for their growth. The flowers are fragrant.

531. *Single Mixed*. Pkt. 5c; $\frac{1}{4}$ oz. 15c.

532. *Double Mixed*. Pkt. 5c; $\frac{1}{4}$ oz. 15c.

533. *All Sorts Mixed*. Pkt. 5c; oz. 25c.

CHRYSANTHEMUMS

(Annual Varieties)

Chrysanthemums are very effective and showy plants for beds and borders, besides affording an immense material for cutting. Sow seeds where the plants are wanted to bloom and thin out to 9 inches apart; earlier flowering plants can be had by sowing early in March in a cold frame, and transplanting when large enough.

521. *Coronarum*. Fine double mixed. Pkt. 5c; $\frac{1}{4}$ oz. 15c.

522. *Dunetti Album Plenum*. Double white. Pkt. 10c.

523. *Hybridum Fl. Pl.* Double Finest [Hybrids]. Pkt. 10c.

524. *Hybridum Mixed*. A splendid collection of single Chrysanthemums. Pkt. 5c; $\frac{1}{4}$ oz. 15c.

Chrysanthemum Coronarium

COSMOS

Mid-west Brand. The best tall Annual for the mid-west gardener. The seed should be sown early in the spring and the tops pinched off, when the plants are small, to induce branching. The plants should be thinned out to 12 or 18 inches apart or more if the soil is rich. The leaves are feathery, attractive and serve well to set off the large showy flowers. Plant as a hedge at the back of the garden or in front of the lawn. The armfuls of flowers that will be cut will bring joy to all. Our luxuriant strains of cosmos grow from 5 to 6 feet tall and bear amply of the delightful Red, Pink and White Blossoms. The early flowering varieties come into bloom by the end of July. The giant flowering and Lady Lennox type are somewhat later, but the plants are larger and as a rule they bear more flowers. Probably for this latitude the giant flowering will be more satisfactory for the amateur gardener than either of the other types.

534. *Giant Flowering*. White. Pkt. 10c; $\frac{1}{4}$ oz. 20c; oz. 60c.

535. *Giant Flowering*. Red. Pkt. 10c; $\frac{1}{4}$ oz. 20c.

536. *Lady Lennox*. White. Pkt. 10c; $\frac{1}{4}$ oz. 20c; oz. 60c.

537. *Lady Lennox*. Pink. Pkt. 10c; $\frac{1}{4}$ oz. 20c; oz. 60c.

538. *Giant Mixed*. Many colors. Pkt. 10c; $\frac{1}{4}$ oz. 15c; oz. 45c.

542. *Early Flowering*. Mixed colors. Pkt. 10c; $\frac{1}{4}$ oz. 20c; oz. 60c.

COREOPSIS

503. *Lanceolata Grandiflora*. One of the finest hardy plants with large showy bright yellow flowers produced from June until frost. One of the very best of the hardy flowers for cutting. Pkt. 10c; $\frac{1}{4}$ oz. 25c.

CANDYTUFT

Very showy, branching annual plants that produce flowers which embrace nearly all shades of red, purple and white. A succession of sowings lengthens the season of bloom. Seed sown outdoors in spring will produce flowers from July until September. Is very effective for beds, borders, etc., and useful for pot culture during winter.

508. *MIXED*.—Tall and dwarf. Pkt., 5c; $\frac{1}{4}$ oz. 15c.

Shasta Daisy

DAHLIAS

BUT few people know that Dahlias can be raised from seed that will bloom the first year, if started early. The seed will germinate as easily and certainly as Zinnias, and from the very first development are strong and sturdy little plants. Plant them in a shallow box or pan early in March or April, transplant them carefully as their growth demands, and keep soil moderately moist. When all danger from frost is over, plant them in the bed or border in the garden, and from then on they will prove no more trouble, than if the tubers had been used instead of seed.

916. Double Mixed. Pkt. 15c.

GODETIA

Magnificent hardy annuals, producing numerous delicately-colored flowers; especially attractive when grown in masses. They thrive in shady places. One foot.

603. Godetia. Mixed, many colors. Pkt. 5c.

604. Godetia Dwarf. Mixed. Pkt. 5c.

Gaillardia

DAISIES

(Arctotis African Daisy)

574. **Grandis**. Annual. A remarkably handsome annual from Africa. It forms much branched bushes two to three feet high; its flowers are large and showy, being pure white on the upper surface, the reverse of petals pale lilac-blue. It is easily grown from seed, and may be started in hotbed, in the house in March or April, or in the open ground in May, the seed germinating in about five days, and the plants may be expected to come into bloom early in July and continue until quite hard frost; being one of the rare flowers not injured by light frosts, and will be a mass of bloom long after the more tender flowers of the garden have passed away. It delights in a sunny situation. Pkt. 10c; ¼ oz. 25c

Dimorphotheca Aurantiaca

(African Gold Daisy)

582. **Golden Star of the Veldt**. Annual, one foot. Rare and very showy annual from South Africa, which has become a great favorite on account of its very easy culture and beautifully colored flowers. Its Marguerite-like blossoms, produced in great profusion, are two and one-half to three and three-fourths inches in diameter. These are a unique, glossy, rich orange-gold, whose brilliant coloring is rendered more conspicuous by the dark surrounding the black zone. Pkt. 10c; ¼ oz. 40c.

583. **Aurantiaca Hybrida**. They vary in color from the purest white to red and blush, white tints, sulphur, lemon, and bright golden yellow, light orange, reddish-yellow changing to pale salmon rose. Pkt. 10c.

Shasta Daisy

(Chrysanthemum Leucanthemum)

Perennial Chrysanthemums, especially the Shasta Daisies, have come to stay in our gardens. They are conspicuous in mixed beds or grown in front of shrubbery and as a cut flower are without equal. They are easily raised from seed and in our latitude are most successfully treated as a biennial.

580. **Shasta Daisy**. Pure white, early flowering. Pkt. 10c.

EVERLASTINGS

Large, full, double, daisy like flower heads with prominent centers and stiff overlapping scales. Produced in various shades of bright yellow and scarlet on stems of good length. Desirable as dried specimens and for use in making winter bouquets. For this purpose the flowers should be gathered when on the point of expanding. Sow early in the spring; thin to one foot apart each way. Hardy annual. Two to two and one half feet high.

(EVERLASTING—All Kinds)

588. **Mixed**. One to two feet tall. Pkt. 5c; ¼ oz. 15c.

FOXGLOVE

(Digitalis)

Handsome ornamental hardy perennials of stately growth. The seed, though small, germinates readily and the plants succeed well even in poor soil if given a half shady location. The spikes are often three to five feet long and thickly strung with scores of thimble-shaped flowers.

585. **Purpurea**. Many colors mixed. Pkt. 5c; ¼ oz. 15c.

GAILLARDIA

(Blanket Flower)

A family of most beautiful plants bearing many brilliantly colored flowers. The perennial varieties have many daisy-like blossoms, mostly in the yellow shades with dark centers. These annual varieties are very showy and are well adapted for garden decoration and cutting. One and one-half feet.

ANNUAL VARIETIES

598. **Picta**. Single mixed colors. One and one-half feet. Pkt. 5c; ¼ oz. 15c.

PERENNIAL VARIETIES

600. **Grandiflora**. Two feet. Large flowering mixed. Pkt. 10c; ¼ oz. 25c.

GOLDEN ROD

(Solidago Latifolia)

Hardy perennial producing large heads of deep golden-yellow flowers, often more than a foot long. Blooms late in the summer. Three feet.

606. **American National Flower**. Hardy perennial, two to five feet. The well-known golden-yellow favorite. Pkt. 10c.

FORGET-ME-NOT

(Myosotis)

Half-hardy perennial, which flowers the first year from seed if sown early. Will bring forth lovely blossoms throughout the whole summer and fall, flowers are borne on long, stiff stems and of the most exquisite sky-blue with a delicate white center. They succeed best with moisture in a somewhat shaded position.

589. **Alpestris Blue**. (Forget-me-not) Trailing habit. Pkt. 5c.

590. **Alpestris**. Very beautiful rose colored flowers. Pkt. 5c.

591. **Alpestris Royal Blue**. Rich indigo-blue flowers. The finest and most effective dark-blue variety; nine inches. Pkt. 10c.

592. **Alpestris Mixed**. A mixture of blue, rose and white-flowered varieties. Pkt. 5c.

593. **Arvensis**. Common Forget-me-not. Pkt. 5c; ¼ oz. 20c.

CAPE FORGET-ME-NOT

(Anchusa)

594. **Capensis**. Annual, two feet. A rare and little known annual of great beauty which will thrive where scarcely anything else will grow. Pkt. 5c; ½ oz. 20c.

FOUR O'CLOCKS

(Mirabilis)

This handsome, well-known free-flowering garden favorite does well in any soil and under almost all conditions. Produces large flowers of many brilliant colors. The flowers are at the height of perfection during the afternoon. Height, two feet. Sow seed outdoors where intended to bloom in May.

595. **Longiflora Alba**. Sweet-scented. Flowers white and very fragrant. Pkt. 5c; oz. 20c.

596. **Mixed**. All sorts and colors. Pkt. 5c; oz. 10c; ¼ lb. 25c.

597. **Dwarf Sorts**. Mixed colors; twelve inches. Pkt. 5c; oz. 15c; ¼ lb. 50c.

Books on Gardening

Will be found on Page 55. We recommend particularly our Garden Guide, which we are issuing as a help to our customers, not to make a profit by sales. It is a very complete book on all sides of the gardening work.

HOLLYHOCK

There is probably no plant better fitted for planting at the back of the garden or for use amongst tall shrubbery than our superb strains of Hollyhock. These hardy perennial plants grow to 5 or 6 feet, with the large showy flowers produced nearly the length of the stem. If the seed is sown early in the year flowers can be produced the same year. This is one of the few perennial plants that can be produced quickly.

620. **Single Red.** Pkt. 5c; $\frac{1}{4}$ oz. 20c.
 621. **Single Pink.** Pkt. 5c; $\frac{1}{4}$ oz. 20c;
 622. **Single White.** Pkt. 5c; $\frac{1}{4}$ oz. 20c.
 623. **Single Mixed.** Pkt. 5c; $\frac{1}{4}$ oz. 20c.
 624. **Double Red.** Pkt. 10c.
 625. **Double Mixed.** Pkt. 10c; $\frac{1}{4}$ oz. 30c.
 626. **Alleghany.** Mixed colors. Pkt. 10c; $\frac{1}{4}$ oz. 40

JOB'S TEARS

627. **Coix Lachrymae.** Hardy annual.
 One and one-half feet. An annual grass extensively grown for its pearly seeds which are used to make strings of beads for children. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 50c.

GOURDS

(Ornamental)

Quick-growing, interesting annual climbers useful for covering arbors, walls or fences. Ornamental foliage, with fruit in many peculiar shapes.

607. **Apple-Shaped.** Beautifully striped. Pkt. 5c.
 608. **Calabash or Pipe Gourd.** Odd-shaped fruit which is used to an advantage in making pipes. Pkt. 5c.
 610. **Dipper.** Makes an excellent dipper. Pkt. 5c.
 611. **Sugar Trough.** Thick shells, very durable. Pkt. 5c.
 612. **Dishcloth or Towel.** Many women prefer a dishcloth made of this gourd to anything else, as it is always sweet and clean as long as any part of it is left. Pkt. 5c
 613. **Hercules Club.** Fruit grows three to four feet long. Pkt. 5c.
 614. **Japanese Nest Egg.** Fruit looks exactly like hen's eggs and may be used as nest eggs. Pkt. 5c.
 617. **Small Fruited Varieties Mixed.** Pkt. 5c; $\frac{1}{2}$ oz. 15c; oz. 25c.
 618. **All Varieties Mixed.** Pkt. 5c; $\frac{1}{2}$ oz. 15c; oz. 25c.

MEXICAN FIREBUSH or SUMMER CYPRESS

628. (**Kochia Tricophylla**). A bushy annual which in summer might easily be taken for an evergreen of the Irish Jupiter type when viewed from a distance. The plant turns a deep red in autumn. This makes a splendid hedge to divide the garden or for any other purpose as it is quickly and easily grown, is perfectly symmetrical and the dark green of the summer and the deep red of the fall makes it very attractive and showy. The seed should not be sown till the ground is thoroughly warmed. Three feet. Pkt. 5c; $\frac{1}{4}$ oz. 20c.

LARKSPUR

One of the best hardy annuals remaining a long time in flower. In order to have blossoms from July until frost the seeds should be sown in the open as early as possible. Exceptionally good for cutting.

ANNUAL VARIETIES

629. **Lustrous Carmine**
 630. **Flesh Color**
 631. **Lilac**
 632. **White**
 633. **Dark Blue**
 634. **Bright Rose**
 635. **Violet**

Each of above: Pkt. 10c; $\frac{1}{4}$ oz. 30c; oz. 90c.
 636. **Giant Hyacinth Flowered Mixed.** Three feet. Flowers resemble those of double Hyacinth. Delicate colors. Pkt. 5c; $\frac{1}{4}$ oz. 15c; oz. 50c.

637. **Dwarf Rocket Mixed.** One foot. Pkt. 5c; $\frac{1}{4}$ oz. 10c; oz. 30c.
 638. **Tall Rocket Mixed.** Two and one-half feet. Pkt. 5c; $\frac{1}{4}$ oz. 10c; oz. 25c.
 639. **Ross Brothers Fine Mixed.** Annual Larkspurs. This mixture contains all the light and dark shades and should be planted generously. Pkt. 5c; $\frac{1}{4}$ oz. 20c; oz. 60c.

Delphinium or Perennial Larkspur

Sow the seed in the open border either in early spring or late fall so germination may take place very early in the spring. As the seedlings grow, thin them to stand six to eighteen inches apart, according to variety.

640. **Chinese Elatum Hybridum.** Fine single mixed. Pkt. 10c; $\frac{1}{4}$ oz. 30c.

Hollyhock

641. **Formosum.** Brilliant blue with white center. Three feet. Pkt. 10c; $\frac{1}{4}$ oz. 30c.
 642. **Hybridum Mixed.** Contains all shades from the palest to the darkest blue, and the various intervening shades of sapphire, turquoise, indigo, etc.; are rich and beautiful beyond description. The plants are dwarf in growth and, unlike the old perennial Larkspur, require no staking. They branch freely from the crown and bloom without intermission from early spring until late autumn with increasing vigor to plants each succeeding season. Pkt. 10c; $\frac{1}{4}$ oz. 50c.

MARIGOLD

Mid-west Seed. Every middle-west gardener likes flowers that will bloom freely during July, August and September. Marigolds will do this and will continue nearly until the snow falls. The shades of yellow and gold can be equaled with no other flower. The range of types are great. The French sorts are very dwarf, suitable for edging and bedding. The African type is tall with large showy flowers nearly the size of the Dahlia.

African Varieties (Tall)

646. **Eldorado.** Extremely large and imbricated double flowers in yellow shades. Pkt. 5c; $\frac{1}{4}$ oz. 25c.
 647. **Lemon Queen.** Another fine variety with soft lemon-yellow flowers, and forming a fine contrast to the rich orange of the preceding. Pkt. 10c; $\frac{1}{4}$ oz. 50c.
 648. **Tall African.** Large double mixed. Pkt. 5c; $\frac{1}{4}$ oz. 20c.
 649. **Marigolds.** All kinds mixed. Pkt. 5c; $\frac{1}{4}$ oz. 15c.

French Varieties (Dwarf)

651. **Dwarf Striata Fl. Pl.** Striped, double. Pkt. 5c; $\frac{1}{4}$ oz. 20c.
 652. **Dwarf Double Mixed.** Extra fine. Pkt. 5c; $\frac{1}{4}$ oz. 20c.

Marigold

LINUM

(Flax)

Very handsome plants for the border or rock garden. The perennial varieties will bloom from seed the first year if started early.

643. **Grandiflora Rubrum.** Hardy annual, two feet. Fine foliage, delicate stems with brilliant scarlet flowers of long duration of bloom. Pkt. 5c; oz. 25c.

644. **Perenne Mixed.** One and one-half feet. White and blue flowers are produced on the tips of long, wiry stems or branches with such airy grace that they appear to be floating in the air. Pkt. 10c.

MIGNONETTE

(Reseda Odorata)

Well known, fragrant favorites, delightful for working into bouquets. For winter flowering seed should be sown in July or August. All the sorts we offer are very fine, and the most desirable for pot culture. A succession of bloom during both winter and summer may be had by repeated sowings.

656. **Goliath.** Fine pyramidal bushes, foliage rich green, contrasting strikingly with the bright red flowers. Flower stalks tall and strong, spikes often seven inches long by two inches in diameter. Pkt. 10c.

659. **Sweet Scented.** Pkt. 5c; oz. 20c.

660. **Grandiflora Large Flowering.** All sorts, finest mixed. Pkt. 5c; 1/2 oz. 20c.

PANSIES

The Pansy is a flower that is well known and highly prized in every garden. The small, dainty, highly colored little fellows are fairly easily grown and are certainly a delight either in the garden or on the table. An effective way of showing them off is to pick them with very short stems, place them in a large flat, dark colored dish filled with water. The blossoms will then float on the water and if a good strain is used the many contrasting colors will display themselves to advantage.

Pansy seed growing is work for an expert of the highest order. He must have complete knowledge, not only of the care and maturing of the seed, but he must also have a wide experience with the hundreds of colors that have been produced so that he can blend the finest of

Specimen of Giant Trimardeau

these into mixtures that will give the most brilliant and the most decorative flowers. The thousands of exquisite pansy beds that have been raised from Ross Brothers Seeds are sufficient proof that we are experts in this business.

682. **English Pansies.** Large flowered, finest mixed. Pkt. 10c; 1/4 oz. 75c.

683. **Cassier's Giant.** Three and five blotches. Mostly light shades with dark markings. Pkt. 25c; 1/4 oz. \$1.00.

684. **Non Plus Ultra Pansy Mixture.** This mixture is made up from over 100 of the finest named varieties grown by Pansy specialists. Unexcelled for diversity of colorings and markings. In making up this mixture expense is not regarded. 100 seeds 25c.

685. **Giant Trimardeau.** The largest flowering type of Pansies called the French strain. The top petals are larger than the three lower ones and are beautifully marked. Mixed colors. Pkt. 10c; 1/4 oz. 75c.

686. **Pansies.** All varieties, in finest mixture, first quality. Pkt. 10c; 1/4 oz. 75c.

For Pansy plants see Page 52.

Single Petunias

NASTURTIUMS

Probably the most widely grown of the universally popular flowers is the Nasturtium. If planted in a well drained and sunny position they will give within a few weeks a profusion of gorgeous blossoms until frost. We have selected the strains best adapted to the middle west. For brilliancy, range of color, duration of bloom and general excellence they are unexcelled. Nasturtiums are most essential for window and porch boxes. If the air in the room is not allowed to become too dry Nasturtiums will afford a mass of blossoms the whole winter long. If you have never had a window box, let us give you some suggestions about one. The trouble it takes is nothing compared to the blooming of flowers during the winter.

Tall or Climbing Varieties

661. **Chameleon.** Various colors on one plant.

662. **Crystal Palace.** Scarlet.

663. **Golden Queen.** Pure yellow orange.

664. **Heinemanni.** Chocolate color, odd.

665. **Jupiter.**—Strong running growth and large, rich, golden-yellow flowers.

666. **King Theodore.** Deep crimson maroon, dark foliage.

667. **Regelianum.** Deep purplish crimson.

668. **Shillingi.** Yellow spotted.

669. **Vesuvius.** Salmon-rose, dark foliage.

670. **Von Moltke.** Bluish-rose, odd and handsome.

Price. Any of the above tall sorts. Pkt. 5c; oz. 20c; 1/4 lb. 60c.

671. **Ross Brothers Superb Mixture.** All colors. Tall varieties. Pkt. 5c; oz. 15c; 1/4 lb. 50c; lb. \$1.75.

Tom Thumb or Dwarf Nasturtiums

672. **Aurora.** Primrose, veined carmine pink.

673. **Chameleon.** Various colors on one plant.

674. **Empress of India.** Fiery crimson, dark foliage.

675. **Golden Scarlet or Cloth of Gold.** Scarlet flowers and yellow foliage.

676. **Lady Bird.** Orange-yellow, suffused with red and a bright-red blotch at the base of the petals.

677. **Ruby King.** Rich crimson-rose.

678. **Vesuvius.** Salmon-rose, dark foliage.

Prices. Any of the above dwarf sorts. Pkt. 5c; oz. 25c; 1/4 lb. 75c.

679. **Ross Brothers Superb Mixture.** All colors. Dwarf varieties. Pkt. 5c; oz. 15c; 1/4 lb. 60c; lb. \$2.00.

PETUNIAS

There is no bedding plant of easier culture than the Petunia, and few that make a gayer appearance when in full bloom. On rich soil it has a tendency to run to vine, which should be suppressed by pinching off the shoots when necessary. As the seeds are as fine as dust, it is advisable to sow in boxes in the house, transplanting when large enough. Hardy annual. One to two feet.

687. **Grandiflora.** Double Petunias, extra large flowered. A great variety of colors. Pkt. 25c.

688. **Ross Brothers Ruffled Petunia.** This superbly ruffled and beautifully marked strain, acknowledged by every expert who has seen it as absolutely unsurpassed. After studying for weeks the brilliant coloring and delicate threads or veins in every conceivable hue, an artist whose color sketches of flowers are greatly admired says: "No human being can ever depict accurately in colors the exquisite beauty and intricate detail of your Ruffled Petunia. Its gorgeousness baffles description." Ross Brothers Ruffled Petunias, mixed colors, Pkt. 25c.

Hybrida Nana Compacta Petunias.

Dwarf, neat, compact bushes, twelve to fifteen inches, covered with a multitude of flowers all summer long; valuable for edging and formal bedding.

689. **Dwarf Inimitable.** Star Petunia. Compact growing variety; flowers striped and blotched. Pkt. 10c; 1/8 oz. 50c.

692. **Petunia. Finest Hybrida Mixed.** Extra fine. Pkt. 10c; 1/4 oz. 30c.

693. **Petunias Mixed.** Pkt. 5c; 1/4 oz. 20c.

For Petunia plants see Page 52.

PINKS or DIANTHUS

A magnificent genus, embracing some of the most popular flowers in cultivation producing a great variety of brilliant colors and profusion of bloom. The varieties classed as annuals are really biennials, but are treated as annuals and may be sown out of doors, when danger from frost is past, and in a few weeks' time they are a mass of bloom, continuing so until after hard frost. As a rule, they survive the winter if given slight protection, flowering abundantly the following season. They grow about a foot high and can be used in beds or borders of solid or mixed colors. The double-flowering sorts are almost as fine as Carnations for cutting. They are not particular as to soil but should have a sunny location.

Double Annual Pinks

700. **Chinese Fl. Pl.** China or Indian Pink. Blossoms in clusters, flowers very double and in a large range of bright colors. Pkt. 5c; 1/8 oz. 15c.
 702. **Heddewigi Fl. Pl.** Double Japan Pink. Double mixed. Colors varying from the richest velvety-crimson to the most delicate rose. Pkt. 5c; 1/8 oz. 20c.
 703. **Imperialis Fl. Pl.** Double Imperial Pink. Double mixed, in a very large range of colors. Pkt. 5c; 1/8 oz. 20c.
 704. **Laciniatus Fl. Pl.** Double Fringed Pink. Large, double, showy flowers, with fringed edges, in a great variety of colors, including beautifully striped sorts, mixed colors. Pkt. 5c; 1/8 oz. 20c.

Hardy Garden Pinks

HARDY GARDEN PINKS

These varieties are well adapted for beds and borders; delightful, refreshing, spicy odor; should be in every garden where cut flowers are wanted, and make a fine edging to a hardy border.

710. **Plumarius.** Grass Pink, Scotch Pink or Pheasant eye Pink. A beautiful single hardy Pink, with fringed-edge white flowers, with a dark center. Pkt. 5c; 1/4 oz. 30c.

711. **Plumarius Fl. Pl.** Double Hardy Garden Pinks. Double and semi-double varieties in beautiful colors. Pkt. 10c; 1/4 oz. 50c.

712. **Latifolius Atrococcineus Fl. Pl.** Ever-blooming Hybrid Sweet William. This is a cross between an annual Pink and a Sweet William, combining the free and continuous blooming qualities of the former with the hardiness of the latter; in color an intense velvety crimson-scarlet; blooms the first year from seed and one of the finest subjects for any position in the garden. Pkt. 10c; 1/8 oz. 50c.

713. **Latifolius Double Mixed.** In addition to the brilliant crimson-scarlet sort offered above, this mixture contains purple, violet and rose. Pkt. 10c; 1/8 oz. 50c.

PHLOX

One of the standard bedding plants which have a place in almost every garden being unexcelled for constant profusion of bloom and diversity of colors. For early flowering sow the seed in boxes to transplant in the border or bed when the weather is warm, and a later sowing may be made in the open ground where they are to bloom. Hardy annuals. One and one-half to two feet.

Phlox Drummondii

694. **Fireball.** Blood red. Pkt. 10c; 1/4 oz. 35c.
 695. **Isabellina.** Yellow. Pkt. 10c; 1/4 oz. 35c.
 696. **Snowball.** Pure white. Pkt. 10c; 1/4 oz. 35c.
 697. **Phlox Drummondii Mixed.** Pkt. 5c; 1/4 oz. 15c.
 698. **Star Phlox Mixed.** (Cuspidata) Pkt. 10c; 1/4 oz. 15c.

Perennial Phlox

699. **Decussata.** Three feet. These are among the finest herbaceous plants for beds and borders. The seed of this germinates very slowly, often requiring five to six months. Mixtures of all finest sorts. Pkt. 10c.

We have splendid Perennial Phlox plants on hand in season. See Page 53.

Oriental Poppy

POPPIES

(Papaver)

Poppies are so well-known that it is needless to say anything in their favor. Quite a number of the perennial varieties bloom the first year from seed if sown early. Sowings made in May, and again several times during spring, will produce a continuous bloom from early summer until frost. The seed should be sown where the plants are wanted to bloom, as Poppies do not take kindly to transplanting. Cover seed very lightly, and firm the soil with a flat board. When large enough thin out the plants. A sandy loam and early spring sowings produce the best flowers.

Annual Varieties

719. **Shirley.** Bright tissue-paper-like appearance. Makes a delightful plant along side of grass borders and paths. The variety we list under this head is the double Shirley extra mixed. Pkt. 5c; 1/4 oz. 25c.

720. **Danebrog or Danish Cross.** A very showy variety, producing large flowers of brilliant scarlet, with a silvery-white spot on each petal, forming a white cross. Pkt. 5c; oz. 25c.

722. **Miss Sherwood** New white poppy beautifully marked with crimson-rose. Pkt. 5c; oz. 40c.

723. **Peony Flowered Mixed.** Double ball-shaped flowers of gigantic size. Pkt. 5c; oz. 25c.

724. **Single Mixed Poppies.** Pkt. 5c; oz. 25c.

725. **Double Mixed Poppies.** Pkt. 5c; oz. 20c.

Perennial Poppies

These poppies when once planted will last for all time. They differ from the annuals in the original root, living and increasing in size, and not from being self-sown from seed dropped the previous year.

726. **Bracteatum.** Three feet. Immense orange-scarlet flowers very showy and attractive. Pkt. 5c; 1/4 oz. 25c.

727. **Iceland Poppies.** (Papaver Nudicaule.) A graceful delicate variety, twelve inches tall, with white, orange and yellow single blossoms, the petals resembling crumpled tissue paper. The plant is low and compact, but the flowers on their slender stalks are excellent for cutting. Sow in the fall where the plants are to remain and thin. Mixed colors. Pkt. 5c; 1/4 oz. 25c.

728. **Mixed Oriental Poppies.** Three feet. For gorgeous coloring the Oriental Poppies have few rivals among hardy plants. Their brilliant flowers produce magnificent effect in shrubberies and herbaceous borders, while for cutting they are invaluable. Pkt. 10c; 1/4 oz. 30c.

Giant Yellow Tulip Poppy

729. **Hunnemannia Fumariaefolia.** This is the best poppy for cutting as it remains in good condition for several days. Seed for July flowering should be sown early in May. The plants, which grow about two feet high, produce large golden-yellow, poppy-like flowers until late fall. The foliage is a fine glaucous green. Pkt. 10c; 1/4 oz. 25c.

California Poppy

Eschscholtzia

Annual, one foot. The state flower of California. A bright free-flowering plant of low spreading growth with finely cut silvery foliage. The poppy like flowers in pure shades of yellow, orange and crimson are produced from early spring until frost. Sow the seed outdoors during May, where the plants are to remain.

730. **Californica.** The original yellow. Pkt. 5c; oz. 30c.

731. **Carmine King.** Beautiful carmine rose color, both on the interior and exterior of the flower. Pkt. 10c; 1/2 oz. 30c.

732. **Maritima.** (Maltese Cross.) Choice mixed. Canary yellow with orange center, leaves grayish and finely cut. Pkt. 5c; 1/2 oz. 15c; oz. 30c.

733. **Eschscholtzia Mixed.** Extra fine mixture. Pkt. 5c; oz. 25c.

Plume Poppy

(Bocconia)

734. **Japenica.** Perennial, four feet. Ornamental plants with cream flowers, excellent for groups. Foliage glaucous green, bears freely spikes two to three feet long. Easily raised from seed. Pkt. 10c; 1/4 oz. 25c.

PORTULACA

Beautiful little plants which bloom profusely all summer. Their richly-colored flowers make an effective and brilliant display when planted in large beds and masses. Hardy annual. One-half foot.

735. **Double Pink.** Pkt. 5c; $\frac{1}{4}$ oz. 50c.

736. **Double Red.** Pkt. 5c; $\frac{1}{4}$ oz. 50c.

737. **Double Yellow.** Pkt. 5c; $\frac{1}{4}$ oz. 50c.

738. **Double White.** Pkt. 5c; $\frac{1}{4}$ oz. 50c.

739. **Large Flowering.** Extra double sorts, mixed colors. Pkt. 10c; $\frac{1}{4}$ oz. 60c.

740. **Grandiflora Large Flowering.** Single sorts, mixed colors. Pkt. 5c; $\frac{1}{4}$ oz. 15c; oz. 50c.

RICINUS

(Castor Oil Plant).

Rather coarse, tender plants of remarkably rapid growth, attaining a height of from five to fifteen feet. The stems and enormous palm-like leaves are of beautiful and varied colors. Much used as a background for other plants. Half-hardy annual.

743. **Zanzibariensis.** Ten to twelve feet. The ornamental leaves, beautifully lobed, are two and one-half to four feet across. Each plant makes a perfect pyramid of foliage thickly set from top to bottom the difference between the varieties is in the coloring of the grand bamboo-like stems and the long slender leaf stalks. Mixed. Pkt. 5c; oz. 20c.

744. **Many Sorts.** Mixed. Pkt. 5c; oz. 15c.

Salvia Bonfire

SALVIA

SCARLET SAGE
(Salvia Splendens)

The Scarlet Sage has long been a favorite bedding plant, also grown for conservatory decoration, bearing long spikes of flowers in great profusion from July till frost; half-hardy perennials, blooming the first year from seed which should be sown as early as possible, either indoors or in a hotbed, and the young plants transferred to their flowering quarters when the weather has become settled and warm.

745. **Ball of Fire.** Very dwarf and compact, ball-shaped variety, especially suitable for pot culture. The plants are about two feet high to the top of the flower spikes and about the same in diameter. Color dull red; large spikes. Pkt. 15c.

746. **Bonfire.** This is one of the finest of the Scarlet Sages, growing in a compact bush two feet high by two feet in diameter. Its erect spikes of brilliant scarlet flowers stand clear above the dark-green foliage and completely cover the plant. It attracts immediate attention in the garden, and is one of the most effective and gorgeous plants in cultivation. Pkt. 10c; $\frac{1}{4}$ oz. 50c.

747. **Splendens.** Two and one-half feet. The original scarlet sage. Pkt. 5c; $\frac{1}{4}$ oz. 50c.

Schizanthus

SNAPDRAGON

(Antirrhinum Majus)

Another real old favorite. Everybody knows the old-fashioned Snapdragon. You can see it growing in all the best gardens throughout the country. Unusually effective bedding displays are made from these noble plants. They withstand both wet and drought and produce beautiful stems of every range of shade and color, and continue to bloom in increasing profusion until frost cuts them off.

Tall Varieties.

750. **Queen Victoria.** Pure White. Pkt. 10c; $\frac{1}{4}$ oz. 35c.

751. **Light Rose.** Pkt. 10c; $\frac{1}{4}$ oz. 35c.

752. **Carmine Rose.** Pkt. 10c; $\frac{1}{4}$ oz. 35c.

753. **Atrococcineum.** Scarlet. Pkt. 10c; $\frac{1}{4}$ oz. 35c.

754. **Majus.** Tall sorts mixed. Pkt. 10c; $\frac{1}{4}$ oz. 30c.

Dwarf Varieties.

755. **Brilliant Rose.** Pkt. 10c; $\frac{1}{4}$ oz. 35c; oz. \$1.00.

756. **Daphne.** Darkest rose, white throat. Pkt. 10c; $\frac{1}{4}$ oz. 35c; oz. \$1.00.

757. **Defiance.** Bright scarlet. Pkt. 10c; $\frac{1}{4}$ oz. 35c; oz. \$1.00.

758. **Queen of the North.** Pure white. Pkt. 10c; $\frac{1}{4}$ oz. 35c; oz. \$1.00.

759. **Black Prince.** Darkest red. Pkt. 10c; $\frac{1}{4}$ oz. 35c; oz. \$1.00.

760. **Dwarf Sorts Mixed.** Pkt. 10c; $\frac{1}{4}$ oz. 30c; oz. \$1.00.

Sunflower (Helianthus)

SUNFLOWER

(Helianthus)

The strong growth of these well-known plants makes them unsuitable for bedding; but they are very useful for massing in shrubbery or borders, and for screening purposes. They do well in sunny positions, in any kind of soil. Seeds may be sown in the open ground as soon as the weather is suitable, or indoors in March and April and later transplanted.

765. **Californicus Fl. Pl.** Five feet. Double, golden-yellow. Pkt. 5c; $\frac{1}{4}$ oz. 10c.

767. **Red Sunflower.** Four to eight feet. Some flowers of a rich chestnut-red color, others tipped with yellow and others slightly washed with red. The flowers vary from a few inches to nearly a foot in diameter, and are of good form, usually having a small disc, and often two rows of long, slightly curled rays. Pkt. 10c.

Double Pyrethrum

PYRETHRUM

Very beautiful hardy perennials with large showy flowers and fine-cut foliage. Very desirable for beds and borders and useful as cut flowers.

741. **Parthenifolium Aureum.** (Golden Feather.) Perennial; six inches. One of the best plants for edging, grown for its beautiful yellow foliage. More successfully treated as an annual. Seed can be sown in the fall or spring and transplanted. Extra fine strain. Pkt. 5c; $\frac{1}{4}$ oz. 25c.

SCHIZANTHUS

(Butterfly Flower).

Dainty, erect, hardy annual plants with finely cut leaves and showy butterfly-like flowers; valuable for pot-culture and for bedding. One and one-half feet.

748. **Grandiflorous Hybrids.** A new variety, forming compact bushes not over a foot high, literally covered with large, beautiful orchid-like flowers in a bewildering range of colors. Dwarf mixed colors. Pkt. 10c; $\frac{1}{4}$ oz. 25c.

SWEET PEAS

Sweet Peas are more than flowers, they are a necessity for every garden. They lend themselves readily and easily to beautifying schemes of the city and country farmer.

Division fences between lots in town, fences across the back lots, and the unsightly spots that are a blemish to an otherwise beautiful home can be blanketed in beauty by the use of Sweet Peas. Sweet Peas should form no small part of your summer garden scheme. Sweet Peas include a wider range of colors than any other flower we know. Our's range from pure white to a light pink, primrose, dark rosy red, scarlet, blue, brown and even almost to a black sort. They also include the striped and spotted varieties. There are many hundred registered varieties.

Sweet Peas are not hard to grow.

Hints on the Growing of Sweet Peas

Location. Any location will be suitable that is well drained, and that will get free circulation of air. The ground should be dug up to a depth of two feet and filled in with good soil mixed with rotted manure or commercial fertilizer. Acid Phosphate is as good as any fertilizer. **Early Planting** is essential with sweet peas in order to give the roots a chance to develop more rapidly than the tops during the cool weather. Early plantings produce blossoms before the intense heat of the summer comes which is likely to wilt the plants if they do not have well developed roots. In this latitude it is usually safe to plant about March first. Fall sowings, made from Thanksgiving to the fifteenth of December are really the best, wherever practicable.

Sowings should be made in a furrow 6 inches deep, and the seed covered with an inch of soil, and the trench filled in as the plants grow. It is a help to soak the seeds in luke warm water over night before sowing. Use one ounce to fifty feet of row.

Staking will be necessary as the plants will grow to a height of six feet or more. Good twiggy bows are the best for this purpose. If these are not available a six foot wire netting will serve the purpose. An easier way is to drive long heavy stakes every 5 or 6 feet, and tie jute twine across every 6 or 8 inches.

Questions concerning the planting or care of sweet peas will be gladly answered, whenever possible by our service department. We were selling sweet peas for many years before the Spencers were introduced, and are leaders in the business today. What information we have gathered in this time is yours for the asking.

Spencer or Orchid Flowering Sweet Peas

775. **Crimson King.** Similar to King Edward Spencer in color, having all of the rich brilliancy of the latter, but is much larger, averaging fully two inches from wing to wing. They are produced freely, three and four growing on the strong long stems. Pkt. 25c; 5 pkts. \$1.00.

776. **Early Lavender King.** A first class lavender has long been needed in this type, and this fills the need perfectly. This glorious variety is a rich, true, deep lavender thruout. The flowers are of large size and beautifully waved. Pkt. 25c; 5 pkts. \$1.00.

777. **Early Snowstorm.** We consider this truly magnificent pure white variety to be the best of the white Early Flowering Spencers yet introduced. The flowers are of great size, beautifully waved and are borne in great profusion. Snowstorm is an appropriate name as the plants become a perfect mass of snow white flowers, coming into bloom very early and continuing thru a long season. Pkt. 25c; 5 pkts. \$1.00.

778. **Primrose Beauty.** An attractive and pleasing shade of deep primrose, flushed with rose. This is one of the very best for growing under glass, where it will bloom profusely, and yet only grow to a height of five or six feet. Pkt. 25c; 5 pkts. \$1.00.

779. **Yarrowa.** The color on opening is rose, changing as the flowers develop to a light pink standard, with buff or blush wings. Pkt. 15c; 2 pkts. 25c.

780. **America.** White ground, heavily striped and flaked with bright crimson scarlet.

783. **Aurora.** Cream white ground; flaked and mottled with rich orange salmon.

784. **Countess Spencer.** A lovely pale pink, the original Spencer.

785. **Dainty.** White, edged with pale rose.

786. **Dobbies Cream.** Deep cream or primrose.

790. **Florence Morse.** Delicate blush with pink edging.

791. **Florence Nightingale.** A fine clear lavender.

793. **George Herbert.** Bright rosy carmine.

794. **Helen Lewis.** Large wavy orange standard, wings rosy-salmon.

797. **King Edward Spencer.** A crimson scarlet.

798. **King White.** A superb large white flower.

799. **Margaret Atlee.** Pink on cream, suffused with salmon.

803. **Mrs. Routzahn.** Buff suffused with pink.

805. **Orchid.** Deep lavender or heliotrope.

806. **Othello.** A deep rich maroon.

807. **Primrose.** Deep primrose, or cream yellow.

809. **Rosabelle.** A pleasing shade of rose.

810. **Senator.** Deep wine stripes on heliotrope ground.

812. **The President.** Dazzling orange-scarlet.

814. **Vermillion Brilliant.** A clear bright scarlet.

815. **Wedgewood.** A delicate light blue.

Prices of any of the above, except where otherwise noted; Pkt. 10c; oz. 30c; ¼ lb. \$1.00; lb. \$3.50, postpaid.

816. **Ross Brothers Superb Mixed Spencers.** This is a careful blend of all the finest types of Spencers and includes a wonderful color range. For a variety of color no mixture can excell this. Pkt. 10c; oz. 25c; ¼ lb. 75c; lb. \$2.50, postpaid.

819. **Ross Brothers Special Mixture**, of Grandiflora and Unwin varieties, a magnificent mixture of the very best sorts of these two types. Pkt. 5c; oz. 20c; ¼ lb. 60c; lb. \$2.00.

846. **Ross Brothers Splendid Mixture**, of Grandiflora Sweet Peas comprises many of the best varieties. Pkt. 5c; oz. 15c; ¼ lb., 45c; lb., \$1.50.

Hardy Perennial Sweet Peas

(*Lathyrus Latifolius*)

Showy free flowering perennial climbers for covering fences, old stumps, etc. They are in bloom for a long season, and are fine for cutting.

847. **White.** Pkt. 10c; 3 pkts. 25c.

848. **Red.** Pkt. 10c; 3 pkts. 25c.

849. **Mixed.** Pkt. 10c; 3 pkts. 25c.

R. B.

Giant Zinnia

ZINNIAS

For the flower gardener of the middle-west we cannot suggest a better flower than the Zinnia. There will be a profusion of bloom all through the hot summer, when nearly everything else has dropped by the wayside. The flowers will continue in abundance until stopped by frost. There is a wide range of colors. The flowers are large and showy. The culture exceedingly simple.

Ross Brothers Special Giant Zinnias. These we have selected for the size of the flowers, averaging 4 inches in diameter, with specimens 5 to 6 inches and 3 to 4 inches deep; for the height of the plants, 3 feet or more; for the strength and length of the stems and for their brilliancy of color. We feel confident that our strain is unsurpassed and will give satisfaction to the most inexperienced gardeners.

855. **Giant Extra Fine Mixed.**
Pkt. 10c; $\frac{1}{4}$ oz. 40c.

858. **Elegans Tall Double Mixed.**
Pkt. 5c; $\frac{1}{4}$ oz. 25c.

859. **Elegans Dwarf Double Mixed.**
Pkt. 5c; $\frac{1}{4}$ oz. 25c.

SWEET WILLIAM

A splendid old-fashioned plant, producing its large head of beautifully colored, sweet scented flowers in great abundance. It is a hardy perennial, easily grown, and flowers the second year from seed. It is much better to raise new, vigorous, young plants from seed every season than to divide the old plants. Two feet.

Single Varieties

714. **Carmine Beauty.** A charming and distinct color, midway between Pink Beauty and Scarlet Beauty.
Pkt. 10c; $\frac{1}{8}$ oz. 40c.

715. **Pink Beauty.** A beautiful pink. Pkt. 10c; $\frac{1}{8}$ oz. 30c.

716. **Scarlet Beauty.** A very effective rich, deep scarlet. Pkt. 10c; $\frac{1}{8}$ oz. 50c.

Double Varieties

718. **Extra Fine Mixed.** Double. Pkt. 10c; $\frac{1}{4}$ oz. 30c.

STOCKS

(Gilliflower)

A magnificent group of plants extensively cultivated for both summer and winter decoration. The extreme beauty of their flowers and luxuriant foliage, combined with their neat, graceful habit, makes them one of the most popular and useful plants for pot culture and bedding purposes.

Improved Large-Flowering, 10-Week Stocks

This is the leading class for outdoor bedding. Comes into flower quicker than the other types.

761. **Ross Brothers Double Mixed.** Pkt., 10c; $\frac{1}{8}$ oz., 50c.

STOKESIA

473. **Cornflower Aster.** This is an old-fashioned hardy perennial. The plant growing about 24 inches high, bearing 20 to 30 large handsome light-lavender-blue corn flower-like blossoms from July until frosts. Splendid for the border or for cutting.
Pkt. 10c; $\frac{1}{4}$ oz. 35c.

VERBENA

Verbenas are the most popular and satisfactory bedding plants in cultivation. Their heads of brilliantly colored flowers are borne in constant succession from June until frost. To secure early plants the seed should be sown in the greenhouse or hotbed in February or March and the seedlings transplanted to the open border when all danger from frost is passed.

770. **Hybrida.** All colors mixed. Pkt. 5c; $\frac{1}{4}$ oz. 30c.

771. **Mammoth Mixed.** Extra large flowered.
Pkt. 10c; $\frac{1}{4}$ oz. 25c.

VINCA

(Periwinkle)

Splendid, tender perennials with luxuriant, dark green foliage and round, single flowers that bloom freely all summer. Excellent for summer bedding and pot culture. One foot.

772. **Rosea.** Pkt. 10c; $\frac{1}{4}$ oz. 20c.

773. **White.** Pkt. 10c; $\frac{1}{4}$ oz. 20c.

774. **Mixed.** All colors. Pkt. 5c; $\frac{1}{4}$ oz. 30c.

SUGGESTED FLOWERS FOR SPECIAL NEEDS

Edging or Borders.

Alyssum.
Ageratum.
Linum
French Marigold
Pansy.
Dwarf Nasturtium.

Shady Places.

Bellis.
Godetia.
Eschscholtzia.
Columbine.
Forget-me-not.
Four O'clock.
Pansies.

Bedding.

Cockscomb.
Phlox
Salvia.
Snapdragon.
Petunia.
Vinca.
Verbena.

Hot Dry Places.

Alyssum.
Calliopsis.
Bachelors Button.
Marigold.
Zinnias.
Calendula.
Petunia.
Portulaca.
Shasta Daisy.

Cutting Annuals.

Calliopsis.
Bachelors Button.
Marigold.
Larkspur.
Pansies.
Sweet Peas.
Nasturtium.
Mignonette.
Cosmos.
Calendula.
Zinnia.

Tall Sorts for a Fence or Screen.

Kochia.
Sunflowers.
Castor Bean.
Cosmos.
Hollyhock

Old Fashioned Perennials

Delphinium.
Coreopsis.
Columbine.
Foxglove.
Chrysanthemum.
Gaillardia.
Poppy.

For Porch or Window Boxes.

Petunia.
Tall Nasturtium.
Alyssum.
Vinca.
Stocks.
Shasta Daisy.
Ageratum.

Clematis Paniculata

BOSTON IVY

549. (*Ampelopsis Veitchi*.) An attractive, hardy climber, remarkably well adapted for covering walls, as it clings to the smoothest surface. The growth is rapid and the plant is hardy. The leaves are deep green, changing to bright crimson in the fall. The bright red berries hang on for most of the winter. Pkt. 10c; ¼ oz. 20c.

BRYONOPSIS

550. *Laciniosa*. Ten feet. A beautiful annual climber, of the gourd species with ivy-like pale green foliage and showy fruit, first green-striped white, turning when ripe to bright scarlet-striped white. Pkt. 5c.

CANARY BIRD VINE

551. Annual, fifteen to twenty feet. Clean, handsome foliage, with an abundance of bright canary-yellow blossoms; excellent window vine for winter. Pkt. 5c; ½ oz. 15c.

CLEMATIS

552. *Paniculata*. One of the finest hardy perennial climbers. Pure white fragrant flowers. The flowers are followed by pretty seed pods of bronzy-red. Twelve feet. Pkt. 10c.

CUP AND SAUCER VINE

553. *Cobaea Scandens*. A magnificent climber growing thirty feet and upwards, if planted in rich soil in a sunny situation. The flowers are large, symmetrical bells, which are light green when first opened and turn gradually to a fine purple-lilac. The foliage is also handsome, and makes a fine screen for porches or lattices of any kind. To secure germination of the seed, plant them edgewise in boxes of moist earth, giving no water until they have sprouted. A piece of glass or cloth will prevent evaporation while the seeds are starting. Tender perennial. Pkt. 10c; ¼ oz. 20c.

CYPRESS VINE

554. (*Ipomea Quamoclit*.) One of the most popular of all summer climbers. The star-shaped flowers are small and thickly set in beautiful dark green foliage of fern-like appearance. Tender annual. Fifteen feet. Mixed colors. Pkt. 5c; oz. 25c.

DUTCHMAN'S PIPE

545. (*Aristolochia Sipho*.) One of the best climbing vines, with immense heart-shaped leaves of a deep rich green color, invaluable for covering walls and trellises. Flowers brownish purple. Hardy perennial. Pkt. 10c.

HYACINTH BEAN

(*Dolichos*)

A rapid-growing, hardy annual climber with white or purple flowers which are followed by ornamental seed pods.

555. *Princess Helen*. (Daylight). Snow white flowers followed by silvery white seed pods. Pkt. 5c; oz. 15c.

556. *Purple Soudan*. (Darkness) Dark vines with rose-violet flowers, seed pods dark-red. Pkt. 5c; oz. 15c.

557. *All Colors Mixed*. Pkt. 5c; oz. 15c; ¼ lb. 50c.

MOON FLOWER

(*Ipomoea*)

Popular rapid-growing climbers, remarkable for their showy flowers of pink, white, blue and scarlet colors. They are excellent vines for covering arbors, trellis, etc., their luxuriant foliage combined with their fragrant flowers forming a beautiful dense screen, twenty feet or more in height. Soak seed twenty-four hours before planting.

558. *Bona Nox*. (Evening Glory.) Violet flowers, large and fragrant. Pkt. 5c; oz. 25c.

559. *Coccinea*. (Star Ipomoea) Small scarlet flowers in great profusion. Pkt. 10c; ¼ oz. 25c.

560. *Mexicana Grandiflora Alba*. (White Moon Flower.) Black seed. Covered with large white flowers every evening and cloudy day. Seeds should be started inside. Pkt. 5c; ¼ oz. 20c.

561. *Mexicana Grandiflora Giant Pink*. Soft lilac-pink flowers. Pkt. 5c; ¼ oz. 15c.

562. *Ipomoea*. Mixed. Pkt. 5c; ¼ oz. 15c.

KUDZU VINE

565. *Pueraria Thunbergiana*. "Jack and the Bean Stalk." A remarkably fast growing vine with large green leaves and clusters of pea-shaped flowers. When well established it will grow from forty to sixty feet in a season. The plant dies back to the ground in the winter. Hardy perennial. Pkt. 10c.

ANNUAL AND PERENNIAL VINES

Rapid climbers are excellent to shade porches; cover stumps and hide unsightly places. Everyone who has a porch or room that is exposed to the hot sun all summer long will appreciate what it would mean to have a dense green vine for protection. We have selected those sorts which we have found to give the greatest satisfaction to our Middle West customers. There are enough types included to take care of all of the various soil requirements and personal tastes. Our Landscape Department will be glad to advise you about your vines if you wish.

BALLOON VINE

546. *Cardiospermum Halicacabum*. Climbing vine of rapid growth with white flowers and seed vessels which resemble miniature balloons. Light, warm soil suits them best. Hardy annual. Pkt. 5c; oz. 20c.

BALSAM APPLE

547. *Momordica Balsamina*. There is little difference between this and the Balsam Pear, except in the shape of the fruit. Pkt. 5c; oz. 25c.

BALSAM PEAR

548. *Momordica Charantia*. Vigorous climber, has handsome leaves, which give quick and dense shade for verandas, etc., and bears a small yellowish white flower. The orange-colored fruit, which is covered with warty protuberances, bursts open when ripe and turns black, showing bright red seeds. It is a really handsome vine and very interesting to those unfamiliar with it. Preserved in spirits, the ripe fruit is highly valued by old-fashioned people for its supposed value in healing cuts and bruises. Half-hardy perennial. Twelve feet. Pkt. 5c; oz. 25c.

JAPANESE HOP

(*Humulus*)

563. *Japanese Hop*. Twenty feet. One of the most rapid growing annual ornamental climbers, green-leaved. Pkt. 5c; ½ oz. 20c.

564. *Variegated Japanese Hop*. There is no harder climbing vine than the Japanese Hop. The foliage is splashed and streaked with white. Pkt. 5c; ¼ oz. 25c.

MORNING GLORY

All members of this family are characterized by such extraordinary beauty of color that it is small wonder that the common name for them is "Morning Glory." Although the flowers are so delicate in texture that they wither before the first touch of sunshine, the vine is the hardiest of our entire list of climbers, growing rapidly in a soil of any character. Unsightly objects may be thus transformed in a few weeks, but the flowers are of course useless for cutting. Hardy annual.

568. *Japanese Fancy Fringed*. Pkt. 5c; ¼ oz. 25c.

569. *Japanese Double Flowering*. Splendid mixture. Pkt. 5c; ¼ oz. 20c.

570. *Convolvulus Major*. The well-known climber. Finest mixed. Pkt. 5c; oz. 20c.

571. *Imperialis*. Giant Japanese Morning Glory. Mixed. Pkt. 5c; oz. 25c.

SCARLET RUNNER BEAN

572. The vine is graceful; flowers are of a brilliant scarlet and the beans of excellent quality, either when shelled or in a dry state. Pkt. 10c; ¼ lb. 20c.

WILD CUCUMBER

573. *Echinocystis Lobata*. Rapid growing vine with bright green foliage and clusters of white flowers. One of the best annual climbers for covering old fences, trellises, etc. Soak the seed in water for twenty hours before sowing. Pkt. 5c; ½ oz. 10c; oz. 15c; ¼ lb. 50c.

Plants

R.B.

WHAT a world of improvement a few well selected plants will make in any yard or garden. Select the right plants and the right places for them, and they will make as much improvement as a few bright pictures would on the bare walls of a living room. It may be a few evergreens in front of the porch, a few shrubs along the side of the house, a vine or so over the back stoop, a collection of geranium plants around an old stump, there is something that will add much to the coziness of the home. If you are not sure as to what will be the best, we would suggest that you get in touch with our landscape department; their services are yours for the asking. We maintain that department for the benefit of our friends. We want them to make use of this offer freely. These landscape experts are able and glad to lend their assistance in planning your home garden and in designing a large estate; in laying out a park or the grounds for a school; in arranging flower beds in a hospital yard and in any way that they can be used. All that we ask is that you give them your problem as early in the season as possible. They will not handle any problem unless they have the time to do a satisfactory piece of work. Later in the season they have many requests so place yours early.

SAFE ARRIVAL

The Ross Brothers Plants are of the same high standard as Ross Brothers Seeds. Our guarantee goes with every plant that we send out, just as with every package of seeds, so that you can be sure of the safe arrival of your plants, as well as of their absolutely satisfactory quality. We carefully inspect all the plants we send out and we reject any that are not absolutely first-class.

SHIPMENT

The time for shipment of plants is dependent on weather conditions. The types of packing of seeds and plants are entirely different and for these two reasons, in nearly every case, separate shipments will usually be made on those orders including plants and seeds. When orders for plants are received, we will reserve the stock and forward at the proper planting season.

When the plants are received they should be immediately unpacked and those that are in growing condition must be planted at once. The beds should be prepared in advance. When the plant is set into the bed it should get a generous

quantity of water and the soil well firmed about the roots. Water the plant occasionally until it is well established.

Be sure that your plants have received proper and careful attention and are planted according to directions, watered and so on, before you lay the blame on the plants for seeming failure to do well. If then they do not flourish the way you think they should, do not lay the blame on the quality of the stock, the chances are that in some way they are not receiving the proper attention. If you are having trouble with your plants whether you bought them from us or not makes no difference, write to us about it and very likely we can tell you exactly what you can do to remedy the trouble.

FORWARDING: Unless otherwise stated the prices on all plants are f.o.b. Wichita. Plants will, in most cases, be forwarded by express. **Be sure that packages are received in good condition, or that a notation of their poor condition is made on the express receipt before signature is made.**

BULBS

FOR Spring and Summer planting these bulbs are set out in a dormant condition and they constitute the easiest form of plants that can be raised. There is no danger of their drying out and dying on the way to you, and if when received they are unpacked and spread out in some out of the way place where they will not freeze, nor become too dry, they will require absolutely no attention until planting season. They can be purchased early in the spring (and we strongly recommend this, as our stock is more complete at that time) they can easily be kept by the customer without trouble.

The Cannas, Dahlias, Gladioli, etc. are wealthy in their range of colors and season of bloom and they can be raised by anyone as no attention is required after they are placed in the ground, except an occasional weeding. All bulbs should be planted in a well fertilized, well prepared and well drained bed. At the end of the season, after the plants have had a chance to recover from their heavy blossoming, but before there is any danger of a heavy frost killing the bulbs, they can be easily lifted, the tips clipped off and the bulbs stored in a cool, dry cellar until the next year. Under favorable conditions they will not only last indefinitely, but will multiply and add considerably to their number each year.

CALADIUM ESCULENTUM

or Elephant's Ear

Caladiums are among the most effective plants in cultivation for beds, borders, or for planting out upon the lawn. They are used extensively in many of the parks where their decorative value is greatly appreciated. The bulbs should be planted about six inches below the surface of the ground; water should be applied regularly, but in small quantities until after the foliage shows above the ground, then the plant requires plenty of water to produce large leaves. It is not unusual for leaves to measure between three and four feet long and fourteen to eighteen inches in width. These bulbs can be forwarded by parcel post if 5c extra per bulb is added to the order.

- 862. Size 7 to 9 inches in circumference. Each 20c.
- 863. Size 9 to 11 inches in circumference. Each 35c.
- 864. Size 11 to 12 inches in circumference. Each 40c.
- 865. Size 12 inches and up in circumference. Each 50c.

A Pleasing Effect with Cannas

CANNAS

CANNAS are one of the best plants for the middle-west garden. If properly handled and if the right varieties are used they are very valuable for foliage, as well as for flowers. They can be had in varieties from two to ten feet high with several distinct colors of foliage and as enormous range of colors in the blossoms. Cannas can be shown most effectively in circular beds as follows: In the center one plant, the first circle six plants, the second circle twelve plants, the third circle eighteen plants and so on. Each circle takes six more plants than the one inside of it. The circles are made eighteen inches apart. For more detailed instruction write our service department.

ROSS BROTHERS SELECTED CANNAS

If you want the bulbs sent by parcel post, please add 2c per bulb, or 15c per dozen, to cover postage costs.

866. **Firebird.** 4-5 feet. The best scarlet green-leaved variety in existence. The flowers are borne in immense trusses, on strong stalks well above the leaves. They are of splendid form, round and shapely. The petals measure and sometimes exceed two and one-half inches across, and the color is a clear glistening scarlet without any streaks, spots, or blotches. 25c each; 3 for 50c

867. **Yellow King Humbert.** 4 feet. An orchid-flowering sport of the well-known variety King Humbert. Has the same habit of growth as its parent; foliage a very dark green with flowers measuring five to seven inches across; individual petals three to three and one-half inches in diameter. Color of flower a deep rich yellow heavily spotted and blotched with bright red. Some plants will occasionally give a scarlet or scarlet-striped flower, which we consider an improvement rather than a defect. 20c each; 3 for 50c.

868. **Gladiator.** 4-5 feet. One of the finest bedders, color deep yellow freely dotted with red. 15c each; 4 for 50c.

869. **Mrs. Alfred Conard.** 4 feet. Green foliage. Flowers salmon pink of large size on finely shaped flower heads. 20c each; 3 for 50c.

870. **Allemania.** 4-6 feet. Green foliage. Flower scarlet-orange with golden-yellow markings. 10c each; \$1.00 per dozen.

871. **Burbank.** 3-4 feet. Green foliage. Flower canary yellow. 10c each; \$1.00 per dozen.

872. **King Humbert.** 4-5 feet. Bronze foliage. Flowers large, five to six inches across. Flower a glowing scarlet or orange-red, often streaked with gold. 15c each; 4 for 50c.

873. **Louisiana (Pennsylvania).** 5-6 feet. Green foliage. Flower a deep, vivid crimson, often with a crinkly edge and always with a silky sheen. 10c each; \$1.00 per dozen.

874. **Indiana.** 5-6 feet. Green foliage. Flowers a gorgeous but velvety fiery orange. 10c each; \$1.00 per dozen.

875. **Austria.** 4-5 feet. Green foliage. The plant is remarkable for its sturdy, rank growth, forming massive clumps four to five feet high, surmounted by tall spikes of golden yellow flowers, standing upright like immense lilies. 10c each; \$1.00 per dozen.

877. **Milwaukee.** 3-4 feet. Green foliage. Flowers rich, deep maroon, the darkest of all cannas. 15c each; 4 for 50c.

878. **Meteor.** 4-5 feet. Splendid green foliage. Flowers dazzling crimson of most spectacular effect. 25c each; \$2.50 per dozen.

879. **La Donna.** 2-3 feet. Green foliage. Flower a lovely shade of soft flesh pink, underlaid with a small recurved yellow petal, dotted with pink in the throat. Large flowers, about half way between the orchid and truss varieties. 20c each; 3 for 50c.

880. **West Grove.** 3-4 feet. Green foliage. Flower moderately large, four to five inches across, with rather narrow petals. Large truss, color a deep cerise pink or faintly salmon pink. 15c each; 4 for 50c.

884. **Egandale.** 4 feet. Bronze foliage. Flowers currant-red, small but held erect. Full truss. 15c each; 4 for 50c.

885. **Venus.** 3-4 feet. Green foliage. Flowers a gay, rosy pink, with borders and markings of cream and yellow. Large flowers and large truss. 15c each; 4 for 50c.

886. **Gigantea Rosea.** 3-4 feet. Bronze foliage. One of the finest dark-leaved Cannas. Foliage good, habit sturdy. The color is deep currant-red. 20c each; 3 for 50c.

887. **King of Bronzes.** 6-7 feet. Foliage canna, with rich red bronze leaves rounded at end; very gorgeous and striking. 10c each; \$1.00 per dozen.

889. **Red Shades.** Unknown varieties of red cannas. 60c per dozen.

890. **Assorted Unknown Varieties.** Often tubers get mixed up, and we will sell you these canna tubers at a very low price. 60c per dozen.

For parcel post add 2c per bulb, or 15c per dozen.

TUBEROSES

One of the best known and most easily grown summer flowering bulbs. Easily recognized by its exquisite fragrance and beautiful flower spikes, which are borne on long stems, making it an admirable cut flower for house decoration. Bulbs should be taken up before freezing weather and placed in a dry cellar.

938. **Dwarf Excelsior Pearl.** 10c each; dozen, \$1.00, postpaid.

939. **Mexican Everblooming.** These came from high tableland of Central Mexico. They have tall, stiff stems, flowers pure white, single, delightfully fragrant. Commence to bloom in May or June farther north (than Texas or Mexico) and are a mass of white until cut down by frosts. They never blight and the smallest bulb blooms the first season. 8c each; dozen 75c.

ANNUAL VINES

945. **Cinnamon Vine.** Quick grower with beautiful glossy heart-shaped leaves and sweet-scented flowers. Vines will run twenty-five to thirty-five feet in one season. Extra large roots, 10c each, postpaid.

946. **Madeira Vine.** One of the best and most popular climbers; not for the flower which is insignificant, but for its leaves, which are small, dark-green and very dense. The vine is of slender growth and will succeed in any location, making best growth, however, in a sunny sheltered place. Not hardy and roots should be taken up in the fall. **Fulbs,** 10c each; 3 for 25c; dozen 90c, postpaid; 100 for \$6.00 at purchaser's expense.

Eugene Teele Dahlia

DAHLIAS

THE Dahlia is said to be a prime necessity of the fall garden for the middle-west. The large showy blossoms are found in nearly every well planned garden and are the most gorgeous flowers in bloom during the fall. Dahlias are not hard to raise if proper care is given. When planting set them flat in holes five or six inches deep, but do not cover with more than one inch of soil; fill in the rest after the plants have started. Tie the plants to stakes as soon as they are a foot high and if they receive plenty of moisture they will bloom profusely. Dahlias are very tender and should not be set out until danger of freezing weather is past. The bulbs must be harvested before the ground freezes in the fall.

STANDARD CACTUS DAHLIAS

893. **AMBASSADOR.** 4 feet. Pure white, medium size. Flower held erect on a good stem.
894. **CORNUCOPIA.** 3 feet. A superb variety; petals very long and regular in form. Deep vermilion, with some even darker shadings. Flowers large and produced in profusion. 25c.
895. **EVELYN WILMORE.** 4 feet. Deep garnet red, petals long and finely formed.
891. **FLORADORA.** 3 feet. A marvel of productiveness and exquisite form. Deep blood red, very early.
897. **MRS. CHARLES TURNER.** 3 feet. Extra large with long pointed petals, and perfect in form. Bright lemon yellow.
892. **MAID OF ATHENS.** 4 feet. Amber yellow shading to fawn. Fine form.
899. **UNCLE TOM.** 3 feet. Dark maroon, almost approaching black. Fine shaped flower with good stem.

STANDARD DECORATIVE DAHLIAS

900. **AUTUMN GLOW.** 4 feet. A very large, full flower, blooming well above the foliage. Color bronze yellow, giving varied shades of autumn tints.
901. **BLACK PRINCE.** 4 feet. Very dark, almost black. A large fine flower, with a good strong stem.
902. **EUGENE TEELE.** 5 feet. A fine deep scarlet, produced on long stems, making it valuable for cutting. 25c.
903. **GOLDEN SUN.** 4 feet. A large massive flower, golden yellow, shaded lighter in the center.
904. **SYLVIA.** 4 feet. Soft pink with light center. Long stiff stems. A profuse bloomer, fine for cutting.

GLADIOLI

THE queen of summer flowering bulbs and a valued prize for cut flowers. Gladioli serve as the best cut flowers for the summer season in the middle-west. The flower stalks come up from the bulb and consequently are not so dependent in getting roots well established before hot weather comes as annuals. For cutting it is best to cut the spikes as soon as the two lower flowers are open, the rest will open in the house. Remove the faded flowers, cut a little off the stem and change the water every day. Each spike will usually bloom for a week or more in this way and be a real delight to the household.

Plant the bulb 2 inches deep and 5 to 6 inches apart.

ROSS BROTHERS SUPERB GLADIOLI

918. **AMERICA.** Exquisite pink. Spikes two to three feet long, upon which flowers of good size are arranged. 7c each; 60c per dozen; \$4.00 per 100.
919. **AUGUSTA.** Splendid large white blossoms with blue antlers. 7c each; 60c per dozen; \$4.00 per 100.
920. **BARON HULOT.** Rich, deep violet. A fine dark shade bordering on blue. Should be planted with a light variety for contrast. 10c each; \$1.00 per dozen; \$7.00 per 100.
921. **EMPRESS OF INDIA.** Deep maroon. A rich velvety shape, very decorative. 10c each; \$1.00 per dozen; \$7.00 per 100.
924. **HALLEY.** Salmon pink shaded yellow. The predominating color of the flowers is delicate pink with a slight roseate tinge. The lower petals bear a creamy blotch, with the bright red stripe thru the center, producing a superb effect. 7c each; 60c per dozen; \$4.00 per 100.

SHOW AND FANCY DAHLIAS

905. **LIVONI.** 3 feet. Rich, pink finely formed. A very handsome flower.
906. **BON TON.** 4 feet. A fine ball shaped flower of deep garnet red. An extra fine dahlia. 25c.
910. **BON MAZA.** 4 feet. An odd, uncertain dahlia, but one of the best. White ground streaked and marbled in a curious manner with bright red.
907. **GLORI DE LYON.** 3 feet. Pure white, the largest white show dahlia in cultivation. Perfectly formed. 25c.
908. **GOLDEN TREASURE.** 3 feet. A beautiful burnt orange color. Flower large, well formed and full to the center.
909. **LADY MILDMAY.** 3 feet. A very beautiful flower, white ground shaded to pale lavender. Very large and full, and a free bloomer.
911. **MOROCCO.** 4 feet. Large well-filled blooms. Dark maroon often tipped with white. Splendid for cutting. 25c.
912. **PURPLE GEM.** 4 feet. Rich royal purple, clear and constant. This is a decided improvement over old varieties. A first-class flower in every way. 25c.
913. **QUEEN OF YELLOWS.** 3 feet. Fine clear yellow. An early and prolific bloomer.
914. **QUEEN VICTORIA.** 4 feet. Canary yellow. A fine shaped bloom, produced on long fine stems.
915. **ROBERT BROOMFIELD.** 4 feet. Pure white of excellent form. Highly recommended.
917. **STADELLA.** 4 feet. Large purple flower, rounded and full.

Price of any of the above, except where otherwise noted; 20c each; \$2.00 per dozen. Postage 5c per bulb or 25c per dozen extra.

Vase of Mixed Gladioli

925. **MRS. FRANK PENDLETON.** Rose with dark carmine blotch. This is one of the finest new gladioli. 10c each; \$1.00 per dozen; \$7.00 per 100.

926. **MRS. FRANCES KING.** Most popular light scarlet. Of exceptional value for cut flower use. Separate flowers often measure four to five inches across, and five or six are open at one time. 7c each; 60c per dozen; \$4.00 per 100.

927. **NIAGARA.** Nearly canary yellow. A charming American variety of delicate yellow lightly marked and splashed with rosy carmine in the throat; very large open flowers, on tall straight spikes. Beautiful as a cut flower. 10c each; \$1.00 per dozen; \$7.00 per 100.

928. **PANAMA.** Finest new pink. It resembles its parent, America, but is richer in shade and larger. The flower spike is exceptionally long. A matchless variety in its class, having taken prizes at many of the largest flower shows. 10c each; \$1.00 per dozen; \$7.00 per 100.

929. **PRINCEPS.** The Amaryllis-flowered gladiolus. Splendid late flowering variety. Flowers of enormous size, five to six inches in diameter, and a dazzling scarlet red in color, with a small white band on each lower petal. Spikes produce twelve to fifteen flowers, and grow four feet high. 10c each; \$1.00 per dozen; \$7.00 per 100.

930. **PEACE.** The best white gladiolus in cultivation. There is sometimes a touch of pink on the tips of the stamens and anther. When this is present it merely serves to heighten the beauty of the flower. 10c each; \$1.00 per dozen; \$7.00 per 100.

931. **SCHWABEN.** A variety of extreme vigor many of the bulbs producing two or three flowering stalks which very often produce side branches besides. The stalk produces about twenty very large flowers, six to eight usually open at one time. The color is a deep canary yellow, shading to a soft sulphury yellow when open. 10c each; \$1.00 per dozen; \$7.00 per 100.

933. **PINK AND ROSE SHADES.** 6c each; 50c per dozen; \$3.50 per 100.

934. **SCARLET AND RED SHADES.** 6c each; 50c per dozen; \$3.50 per 100.

936. **WHITE AND LIGHT SHADES.** 6c each; 50c per dozen; \$3.50 per 100.

937. **SUPERB GENERAL MIXTURE** 6c each; 50c per dozen; \$3.50 per 100.

Six of a kind at the dozen rate; 25 at the 100 rate. Postage paid on single bulbs. For a dozen or more add 10c per dozen for postage.

SHRUBBERY

ROSS Brothers Vines and Shrubbery are all of large well grown stock. It is too large to send advantageously by mail, consequently we will forward it by express, unless otherwise instructed. We are not able, at the very low prices we charge, to pay the transportation charges on this class of goods. These plants are usually ready for shipment shortly after March first, but our customers may rest assured that we will forward at the best time, depending on the season.

SHRUBS

Japanese Barberry (*Berberis Thunbergii*)—

This is a hardy attractive nearly evergreen shrub of great merit. The leaves are small and dark green; the berries, which appear late in the fall and last all winter, are a bright red. The branches are heavily thorned. Extra large plants; 50c each; \$5.00 per dozen.

Butterfly Shrub or Summer Lilac (*Buddleia Variabilis Veitchiana*)—

A most desirable bush bearing long spikes of small Lilac like flowers from July until cut by frost. It is the center for clouds of butterflies the whole summer. The top dies down each winter and the plant comes fresh again from the roots. 35c each; \$3.50 per dozen.

Forsythia Viridissima or Golden Bell—

The first shrub to show signs of life in the spring. About when the crocuses are out this large well known shrub lights up the garden with its masses of bright yellow bell-shaped flowers, before the leaves appear. 50c each; \$5.00 per dozen.

Bush Honeysuckle—

One of the most shapely ornamental plants to be found. The pink and white blossoms are followed by shiny red berries. Extra strong plants; 35c each; \$3.50 per dozen.

Hydrangea Arborescens Grandiflora (Snowball Hydrangea)—

This magnificent, perfectly hardy American shrub has snow-white blossoms of enormous size during June and July, after the passing of the early Spring blooming shrubs. 75c each; \$7.50 per dozen.

Hydrangea Paniculata Grandiflora—

The best known and most popular shrub throughout the middle west. The flowers, which are borne in dense pyramidal panicles a foot long, are white when they first open, but gradually change to a rose color, and remain in good condition for a long time. We have some extra strong plants; 75c each; \$7.50 per dozen.

Purple Lilac (*Syringa Vulgaris*)—

A large upright shrub 10 feet high, with bright green heart-shaped leaves. The flowers are well known by everyone. Large field-grown plants; 50c each; \$5.00 per dozen.

White Lilac (*Syringa Vulgaris alba*)—

The flowers are white, and fully as fragrant as the purple type. 50c each; \$5.00 per dozen.

Japanese Snowball (*Viburnum Plicatum*)

One of the choicest hardy shrubs, with healthy dark foliage, and large balls of pure white flowers, borne in great profusion in May. Extra large plants; 75c each; \$7.50 per dozen.

Snowberry (*Symphoricarpus Racemosus*)

A well-known dwarf shrub with small pink flowers and large white berries that hang on the plant the greater part of the winter. 50c each; \$5.00 Per doz.

Spiraea Anthony Waterer—

A splendid dwarf dense bush, the bright crimson flowers are in bloom all summer and fall if they are kept picked. 50c each; \$5.00 per dozen.

Spiraea Van Houttei—

This medium tall graceful bush is an ornament to any yard all season long, and when, late in the spring, it blossoms, the white flowers make it look like a fountain. Every Middle West gardener should be able to enjoy this delightful shrub in his own grounds. Extra large two-year plants; 50c each; \$5.00 per dozen.

Mock Orange (*Philadelphus Coronarius*)—

A hardy shrub with tall, upright over-arching branches. The leaves are bright green; the deliciously fragrant creamy-white flowers are borne late in the spring. 50c each; \$5.00 per dozen.

Golden Leaved Mock Orange (*Philadelphus Coronarius Aureus*)—

A dwarf sort, much prized for its golden-yellow foliage, contrasting beautifully with the dark green leaves of other shrubs. 60c each; \$6.00 per dozen.

HEDGE PLANTS

What an improvement a green, growing hedge is to the old type of fence, wooden, wire or what-not. A hedge requires but little attention, and the varieties we have selected are all well adapted to the climate of the Middle West. Any of them will be greatly admired by all who use them.

Amoor River Privet—

This is very similar to the well known California Privet, but is much more valuable here as it is much more hardy. It can be easily trimmed, and makes a very neat border for the yard. Strong, well grown plants 12 to 18 inches tall; \$1.00 per dozen; \$10.00 Per hundred.

California Privet—

We cannot recommend this variety for our customers unless they live in a section where the weather is fairly mild, both summer and winter. In the east no other kind is used. Good strong plants; 65c per dozen; \$6.50 per hundred.

Japanese Barberry—

Strong plants 12 to 18 inches tall; \$2.00 per dozen; \$20.00 per hundred.

Bush Honeysuckle—

\$2.00 per dozen; \$20.00 per hundred.

Spiraea Van Houttei—

Good strong plants 18 inches tall; \$2.50 per dozen; \$22.50 per hundred.

THE HOMESTEADER

There ain't no smilin' vistas out where I drove my stakes,
There's nothin' much around me but prairie dogs and snakes;

My nearest neighbor's dwellin' is forty miles away,
And when I go a-shoppin' I git back late next day;
My cabin's like an island, stuck in a prairie sea,
But I'm holdin' down this homestead for Mary Ann and me.

The nearest shade around me is down by Lone Tree Draw,
There ain't no plays and op'rys, there aint' no books and law;

The dog's all I can speak to, except my saddle nag,
But, spite of all the silence, the days don't ever drag;
If I was all that figgered, I'd pul my freight—but gee!
I'm holdin' down this homestead for Mary Ann and me.

I've seen lots bleaker places that blossomed as the rose;
A lovin' touch works wonders, wherever mankind goes;
The desert yields to kindness, just like a livin' thing—
It pays you back most lavish, for all the care you bring;
So come along then, stranger, in five years—mebby three—
And see my purty homestead, and Mary Ann and me!

—Arthur Chapman.

HARDY VINES

ALL vines should be deeply planted in a well prepared hole, at least one foot square and two feet deep, and good rich soil filled in when the plant is placed. Water thoroughly. Evergreen vines prefer shady places; deciduous vines, sunny positions.

Boston Ivy or Ampelopsis Veitchii—An attractive hardy climber remarkably well adapted for covering walls, as it clings to the smoothest surface. The growth is very rapid, and after the first year it is absolutely hardy in the middle west. Foliage deep green, changing to a bright crimson in the fall. After the leaves have fallen the attractive red berries hang on during most of the winter. Extra strong two-year plants, 50c each; \$5.00 per dozen.

Clematis Jackmanii—The finest of the large flowering Clematis. The violet purple flowers are 4 to 6 inches across, and bloom during June and July. This and the Henryi are tender plants and require very careful attention. 75c each; \$7.50 per dozen.

Clematis Henryi—Similar to the Jackmanii, only the flowers are creamy white. 75c each; \$7.50 per dozen.

Clematis Paniculata—The best vine known for covering trellises, arbors or anything that will give it support. The vine grows rapidly and quickly forms a dense mass of dark, glossy leaves. The fragrant small white flowers are produced in clouds during September, when very few other vines are blossoming. 35c each; \$3.50 per dozen.

English Ivy—Invaluable for covering shady walls or graves. It is a slow grower, but if it is not exposed to the sun it will last for hundreds of years. We can only recommend this for growing on north, northeast of northwestern exposures. 50c each; \$5.00 per dozen.

Evonymous Radicans Vegeta—A rapid growing large leaved attractive vine, very useful in covering high walls. Quite hardy. During the first year it may require some support, such as light strips of lath or adhesive tape, after that it will cling readily to any wall. 35c each; \$3.50 per dozen.

Japanese Honeysuckle, Variety Halliana—A rampant evergreen climber, with small dark green leaves, and white and creamy-yellow flowers, with a wonderful fragrance. Besides its popular use as a climber it is also valuable for covering banks and bare spots where grass will not grow. Extra strong two-year plants, 35c each; \$3.50 per dozen.

Kudzu Vine—(Pueraria Thunbergiana). The fastest growing vine in cultivation. After it is established it will grow 50 feet or more in a season and has been known to do over one hundred. The leaves are large, dark green, and form a dense shade. However, this vine has a somewhat coarse appearance and we should prefer to recommend it for planting around barns, out-buildings, or the less prominent parts of the house, such as the back stoop. We have a fine stock of two-year plants at 35c each; \$3.50 per dozen.

Wistaria, Purple—A vigorous, strong growing vine, producing in early summer, a profusion of rich, violet-blue flowers, in loose panicles frequently 3 feet long. One of the best and most artistic vines for covering verandas and porches. We can supply two-year potted plants, 75c each; \$7.50 per dozen.

Purple Wistaria

THE GARDEN

The main planting of any place should be of trees and shrubs. The flowers are then used as decorations. They may be thrown in freely about the borders of a place, not in beds in the center of the lawn. They show off better when seen against a background; this background may be foliage, a building, a rock, or a fence.

Where to plant flowers is really more important than what to plant. In front of bushes, in the corner by the steps, against the foundation of the residence or the outhouse, along a fence or walk—these are places for flowers. A single poppy or petunia plant against a background of foliage is worth a dozen similar plants in the center of the lawn. In a cozy back yard the shrubs and trees should be the main features and bright flowers the incidents. Too many flowers make a place over-gaudy. Too much paint may spoil the effect of a good building. The decoration of a yard as of a house should be dainty.

The open centered yard may be a picture; the promiscuously planted yard may be a nursery or a forest. A little color thrown in here and there puts the finish to the picture. A dash of color gives spirit and character to the brook or pond, to the ledge of rocks, to the stump, or even to the pile of rubbish. A good small garden is much more satisfactory than a poor large garden. Prepare the land thoroughly, fertilize it, resolve to take care of it, choose the kind of plants you like; then go ahead.—L. H. Bailey.

Clematis Paniculata

HARDY PERENNIAL PLANTS

WE have a splendid assortment of the Hardest Perennial Flower Plants that are well suited to this climate. For the beginner who has trouble in raising plants from seed, or for those who do not wish to wait for the young seedling to develop into rooted plants we offer this list.

The plants we have are all very stocky and sent out in the best of condition. Owing to the big expense it would entail and the consequent increased cost to you we cannot furnish plants of any specified color, where we have them listed as mixed. The colors given only indicate the range which is included in the mixture. Prices are for plants packed for shipment F. O. B. Wichita.

Canterbury Bells (Campanula Medium)—A very attractive flower, best suited for plantings in partly shaded places. We offer this in blue, white and rose, mixed; 25c each; 5 for \$1.00; \$2.25 per dozen.

Chrysanthemums—These bloom profusely in the late fall after nearly all other plants have been cut by frost. Plant in a well drained location. Red, yellow, pink and white, mixed; 25c each; 5 for \$1.00; \$2.25 per dozen.

Columbine (Aquilegia)—The range of colors of this graceful plant is not exceeded by any other in the list. Mixed colors; 25c each; 5 for \$1.00; \$2.25 per dozen.

Coreopsis Lanceolata Grandiflora—The golden-yellow flowers with the dark center, begin to bloom in June and continue throughout the summer. Particularly well adapted to dry climates. 20c each; \$2.00 per dozen.

Shasta Daisy, Alaska—The large blossoms of this average 4 to 5 inches across, and are very free flowering all summer long. 20c each; \$2.00 per dozen.

A Ross Brothers Pansy

Oriental Poppy

Foxglove (Digitalis)—One of the most popular of the old-fashioned dignified and stately flowers. White, purple and rose, mixed; 25c each; 5 for \$1.00; \$2.25 per dozen.

Gaillardia or Blanket Flower—One of the showiest of perennials. They make a mass of bloom from June till frost. The center of the flower is dark red-brown, while the petals are variously marked with rings of scarlet crimson, orange and vermillion. Excellent for cutting. 20c each; \$2.00 per dozen.

Gypsophilla Paniculata (Hardy Baby's Breath)—A very delicate, feathery plant with small, guaze-like white flowers. It is excellent for cutting with larger flowers. Will do well in any sunny position. 20c each; \$2.00 per dozen.

Hollyhock—Invaluable for planting in rows, or for interspersing amongst shrubbery. Should have good rich soil, and slight protection during the winter. Double white, rose and scarlet mixed; 20c each; \$2.00 per dozen.

Iris Germanica, or Flags—This well known flower is the delight of the gardener very early in the spring, before the rest of nature is awake. 15c each; \$1.50 per dozen.

Iris Kaempferi (Japanese Iris)—Much more delicate than the Germanica. They bloom about the middle of June, and for two or three weeks after, a time when such plants are particularly welcome. They should have rich soil and plenty of water. 30c each; \$3.00 per dozen.

Hardy Larkspur (Delphinium)—The tall spikes of blue flowers of many attractive shades make this one of the most popular flowers in the Middle West. 25c each; 5 for \$1.00; \$2.25 per dozen.

Day Lily (Hemerocallis Thunbergii)—Large, fragrant, orange flowers bloom freely during July and August, and should be included in every old-fashioned garden plan. 20c each; \$2.00 per dozen.

Peonies—The Queen of Spring Flowers. Absolutely hardy, and easy of culture. In planting care should be taken that the crowns are planted not more than two inches deep. We offer them in large clumps, 3 to 5 eyes, either red, pink, or white; 35c each; \$3.50 per dozen.

Hardy Phlox—Few flowers can equal the Phlox in length of blooming season, range of colors, or ease of cultivation. Our assortment includes a great variety of the better shades. 25c each; 5 for \$1.00; \$2.25 per dozen.

Hardy Garden Pinks (Dianthus)—Old favorites, bearing their sweet, clove-scented flowers abundantly during May and June. They are indispensable for the edge of a hardy border, and for cutting. 20c each; \$2.00 per dozen.

Oriental Poppy—These large brilliant flowers give a bright touch to the garden that nothing else can do. 25c each; \$2.50 per dozen.

Sweet William (Dianthus Barbatus)—An attractive old-fashioned flower that should have a place in every garden. Particularly well adapted to withstand hot weather. 25c each; \$2.50 per doz.

ANNUAL FLOWERS

The showy, bright colors of a garden are always furnished by Annuals. The plants we offer are well grown, and carefully packed in berry boxes, except those marked potted.

	Dozen	hundred
ASTERS, Late Branching mixed..	\$0.25	\$1.50
PETUNIA, Single dwarf mixed.....	.25	1.50
SALVIA, Bonfire.....	.35	2.00
SNAPDRAGON, Either tall or Dwarf mixed.....	.25	1.50
PHLOX, (Annual).....	.25	1.50
PANSIES, Grown from our own splendid mixture.....	.35	2.25
PANSIES, Potted.....	.60	4.50
VERBENA, Single mixed.....	.25	1.50
VINCA, or Old-fashioned Periwinkle. Strong upright plants, in 2 inch pots; 20c each; \$1.75 per dozen.		
GERANIUMS, Salmon, White and Scarlet. These are fine in 4 inch pots; 40c each; \$4.00 dz.		
WANDERING JEW (Tradescantia Zebrina). A splendid trailing plant; 20c each; \$1.75 dozen.

Salvia Bonfire

Evergreens for Windbreak, Hedge and Lawn Decoration

Strong, Well Rooted Transplanted Stock for Express Shipment. Safe Arrival Guaranteed

SPECIMEN EVERGREENS FOR LAWN DECORATION. A pair of Evergreens on either side of entrance, walk or drive, or a well arranged group in each corner of the front yard will bring a new beauty and charm to the grounds. As ornamental trees, Evergreens are unsurpassed. No other trees remain green throughout summer and winter; none are more beautiful. There is unquestionably no better way of beautifying a place than surrounding it with beautiful Evergreens.

PRICES

All Specimen Evergreens, Roots balled, and burlapped. For Spring delivery only.

Variety	Height in feet	Each	Pair
Colorado Blue Spruce (Shiners).....	2-3	\$12.00	\$20.00
Colorado Green Spruce.....	2-3	10.00	18.00
Silver Cedar (Juniperus Glauca).....	2-3	8.00	15.00
Pyramidal Arbor Vitae (Thuya).....	2-3	8.00	15.00
Hemlock (Abies Canadensis).....	2-3	8.00	15.00
Douglas Golden Arbor Vitae (Thuya).....	2-3	8.00	15.00
Red Cedar (Juniperus).....	2-3	8.00	15.00
Black Hill Spruce (Picea Canadensis).....	3-4	13.00	25.00
White Spruce (Picea Alba).....	3-4	10.50	20.00
Dwarf Mountain Pine (Pinus Mugho).....	1-1 1/2	4.50	8.00
Dwarf Mountain Pine (Pinus Mugho).....	1 1/2-2	5.50	10.00

For best results we always advise selection be left to us so we can select the best for your section.

EVERGREENS FOR WINDBREAKS. Authorities figure that a good Evergreen windbreak will add from \$2,000.00 to \$5,000.00 to the value of the average farm. An Evergreen Windbreak beautifies and protects, increasing in value each year. The first cost is the only cost.

For best results we always advise selection be left to us so we can select the best for your section.

PRICES.

Twice transplanted, twice root-pruned.	Strong, thrifty Evergreens.
50	75
100	150
200	300
400	600
800	1200
1600	2400
3200	4800
6400	9600
12800	19200
25600	38400
51200	76800
102400	153600
204800	307200
409600	614400
819200	1228800
1638400	2457600
3276800	4915200
6553600	9830400
13107200	19660800
26214400	39321600
52428800	78643200
104857600	157286400
209715200	314572800
419430400	629145600
838860800	1258291200
1677721600	2516582400
3355443200	5033164800
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TOOLS AND SUPPLIES

IN the following pages we are listing a few articles for the convenience of our gardening and farming friends. These are not really in the true field of the seed house, but we carry them, as we feel that it may be easier for our friends than to have to seek them in several different places. This list is by no means complete, it is merely those supplies that we have found to be of the greatest value to the gardeners and farmers of the middle west. If there is some special article that you need for some special purpose we shall be glad to try to get it for you or to direct you to where it can be secured. These goods are

priced f. o. b. Wichita, unless otherwise noted. Heavy articles and poisons can be sent only by express or freight. Some of the smaller articles can go by parcel post. Rates can be secured from your local office, or we shall be glad to secure them for you.

Kindly give full shipping instructions and allow for transportation charges if you wish the shipment to go forward prepaid. Our customers will readily understand that as we are merely buying these articles on the market for their convenience, these prices must be subject to market changes.

BASKETRY

The past few years has seen a great increase in basket making, not only throughout the public schools, but also in the homes. There are few, if any arts, that serve more in training the child than basket making.

WOOD BASES

We have put in a stock of wooden bases for Reed Baskets, Trays, etc., made of 3-ply Birch bored for different size reeds. Round, Oval, Square, Rectangular, and odd shapes for making work baskets, waste paper baskets, flower pot covers, serving trays, lemonade costers, etc.

PRICES. We will quote prices on application. Please mention the article you wish to make. Also give us the approximate size and shape you prefer.

BEE SUPPLIES

Bees are the only animals on the farm that do a full days work and more than pay their board bill besides. Bees are very useful for fertilizing orchard blossoms or any other flowers, and they yield besides a good substantial crop of honey. Everyone knows how good Honey and Waffles are for Sunday breakfast.

We carry a complete line of hives and other bee supplies and will furnish a complete bee catalog upon request. Our bee expert will gladly go into your bee problems with you. Feel free to call upon him at any time.

REEDS (Rattan)

Reeds in natural colors only. Samples on request.

	Bunch	¼ lb.	Lb.
No. 0	\$0.25	\$0.75	\$2.50
No. 1	.25	.55	1.90
No. 2	.25	.55	1.70
No. 3	.25	.55	1.60
No. 4	.25	.50	1.50
No. 5	.20	.40	1.30
No. 6	.20	.40	1.25
No. 7	.20	.40	1.10
No. 8	.20	.40	1.10
No. 9	.20	.40	1.10
No. 5 Split	.25	.45	1.35
No. 6 Split	.20	.40	1.30
No. 6 Flat	.20	.40	1.25
Winding Reed	.25	.40	1.40

INDIAN SWEET GRASS

Sweet Grass is an excellent basket-weaving material and may be combined with Raffia with charming effects. It possesses a delightful fragrance Oz., 25c; ¼ lb., 75c.

BOOKS—Illustrated books for making Baskets, 30c each postpaid, and up.

NEEDLES for Raffia work. Nos. 18, 19, 20; 6 for 10c; 25c per pkt., postpaid.

RAFFIA

Raffia comes from a long leaved plant that is ideal for this purpose as it combines softness, flexibility and great strength. We can supply Raffia in natural and the following colors: Canary Yellow, Orange, Goldenbrown, Seal-brown, Lavender, Violet, Black, Delft Blue, Navy Blue, Rose, Indian Red, Mahogany, Emerald Green and Olive green. We shall be glad to send samples and to tell you something about how to make baskets if you will write our service department.

Prices: Natural, Bunch, 10c; ¼ lb. 25c; 1 lb., 75c.
Colors, Bunch, 20c; ¼ lb., 50c; 1 lb., \$1.50.

BIRD SUPPLIES

We do not claim to be The Bird House of the Middle West—we admit it. We handle in season, canaries that are fit to sing before a queen. We could not give a fixed price of these, of course, they must vary with the quality of the bird. Our prices are always in accord with the quality; that is why we say that if a bird does not sing, you can exchange it. Write us about what you want. We shall be glad to tell you what sort of birds can be had to fit your needs. We have with us the bird wizard of the Middle West, and if your canary does not sing right, or feel well, get in touch with us, and he will gladly lend you his help. He will be willing at all times to help you with any bird problem that you may have.

We are illustrating only a couple of bird cages here to remind you that we carry them in stock. We have as many kinds of cages as there are kinds of birds. We shall be glad to send you a complete list if you wish. We also have the necessary supplies to go with birds and cages. It takes a good bird man, of course, to mix the proper bird feeds, that is why the birds thrive so on our mixture. We give the birds what they actually and really need and like. We have on hand hundreds of birds and must, of course, have a good quantity of the proper mixture. We will be glad to offer some from the same bag to any of our customers at 35c per pound, postpaid; in 5 pound lots, 27c F. O. B. Wichita.

CAGES

- No. 7004. Brass, $9\frac{1}{2} \times 6\frac{1}{2} \times 12\frac{3}{4}$ inches. \$4.00.
 No. 7006. Brass, $10 \times 7 \times 13\frac{1}{4}$ inches. \$4.50.
 No. 7008. Brass, $10\frac{3}{4} \times 7\frac{3}{4} \times 13\frac{1}{2}$ inches. \$5.00.
 No. 165. Enamel, $9\frac{1}{2} \times 6\frac{1}{2} \times 15\frac{1}{4}$ inches. \$1.50.
 No. 166. Enamel, $10\frac{1}{2} \times 7 \times 16$ inches. \$1.75.
 No. 167. Enamel, $11 \times 7\frac{1}{2} \times 16\frac{3}{4}$. \$2.00.
 No. 168. Enamel, $12\frac{1}{4} \times 8\frac{1}{4} \times 17\frac{1}{2}$ inches. \$2.50.
 No. 169. Enamel. $13 \times 8\frac{3}{4} \times 18$ inches. \$3.00.

BIRD MANNA. A medicated food. Package 25c, postpaid; 2 for 45c.
MOULTING PEPPER. The right thing to make the birds yellow. Package 40c postpaid.

NESTLING FOOD. Fine food for young birds. Package 40c postpaid.
CUTTLEBONE. Good for all cage birds. 5c each.
BIRD GRAVEL. For the bottom of the cage. Large package 30c postpaid.
NESTLING WOOL. Birds like it to build nests with. Package 10c postpaid.
SINGLE BRASS CAGE SPRINGS. 20c each.
DOUBLE BRASS SPRINGS. 25c.
BRASS CHAIN. 12 inches, 15c; 24 inches, 25c.
DRINKING CUPS. 15c and 20c.

GARDENING AND AGRICULTURAL BOOKS

We are glad to recommend the following books to our customers. They are all written by experts and are well recognized as authoritative. The person who wishes to farm or garden intelligently must find out what methods the people use who are a success in the same line. To do this he can either travel around and see and talk with these experts or he can read what they have written on the subject. The first is probably better, but we cannot all take the time, or the money, to travel, and for this reason we offer these books. We shall be glad to furnish additional information concerning any of these books at any time.

ROSS BROTHERS GARDEN GUIDE. A 336 page book dealing with every phase of gardening. It is simple enough for the beginner, and yet complete enough for the experienced gardener to use as reference. 75c postpaid.

FARM AND GARDEN RULE BOOK. By L. H. Bailey. \$2.50. A small cyclopedia of ready rules and reference on almost every subject connected with country life. Illustrated.

MY GROWING GARDEN. By J. Horace McFarland. \$2.25. Filled with suggestions and advice, the history follows the cycle of the year, devoting a chapter to each month's changes in the growing garden. Color illustrations.

THE SPRAYING OF PLANTS. E. G. Lodeman. \$1.75. Full directions regarding materials and formulas of spraying, with descriptions of apparatus used. Each flower and fruit with respective forms of blight and insect is discussed individually.

STANDARD CYCLOPEDIA OF HORTICULTURE. L. H. Bailey. Set of 6 volumes \$36.00. By four hundred leading botanists and horticulturists of North America, each selected as the expert of the highest reputation in his specialty, under the general leadership of L. H. Bailey. Six large quarto volumes, over 3,600 pages, 24 full page color plates, 96 special full page half-tones, more than 4,000 text engravings, approximately 3,300 genera, 20,000 species and 40,000 plant names. Each state of the Union has separate treatment and there are special articles on Canada, Porto Rico, Hawaii and the Philippines. It is the most modern work of its kind.

CYCLOPEDIA OF AMERICAN AGRICULTURE. L. H. Bailey. Set of 4 volumes, \$20.00. "Indispensable to public and reference libraries, readily comprehensible to any person of average education."—The Nation.

FARM MANAGEMENT. F. G. Warren. \$1.75. A discussion of the more important phases of farming from the selection and purposes of the farm to the marketing of its products. Illustrated.

STRAWBERRY GROWING. S. W. Fletcher. \$1.75. A clear outline of the present commercial value of the strawberry, taking up all the important points in considerable detail. Illustrated.

A TEXT BOOK OF GRASSES. A. S. Hitchcock. \$1.50. Covers the two great branches of grass knowledge—the economic value of grasses and the identification of the main economic species and groups. Illustrated.

A MANUAL OF WEEDS. Ada E. Georgia. \$2.50. A summary of our present knowledge regarding weeds as they effect horticultural and agricultural practices. Illustrated.

No. 274

No. 820

No. 820. Size 10×16 inches. Brass, \$8.00; No. 6. Enamel, \$5.00.

A heavy brass cage fitted with a guard to prevent the bird from scattering the food out onto the floor.

No. 274. $9 \times 9 \times 15$ inches. with guard. Dull, \$14.50; Polished, \$16.50.

The most popular cage on the market and one that will give excellent service at a reasonable cost.

AUTO VACUUM ICE CREAM FREEZER

At last! An ice cream freezer that does not have to be turned. This ingenious device does its own freezing; merely pack the ice and salt in one end, fasten the lid on and turn the bucket upside down; there is a second opening at the other end; pour the cooled cream into this and fasten that lid and that is all there is to it. When you want the ice cream it will be ready for you. It freezes in fifteen or twenty minutes and stays hard for six or eight hours. The salt cannot get into the cream. The cream is even softer and smoother than that which is made in the old laborious way. There is no dirt and no labor in the preparation. This is a great benefit to any one who wants to take ice cream to a picnic, or for a supper away from home. Put this little bucket in the back of the carriage or flivver and drive along. The ice cream will all be ready when you get there.

2 quart size.....\$5.00
 4 quart size.....8.00

FERTILIZERS. Edwin B. Voorhees. \$1.60. This book instructs the farmer upon the fundamental principles and the use of fertilizers so that he may determine for himself what his practice shall be.

THE SMALL GRAINS. M. A. Carleton. \$1.90. A valuable book on the methods of cultivation and the handling of such grains as wheat, oats, rye, barley and the minor cereals. Illustrated.

DAIRY FARMING. C. H. Eckles and G. F. Warren. \$1.20. Setting forth clearly and systematically the principles and practices of dairy farming. Illustrated.

THE NUTRITION OF FARM ANIMALS. Henry P. Armsby. \$2.60. Deals with the natural laws governing the nutrition of farm animals, as distinguished from the broader field of animal husbandry. Illustrated.

WESTERN LIVE STOCK MANAGEMENT. Ermine L. Potter and others. \$1.75. For those persons who want a knowledge of the methods and problems of live stock management in the Middle West. Beef cattle, sheep, horses and swine are treated in detail. Illustrated.

BREEDING OF ANIMALS. F. B. Mumford. \$1.75. A textbook emphasizing the principles, methods and practices peculiar to animal breeding. Illustrated.

FARM STRUCTURES. K. J. T. Ekblaw. \$1.75. A practical book containing plans for various types of farm buildings designed to enable the farmer to solve his particular building problems himself. Illustrated.

INTENSIVE FARMING. L. C. Corbett. \$1.00. A discussion of the meaning, method and value of intensive methods of agriculture for the convenience of practical farmers who are forced to make a living out of high-priced land. Illustrated.

THREE ACRES AND LIBERTY. Bolton Hall. \$1.75. The result of actual experience in farming, this book contains many useful detailed suggestions for the progressive farmer. Illustrated.

NEIGHBORHOOD ENTERTAINMENTS. Renee B. Stern. \$1.50. Practical suggestions for social activities and entertainment in country and farm districts. Illustrated.

HOME AND FARM FOOD PRESERVATION. William V. Cruess. \$1.50. The theory and methods of fruit preservation are fully given, including the sterilization of milk, sun-drying of vegetables and other economical home methods. Illustrated.

THE FOOD CRISIS AND AMERICANISM. William Stull. \$1.25. The author from long experience in dealing with farm mortgages in Nebraska presents a vigorous picture of Middle West Agriculture and Government control.

THE A-B-C AND X-Y-Z OF BEE CULTURE. A. I. Root. \$2.50. A very complete book on all branches of bee keeping, and one that will be a great help to anyone who keeps bees for profit or pleasure.

If you wish the books sent by parcel post, please add 10c to cover postage costs. In ordering two or more books allow 10c for the first book and 5c for each book more than that. If you remit more than enough to cover the costs of mailing we will gladly refund the difference.

GARDEN TOOLS

"You Can Judge a Workman by His Tools"

HUDSON DRILL AND SEEDER

This is a combination tool quickly convertible into a double or single wheel hoe, hill and drill seeder, or double and single wheel cultivator. It will sow accurately, everything from beans down to the smallest garden seeds in hills or in drills at practically any desired depth and distance apart. The brush force feed is constructed of selected bristles and guaranteed not to injure the most delicate seeds and will feed all the seed from the hopper. By use of the thumb screw the index may be easily adjusted to feed the required amount of seed. Should the hopper run out of seed this can be detected by the operator as the seed is in plain sight at all times. The handles have a plow handle grip, giving great leverage with little exertion and are not tiresome to the hands. Wheel diameter 16 inches. Tire 1 1/4 inches with 16 spokes. Tool equipment as per illustration. This is the most popular pattern we make and is particularly desirable for regular gardeners and farmers. Standard package, one in a wooden box, handles bunched separately. Shipping weight 55 pounds.

No. 201. Complete as shown. Price each.....\$19.50
No. 205. Same as No. 201, seeder only. Price each.....\$15.50
No. 210. A double-wheel cultivator. Weight 40 pounds. Price each.....12.50

STANDARD GARDEN PLOW

Has a very strong single wheel 24 inches in diameter, with 1-inch tire. The adjustment is simple and perfect. Plow is adjusted up or down without disturbing the plow. Equipped with double-end shovel, moldboard, and land side, weeder and rake. These tools are made from hard steel, ground and polished. Steel shank is shaped so it can be raised or lowered for deep or shallow cultivation with out changing slant of tools in the ground.

No. 20. Complete with attachments as illustrated, shipping weight 18 pounds.

Price.....\$5.00

No. 1. Seeder attachment for No. 20, weight 7 pounds.

Price.....\$4.50

STANDARD HILL AND DRILL SEEDER

Combined double and single-wheel Cultivator, Plow and Rake. This tool is light and strong, with few parts to get out of order and has a positive rotary force feed. The frame of the seeder, cultivator, the plow, hoe, shovel shanks and rakes are all made of malleable iron. The attachments are: four cultivating teeth, 1 pair 6-inch hoes, 1 pair vine guards, 1 pair plows, 1 pair rakes, 1 wrench, and 1 hill and drill seeder complete.

No. 9. With all attachments, shipping weight 58 pounds.....\$19.50

PULL EASY (Adjustable Cultivator)

The handiest little garden tool that ever sunk its teeth into Motner Earth. It has the perfect balance or "hang" which is necessary to any tool and which enables one to use it for a long time without tiring the arms. The handle is 4 1/2 feet long. Teeth are of one piece cold pressed steel and are unbreakable. Ask for pamphlet.

F. O. B. Wichita.

Pull Easy Cultivator.....Each \$1.25
Pull Easy, Jr., Cultivator......75
Pull Easy Wheel Cultivator.....4.00

"NORCROSS" CULTIVATOR

Will cultivate closer to plants without injuring them than any other type of implement known, leaving the soil level, loose and untrampled.

The sharp, tapering shovels enter the ground easily and are so arranged, one with another, as to literally tear up every inch of soil from one to five inches deep, as required.

Detachable steel prongs, malleable head, extra high grade handles. Finely finished throughout.

Three sizes, suited to both men and women, and the average cost is only that of a common hoe.

THREE SIZES AND PRICES

5-prong, 4 ft. handle, wt. 3 lbs.....	Each \$1.25
3-prong, 4 ft. handle, wt. 2 lbs.....	.85
"Midget", 9-inch handle, wt. 12 ounces.....	.50

(Midget by Parcel Post, prepaid, for 60 cents.)

HUDSON PLOWS

A counterbalanced plow with a 24-inch high wheel, made of the very best of material and most careful workmanship. This is a good strong durable tool and can be used in larger gardens. It is very popular, and the best of its kind. No. 240. Weight 28 pounds. Price.....\$4.60

THE CYCLONE SEED SOWER

It is the greatest labor and seed-saving invention of the age. The working principles are a novelty of simplicity, the results of more than twenty-five years of careful study. It is so simple in construction and perfect in operation that even a boy can operate it. It will sow Alfalfa, Timothy, Wheat, Oats, Rye, Buckwheat, Hungarian, Red-Top, Turnip, Millet, Kaffir, Cane, Cotton, and all other grains and seeds perfectly even, any desired amount per acre, and from thirty to sixty acres a day. Full instructions and directions on every machine. Price, \$2.00.

PLANET, JR., TOOLS

We wish that we had the space to devote to these well known and excellent tools. We shall, however, be glad to send a special catalog upon request and to give any advice that we can concerning them. They are a splendid tool in every way.

We have on hand at all times, a complete line of the ordinary small hand garden tools, hoes, rakes, digging forks, etc. These cannot be forwarded very easily unless a large shipment is going forward with them.

However, for the benefit of our friends who live near us, or for any others who cannot get the tools locally, we have complete stock.

GARDEN HOSE

Anyone who wishes to keep the lawn in a good green condition, or to keep the garden growing constantly, in the hot dry summers that the Middle West knows so well, must keep everything well watered. We have in stock quantities of two well known standard brands of garden hose.

Old Hickory. Half inch, moulded hose, non-kinkable. 18 1/2c per foot.

Black Beauty. Half inch, moulded hose. Best value on the market. 20c per ft. Couplings are free with 50-foot lengths; in shorter lengths they are 35c each.

LAWN MIST SECTIONAL SPRINKLER

For your lawn, and especially for your flowers and your vegetables, this sprinkler is admirable. Its especially constructed nozzles spread a mist cloud of moisture that can thoroughly water newly started grass or delicate plants without injury. This sprinkler throws the finest spray that can be used out of doors. A finer spray would blow away. It can be used in separate lengths or sections joined. Mounted on two wheels and a castor.

DESCRIPTION. Length 15 feet. Minimum pressure recommended 20 lbs. Five spray clusters, 36 inches apart. Total 15 nozzles. Each sprinkler packed with three extra nozzles and wrench. Weight 30 lbs. Price \$16.50.

LAWN MOWERS

Every one who has a home wants a good lawn, of course! There is more to keeping a good lawn than just the seeding. Proper seeding is the first essential, and then the lawn must be given sufficient water, but that is not all. The grass must be

properly mown. This does not mean that a high priced gardener must be employed. Not a bit. The exercise of mowing will do every one good. But get a good lawn mower. Many people think that a lawn mower is merely a lawn mower. We beg to differ. A good lawn mower for the sections where there is abundant rainfall and the grass grown plentifully is not a good mower for the Middle West, where the rain fall is scarce and the grass has to be coaxed for every inch that it grows. We recommend a lawn mower that cuts the grass an inch and three quarters from the ground, thus allowing plenty of shade for the soil. The sod retains its moisture in this way much more readily and we have found that the lawn stays much greener. We have, however, some of both kinds ranging in prices from \$12 to \$27. We shall be glad to tell you about the lawnmower which we believe will fit your condition the best.

Grows Bumper Crops

of Alfalfa,
Clovers, Peas,
Beans, Other
Legumes.

It Will Insure
a Catch, Yield
Big Crops.

"Nitragin" Increases Yield, Makes Fertile Soil

The simplest, safest and surest system of soil inoculation for all legumes. Awarded gold medal, St. Louis, 1904. The lack of necessary bacteria in the soil is often the cause of failure to secure a "catch" of alfalfa, clover or other legumes. "Nitragin" is insurance. "Nitragin" is the original pure culture. Packed in a ventilated can. Include "Nitragin" with your seed order.

PRICES

1/2 acre size... \$.50 1 acre size... \$1.00
2 acre size... 1.80 5 acre size... 4.00
10 acre size... \$7.50

Postage or express extra.

Be sure to state what crop the "NITRAGIN" is to be used for. You can also get the special Garden "Nitragin" which is good for Peas, Beans, and Sweet Peas, and large enough for the average garden, for 35c, postpaid. Simply order: GARDEN "NITRAGIN"—35c, postpaid:

NITRO-FERTILE

The Liquid Fertilizer. An absolutely odorless plant-food, free from weed seeds and bulk waste,

quick in action and widely used by professional florists and growers. It is excellent for house plants and the lawn, shrubbery, flower and vegetable garden; can be fertilized

throughout the growing season easily and pleasantly; successfully used to force growth.

Contains 2% Nitrogen, 3% Phosphoric Acid and 3% Potash. To use, dilute with water in the following proportions: 1 tablespoon to a gallon for potted plants; 2 tablespoons to a gallon for shrubs, lawns, or garden. Will keep indefinitely. Fertilizing with Nitro-Fertile is a simple, pleasant and economical way of insuring a successful garden. One quart fertilizes 1,500 square feet. One gallon is sufficient for the average lawn and garden for the entire season. 1/2 pint, 35c; pint, 60c; quart \$1.00; gallon. \$3.00. Not Mailable.

Standard Inoculating Bacteria

Alfalfa, all clovers, all beans and peas, and vetch are legumes. Legumes, if inoculated, will develop on their roots small protuberances, called nodules. These nodules are masses of bacteria—living germs. These germs take nitrogen from the air and supply it to the plant. Nitrogen is the most expensive of all the chemical elements entering into plant growth. The farmers' problem is largely a nitrogen problem. Lime, phosphorus, even potash where needed, can be supplied. But nitrogen, in quantity,

is too expensive to supply. Modern farmers, therefore, grow their nitrogen, grow it with legume crops.

But legumes cannot take nitrogen from the air unless there are nodules on the roots, and nodules do not ordinarily develop unless the germs are artificially placed on the roots. Placing these germs is called inoculation.

Inoculation is done with a culture of living germs, bacteria, applied to the seeds before planting.

Standard Inoculating Bacteria is a culture of living germs, grown direct from nodules taken from the roots of legume plants. It is grown by a competent bacteriologist, in a modern laboratory, supplied with the best appliances procurable. The germs are shipped in amber bottles to exclude the light, with glass cotton plugged air tubes to supply air to the germs. This bacteria is then mixed with water and the seeds are sprinkled before planting. This places the germs right on the incipient root of the plant, where it belongs, and inoculation is sure and certain.

The cost of Standard Inoculating Bacteria is low, very low, but a better bacteria can not be made at any price. Every one can afford to inoculate—can not afford not to. It will pay for itself many times in the increase in crop grown, and many more times by the improvement of the soil itself—by the nitrogen placed in the soil from the nodules and left there for succeeding crops.

Remember there is a separate germ for every legume—one for each of the clovers, for alfalfa, soy beans, garden beans, peas, vetch, etc., etc.

When ordering, state crop to be inoculated.

STANDARD INOCULATING BACTERIA

Garden Size.....	\$0.50	2 Acre Size.....	\$1.45
1 Acre Size.....	.75	4 Acre Size.....	2.25
		6 Acre Size.....	\$3.00

Ross Brothers Standard Fertilizers

"The art of agriculture will never be higher than that of the man on the land." The farmer who is going to make his farm a business success must learn what fertilizers to use and what quantity can be applied with the greatest profit. Commercial fertilizers wisely used will restore to the land the strength that has been removed by the sale of crops and stock. It is hardly necessary to point out that the best of fertilizers will be of little avail unless applied to land that has been well prepared, and that is receiving good cultivation. Barn-yard and green manures will also be included in the fertilizer plans of every well run farm.

We handle the following Helmet Brands of fertilizers which are put up in sacks of 125 pounds. The prices quoted are F. O. B. Wichita and must be subject to market fluctuations. We should be glad to quote on your fertilizer needs. If we can be of help in choosing what to use please feel free to call on our service department.

General Crop Fertilizer. 1-10-1. Very economical for general farming or gardening. \$2.75 per sack.

Gardeners Favorite. 1-12-1 The home gardener will find this the most profitable. \$3.50 per sack.

Corn, Oats, and Wheat Special. 1-8-1. Well recognized as a leader thru the Middle West. \$3.25 per sack.

Root Crop Grower. 2-8-2. Unexcelled for Beets, Rutabagas, Turnips, etc. \$3.75 per sack.

Armour's Bone Meal. 3-24-trace. Fine for lawns and gardens. \$4.25 per sack.

Sheep Manure. A very high grade fertilizer. As a top dressing for lawns or use in the rows of the garden it has no equal. \$3 per 100 pounds.

Hydrated Lime. Lime should be applied to any ground that is sour, or soggy. 75c per 40 pound Sack.

SPRAYS AND SPRAYERS

"The best laid plans of mice and men gang oft agley."

This is the way many gardeners feel when the bugs come and devour the best part of the garden when it all looks fine. There is no need for this, however, if a little care and foresight are used. Have on hand the proper sprayers and spray materials and get after the insects and diseases before they do serious damage. For the small gardener we recommend that he have a small sprayer, the type depending on the size of the garden, and a small quantity of Arsenate of Lead, Bordeaux and Black Leaf 40. These three will control the great majority of the troubles. The farmer with larger plantings can afford to have a more complete equipment.

ARSENATE OF LEAD

This is a strong stomach poison. Any insect eating a leaf with Arsenate of lead on it will be quickly killed. Care should be taken that it is not left where children or pet animals can get at it.

POWDERED FORM

1 pound of Dry Arsenate of Lead will do the work of two or three pounds of paste and be more effective. Mixes easily and readily in water; it is only necessary to shake the proportional amount into the spray tank. Two pounds to 50 gallons of water. Prices:

1/2 lb. package.....	.30	25 lb. drum.....	\$ 9.00
1 lb. package.....	.55	50 lb. drum.....	17.50
5 lb. can.....	2.50	100 lb. drum.....	34.00
10 lb. can.....	4.00	200 lb. drum.....	66.00

PASTE ARSENATE OF LEAD

1 lb. can.....	.35	25 lb. kegs.....	5.50
2 lb. can.....	.70	50 lb. kegs.....	\$ 9.00
5 lb. can.....	1.50	100 lb. kegs.....	19.00
12 1/2 lb. kegs.....	3.00		

BORDEAUX MIXTURE

This is the best fungicide, or plant disease cure known. If used properly it will kill nearly every plant disease that bothers the garden. It is often mixed with Arsenate of Lead and one application will then serve for both insect and diseases.

1 lb. cartons.....	.35	10 lb. boxes.....	\$2.70
5 lb. cartons.....	1.50	25 lb. drums.....	6.25

LIME SULPHUR

This is not used by the gardener, but the orchardist, whether he has one tree or a hundred acres, needs it every year. A strong one-to-six solution should be sprayed on the trees in the winter to control the San Jose Scale. It is often profitable to spray again in the spring before the leaf buds open and to follow with a 2-50 solution a month before the fruit is picked to control summer rot. Liquid Lime Sulphur can only be shipped when there is no danger of freezing.

1/2 gallon cans.....	.60	1 gallon cans.....	.90
50 gallon barrel.....			\$12.00

DRY LIME SULPHUR

It requires 10 pounds Dry Lime Sulphur to 50 gallons of water. The best manner to mix Dry Lime Sulphur with water is to run a small quantity of water into barrel or tank, put in enough Dry Lime Sulphur (at the rate of 10 pounds to 50 gallons of water), start the agitator and run in water until barrel or tank is filled; by this time the Dry Lime Sulphur will be in solution.

Prices of Dry Lime Sulphur

1 lb. cartons..	.25	25 lb. drums.....	\$ 3.50
5 lb. drums.....	.90	50 lb. drums.....	6.50
10 lb. drums.....	1.60		

BLACK LEAF 40 or NICOTINE SULPHATE

40% NICOTINE

This destroys Aphids, (plant lice), Thrips, Leaf-hoppers, Apple Red Bug, Pear psylla, and similar soft-bodied sucking insects—all without injury to the foliage. May be combined with other sprays. Highly concentrated. Soluble in water—easy to mix—does not clog nozzles. Black Leaf 40 is what we recommend for the control of all sucking insects.

PRICES

1 oz.....	.25	Makes 6 gallons of spray.
1/2 lb.....	1.00	Makes 40 to 120 gallons spray.
2 lbs.....	3.25	Makes 150 to 500 gallons spray.
10 lbs.....	13.75	Makes 800 to 2500 gallons of spray

Ross Brothers make it a part of their business to keep abreast of the times: to know what the latest methods are in the control of insects and plant diseases. We study, particularly, the conditions of the Middle West, and hence are always in a position, not only to sell spraying material, but to sell that which will do the users the most good. Write for our help if you need it.

A common source of trouble in the home garden is that when the garden is once carefully sprayed, the gardener forgets that even though he may have killed all of the insects that were about at that time, he could not possibly have destroyed the larvae or eggs of the next generation. These were probably tucked carefully away somewhere in the ground or in an out-of-the-way place. The only thing for him to do is to keep everlastingly on the job and as soon as the next batch of insects appears, spray again and again after that. It does not take over 20 minutes to spray the average home garden, and the saving made by 20 minutes work will be well worth it.

NICO-FUME

This is very similar to Black Leaf 40, except that it contains 40 per cent of free Nicotine, rather than Nicotine Sulphate. It is used in the same way as Black Leaf 40, and more particularly for green house work, where it is painted on the hater pipes. It will then evaporate and the vapor created will go into every part of the room. It kills the insects immediately. Price:

1/4 lb.....	.65	4 lbs.....	\$ 7.50
1 lb.....	2.00	8 lbs.....	14.50

PARIS-GREEN

This is a compound high in Arsenate. Splendid for the control of Chewing Insects. It is stronger in Arsenate than Arsenate of Lead, but does not stick as well to the leaf. Some people prefer it to Arsenate of Lead, but whenever it is used, care should be taken that it is not applied before a rainstorm, as the slightest water washes it off. It will not combine with Bordeaux Mixture. Price: 1/4 pound packages 20c each; 1/2 pound packages 35c each. 1 pound packets 70c each. Prices on larger quantities on application.

SURE-NOX-EM

A patent product for the control of all insects. 1 pound can 20c; 5 pound box 55c; 10 pound box \$1.00.

HOFSTRA

(Non-Poisonous Insecticide)

DEADLIEST ENEMY OF GARDEN INSECTS, HOUSEHOLD BUGS, FLIES AND POULTRY PESTS.

There is practically no insect known which does not breathe through its skin. Hofstra, though absolutely non-poisonous to man, or beast, stifles, suffocates and kills all bug life. It is a powder, unbelievably fine, which, when sprayed among the foliage of plants, permeates every part of the air surrounding it, effectively ridding the worst infested gardens and flower beds of all bug life. Sprayed in the feathers of poultry or in the henhouse, it positively kills lice; gets fleas and ticks on dogs; kills ants, roaches and flies in the house.

A reliable Metal Gun Loaded with Hofstra, 15c.

The Hofstra bellows gun or sprayer is the quickest, easiest method of applying insecticide known; covers a good sized garden in a few shots; made of metal; impervious to moisture; refillable and lasts a lifetime.

Refill Gun with Package Powder 25c, 50c, and \$1.00 sizes.

Large guns (not loaded) for truck gardeners, each 50c. The 50c size contains 25 per cent more than two 25c packages; the dollar size, 50 per cent more than four 25c packages.

TREE TANGLEFOOT

Serves as a protection for trees against crawling insects, and is also recommended for waterproofing crotches, cavities, and wounds of trees. It is also serviceable after pruning and trimming. Prices:

1 lb. package.....	\$.50
3 lb. package.....	1.45
10 lb. package.....	4.50
25 lb. package.....	8.75

SPRAYING MACHINES

The Century Barrel Sprayer

Fig. 645—The Century is the best all-around Barrel Sprayer on the market; it is strong and durable and with proper care will last for years. The pump is only 44 inches high, having the large air chamber located principally within the barrel, leaving no projection to catch in the branches. The Cylinder is submerged in the liquid and is constantly primed.

A special mechanical agitator is provided. The Century No. 2 is made with 2½-inch cylinder; length of stroke, 4½ inches. All working parts are brass and the Century is provided with special packing. Shipping weight, pump only, boxed, about 75 pounds.

Fig. 645, Outfit A, with 12½-foot section of ½-inch hose and Demorel nozzle, with pole connection, \$18.65; barrel not included.

Complete Deming Sprayer catalog will be furnished on request.

SUCCESS BUCKET BRASS SPRAY PUMP—With 3 feet of hose and nozzle, \$5.50.

“Kant Klog” Sprayer

The “Kant-Klog” comes in two styles—Style G has thumb pressure Spring Hose-Cock. Style B has lever pressure Spring Hose-Cock.

Sprays trees, all kinds of small fruits and garden vegetables, disinfectants, whitewash and many other uses

PRICES

Galv. G—With galvanized steel body.....\$6.75
Brass G—With polished brass body..... 10.00
Galv. B—With galvanized steel body..... 7.25
Brass B—With polished Brass body..... 10.50

Utility Sprayer

Tank made of heavy galvanized iron, having all seams sweated absolutely tight, large filling hole. Pump has extra heavy tin cylinder, with oil treated plunger. Suitable for general use, giving a forceful and wide spray. Well adapted for spraying small plots on the farm and large gardens. Packed separately one in a box. Prices: 1 pint, 40c; 1 quart, 65c; 3 quarts, \$1.50.

Junior No. 5 Sprayer

This pump requires no fastenings of any kind, holds itself down and works anywhere and everywhere. All the operator needs to do is to press the plunger down. It rises of itself, the upward stroke being made by a brass spring forcing the cylinder apart.

The all Brass suction working within a Brass cylinder with all Brass Valves, does away entirely with all leather, rubber, or other packing. It is practically impossible for any part to get out of order.

Everything except handle and hose is Solid Brass Threaded and Screwed together.

Easiest Working and will do more different kinds of work than any pump ever made. Will pump from a pail, barrel, tank, spring or creek. Without fastenings of any kind it stands firmly wherever placed. Weighs only 4 pounds and is Ready for Instant

Will throw three sizes of solid continuous streams and two sizes of fine round spray. Has automatic mixer to keep solution stirred. Pleases everybody and will last a lifetime. \$4.50.

Feeney Dust Gun

The very best dust gun on the market. Is a great help in applying dry powders of any kind. Price.....\$2.75

The Standard Spray Pump

The Standard is made entirely of brass. No Leather Packings. No Iron Castings to Rust or Decay. Nothing to get out of order.

Its plan of operation is slightly different from other types of spraying apparatus, since the hose is used on the suction end instead of the discharge end. This makes it possible to use the pump with a bucket, barrel, tank or knapsack, depending upon the number of trees or the kind of spraying to be done.

For bucket use a 3½-foot length of hose is supplied. To use it with barrel or tank for a large orchard, a longer hose up to 25 or 30 feet is desirable.

For spraying young or scattered trees or truck crops such as potatoes, tobacco, etc., the knapsack and short extension are used. With these attachments the Standard will spray potatoes one row at a time at the rate of an acre an hour or better.

The Standard is provided with a set of three nozzles.

The Standard with 3½ feet hose and full set of nozzles.....\$5.00
Knapsack attachments.....2.75

Price List of Spray Nozzles and Poles

	Each
Simplex nozzle.....	\$ 1.00
Simplex Angle nozzle.....	1.00
Bordeaux nozzle.....	1.00
High pressure ½-inch hose, per foot.....	.20
Hardy Orchard Gun.....	12.50
“Hilo” Spray Rod.....	6.00
10-ft. bamboo, brass lined, spray poles.....	4.00
The above with angle cut-off.....	4.50

Ask for Hardie Spray Pump Catalog.

DO YOU KNOW

What a Squash Bug looks like?
How to control the Flea Beetle?
What it is that blasts onions?

One may be ever so careful in the care of his garden, and yet if he can not recognize his enemies, the insects and diseases, he may have failure instead of success. We should be greatly disappointed if a single one of the Acorn Brand gardens proved anything but a shining success, so we are issuing a 336 page Garden Guide. Among other things this gives a picture of the Squash Bug; tells how to control the Flea Beet'e; describes control of onion blasting. There are 13 pages devoted to pictures and descriptions of harmful insects. Let us send you one and save the garden. Price 75c postpaid.

SPRAY YOUR GARDEN

Keep it free from destructive insects. Spraying insures luxuriant flower gardens and perfect fruit, and takes but little effort.

DEMING SPRAY PUMPS

Are made in all sizes from the little bucket sprayer for garden use, whitewashing, window washing, etc., to large power sprayers for big orchards.

¶ We have a few 64 page spraying books and Deming Spray Pump Catalogues which we will give to interested parties. We also carry Deming Sprayers in stock.

POULTRY

SUPPLIES

Standard Cyphers Incubators

MADE IN FOUR SIZES.

The CYPHERS INCUBATOR is known as the "business incubator of the age." It has won its way in all parts of the world because it gives the best results. It is used on more Government Agricultural Experiment Stations, on more large Practical Poultry Plants, on more Successful Egg Farms, and by more prominent Poultry Fanciers than all other makes combined. It hatches a larger percentage of the eggs entrusted to it, and produces larger, stronger, healthier and more vigorous chicks and ducklings than any other incubator built. This is CYPHERS guaranty.

CYPHERS INCUBATORS are built to hatch and to last. With proper care—the same care you would give a valuable piece of household furniture—a Standard Cyphers will last an ordinary lifetime. They are guaranteed to last ten years without repairs. We make this guarantee because they have lasted much longer than this—and are still doing first-class work.

These are machines that for fifteen years and more have been recognized as the "standard hatching of the world." Tens upon tens of thousands of them have been sold and are in successful use in every civilized country on the globe. They are the last word to date in incubator building, not a penny being spared anywhere in their construction to make sure of their doing satisfactory work in all climates, under widely different conditions, in the hands of all sorts of people. Are built in four popular sizes and at prices as follows: 70 egg, price complete, \$25.00; 144 egg, price complete, \$38.00; 244 egg, price complete, \$54.00; Satisfaction or your money back.

Queen Incubators

STOP HATCHING WEAK CHICKS! WITH CHEAP INCUBATORS!

A Queen costs but little more, and the extra chicks that live and grow soon pay the difference.

Most of the chicks you lose in the first few weeks die because they did not have, when hatched enough strength or vitality for a good start.

The Queen is accurately regulated, keeping the temperature just right for the hatching chick. No hot and cold changes to weaken the chick's system. The Queen is properly insulated—two layers of wood and one of corrugated strawboard, with dead air space. This also helps to maintain an even temperature for the entire hatching period. Both Queen walls are built of genuine California Redwood. Redwood does not absorb the odor from hatching eggs.

SIZES AND PRICES

Shipping weight

No. 1 Queen, 85 egg size, 60 lbs.....	\$25.00
No. 2 Queen, 135 egg size, 70 lbs.....	34.00
No. 3 Queen, 180 egg size, 80 lbs.....	39.50
No. 4 Queen, 275 egg size, 100 lbs.....	49.50

Delivered to your station in Kansas, Missouri, Iowa or Nebraska at above prices. Add 50 cents for Oklahoma and Arkansas, \$1.00 for Texas, and \$1.50 for New Mexico points.

Cyphers Adaptable Hover and Standard Fire-Proof Brooder Heater

As the name indicates, this efficient device is "adaptable" for use anywhere that chicks can be housed with safety, and it will do its work under widely varying conditions. It is constructed entirely of non-combustible material.

The adaptable Hover is especially recommended for use in continuous brooding houses, containing pens or chick runways side by side.

It may also be used separately to excellent advantage as a brooding device in colony coops, in portable houses and in home-made brooders, such as goods boxes, piano boxes or organ cases, and can be adapted to other makes of brooders, provided they are 26 inches high and of fairly large dimensions otherwise. \$15.00 f. o. b. Wichita.

Queen Brooder Stoves

The Queen Brooder Stove is just what is needed to keep the house comfortable for the early chicks. It is the only Brooder Stove in which both fire and amount of heat are automatically controlled by one thermostat and one connecting rod.

Damper indicated by arrow regulates the check draft and the direct draft to the fire. Gas controlled above deflector. No gas can escape below to injure chicks. Hover is collapsible, made in sections, and easy to put together and take apart. Holds enough coal to last 40 to 48 hours.

PRICES

No. 1, 600 chick size.....	\$19.75
No. 2, 1,200 chick size.....	24.75

This damper regulates your check draft and the direct draft to your fire.

The International Sanitary Hover

This is especially suitable for use in colony brooders; but it can be used with equally good results in a hen house, pen, barn, stable, piano box, or even a dry goods box. It can be picked up and carried around with ease.

The International Sanitary Hover provides 450 square inches of hovering space—200 square inches more than any other hover.

Sanitary hovers are as practical for the small backyard poultry raiser as for large poultry plants. They are the warmest at the curtain—usable anywhere—ready for business wherever placed. All that is necessary is to place the hover in the colony house and light the lamp. And the easiest way to set it up is to set it down. No crowding or smothering of chicks—no kneeling in mud or dust to get in the lamp—no cutting of holes or building platforms.

This hover is constructed of heavy galvanized iron and is always sanitary, for no mites or other vermin can collect around it, as there are no cracks or crevices for them to find shelter. It can be easily cleaned and sprayed when necessary, and will last a lifetime, and give perfect brooding service every day of that time. It is only necessary to lift the thermometer to ascertain the temperature under the hover. Many of our customers tell us that they raised 94, 96, 98, and some even 100 per cent of the baby chicks put under the hover. One customer says: "It has the old hen beaten a mile." But while the hover has been built on the principal of the mother hen heat, it has many advantages that the old hen does not have.

Write for illustrated booklet or call and examine the hovers. We shall be pleased to show them to you. Price complete, \$12.50, f. o. b. Wichita.

Tested Thermometers

The best incubator or brooder is useless unless the thermometer used therein is accurate. Hundreds of hatchlings in incubators fail because of inferior thermometers. A large number of chickens are killed in brooders owing to defective or worthless thermometers. The thermometers listed herein are manufactured especially for us, and are thoroughly tested and seasoned before they are shipped.

Tyco Certified Incubator Thermometer.

—Engraved tube, every fifth line and figure stamped on the scale. Each one accompanied by maker's certificate of accuracy. Each, \$1.25.

PRICES

Ross Brothers Incubator Thermometers, 75c each; postpaid, 90c.

Ross Brothers Brooder Thermometers, 65c each; postpaid, 75c.

Thermometers for general use, tin frame, 75c each. High Grade Thermometers for general use, \$1.25 each. Hotbed Thermometers, \$1.25 each.

Frost Alarm Thermometers.—We can supply frost Alarm Thermometers for the orchard in different sizes. Prices a matter of correspondence.

Tyco Incubator Hygrometer

Millions of chicks die in the shell every year for want of proper moisture conditions. The importance of a correct percentage of moisture during incubation has made the Tyco Incubator Hygrometer as essential as the Tyco Incubator Thermometer. Neither takes the place of the other, but together they give the practical poultry raiser all facts required for successfully regulating the heat and moisture of an incubator.

Brass oxidized brass scale, white filled figures and graduations, glass cistern, silk wick. Complete with directions. Each, \$2.25, postpaid.

Lansdowne Poultry Marker

Look at illustration and see how easy it is to use. Large or small size sent postpaid. 35 cents.

Petty's Perfect Pocket Poultry Punch

All steel nickel-plated. Punches clean. Hole right size. Will not bruise the foot. Price, 35 cents, postpaid.

Our Poultry Expert will be glad to go into any of your poultry questions with you. He has had thirty years experience with poultry and knows enough about this subject to fill a couple of catalogs. Before you buy your poultry supplies we suggest that you get in touch with him. Very likely he can give you several hints that will save you many dollars.

EGG BOXES

The Eryie

A box that is self-locking cannot be tampered with, impossible to pilfer after it is filled. Placing the handle in socket locks the box. You can stand on it after locked without damage to contents.

Prices, F. O. B. Wichita.

PRICES

No. 1.—1 setting, \$2.75 per doz. Wt. 10 lbs. per dozen.

No. 2.—2 setting, \$4.10 per doz. Wt. 19 lbs. per dozen.

An extra charge of 25c for orders of less than one dozen of a size.

NOTE.—This box is for express use only. Locking features prevents its use for parcel post.

The Anderson

Constructed on same general principle as Eryie, but seals instead of self-locking.

PRICES

	Shipping Weight	Per doz.
1 setting.....	10 lbs. per doz.....	No. 3, \$2.25
2 setting.....	13 lbs. per doz.....	No. 4, 3.15
50 Egg Size.....	24 lbs. per doz.....	No. 5, 4.65

An extra charge of 25c for orders of less than one dozen of a size.

F. O. B. Wichita.

This box may be used for Parcel Post within weight limit or Express.

Note.—Use string instead of sealing strips for Parcel Post.

The Sefton

Similar in construction to Anderson. Two layers corrugated paper to protect the eggs from damage.

PRICES

Eggs per carton	Size	Packed	Per doz.	Wt.
1 dozen.....	7 1/2 x 5 1/2 x 2 1/2	2 doz. per bdl.	\$1.50	5 lbs.
3 dozen.....	7 1/2 x 5 1/2 x 8 1/2	2 doz. per bdl.	2.50	12 lbs.
4 dozen.....	11 1/2 x 7 1/2 x 5 1/4	1 doz. per bdl.	3.75	17 lbs.

F. O. B. Wichita.

An extra charge of 25c per size will be made for splitting bundles.

Leg Bands

Champion

Champion Leg Bands.—Aluminum. Prices, postpaid, 12 for 15c; 25 for 25c; 100 for 75c.

Convenient Leg Band.—This Leg Band is well named, because it is a very convenient band to use. In ordering, use following table of sizes. No. 3, Asiatic Males and Small Turkeys. No. 4, American Males, Large Asiatic Females. No. 6, Asiatic Females, Minorca Males, etc. No. 7 American Females and Leghorn Males. No. 10, Leghorn and Mediterranean Females. Prices, postpaid, 12 for 15c; 25 for 40c; 100 for \$1.25.

Convenient

Farmers' Caponizing Set

Price Complete Set of Instruments in velvet-lined case, \$3.00 per set, postpaid. With easy-to-use directions.

Blatchford's Products

The outstanding reason for the great popularity of the Blatchford line of milk-substitutes for calves, pigs, lambs, colts, rabbits and poultry, is that each of them gives bigger profits, better and quicker results to farmers, dairymen and poultrymen than they can secure from anything else. Always insist on *Blatchford's*—the name is a guarantee of satisfaction.

Blatchford's CALF MEAL

First on the Market
First in Quality
First in Results

BLATCHFORD'S Calf Meal is the original milk-substitute. It was the first on the market. For over one-third of a century it has been successfully used in raising calves by the most progressive farmers and dairymen in this country. It is the only calf meal backed by so remarkable a record.

Its success is due to three things. **First**—its *quality*. Blatchford's is above all a *quality* calf meal. Only the best materials are used in its manufacture. It contains no waste materials or by-products of low feeding value. **Second**—it contains all the nutritive and growth-producing properties required by the calf. The finest and healthiest of calves can be raised upon it. **Third**—it is economical. One pound makes a full gallon of pure milk-substitute and it can be used at less than half the cost of using milk.

Sold in 100-, 50- and 25-lb. bags. Satisfaction guaranteed with every bag.

Blatchford's MILK MASH

Should be Every
Chick's First Feed

BLATCHFORD'S Milk Mash is the favored starting and growing feed of the most prominent poultry-raisers in the country. It contains all the feeds and nutrient chicks need right from the start. It shields them from white diarrhea, bowel trouble and leg weakness.

This mash is neither a tonic nor a medicine but a nutritious, wholesome, palatable body-builder. It promotes health, vitality and growth by building up sturdy, disease-resistant frames. It does not force, but, by supplying proper nourishment to each and every part of the body, promotes steady and completed development in the shortest possible time.

Blatchford's Milk Mash contains no screenings hulls or cheap by-products from the manufacture of breakfast foods, cereal foods or scratch grains. It carries chicks *all the way*—starts, grows and matures—without change of feed.

This is the safest, the most economical and the best starting and growing feed on the market. Use it. Sold in 100- and 25-pound bags and 4-pound cartons. Satisfaction guaranteed.

Blatchford's PIG MEAL

Carries Pigs Safely Through
the Critical Weaning Period

IT contains just the right percentage of vegetable protein, fat, etc., in correctly diversified form to grow bone and muscle. Little pigs *relish* it and *thrive* upon it. It makes the runts catch up.

Sold in 100-, 50- and 25-pound bags. Satisfaction guaranteed.

Blatchford's "Fill-the-Basket" EGG MASH

BLATCHFORD'S Egg Mash contains a large variety of the best materials available for egg manufacture. It successfully solves the problem of securing eggs both winter and summer.

Feed it—you will find it a profitable thing to do. Sold in 100- and 25-pound bags.

Blatchford's RABBIT MEAL

Solves the Rabbit-Feeding Problem

THIS inexpensive milk-substitute feed contains all the nutritive elements the rabbit requires for proper development and growth. It will put your rabbits in condition and *keep* them so.

Always feed it to your weanlings, to growing stock, to nursing does and stud bucks.

Sold in 5-pound packages, 100- and 25-pound bags. Contains no drugs or tonics.

Write for prices, also for Blatchford literature and further particulars

FRENCH POULTRY MUSTARD

French's Poultry Mustard will put your flock in excellent condition, help supply the properties needed during the moulting season and cold weather and fill the basket with eggs. French's Poultry Mustard is put up in 1½, 3, 5 and 10-lb. sealed moisture-proof packages, 25-lb. pails and 100 and 200-lb. barrels.

If wanted by parcel post (small sized packages), include postage; otherwise we will forward by express.

	Shipping	Each Weight
1½-lb. package.....	\$.60	2 lbs.
3 -lb. package.....	1.00	4 lbs.
5 -lb. package.....	1.65	7 lbs.
10 -lb. package.....	3.25	12 lbs.
25 -lb. package.....	8.00	30 lbs.

DARLING'S MEAT CRISPS

A clean, wholesome Meat Scrap. After being cooked in the most careful and thorough manner, the feed is pressed in tremendous hydraulic presses to take out every possible bit of grease and moisture. Darling's Meat Crisps are uniformly ground in 3 sizes—fine, medium and coarse.

Guaranteed Analysis

Protein (minimum).....	75 per cent
Fat (minimum).....	1/2 to 1 per cent
Fibre (minimum).....	2 per cent
Put up in 3-lb. packages for 45c; 6½ -lb. packages for 85c; 25-pound pails, \$3.00; F. O. B. Wichita.	

ROSS BROTHERS STANDARD FEEDS

Linseed Oil Meal.....	
Cotton Seed Meal.....	
Dold's Digester Tankage.....	
Cudahy's Blue Ribbon Meat Meal.....	
Crushed Oyster Shell.....	
Mica Crystal Grit.....	
Loveland's Chick Feed.....	
Loveland's Scratch Feed.....	
Otto Weiss Chick Feed.....	
Otto Weiss Hen Feed.....	
Full-o-Pep Mash.....	

Prices will be
quoted upon
receipt of
inquiry.

Approximate Quantity of Silage Required

KIND OF STOCK	Daily Ration in Pounds
Beef Cattle —	
Wintering Calves, 8 months old	15 to 25
Wintering Breeding cows	30 to 50
Fattening beef cattle 18 to 20 mo. old—	
First stages of fattening	20 to 30
Latter stage of fattening	12 to 20
Dairy Cattle	30 to 50

INSTRUCTIONS FOR ORDERING

Guarantee and Non-Warranty

YOU are safe in ordering from ROSS BROTHERS. Our experience, covering more than a third of a century, in wrapping, packing and shipping seeds warrant us to guarantee that your order will reach you in first-class condition. If for any reason your order is damaged in shipping, or you do not receive your order within a reasonable time, we will duplicate it free.

We use every bit of knowledge that science and experience has taught us in selecting our seed stocks. We honestly believe that they are unsurpassed by any seed that can be had, and if through fault of the seed they fail to give satisfaction we will be glad to replace the package or refund the purchase price. It must be understood, however, that the seeds constitute only one factor in the success of the crop. The soil, weather conditions, culture and so on are equally important and over these we have no control, therefore we do not warrant in any way, express or implied, the description, purity productiveness or any other matter of any Seeds, Plants or Bulbs which we sell and will not in any way be responsible for the crop. If the purchaser does not accept the goods on the above terms, no sale is made thereof and the goods must be returned at once and the money will be refunded. Subject to the above conditions we make this sale at the moderate prices which we quote in this catalog.

How to Order Safely

Please write your name and address plainly and carefully.

When you send us an order, give the name of your postoffice, county and state.

If your freight or express office is different from your post-office, give us that information. If you live on a rural route, give the exact number of route and also your box number.

Unsigned Orders

Every season we receive several orders without a signature and frequently without an address. The only thing we can do is to hold the orders until we hear further from the sender. Letters often go astray in the mail and for that reason they fail to reach us, and in consequence if you do not hear from us in a reasonable time after the order is sent, send us a duplicate order, telling us the date under which the first order was sent

and the amount of money enclosed and how it was sent. If we find that your order has been received, but has not been sent out it will be filled at once, or if we find that the order has been sent to you, but has been lost on the way to you, we will duplicate it in accordance with our guarantee.

Always Keep a Copy of Your Order

This will protect you in case there should be an error made in filling your order.

We try to exercise the utmost care in filling every order, but in the rush of the busy season mistakes may occur, in which case we shall appreciate being promptly advised, when corrections will be made at once. So keep a copy of your order for comparison.

Remittances

Money can be safely sent by bank draft, express or post-office money order or registered letter. Remittances sent in any other way are entirely at the senders risk. With small orders it is often convenient to send postage stamps with your letter or order. We are willing to accept these in amounts up to \$1.00. Money should in no occasion be sent loose in the letter.

Our Responsibility

You run no risk in sending money to us. Our reputation as honest and experienced Seedsmen is well known and our financial responsibility can be learned at any bank, trust company or merchant who subscribes to the commercial agency reports. Our credit rating is top-notch.

Packages Extra

When it is necessary to use packages to protect shipments of seeds they will be charged at following prices. Barrels from 50c to 80c each; cotton seamless sacks at 65c each; heavy jute sacks at 35c each.

Forwarding of Goods

We forward, postpaid all vegetable and flower seeds in packets and in lots up to and including one pound, excepting in the case of Peas, Beans, Sweet Corn and Field Seeds; these, together with Onion Sets, Plants, Tools and Supplies, are forwarded at the customers expense. If you wish them sent by parcel post add the zone charge from Wichita to your Postoffice in accordance with the table on page 64. We will secure for you the lowest express or freight rates possible if goods are to go in this way. When the goods are shipped we send you a shipping notice and a bill of lading showing that the goods were delivered to the transportation company in good condition. If they are not in the same condition when they reach you make notations of this on the freight or express receipt. Please give full shipping instructions. In the absence of these we will use our best judgment, based on thirty-five years of shipping experience.

Our Commerce Street Warehouse

**Ross Brothers
Seed Co.**

WICHITA, KANSAS

RATES FROM WICHITA TO A FEW OF THE LARGER CITIES OF THE COUNTRY.

Most Seeds, Plants, and other Garden Supplies travel at second class express rates and third class freight.

	EXPRESS		FREIGHT	
	10 lbs.	25 lbs.	100 lbs.	100 lbs.
Kansas City, Mo.	\$.33	\$.51	\$1.41	\$.62½
Chicago, Ill.	.46	.84	2.73	1.07½
St. Louis, Mo.	.42	.73	2.28	.95
Boston, Mass.	.58	1.15	3.96	1.89
New York, N. Y.	.56	1.11	3.79	1.82½
St. Paul, Minn.	.47	.87	2.85	1.11½
Omaha, Nebr.	.36	.59	1.74	.81½
Denver, Colo.	.43	.76	2.40	.87½
Portland, Ore.	.89	1.94	7.09	2.75
San Francisco, Calif.	.89	1.91	7.06	2.56½
Dallas, Texas	.38	.64	1.95	1.20
San Antonio, Texas	.46	.84	2.73	1.30
Oklahoma City, Okla.	.31	.46	1.24	.57
Topeka, Kansas	.31	.46	1.24	.50
New Orleans, La.	.53	1.00	3.39	1.30
Phoenix, Ariz.	.67	1.36	4.87	2.10
Albuquerque, N. M.	.47	.88	2.89	1.49

DOMESTIC PARCEL POST RATES

On Seeds, Plants, Bulbs, Roots, Books, Tools, etc., within the U. S. and Possessions. War tax postage extra.

	First pound or fraction.	Each additional pound or fraction.
First Zone	5c	1c
Second Zone	5c	1c
Third Zone	6c	2c
Fourth Zone	7c	4c
Fifth Zone	8c	6c
Sixth Zone	9c	8c
Seventh Zone	11c	10c
Eighth Zone	12c	12c

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A large field of alfalfa with a wooden sign in the foreground. The sign is white with a dark border and contains text. The background shows a line of trees and a small house under a cloudy sky.

WE GUARANTEE

That the seeds you order will be delivered to you in first class condition, and we further agree to refund the purchase price or replace any package of seeds which, due to the fault of the seeds, has failed to give satisfaction.

ROSS BROTHERS SEED CO.

JOHN DEARTHAGE of Douglass, has just sold his crop of alfalfa seed to Ross Bros. for \$3,823.57. This crop was raised on 60 acres of land and in addition two crops of hay have been harvested, worth as much as the seed crop. The hay from which the seed crop was threshed will sell for enough to pay expense of harvesting the seed. Why need an oil well? —*Wichita Eagle*, October 31, 1919.

MIDDLE - WEST SEEDS

ROSS BROTHERS SEED CO.

WICHITA, KANSAS