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McCullough's Seed Catalogue AND AMATEUR'S GUIDE

The J.M. McCullough's Sons Co.
H.B. McCULLOUGH *Pres't.*

316 Walnut St.

Cincinnati, Ohio

PHONE MAIN 4598

Established 1838

INSTRUCTIONS TO PURCHASERS

Established 1838

WHEN ordering Beans, Corn or Peas to be forwarded by mail, "be sure to add 6c per pound for POSTAGE in first and second zones. For third zone add 7c per pound, for all other zones add extra postage in proportion. See Parcel Post Rates.

Packets and half pounds of Beans, Corn and Peas are sent postpaid at prices quoted, and all other varieties of vegetable and all Flower Seeds will be forwarded free by mail at Catalogue Prices unless otherwise noted. Grass Seeds; Clover Seeds; Miscellaneous Seeds; Plants; Tools and Supplies are not sent free by mail—see Parcel Post Rates.

Order Early. It will greatly facilitate shipments if orders are sent early. We aim to send off all orders the day received.

Send the Money with the Order. Postal Note, Postoffice Order, Registered Letter, Express Money Order, or Draft on Cincinnati or New York. United States Postage Stamps will be received for small amounts; be exceedingly careful about the least moisture getting on them when remitting, as they sometimes reach us so stuck together as to be almost worthless.

We do not send C. O. D. Everything being plainly priced, the return charges on money is an unnecessary expense.

Should you change your address, we will esteem it a favor if you will notify us, so we can forward our Catalogue with regularity; if you receive two Catalogues of the same kind, please hand one to some friend who has a garden.

Should an error occur, we desire to be promptly informed, and will take pleasure in making satisfactory corrections.

Write your Name and Address distinctly and in full; please use the Order Sheet and Envelope inserted in this Catalogue.

PARCEL POST RATES

All parcels of seeds, bulbs and plants, up to and including 8 oz. at the rate of 1c for each 2 oz. regardless of distance; over 8 oz., at the Zone Rate. All merchandise other than seeds, bulbs and plants up to and including 4 oz. in weight can be sent at the rate of 1c an ounce regardless of distance. Over 4 oz. at the Zone Rate.

NOTE:—On orders for one to three pounds of goods (larger quantities in proportion) not included in our free delivery, while the packing may only weigh the fraction of a pound it must be considered as a full pound when adding postage.

Limit of weight for delivery within local, first and second zones, 50 pounds; to all other zones, 20 pounds. If weight exceeds this we will pack in 2 or 3 parcels (no more) provided money is remitted to cover postage.

A fraction of a pound is considered a full pound.

Zone	First Pound	Each Additional Pound
1 and 2—150 miles.....	5c	1c
3—150 to 300 miles.....	6c	2c
4—300 to 600 miles.....	7c	4c
5—600 to 1,000 miles.....	8c	6c
6—1,000 to 1,400 miles.....	9c	8c
7—1,400 to 1,800 miles.....	11c	10c
8—all over 1,800 miles.....	12c	12c

Poisons cannot be sent by mail. Liquids and goods packed in glass should be sent by Express.

The J. M. McCullough's Sons Co., give no warranty, express or implied, as to description, quality, productiveness, or any other matter of any seeds, bulbs or plants they send out, and they will not be in any way responsible for the crop. If the purchaser does not accept the goods on these terms, they are at once to be returned.

Trade Marks Registered, McCullough's Seeds, XXXX, Buckeye, Suburban Lawn Grass, Central Park Lawn Grass

THE J. M. McCULLOUGH'S SONS CO.

H. B. McCULLOUGH, Pres't.

GEO. H. PARVIN, Vice-Pres't.

Seedsman

SALESROOMS AND OFFICES:

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Just Below Fourth

Long Distance
Phone Main 4598

P. O. Box
845

Cincinnati, Ohio

Established 1838

Established 1838

ESTABLISHED 80 YEARS

PLANTING INSTRUCTIONS
FOR **WAR GARDENS**

—ISSUED BY—

THE **J. M. McCULLOUGH'S SONS CO.**

H. B. McCULLOUGH, Prest.

GEO. H. PARVIN, Vice-Prest.

Seedsman

316 WALNUT STREET **316**
Just Below Fourth

CINCINNATI, OHIO

**Phone, Main 4598 Private Branch Exchange connecting
all Departments**

IN response to numerous inquiries for complete detailed information covering the planting of WAR GARDENS, we submit the following instructions hoping their perusal will stimulate all planters of Garden Seeds to increased effort in the economical production of Food Supplies.

We have endeavored to eliminate all unnecessary waste in the use of Vegetable Seeds, and have attempted to show the proper proportions necessary to produce results.

Our instructions are in no sense arbitrary, as our intention is to leave the working out of the various plans largely under the control of each planter, merely bringing to your attention the methods we have employed during the passing years.

The planting operations recommended by us are intended for the latitude of Cincinnati, consequently those living farther North or farther South will be guided accordingly.

THE principal element for the best success in all Garden operations lies in getting started right and continuing so throughout the season.

From our own observation and experiences of many years, we are convinced that most of the land through exhaustive croppings has become sour and impoverished, and needs first the application of lime to sweeten and then the application of either Sheep Manure or well rotted stable manure to enrich the soil.

PERMIT us to suggest that about the first of March (weather permitting) the garden be dug at least one foot deep, then, for a War Garden 50 feet wide by 100 feet long, apply 200 lbs. of our Evr Green Lime to sweeten the soil and in another week or so apply 300 lbs. of Sheep Manure; raking and pulverizing the surface properly will sufficiently incorporate the fertilizers in the soil. **It is useless and a waste of time and money to apply commercial fertilizers on sour soil.**

It is surprising what a quantity of vegetables may be raised on a plot of ground this size by intensive gardening, providing the soil is enriched as indicated above.

Bear in mind it is false economy not to use sufficient quantity of fertilizer. To reduce chances of failure to a minimum, inoculate Peas and Beans with Edward's Legume Bacteria as per instructions contained in our Catalogue.

FOR a plot of ground 50 feet wide by 100 feet long, we suggest leaving a space 3 feet wide along the far side and across the back for Tomatoes. On the near side of the piece leave a strip 2 feet wide, the entire length, for a walk. This leaves the rows 45 feet long. Reserving a space at the front for beds 4 feet wide and 45 feet long, there remains space for 70 rows of vegetables 16 inches apart, which proceed to plant as follows:

AS soon as possible after the 15th of March (weather permitting) plant 4 rows of "Maud S" Peas; make the furrows about 4 inches deep and scatter the Peas in the furrow, using one-half pound for the 4 rows. In private gardens the general practice is to cover the seed about 2 inches and gradually add more soil as the Peas grow. But do not fill the furrow level full, so as to leave a little hollow to hold water. This plan however is not practical for field culture. This crop should mature in about 60 days depending on the weather. After this crop is harvested the ground may be planted in late Sugar Corn, Bush Beans, etc.

ANY time after the 17th of March plant 8 rows of early Potatoes, either Early Ohio or Irish Cobbler; make furrows 4 inches deep, and plant the seed pieces 15 inches apart in the furrow. Each seed piece should contain 2 to 3 eyes, and it will require about fifteen pounds to plant 8 rows. After the plants are 6 to 8 inches high they should be sprayed every 10 days with Bordeaux Arsenate of Lead to destroy the Beetles and prevent Mildew. This crop should be matured in 90 days from planting and may be followed with late Sugar Corn or Bush Beans.

BETWEEN the 20th of March and first of April, 6 rows of Onion Sets may be planted; plant the larger sets 3 inches apart in the row and about 2 inches deep, as large sets never produce large onions, on account of going to seed; plant small sets 3 inches apart and not over $\frac{1}{2}$ inch deep, when large enough every other one may be pulled for green onions and the rest left to mature. In the latter part of July the tops should be bent over, this causes the bulb to increase in diameter. When the tops ripen off the onions should be pulled and thoroughly dried before storing away for winter. It will require from 3 to 4 quarts of Onion Sets, according to size to plant the 6 rows. After the Onions are harvested, Fall Spinach, Kale, Lettuce, Radishes and Turnips may be planted.

AT the far corner of the bed of Onions reserve a space the width of two rows and three feet long, in which plant one packet of Parsley. Scatter seed thinly and cover lightly, tamping if soil is dry. Parsley Seed is very slow to germinate, but planted early and kept free from weeds will produce sufficient greens all summer.

FROM now on throughout the season, particularly in dry weather, when there is less moisture in the soil, use a tamping block for tamping the soil after planting, to conserve the moisture and bring the seed into close contact with the soil. Our tamping blocks are made from 2 inch lumber 10 inches square, with a broom handle fastened securely in the center.

BETWEEN the 20th of March and the 1st of April it is time to proceed with the 4 beds at the front of the garden; these should be 10 feet long by 4 feet wide, with an 18 inch walk between each bed, we prefer to have the beds made flat, as raised beds dry out too readily, although they make a nicer appearance.

THREE rows of Radishes may be planted; rows 1 foot apart, and seed 2 inches apart in the row. If only one kind of Radish is to be planted, 2 packets of seed will be sufficient, but if three kinds are desired, it will require one packet of seed for each row. This crop should mature in 28 to 32 days and may be followed by another planting of Radishes, or early Cabbage, this bed being large enough for 25 early Cabbage Plants.

THE next in order is planting one of the beds in Lettuce; after the soil has been carefully raked and in fine order, scatter the contents of two packets of seed thinly and rake in lightly. For Head Lettuce use our Selected Nonpareil and for Curly Lettuce use Grand Rapids. Head Lettuce should be transplanted early in its growth if specimen heads are desired, or sown in shallow drills 16 inches apart and plants thinned to stand 10 inches apart in the row. This crop will mature in 60 to 80 days and may be followed with Summer Radishes, they in turn to be followed with Fall Turnips. It will require 2 packets of Radish, or 1 packet of Turnip Seed to plant this bed.

BLOOMSDALE Spinach may be planted in another one of the beds, either in rows or broadcast. We always prefer planting in rows. If in rows make them 1 foot apart, and sow the seed thinly about $\frac{1}{2}$ inch deep and after covering tamp or tramp the soil to make the soil firm. It will require 2 packets of seed to plant this bed. This crop should mature in about 50 days and may be followed with Carrots, of which 1 packet of seed will be sufficient.

OUR Norwood Beet may be planted in the fourth bed; these should be planted in rows 1 foot apart and 1 inch deep. Plant seed thinly and when the plants have three or four leaves, thin out so that the plants stand 5 inches apart in the row. The plants pulled out may be cooked as greens. One packet of seed will be sufficient. This crop will mature in 50 to 60 days, and may be followed with Bush Beans.

THE above planting operations should all have been completed by April 1st; but if weather conditions have prevented planting, all the foregoing may now be planted; in addition to which, between April 1st and April 20th the following plantings should be made:

TWO rows, 45 feet long, planted in Parsnips, using one packet of seed for each row. Plant seeds in shallow furrows and cover evenly with rake. Seed is slow to germinate and is frequently a long time in coming up. Germination may be hastened by steeping 6 to 12 hours in diluted manure water and mix with sand before planting. When well up, thin out to 5 inches apart in the rows. Requires the whole season to mature the crop. May be left in the ground to be dug during Winter as required.

PLANT one row of Salsify or Oyster Plant, 45 feet long. Requires the same cultivation as Parsnips, and like them may be left in the ground until Spring. It will require one packet of seed to plant one row.

THREE rows each 45 feet long planted in Swiss Chard or Spinach Beet; plant seeds thinly 1 inch deep and thin out so that the plants will stand 12 inches apart in the row. It will require 2 packets of seed which will produce plants from which cuttings can be made all summer, as you can cut right down to the ground, and new shoots will soon spring up and make a fast growth, while those plants which are allowed to grow on without any cutting, will make large curly leaves, with thick, light-colored midribs; these midribs are delicious when cooked and served like Asparagus.

PLANT one row of Chantenay Carrots using 1 packet of seed. Do not plant over $\frac{1}{2}$ inch deep and when well up, thin the plants to stand 3 inches apart in the row, as this variety permits of close planting. Carrot Seed is slow to germinate, consequently if soil is dry at time of planting tamp the soil firmly, or tramp the row. Carrots may be used when quite small and all through the season; if not all used, may be left in the ground until frost; otherwise, this variety should mature in about 75 days, and the ground may then be planted in Sugar Corn or Bush Beans, either Stringless or Wax.

ONE row for Kohl-Rabi. If the merits of this vegetable were better known, it would be more largely grown. Soil must be rich and the plants must be kept growing rapidly, responding liberally to intense cultivation. This rule applies to all vegetables.

One packet of seed is sufficient and when the plants are well up, they should be thinned to stand 8 to 10 inches in the row. When the thickened stems above ground are 2 to 3 inches through, they should be eaten, as they get tough when old. We advise making two plantings, two weeks apart, using one-half of the row each time. This crop should be out of the way in 75 to 90 days and may at once be replanted for Fall use, or may be followed with Endive, Kale or Fall Turnip.

ONE row may be planted in Extra Early Purple Top Milan Turnip. We recommend this variety on account of its extreme earliness. This is a white Turnip with a purple top, fine-grained and of delicate flavor. It will require 1 packet of seed to plant the row. Seed should be mixed with ashes or sand and planted in a shallow furrow, covering lightly and tamping the soil if dry. Sow seed thinly so plants will stand about 3 inches apart. Should mature in 60 to 75 days and may be followed with Fall Turnips, Corn Salad, Endive or Kale.

APRIL 20th. Presuming instructions regarding the preparation of the soil and the planting of the seeds have been faithfully followed, the season has now arrived for setting out Early Cabbage or Cauliflower Plants, or both. If, however, the seeds have not all been planted, do not let anything interfere with setting out the above plants on this date. A row 45 feet long will accommodate 3 dozen early Cabbage Plants, or 3 dozen Cauliflower Plants. Cabbage plants should all be used up in about 100 days, and the row may then be planted in any of the Fall Seeds. Cauliflower should be out of the way in 50 to 60 days, and may be followed with Bush Beans, Sugar Corn, etc. Nitrate of soda, used as instructed in our Catalogue, is a splendid Agent in making Cauliflower and Cabbage head up properly.

AFTER April 20th planting operations should follow more rapidly, providing season is favorable and the frost is out of the ground. Between the 20th and 25th inst., plant 4 rows of early Beans. We prefer the Black Valentine Bean for the first planting and although these are not stringless, still when picked while young they are almost so. Beans should be planted 2 inches deep, and 3 to 4 inches apart; it will require three-quarters of a pound to plant the 4 rows. Do not cultivate Beans when wet with dew or rain, as it causes them to rust. In hoeing draw the soil to the plant. This crop should mature in 40 days and may be followed with Stringless Beans, Sugar Corn, etc.

NEXT in order is the planting of 4 rows of Golden Bantam Sugar Corn. This is not only one of the sweetest, but is also one of the hardiest, producing ears 6 to 7 inches long, filled with delicious golden-yellow kernels. If ground is moist plant in furrows 1 inch deep, but if ground is dry, plant 2 inches deep, and tamp soil firmly to conserve moisture. When plants are up, thin out the plants to stand about 8 inches apart in the row. It will require one-quarter pound of seed to plant the 4 rows. This crop should be out of the way in 60 to 75 days and ground may then be planted in late Sugar Corn, Bush Beans, etc.

FOUR rows may now be planted in Little Marvel, Nott's Excelsior or American Wonder Peas. Plant the seed 4 inches deep, as deep planting helps to prevent mildew; scatter the seed in the furrow about 2 inches apart. It will require three-quarters of a pound of seed to plant the four rows. All Peas do better when furnished with some kind of support. Crop should all be used up in from 60 to 75 days, and ground may then be planted in any of the Summer or Fall Crops, or may be set out in late Cabbage.

PLANT one row in New Zealand Spinach. Seed should be carefully planted 1 inch deep, and if soil is dry it should be tamped. It will require 2 packets of seed to plant the row, and when well up, thin out the plants so as to stand about 10 inches apart. Requires no further attention during the summer, except to keep down the weeds, and will produce a continuous crop of excellent Spinach until hard frosts.

MAY 1st. The planting operations for March and April should now be completed, but if weather conditions are still unfavorable, all the Seeds recommended for March and April planting may now be planted, with the exception of Parsnip, Salsify and Onion Sets for large Onions. However, if Parsnip and Salsify can be planted before the 10th of May, they may make a crop in rich ground, with a favorable season, otherwise rows can be used for Bush Beans, Beets, Carrots, etc. Almost impossible to produce large Onions from Sets planted later than April, but in place of the 6 rows reserved for Onions, these may be planted in Sugar Corn, Bush Beans, etc.

AS soon as possible after the 1st of May (providing ground is fairly warm) plant 4 rows of Bush Lima Beans. These can be grown and gathered much more easily than the Pole Limas as they require no support. Wilson's, Fordhook, Burpee's or Henderson's may be planted, depending upon the choice of the planter. The Seed of the Henderson Bush Lima is small, while the Seed of the others compare favorably in size and quality with the Pole Limas. Seed should be planted in drills $1\frac{1}{2}$ to 2 inches deep, and 4 to 6 inches apart. In planting Limas and other flat Beans, if they are planted with the eye down, they will germinate more rapidly. It will require one and one-half pounds of seed to plant the four rows. It requires from 60 to 90 days to mature the crop as they continue a long time in bearing. May be followed with Bush Beans, Radishes, Endive, Kale or Fall Spinach.

NEXT planting should be 2 rows of Beet Seed. As this is to be a main crop planting, either Columbia, Crimson Globe or Detroit may be used. Seed should be planted 1 inch deep and when plants have three or four leaves, thin out so that the plants will stand 5 to 6 inches apart in the row. The plants pulled out will make excellent greens, prepared in same manner as Spinach. Requires one packet of seed for each row, consequently two varieties may be planted. If soil is dry at the time of planting, tamp the soil firmly. Crop should mature in about 60 days, but if not all used, may be left until Fall and then dug and buried for Winter use, or may be followed with Early Peas, Bush Beans or other Fall Seeds.

THREE rows of Country Gentleman Sugar Corn may now be planted. We recommend the Country Gentleman Corn presuming the soil has been made rich as outlined by us, as this variety must have rich ground and must be well cultivated and kept growing rapidly to reach perfection in quality. Otherwise plant Premo, or Kendal's Early Giant. If ground is moist, plant in furrows 1 inch deep, but if soil is dry, plant 2 inches deep and tamp the soil to conserve moisture. When up, thin the plants to stand 8 to 10 inches apart in the row. It will require one packet of Country Gentleman and two packets of either Premo or Kendal's Early Giant to plant the three rows. This crop should all be used up in 80 to 90 days, and the ground may then be planted in Bush Beans, Fall Turnips, Kale, Spinach, Endive, etc.

NEXT planting should be 4 rows of Norwood Giant Stringless Beans or Burpee's Stringless. Either of these varieties represent the highest qualities in Stringless Beans and are now the standard for this market. Beans should be planted 2 inches deep and 3 to 4 inches apart. It will require three quarters of a pound to plant the four rows. Do not cultivate when wet with dew or rain, and in hoeing draw the soil to the plant. Crop should mature in 40 to 45 days and may again be re-planted in Beans, or followed with Sugar Corn, Fall Turnips, Spinach, etc.

THE time has now arrived for setting out Tomato Plants in the space reserved for them. These should be set out between the 5th and 10th of May, depending on the weather. Nothing is gained in setting out Tomato Plants during cold, chilly weather. If the soil is light and sandy the early sorts, such as Earliana, Acme and June Pink may be set out 3 feet apart, but if the soil is heavy and therefore unsuitable for early Tomatoes, such varieties as Beauty, Detroit, Ponderosa, John Baer, Norwood, Stone, etc. may be set out 4 feet apart. Set plants deep as possible in rich ground, water liberally when transplanting and if possible shade for a few days. In setting out Tomato Plants it has always been our custom to cover the roots of the plants with fine soil, then nearly fill the hole with water, and by the time the planting is all done, the water will have soaked in and we then begin at the first plant to fill the hole level full with dry soil. Planted this way the plants will seldom wilt. Space reserved for Tomato Plants will accommodate 4 dozen of the early varieties or 3 dozen of the later. Tie plants to stakes or tréllisses as the plants will be more productive, fruit will ripen better and be of better quality.

TWO rows of late Peas may now be planted, using Telephone, Everbearing or any of several other good varieties. Seed may be planted exactly as recommended for early Peas, but brush or other support should be provided for the vines, as they will do better with support of some kind on account of growing from 4 to 5 feet high. Late Peas do not require as rich soil as the earlier varieties, as this reduces the tendency to run to vine. Cultivate well and pick the pods as soon as fit, allowing none to ripen on the vines, as they will then cease bearing, and pinching off the pods prolongs the season. Have brush or other support ready to be placed between the rows just as soon as the Peas appear above ground. It will require three packets of seed to plant the two rows. Crop should mature in 75 to 90 days and may be followed with Extra Early Peas, Bush Beans or Fall Seeds.

FROM the 10th to the 20th of May is the time for setting out 1 row each of Egg and Pepper Plants. Do not set out Egg Plants unless nights are warm, as any chill checks the growth, and they must be kept growing steadily to produce results expected. Egg Plants should be set about 3 feet apart in the row and it will require 18 plants for 1 row. Pepper Plants should be set 18 inches apart in the row and it will require 30 plants for one row. Thirty Mango Pepper Plants will produce too much for an ordinary family, so we advise setting out some Cayenne Peppers and two varieties of Mangoes. Egg and Pepper Plants practically consume the whole season, making it unnecessary to provide a follow-up crop.

PLANT 1 row in Bush Squash. These do best in light, rich soils. Before planting the seeds it will be advisable to make a furrow about 4 inches deep and incorporate with the soil plenty of sheep manure or well rotted stable manure, and after tamping the soil well, plant two or three seeds about $\frac{1}{2}$ inch deep in hills, $3\frac{1}{2}$ feet apart, and when well up thin to 1 plant in each hill. It will require one packet of seed for the row. Crop should mature in about 75 days and may be followed with Kale, Endive, Fall Spinach, etc. Put a handful of Tobacco dust around the plants to repel the Squash Vine Borer, and spray early and often with Bordeaux Arsenate of Lead for Yellow-striped Beetle and Blight.

ALONG towards the latter part of May, 4 rows may be planted in some late variety of Sugar Corn, such as our Cincinnati Market or Club Zig-Zag Evergreen, Stowell's Evergreen or Zig-Zag Evergreen. Our favorite late Corn for family use is Stowell's Evergreen; in rich ground it produces large ears, filled with large juicy kernels of delicious quality. The cultural directions given for other varieties of Sugar Corn apply to these, with the exception that the plants should be thinned out to stand 12 to 14 inches apart in the row. It will require two packets of seed of any of these varieties to plant the four rows. Requires balance of the season to mature the crop.

TWO rows may now be planted in Stringless Beans, it will require one-quarter pound of seed to plant the two rows, and the same cultural directions heretofore given for planting Stringless Beans may be followed. May be replanted in Beans, or followed with Sugar Corn or any of the Fall Seeds.

ON Decoration Day arrange to plant 4 rows in late Potatoes. Same planting instructions given for early Potatoes may be observed as well as instructions for cultivating and spraying. Will require about fifteen pounds to plant the four rows, and will require balance of the season to mature the crop.

JUNE 1st. Nearly all the seeds for the year's supply of vegetables have now been planted, and many of the crops are well advanced. One of the pleasantest returns afforded in this month, more than any other, is the contemplation of the thrift and promise of the garden. All nature is now at her best, and if the garden has been properly planted and industriously tended, it cannot fail, especially during this month, to please its owner. The principal work will be the war with the weeds and bugs.

During June and July do not overlook the follow-up plantings made necessary by the maturity of the earlier crops.

IT will be observed that in planning this Garden we have made no provision for planting Cucumbers, Muskmelons, Watermelons, Pumpkin and Squash other than the Bush Squash, because in a Garden such as we have outlined where intensive cultivation is to be practiced, there would be no room for Vine Plants. However as our suggestions are not iron-clad, we prefer to leave the matter in the hands of each planter, so that they may use their own initiative in determining whether or not to eliminate some of the varieties recommended by us in favor of some or all of the Vine Plants. We, however, submit the following Cultural Directions for the Vine Plants in case seeds of them are to be planted.

NONE of the Vine Seeds should be planted until weather is settled and ground is warm. Bearing this in mind, along in early May Cucumbers may be planted in hills, 4 to 6 feet apart each way, thin out to 4 of the strongest plants in each hill, after all danger from insects is over. May be planted at intervals for a succession. The Cucumbers should be gathered when large enough for use, whether required or not; if left to ripen, it destroys their productiveness. For pickles plant from the middle of June to middle of July. Use Bordeaux Arsenate of Lead Mixture as advised in our Catalogue. One packet of Cucumber or Pickle Seed should produce enough for an ordinary family.

PLANTING instructions for Cucumbers covers the planting of Muskmelons, Watermelons and Squash Seeds. For the use of an ordinary family one packet of Muskmelons, two packets of Watermelons and one packet of Squash Seeds should be sufficient.

CORN SALAD for Winter and Spring use is usually planted in drills during August and September and covered with straw on the approach of cold weather, in the same manner as Spinach. Seed should be planted $\frac{1}{4}$ inch deep and if soil is dry, tamp or tramp it lightly. It will require one ounce of seed to produce sufficient for an ordinary family, as seed should be sown very thickly.

ENDIVE should be planted in June or July. Sow seed in shallow drills and thin the plants to stand 1 foot apart in the row. If soil is dry, tamp lightly. When nearly full grown they must be blanched. This is done by gathering the leaves together and tying with yarn or raffia to exclude the light and air from the inner leaves, this must be done when quite dry, or they will rot. One packet of seed will be ample.

KALE or BORECOLE. This vegetable is more hardy than Cabbage, and Seed may be sown in May or June and cultivated same as Cabbage. Flavor is greatly improved by frost. For early Spring use, sow seed in September and protect during Winter. One packet of seed will be sufficient.

WHEN planting Seeds of slow germination such as Parsnips, Carrots, Parsley and Beets, it is advisable to scatter a few Radish Seeds in the row. These come up quickly and mark the row, permitting of earlier cultivation than would otherwise be possible.

The J. M. McCULLOUGH'S SONS CO., Seedsmen

H. B. McCULLOUGH, President

GEO. H. PARVIN, Vice-President

The Leading and Oldest Established Seed House in the Middle States

Trade Marks registered, McCullough's Seeds, XXXX, Buckeye,
Suburban Lawn Grass, Central Park Lawn Grass

—WHOLESALE AND RETAIL DEALERS IN—

GARDEN, FIELD AND FLOWER SEEDS, PLANTS, SHRUBBERY,
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OFFICE OF

The J. M. McCullough's Sons Co., Seedsmen

316 WALNUT STREET.

Phone Main 4598

Cincinnati, Ohio.

* * * * *

"SHOP EARLY—AVOID THE RUSH."
This well-known Yule-tide slogan appeals with peculiar force this season to all purchasers of Seeds and Supplies.

Never in the history of the trade have Seed Stocks been as light as they are at present, consequently we cannot urge our customers too strongly to send in their orders while stocks are still fairly complete and while we have more time to attend to the wants of our Patrons, before the spring rush begins.

The genuine shortage of Supplies, together with freight congestion, makes it imperative on all to ORDER EARLY and avoid the disappointment that is bound to ensue at actual planting time.

The uncertainty of deliveries is responsible for the delay in issuing our Spring Catalogue, and since our Catalogue went to press we have been confronted with general advances in prices.

While we shall try to adhere as closely as possible to Catalogue prices, we must reserve the right to advance prices, without further notice, so soon as our present limited supplies are exhausted, and it then becomes necessary to purchase further supplies on the open market.

The war situation calls for united effort to combat the food shortage, requiring the co-operation of the small as well as the large planter, in producing maximum crops this season.

SHOP EARLY—BUY EARLY and be prepared to "DO YOUR BIT" in what promises to be the greatest Agricultural year in the history of our Nation.

May we look forward to an early favorable reply? A more intimate acquaintance should prove to be mutually advantageous.

Inviting your favors, we remain

Yours cordially,

THE J. M. McCULLOUGH'S SONS COMPANY.

OFFICE OF

The J. M. McCullough's Sons Co., Seedsmen

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The uncertainty of deliveries is responsible for the delay in issuing our Spring Catalogue, and since our Catalogue went to press we have been confronted with general advances in prices.

While we shall try to adhere as closely as possible to Catalogue prices, we must reserve the right to advance prices, without further notice, so soon as our present limited supplies are exhausted, and it then becomes necessary to purchase further supplies on the open market.

The war situation calls for united effort to combat the food shortage, requiring the co-operation of the small as well as the large planter, in producing maximum crops this season.

SHOP EARLY—BUY EARLY and be prepared to "DO YOUR BIT" in what promises to be the greatest Agricultural year in the history of our Nation.

May we look forward to an early favorable reply? A more intimate acquaintance should prove to be mutually advantageous.

Inviting your favors, we remain

Yours cordially,

THE J. M. McCULLOUGH'S SONS COMPANY.

THE J. M. McCULLOUGH'S SONS CO., Cincinnati, O.

VERY IMPORTANT—Write your Name and Address distinctly and in full.

Date.....191.....

Name of Person.....

(Remittance may be made by P. O. Order, Express Money Order, Postage Stamps, Drafts on New York or Cincinnati, or Cash by Express. : :)

“ Post Office

Enclosed find Cash - - \$

“ County

“ “ Draft - - \$.....

“ *State*

“ “ *P. O. Order* - \$.....

Shipping Point (If different from P. O.).....

“ Express Money Order \$_____

Please forward by _____ (State if wanted by Mail, Express
or Freight and which Company.)

“ “ *Postage Stamps* - \$_____

POSTAGE

{ All packets and half pounds of BEANS, CORN and PEAS are sent postpaid; for larger quantities by mail, see "Postage" on page 11.
All other VEGETABLE and FLOWER SEEDS by the packet, ounce, quarter pound and pound are sent postpaid.

Please use this order sheet for orders only, and carry out catalogue price of each article. Order Flower Seeds by Number. For further particulars and conditions of sale, see 2nd page of cover. Always write letters on a separate sheet from your order. More order blanks will be sent on request.

We give no warranty, express or implied, as to description, quality, productiveness or any other matter of any seeds, bulbs or plants we send out, and we will not be in any way responsible for the crop. If the purchaser does not accept the goods on these terms, they are at once to be returned.

THE J. M. McCULLOUGH'S SONS CO.

THE J. M. McCULLOUGH'S SONS CO.

Trade Marks registered, McCullough's Seeds, XXXX, Buckeye, Suburban Lawn Grass, Central Park Lawn Grass.

"United States Food Administration License Number G-18737."

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FOREWORD

WITH this issue of our Annual Catalogue and Amateur's Guide, we enter upon the 80th year since the founding of our business by the late Mr. J. M. McCullough.

We doubt if there is any business in which the knowledge gained through the experiences of eighty years of active progress, is of more value to mankind in general than the Seed Business.

A business like ours, which at all times is closely allied with Nature, must of necessity be progressive, must be untiring and painstaking in every effort, and must be ready at all times and under all circumstances to meet intelligently, and therefore economically, all the various demands that from time to time are made upon our resources.

We have for years maintained a fully equipped Seed Laboratory, where all our Seeds are microscopically examined for Purity and carefully tested for Germination. For the guidance of our customers all Agricultural Seeds sent out by us are tagged, showing the percentage of both purity and germination, consequently where **Quality** is a consideration, our prices always compare favorably.

The continuation of our successful business career is due to the fact that **Quality**, rather than price, has been our safe-guard through the passing years, and having proved successful in the past must be maintained in the future.

The disappointing crop conditions of last season promises to be intensified, as there is already a decided shortage in several leading stocks, consequently buyers will profit by anticipating their wants at earliest possible moment.

We wish to heartily thank our numerous customers for their loyal patronage in the past, and to assure them that the **same careful attention will be given all orders, whether large or small.**

Inviting your patronage, we remain

Yours to command,

January 1st, 1918

The J. M. McCullough's Sons Co.

McCULLOUGH'S "SUBURBAN" LAWN GRASS SEED

WILL MAKE A BETTER LAWN THAN TURF OR SOD

McCullough's "Suburban"
Lawn Grass Seed

IS a mixture of the finest Dwarf Evergreen Grasses that grow and flourish during different months of the year so that a rich, deep green, velvety lawn is constantly maintained. Our mixture is the result of several years experimenting, and, as we now offer it, is unequalled. The quantity required for making a new lawn is four bushels (64 lbs.) per acre, or for renovating old lawns, two bushels (32 lbs.) per acre. For a plot 15x20, or 300 square feet, one pound is required for a new lawn, or about one-half pound for renovating.

If it is honestly made, a lawn seed mixture is very much to be preferred to any single grass, because the several varieties of grasses which compose it, mature at different seasons of the year, thus keeping the green sward in good color and condition during the hot weather, not losing its color, as the single variety is liable to do.

How to Make a Lawn.—The matchless beauty of a well kept lawn instantly commands the attention of all lovers of the beautiful in Nature, because a fine lawn is an unfailling mark of intelligence and taste, to obtain which the main point is to start right. Seed will make a better lawn than turf or sod. The best soil is a good medium texture; the surface should be thoroughly pulverized and smoothed to the desired grade; remove all large stones, roots and hardened pieces of earth that can not be readily broken; ample time being allowed for the thorough settling of the soil, which is greatly aided by a few heavy showers of rain. When the soil is firm, level and suitably moist, sow "Suburban" Lawn Grass Seed at the rate of four bushels (64 lbs.) per acre. It is unwise to be too economical in the quantity of seed used, if the best results are desired. The seed should be sown broadcast and as evenly as possible, then give a thorough rolling or pat well with the back of a spade. The seed must be well firmed in the soil. When the young grass attains a height of 4 or 5 inches, carefully mow with a sharp scythe. After this, according to the season, it should be mown with a lawn mower every week or ten days.

General Surface Renovating.—When your lawn has been established, you will find it to your advantage to lightly re-seed each season. As early as possible, carefully rake off all dead leaves, etc., and give the lawn a dressing of our pulverized SHEEP MANURE, or our PURE BONE MEAL at the rate of at least 500 pounds per acre, and rake in, after which sow our "Suburban" Lawn Grass Seed at the rate of two bushels (32 lbs.) to the acre; roll thoroughly or pat with the back of a spade.

Renovating in Spots or Patches.—Everyone is aware that even in the best-kept lawns unsightly spots devoid of grass will appear, which are caused by root-destroying insects; and as these spots are not protected by a covering of turf during the winter, as a natural consequence, the chemical elements in the soil are leached out by the action of the weather, causing them to "cake" or become hard early in the spring. It is useless and a waste of seed to sow these spots unless they are carefully prepared to receive the seed. For this purpose it is our practice to cover them with either of the fertilizers mentioned above at the rate of 13 lbs. for each 300 square feet, then dig these spots up, and after raking until no trace of the fertilizers can be seen, sow our "Suburban" Lawn Grass Seed at the rate of 1 lb. to each 300 square feet. Roll thoroughly or pat with the back of a spade. When any weeding is done on the lawn immediately drop a few grains of seed wherever a weed is removed, and while the soil is disturbed press the seed into the soil.

Prices:— $\frac{1}{2}$ lb., 20c; 1 lb., 35c; 3 lbs., \$1.00; 5 lbs., \$1.50; $\frac{1}{2}$ bu. (8) lbs., \$2.00; per bu. of 16 lbs., \$4.00.

Postage Must be Added if Wanted by Mail. See Postal Rates, Second Page of Cover.

NOTE:—The price of "Suburban" Lawn Grass Seed is based upon sixteen pounds to the bushel. We mention this because there is no standard weight per bushel for Lawn Grass Seed in the United States; those who prefer to buy by weight may base their calculations in this way.

Owing to the cleaning process that our "Suburban" Lawn Grass Seed is put through it will be found to contain a much larger per cent of actual seed and less chaff than ordinary Lawn Seed.

Pulverized Sheep Manure and Pure Bone Meal are the Best Fertilizers for Lawns. See Fertilizers.

McCullough's "Shady-Place" Lawn Grass Seed

View of Lawn and Trees—Shady Places—"The Pines"

McCullough's "Shady Place" Lawn Grass Seed

ON nearly all lawns there are more or less shady places, which result in having bare and unsightly spots on which the owners have difficulty in securing a satisfactory stand of grass. After many years of experimenting with different grasses both native and foreign, we several years ago developed our present "Shady Place" Lawn Grass Seed Mixture.

This mixture of grasses is adapted for such places, as it is composed of dwarf-growing grasses which are found naturally growing in shady locations. Should the ground have become "sour" or drainage defective, it is apt to be covered with moss. If such is the case, the moss should first be removed by the use of a sharp rake, then apply **Evr Green Lawn Lime** to sweeten it, and after another thorough raking, apply commercial Fertilizer at the rate of not less than 600 pounds per acre, then sow the seed at the rate of four bushels (64 lbs.) per acre, or 1 lb. to each 300 square feet, after which roll thoroughly.

Prices:— $\frac{1}{2}$ lb., 25c; 1 lb., 40c; 5 lbs., \$1.75; 8 lbs., \$2.50; per bushel of 16 lbs., \$5.00.

Postage must be added if wanted by mail. See Postal Rates, second page of cover.

McCullough's Eden Park Lawn Grass Seed

EDEN
PARK

VIEWS IN EDEN PARK

LAWN
GRASS
SEED

McCullough's Eden Park Lawn Grass Seed

TO supply the demand for a Lawn Grass Seed that will meet general requirements, it has become necessary to place on the market our "Eden Park."

The quality of this lawn grass seed will compare favorably with a majority of the lawn grass mixtures on the market as it contains practically the same grasses as our "Suburban" but without recleaning.

Prices, $\frac{1}{2}$ lb., 15c; 1 lb., 25c; 5 lbs., \$1.00; 8 lbs., \$1.50; per bushel of 16 lbs., \$3.00.

TERRACE MIXTURE

There is nothing more annoying than to have ground washed out. In this mixture we have put quick-growing and deep-rooted grasses. Of course, it depends a great deal on this being well started before very heavy rains.

Per lb., 35c; 5 lbs., \$1.50; per bushel of 16 lbs., \$4.00.

McCullough's

Special Mixtures for Golf Links and Putting Greens

View of one of the Putting Greens on the Golf Grounds of the Hyde Park Country Club, Cincinnati, Ohio, where our **Putting Green Mixture** has produced a "Green" three weeks from time of sowing the seed.

PUTTING GREEN MIXTURE

HAVING specialized for over three-quarters of a Century in all varieties of Grass Seeds and having become familiar with the habits and characteristics of all cultivated grasses, we were prepared to develop the Mixture of Grasses herewith offered by us, after making a careful study of the requirements for producing the most substantial turf for Putting Greens.

The numerous testimonials we have received establishes the fact that our Mixture of Grasses will produce the results desired, because it has given thorough satisfaction wherever used, and produces a thick, tough, beautiful green turf. The varieties comprising this Mixture of Grasses are all the finest-bladed, low-growing and most hardy kinds, and will maintain their rich, velvety green color throughout the season. Per lb., 40c; 5 lbs., \$1.75; per bushel of 16 lbs., \$5.00.

Quantity of Seed to Sow. One pound of these mixtures will sow 15 x 20 feet, or 300 square feet. Four bushels should be sown to the acre. For renovating use one-half of this quantity.

Pulverized Sheep Manure and Pure Bone Meal are the Best Fertilizers for Lawns. See Fertilizers.

We wish to emphasize the fact that one of the important essentials for success in building lawns, lies in the abundant use of Fertilizers, which should be applied at the rate of not less than 600 pounds per acre.

GOLF LINKS MIXTURE

WE have given much attention to grasses for golf links. The mixture of grasses we offer below is composed of such varieties as will thrive here, and are the result of experiments conducted on our grounds, as well as careful observation for several years of the practical results obtained on those golf links, for which we have supplied the seed. We have always on hand all the natural grasses of Europe and America and we are familiar with the habits and merits of each. We shall be glad to prescribe for whatever the requirements of the links may be; for poor lands or rich, high and dry, or low and wet.

Per lb., 25c; 5 lbs., \$1.00; 8 lbs., \$1.50; per bushel of 16 lbs., \$3.00.

McCullough's "Suburban" Lawn Grass Seed

Illustration indicates style of packets. For complete description of this famous Lawn Grass Seed, see page 2.

PRICES.

½ lb. pkt.	20c
1 lb. pkt.	35c
3 lb. pkt.	\$1.00
5 lb. pkt.	1.50
8 lb. Bag (½ Bushel)	2.00
16 lb. Bag (1 Bushel)	4.00

Postage Must be Added if Wanted by Mail.

See Postal Rates, Second Page of Cover.

Novelties and Specialties in Garden and Flower Seeds

BEANS

(Krup Bohnen, Ger.)

Under this heading we introduce varieties that we know from our own experience to possess exceptional merit.

We have endeavored to make our descriptions as accurate and helpful as possible, to aid the purchaser in making selections.

McCullough's Norwood Stringless Green Pod.

This variety is superior to any other green-podded bean grown. It is positively stringless, and ripens a week

earlier than the Valentine. The pods which are produced in abundance on the vines are long, straight, round, deeply-saddle-backed, brittle, tender and of real good flavor. Has a much larger pod than the Valentine.

Pkt., 10c; $\frac{1}{2}$ lb., 25c; 1 lb., 40c; 5 lbs., \$1.85 15 lbs., \$5.25.

Wilson's Improved Bush Lima. We consider this variety the best Bush Lima Bean in cultivation. Of strong, upright growth, producing large pods which frequently contain five or more thick, luscious beans. Matures one to two weeks earlier than Burpee's Bush Lima and is more productive, as it continues bearing until frost.

Pkt., 10c; $\frac{1}{2}$ lb., 25c; 1 lb., 45c; 5 lbs., \$2.00; 15 lbs., \$5.25.

Burpee's Kidney Wax. Plant is robust in growth and produces large crops of long, stringless, fleshy and brittle pods, which are somewhat flattened in form, lemon-yellow in color and of superior quality. Foliage and pods are remarkably free from rust.

Pkt., 10c; $\frac{1}{2}$ lb., 30c; 1 lb., 50c; 5 lbs., \$2.25.

Ohio Wax Pole. Large podded variety, usually 7 inches or more in length, and are so fleshy that they are frequently greater in width than breadth. They are solidly meaty, entirely stringless, and when cooked, deliciously rich and buttery. It commences to bear when scarcely higher than the bush variety, and keeps on producing until killed by frost. It is a rampant grower, one plant filling a pole with a mass of vines densely loaded with luscious beans, almost a solid mass of pods from bottom to top. The finest Wax Pole Bean. Pkt., 10c; $\frac{1}{2}$ lb., 30c; 1 lb., 50c; 5 lbs., \$2.25.

All packets and half pounds of Beans are sent postpaid, for larger quantities by mail, see "Postage" page 11.

NOVELTIES AND SPECIALTIES—Continued

BEETS

(Rothe Rube, Ger.)

McCullough's
"Norwood" Beet

A superb early maincrop Beet. Both for market and the home garden. The roots are of neat turnip shape, growing three or four inches in diameter, deep through, smooth and entirely free from small rootlets. Flesh deep blood-red, tender, and of rich flavor. The roots can be used early in the season when only partially grown, being ready for use almost as quickly as the Extra Early sorts and of better quality. It retains its choice quality and freedom from woodiness until the beets have reached their full size. Foliage is small, of a rich bronze color. Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb. 60c; per lb., \$2.00.

Swiss Chard, or Spinach Beet

Giant Lucullus. All of our customers who have grown this variety speak loudly in its praise. The plants grow from 2 to 2 $\frac{1}{2}$ feet tall and when fully developed produce about one dozen pale green curly leaves, which are carried on broad, thick midribs about

12 inches long. This variety is usually prepared for the table in the same manner as Spinach; the midrib is prepared like Asparagus, with drawn butter. Seed planted early in the Spring will quickly produce plants from which cuttings may be made all Summer, as you can cut right down to the ground, and new shoots will soon spring up and make a fast growth, while those plants which are allowed to grow on without any cutting will make large curly leaves with thick, light-colored midribs, which are delicious when cooked and served like Asparagus. Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 60c; per lb., \$2.00.

CELERY

(Sellerie, Ger.)

McCullough's Paris
Golden Yellow

Extra selected stock, unsurpassed. We have been furnishing our customers this strain of Paris Golden Yellow Celery for a number of years and it is pronounced by one and all the finest strain they have ever seen. The color is a rich golden yellow, stalks are very solid and tender, flavor is delicious, has large heart, grows medium height, and is without doubt the best early Celery on the market. The demand for our strain of this variety is increasing every year and we advise our customers to order early, as supply is limited.

We are confident you can not obtain anywhere a strain of Paris Golden Yellow Celery superior to our own particular selected stock. Pkt., 10c; oz., \$1.25.

CABBAGE (Kohl, Ger.)McCullough's Early
Louisville Drumhead

Originated by us many years ago, and is still the peer of all other varieties for early market purposes throughout this section. It is highly esteemed by the market gardeners, and it will stand hot weather better than any other sort; will stand the entire summer without bursting; in fact, we produced heads that weighed 18 pounds on September 1, having been planted with Jersey Wakefield, which was long unfit for use. Our Louisville forms large, solid heads, and is the earliest large-heading variety, while, if planted later, it makes excellent heads for winter. The quality is very fine, and is remarkable for its certainty to head. For winter use, sow later in the season. We have received expressions of unanimous praise from all parts of the country, and could fill many pages of our catalogue with testimonials. ... Pkt., 5c; oz., 40c; $\frac{1}{4}$ lb., \$1.50.

NOVELTIES AND SPECIALTIES—Continued

CAULIFLOWER (Blumenkohl, Ger.)

McCullough's Earliest
Dwarf Erfurt

Is beyond question the best for all purposes. It heads where others fail. Year after year this has become more popular, until leading market gardeners now grow it entirely, having discarded all the older varieties, as they find our strain of Erfurt to be the surest-heading. On account of its dwarf and compact habit, the plants may be set out 20 to 22 inches each way, so that from 12,000 to 14,000 can be planted on an acre. For pickling it is the standard variety. The compact and solid texture of the snow-white heads, combined with delicious flavor, surpass all others.....Pkt., 25c; ¼ oz., \$1.25.

Pe-tsai, Chinese or Celery Cabbage.

The Seed we offer is the true variety which has been grown in China for many years. This new vegetable is a species of Cabbage with a fine delicate flavor and resembles a stalk of Celery more than a head of Cabbage. It is as tender as Head Lettuce and is rapidly coming into general use for salads or cold slaw. Can also be eaten raw or may be cooked. The many uses to which it can be put as a "high toned vegetable" is bound to make it popular with the public as well as the market gardener. This delicious vegetable may be grown in any soil that will grow good Cabbage, but to attain perfection should be grown in cool, moist and very rich soil. Seed should be sown about the first of August in rows 24 to 36 inches apart, thinning to 15 inches apart in the rows.

If weather is warm at time of heading, tie up like Endive and keep well watered. As this variety will not stand frost it should be stored in a cool, frost-proof cellar. Early sowing is not recommended...Pkt., 10c; oz., 50c; ¼ lb., \$1.75.

C O R N , Sweet or Sugar (Welschkorn, Ger.)

McCULLOUGH'S CINCINNATI MARKET

The illustration represents a matured ear of our Cincinnati Market or Club Zig-Zag Evergreen Corn. Our patrons can readily infer how juicy this corn is when the Kernels are filled with milk.

McCullough's Cincinnati Market
or Club Zig-Zag Evergreen.

This variety, which we offered for the first time last season, is a distinct

variety and in a class by itself. Originated in this market and has been the best seller on the Cincinnati market for

several years, but so closely has the seed been guarded, that until last year, we had been unable to obtain any.

A late Zig-Zag Evergreen Corn, the ear ordinarily being twice the size in diameter of any other sort, while in sweetness and flavor it cannot be excelled.

Pkt., 10c; ½ lb., 25c; 1 lb., 45c; 5 lbs., \$2.00; 15 lbs., \$5.50.

NOVELTIES AND SPECIALTIES—Continued

CUCUMBER

(Gurken, Ger.)

McCullough's
Special

An excellent Cucumber for both forcing and outdoor use. The fruits grow 11 to 15 inches long, slim, slightly pointed, a dark glossy green color, which they keep until ripe. In quality it is very tender, brittle and of fine flavor. A vigorous grower, withstanding blight better than other long sorts.

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; per lb., \$1.50.

LETTUCE (Gartensalat, Ger.)

McCullough's
Selected Nonpareil

The finest home garden and market variety. Its beautiful yellowish-green color, crimped curled and well formed heads, tender quality and sweet flavor, place it at the head of the list for the market gardener or for family use. It withstands the heat of summer and retains its sweetness for a long time.

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c.

MUSKMELONS (Zucker Melone, Ger.)

Delicious Gold Lined. It is the result of several years' careful selection by a progressive grower. The shape of this

Melon is ideal, being slightly oval, and it is heavily netted over the entire surface.

The flesh is as thick at the bloom end as elsewhere, and the flesh of the entire Melon is noticeably thick, fine grained and sweet. The color is green with a gold margin next to the seed cavity. It is attractive, both as to outward appearance and when cut.

Pkt., 5c;
oz., 20c;
 $\frac{1}{4}$ lb., 60c.

Honey Dew. All the claims of the introducer of this delicious Melon have been fully realized. Average size is about six to eight inches in diameter and they weigh five to six pounds. Skin smooth with little netting and of creamy yellow color when ripe. Flesh is green, thick, melting, fine grained and can be eaten almost to the rind. Not easily bruised and stands shipping long distances. Easily pulled when ripe and will keep for several weeks. Matures about ten days later than the Rocky Ford. Pkt., 10c; oz., 30c; $\frac{1}{4}$ lb., \$1.00.

PEAS (Erbsen, Ger.)

Market Surprise. This new variety is another addition to the extra early type of Peas, but pods are larger and contain 6 to 8 large peas of excellent quality. The seed resembles the "Maud S" in color while it is not quite as smooth nor yet is it a wrinkled Pea. We urge all growers to give this variety a trial and as the supply is limited we can only offer in small quantities this season.

Pkt., 10c; $\frac{1}{2}$ lb., 25c; 1 lb., 40c; 5 lbs., \$1.75; 15 lbs., \$4.50.

NOVELTIES AND SPECIALTIES—Continued.

R A D I S H (Rettig, Ger.)

We were the introducers of this remarkable radish, which has proven one of the best long Radishes ever offered.

It is largely grown by the Cincinnati

market gardeners. The tops are so small that the radishes may stand touching each other in the rows. They grow perfectly straight and smooth and from six to seven inches in length. Their attractive, glossy, scarlet skin is very thin and the flesh crisp and brittle, and of delightful pungent flavor. It is the finest Long Red Radish for forcing and outsells any other that is put in competition with it on the market. Being long standing, it is also an extra fine sort for the home garden, entirely exempt from any tendency to become pithy or hollow.

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; per lb., \$1.75.

SPINACH (Spinat, Ger.)

McCullough's
Norwood Savoy

This variety is one of the most important for market gardeners, also one of the best for the kitchen garden. A quick-growing, round-seeded variety, producing in abundance, thick, dark green, slightly crumpled leaves, in large demand for either Spring or Fall sowing.

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c.

New Zealand. This distinct type of Spinach yields an abundance of the tenderer Spinach during the hottest months of the year, or in dry, arid localities where the ordinary spinach runs to seed. The plants grow in branching form with thick, succulent leaves. The seed is sown where the plants are to stand, in May, or earlier in a hotbed and transplanted, and the plants will continue to yield a supply of good leaves of excellent quality during the entire Summer, requiring scarcely any attention.....Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c.

TOMATO

(Liebesapfel, Ger.)

McCullough's
Norwood

The plants are strong and vigorous, bearing

an abundance of large, smooth fruit of a beautiful purplish crimson color, which is produced in clusters of four to six; is large, of perfect shape, and retains its size until late in the season. The flesh is remarkably thick, firm and solid and of the finest quality, with few seeds.

Pkt., 5c; oz., 30c; $\frac{1}{4}$ lb., \$1.00.

NOVELTIES AND SPECIALTIES—Continued

McCULLOUGH'S SELECT SWEET PEA NOVELTIES

IN presenting the following varieties of Spencer Sweet Peas we wish to emphasize the fact that these are the "Early Flowering Spencers," and are separate and distinct from the late or standard Spencer types, as they continue blooming two to three weeks longer than the standard Spencer varieties.

Be sure to give these varieties a trial as the types are fixed and customers may rely on the descriptions.

Early Meadow Lark. We consider ourselves fortunate in being able to offer this rich cream variety which goes so well with many of our Early Flowering Spencer introductions. The flower is quite similar to the beautiful late flowering variety "Dobbie's Cream." Many of the flowers are duplexed and are well waved and borne in fours and threes very floriferously on strong vines.

Per pkt. of 15 seeds, 25c.

Early Warbler. We consider that in Early Warbler we have a gem for the Florists and Amateur growers. The color is rich mauve purple somewhat similar to the late flowering variety Tennant Spencer. The flowers are extra large and beautiful in form. Like all of our Early Spencers this variety carries a wealth of blossom on vigorous vines. We are confident ourselves that this color will be highly valued by Florists and Amateurs alike.

Per pkt. of 25 seeds, 25c.

Early Liberty. A rich, deep sunproof crimson. The color is very similar to that of the late flowering varieties "Sunproof Crimson," "Maud Holmes" and "King Edward Spencer." It is richer than the Early Australian varieties "Ruby" and "Emperor." This is one of the colors so much in demand by Florists. The flowers are large, well waved and borne in fours and threes. The vines are vigorous and floriferous.

Per pkt. of 15 seeds, 25c.

Early Songster. We believe we have a most excellent and attractive variety in "Early Songster."

Its lavender color is similar to the late flowering variety "Masterpiece" having much less of the mauve than found in the Late Flowering variety "Asta Ohn." The vines are floriferous and the flowers very large and nicely waved. A most pleasing and attractive flower.

Per pkt. of 15 seeds, 25c.

Early Henrietta. The color of this charming variety is beautiful clear light rose pink on a cream ground. The great attractive beauty of the flower, however, is its enormous size and frilled appearance, owing to the extent of the duplexing. Many visitors have remarked that the flowers were more like Pink Roses than Sweet Peas. A few sprays together look like a bouquet.

For dainty table decorations, corsage bouquets or exhibition it will be hard to beat "Henrietta." Per pkt. of 25 seeds, 25c.

Early Blanche Ferry. This is of the true Giant Spencer type and the flower is similar in color to the popular Blanche Ferry. The standard is bright rose, the wings being pinkish or bluish-white. Vines are strong and vigorous, bearing large, well waved flowers in threes and fours.

Pkt., 10c; ½ oz., 40c; oz., 75c.

Early Mrs. A. A. Skaach. Those who admire a shell pink color in flowers will be well pleased with this variety, as the large handsomely formed and nicely waved flowers of true Spencer type are borne on strong vines, generally in fours.

Pkt., 10c; ½ oz., 40c; oz., 75c.

EARLY
MEADOW LARK

See pages 78-79-80
for general list of
SWEET PEAS.

Founded 1838
Established 80 Years

McCullough's Selected

VEGETABLE SEEDS for 1918

Our policy adopted many years ago of carefully eliminating all undesirable varieties of GARDEN SEEDS has been an important factor in maintaining our high standard of quality for over three quarters of a century.

TRADE MARKS REGISTERED, MCCULLOUGH'S SEEDS, XXXX, BUCKEYE, SUBURBAN LAWN GRASS, CENTRAL PARK LAWN GRASS.

POSTAGE When ordering **BEANS, CORN OR PEAS** to be forwarded by mail be sure to add 6c per pound for **POSTAGE** in first and second zones. For third zone add 7c per pound; for all other zones add extra postage in proportion. See postal rates, second page of cover. Packets and half pounds of **BEANS, CORN and PEAS** and all other **VEGETABLE** seeds offered in **PACKETS, OUNCES, QUARTER POUNDS** and **POUNDS** are sent postpaid at prices quoted, except where otherwise noted.

ARTICHOKE (Artischoke, Ger.)

THE Globe Artichoke is cultivated for its flowerheads, which are cooked like Asparagus. Plants set in any good soil, with slight covering in winter, will remain in bearing several years. Seeds may be sown indoors and plants potted same as the Tomato, and set out in May, or can be sown in hills outside, and thinned out to one plant in hill.

Large Green Globe.....Pkt., 5c; oz., 40c.

ASPARAGUS SEED (Spargel, Ger.)

One ounce will produce about 400 plants.

ANY good loamy, not too weedy, garden land is good for growing the plants. Sow in rows 12 to 15 inches apart, as early in spring as the ground is in fit condition and give good cultivation; also thin the plants to stand 2 or 3 inches apart. Deep, warm, rich, loamy soil, deeply and thoroughly stirred, is required for permanent bed. Use manure and fertilizers freely. Make furrows 4 or 5 feet apart and 6 to 8 inches deep. Set the one or two-year-old seedlings 2 feet apart in the bottom of furrows and cover lightly at first. Gradually fill in with soil and old compost. In early spring fork or plow the bed shallow and carefully, or pulverize the surface by harrowing. Give clean cultivation until fall; then cover with manure or compost. Second season after planting, hill up the rows, especially for blanched "grass," and cut sparingly for use. After that the bed will give full crops.

Palmetto. An early, prolific and very desirable variety.

Pkt., 5c; oz., 10c; ¼ lb., 25c.

Columbian Mammoth White. Large, white stalks.

Pkt., 5c; oz., 10c; ¼ lb., 25c.

Conover's Colossal. Large and productive.....Pkt., 5c; oz., 10c; ¼ lb., 25c.

Argenteuil. This variety is largely grown in France for the Paris market. The stalks grow to a mammoth size.

Pkt., 5c; oz., 10c; ¼ lb., 25c.

Barr's Mammoth. A fine large-stemmed green variety.....Pkt., 5c; oz., 10c; ¼ lb., 25c.

ASPARAGUS ROOTS (See Plants and Roots, end of the Vegetable Seeds.)

"UNITED STATES FOOD ADMINISTRATION LICENSE NUMBER G-18737."

BEANS Dwarf or Bush

(Krup Bohnen, Ger.)

One pound will plant 50 feet of drill—60 to 120 pounds per acre.

WHILE the Bean is a very tender plant and, therefore, should not be planted until there is no more danger of frost; still it often pays to take some risks. Plant in a warm, loamy soil at the beginning of warm weather in Spring and at intervals for succession until August. Rows may be made 2 feet apart and the beans planted 2 inches deep and a few inches apart in the rows, or 3 to 4 beans in hills 6 to 8 inches apart.

Cultivate and hoe frequently, always, however, when the vines are perfectly dry; working them when wet with rain or dew will cause them to rust and injure the crop. In hoeing, draw the soil up towards the rows or plants. For string Beans gather the pods clean as soon as fit for use. The plants will remain all the longer in bearing.

All varieties of Beans, pkt. 10c. All packets and half pounds of Beans are sent postpaid; for larger quantities by mail, see "Postage" page 11.

Green-Podded Varieties

McCullough's Norwood Stringless Green Pod.

This variety is superior to any other green-podded bean grown. It is positively stringless, and ripens a week earlier than the Valentine. The pods which are produced in abundance on the vines are long, straight, round, deeply saddle-backed, brittle, tender and of real good flavor. Has a much larger pod than the Valentine.

Pkt., 10c; ½ lb., 25c; 1 lb., 40c; 5 lb., \$1.85; 15 lbs., \$5.25.

McCullough's Improved Round Pod Red Valentine.

Our stock of this is extra choice. This variety is usually ready to pick in thirty-four days after planting. The pods are very thick and fleshy, of finest quality and unequalled in uniformity of ripening, which latter fact, combined with its earliness, makes it one of the most profitable sorts for the gardener.

Pkt., 10c; ½ lb., 25c; 1 lb., 40c; 5 lb., \$1.85; 15 lbs., \$5.25.

Black Valentine. This variety is very productive. Pods are extremely long, round and straight, and are quite attractive in appearance. The quality is also good, pods being decidedly tender. Suitable for both early and late planting, being extremely hardy. It will withstand early and late frosts.

Pkt., 10c; ½ lb., 25c; 1 lb., 40c; 5 lb., \$1.85; 15 lbs., \$5.25.

Prices Subject to Market Changes.

BEANS

Dwarf or Bush Green Podded Varieties, Continued

All varieties of Beans, pkt. 10c. All packets and half pounds of Beans are sent postpaid, for larger quantities by mail, see "Postage" page 11.

Bountiful. An improved Long Yellow Six Weeks. Being earlier, harder and producing better and larger pods and more of them. Pods grow to large size, are broad and fleshy; absolutely stringless, tender, of finest flavor and good appearance.
Pkt. 10c; ½ lb. 25c; 1 lb., 45c; 5 lbs., \$1.85; 15 lbs., \$5.25

Burpee's Stringless Green Pod. This variety is stringless and remains tender and crisp. The pods are pale green, long and straight, perfectly round and meaty, maturing with the earliest of the green pod varieties.
Pkt. 10c; ½ lb., 25c; 1 lb., 45c; 5 lbs., 1.85; 15 lbs., \$5.25.

Fordhook Favorite or White Seeded Stringless. This is one of the best green-podded bush beans yet produced. Pods measure from five to six and one-half inches long; one-half inch wide and thick, so full and fleshy that they are perfectly round. Pods are light green, brittle, juicy, free from tough fibre and entirely stringless at all stages of growth. Seed being white, can be used for dried beans in winter.
Pkt., 10c; ½ lb., 30c; 1 lb., 50c; 5 lbs., \$2.25.

Improved Refugee, or Thousand to One. Medium or late variety; grown for pickling.
Pkt., 10c; ½ lb., 25c; 1 lb., 45c; 5 lbs., 1.85; 15 lbs., \$5.25.

Tennessee Green Pod. A very recent introduction, very meaty flat pods of large size and good flavor. Dwarf vine with heavy foliage. It is very hardy and an excellent cropper on poor soil or hillside.
Pkt., 10c; ½ lb., 25c; 1 lb., 45c; 5 lbs., 1.85; 15 lbs., \$5.25.

DWARF SHELL BEANS

Horticultural Dwarf. Excellent quality as a shell bean either green or dry.
Pkt., 10c; ½ lb., 25c; 1 lb., 45c; 5 lbs., \$1.85; 15 lbs., \$5.25.

White Kidney, or Royal Dwarf. A superior kind for baking, and is also excellent when shelled green.
Pkt., 10c; ½ lb., 20c; 1 lb., 35c; 5 lbs., \$1.50; 15 lbs., \$4.25.

Red Kidney. Similar to White Kidney except in color.
Pkt., 10c; ½ lb., 20c; 1 lb., 35c; 5 lbs., \$1.50; 15 lbs., \$4.25.

White Marrowfat. Grown for sale as a dry bean for winter use; excellent shelled, either green or dry.
Pkt., 10c; ½ lb., 20c; 1 lb., 35c; 5 lbs., \$1.50; 15 lbs., \$4.25.

Mexican or Prolific Tree. Grows 18 inches high, branching like a tree, bearing its pods so high that they do not touch the ground.
Pkt., 10c; ½ lb., 20c; 1 lb., 35c; 5 lbs., \$1.50; 15 lbs., \$4.25.

Navy. The old standard sort for winter use.
Pkt., 10c; ½ lb., 20c; 1 lb., 35c; 5 lbs., \$1.50; 15 lbs., \$4.25.

BEANS

Dwarf or Bush Wax or Yellow-Podded Varieties

All varieties of Beans, pkt. 10c. All packets and half pounds of Beans are sent postpaid, for larger quantities by mail see "Postage" page 11.

Burpee's Kidney Wax. Plant is robust in growth and produces large crops of long, stringless, fleshy and brittle pods, which are somewhat flattened in form, lemon-yellow in color and of superior quality. Foliage and pods are remarkably free from rust.
Pkt., 10c; ½ lb., 30c; 1 lb., 50c; 5 lbs., \$2.25.

Round Pod Kidney Wax. The plant grows tall, strong and sturdy, with long, round, handsome, stringless pods of large size, very solid and full of meat, crisp, brittle and free from rust. The earliest and best Wax Bean for either the market or home garden. We recommend it very highly.
Pkt., 10c; ½ lb., 30c; 1 lb., 50c; 5 lbs., \$2.25.

Golden Wax, Improved. One of the best strains of Golden Wax. Prolific, of best quality; pods long, straight, thick and vines very erect.
Pkt., 10c; ½ lb., 25c; 1 lb., 45c; 5 lbs., \$1.85; 15 lbs., \$5.25.

Davis' White Kidney Wax. Very productive, white-seeded, rustless string or snap variety; long, flat pods, which are very tender while young.
Pkt., 5c; ½ lb., 25c; 1 lb., 45c; 5 lbs., \$1.85; 15 lbs., \$5.25.

Wardwell's Kidney Wax. Almost entirely free from rust and spots. The pods are long and showy, very tender, stringless and of excellent quality.
Pkt., 10c; ½ lb., 30c; 1 lb., 50c; 5 lbs., \$2.25.

Curries Rustproof Wax. This variety has proven to be practically rust-proof, in addition to which is unusually prolific, bearing large crops of long, flat, light yellow pods.
Pkt., 10c; ½ lb., 25c; 1 lb., 45c; 5 lbs., \$1.85; 15 lbs., \$5.25.

Black Wax Improved. Very early and prolific; pods round, meaty, brittle and stringless; deep golden yellow and excellent flavor. Bush is of dwarf growth.
Pkt., 10c; ½ lb., 25c; 1 lb., 45c; 5 lbs., \$1.85; 15 lbs., \$5.25.

Black Wax Pencil Pod. Plants grow about fifteen inches high and are extremely productive. Magnificent straight pods six to seven inches long, light golden yellow in color, beautifully rounded, meaty and deeply saddle-backed; flesh brittle, solid and entirely stringless, of fine mild flavor.
Pkt., 10c; ½ lb., 25c; 1 lb., 45c; 5 lbs., \$1.85; 15 lbs., \$5.25.

Valentine Wax. We consider this variety the earliest Wax Bean in cultivation. Plants are strong and vigorous, pods are round and very meaty.
Pkt., 10c; ½ lb., 25c; 1 lb., 45c; 5 lbs., \$1.85; 15 lbs., \$5.25.

Prices subject to Change Without Notice.

BEANS—Continued

Dwarf or Bush Lima

THE Dwarf Lima class can not be recommended too highly. The Beans can be grown and gathered much more easily than the Pole Limas as the plants require no support. They can also be grown closer together than those of any Pole variety. Dwarf Limas are fully equal in quality to Pole Limas and as a rule are earlier maturing.

Limas require a longer season for maturing than other garden Beans. Do not plant till the ground is dry, weather warm and danger of frost is over. If possible, select rich, light soil. Plant in drills two to three feet apart, dropping the Beans three to four inches apart and covering one and one-half to two inches deep. If planted in hills, make the hills two to three feet apart one way and two to two and one-half feet the other and plant four to six beans in a hill. Hoe often, but only when the leaves are dry.

All varieties of Beans, pkt. 10c.

All packets and half pounds of Beans are sent postpaid; for larger quantities by mail see "Postage" page 11.

Wilson's Improved Bush Lima. We consider this variety the best Bush Lima Bean in cultivation. Of strong, upright growth, producing large pods which frequently contain five or more thick, luscious beans. Matures one to two weeks earlier than Burpee's Bush Lima and is more productive, as it continues bearing until frost.

Pkt., 10c; $\frac{1}{2}$ lb., 25c; 1 lb., 45c; 5 lbs., \$2.00; 15 lbs., \$5.25.

Fordhook Bush Lima. This is one of the best Bush Lima Beans in cultivation. It has a distinct upright vigorous growth; the pods, which are borne in clusters well above the ground, frequently contain as many as 5 thick luscious beans. It matures very early and continues in bearing till frost. This is so far ahead of the old strain of Burpee's Bush Lima, that it should be used instead; the bean is thicker, sweeter and earlier, being also more prolific.

Pkt., 10c; $\frac{1}{2}$ lb., 25c; 1 lb., 45c; 5 lbs., \$2.00; 15 lbs., \$5.25.

Burpee's Improved Bush Lima. Pods and beans are both larger and thicker than Burpee's Bush Lima, and fully eight days earlier. Plant is a vigorous grower with heavy foliage. Even when of full size the enormous beans are of the most luscious flavor.

Pkt., 10c; $\frac{1}{2}$ lb., 25c; 1 lb., 45c; 5 lbs., \$2.00; 15 lbs., \$5.25.

Burpee's Bush Lima. This is the true bush form of the old large Lima Pole Bean. It grows vigorously to a height of 18 to 20 inches, forming a circular bush 2 or 2 $\frac{1}{2}$ feet in diameter, requiring no poles or stakes, yielding from 50 to 100 fine pods, similar to those grown on the large white Lima Bean. Pkt., 10c; $\frac{1}{2}$ lb., 25c; 1 lb., 45c; 5 lbs., \$2.00; 15 lbs., \$5.25.

Henderson's Bush Lima. For convenience and practical use in the home garden, it is a really good thing. It grows without the aid of poles, in compact bush form, about 18 inches high.

Pkt., 10c; $\frac{1}{2}$ lb., 20c; 1 lb., 35c; 5 lbs., \$1.60; 15 lbs., \$4.50.

BEANS—Continued

Pole or Running Varieties

All varieties of Beans, pkt. 10c.

All packets and half pounds of Beans are sent postpaid; for larger quantities by mail, see "Postage" page 11.

THE Pole or Running varieties are tender and should be sown two weeks later than Bush Beans. They succeed best in sandy loam, which should be liberally enriched with manure. Form hills 3 to 4 feet apart; plant 6 to 10 beans in a hill, 2 inches deep, leaving space in center for the pole. When well started, they should be thinned to from 4 to 6 plants in a hill. One quart will make 100 to 200 hills, according to size of the beans.

Kentucky Wonder, or Old Homestead (Green Pod). An old favorite, with long, fleshy, deeply saddle-backed pods. Very prolific, producing an abundance of fine, stringless, crisp beans until late in the season. One of the best green pole beans, producing pods in clusters, ready for use about 85 days from time of planting. Pkt., 10c; $\frac{1}{2}$ lb., 25c; 1 lb., 45c; 5 lbs., \$1.85; 15 lbs., \$5.25.

White Kentucky Wonder or Burger's Stringless. This desirable variety is earlier and consequently covers a longer season of productiveness than the Brown Seeded Kentucky Wonder. Pods are borne in clusters and average six to eight inches in length, entirely stringless, uniformly straight, of a dark green color and of mild, sweet flavor. The dry beans are pure white. Pkt., 10c; $\frac{1}{2}$ lb., 25c; 1 lb., 45c; 5 lbs., \$1.85; 15 lbs., \$5.25.

Cut Short, or Corn Hill. One of the best varieties of Corn Beans in use. Can be used as a snap or shell bean. Considered the best Corn Bean for this section. Pkt. 10c; $\frac{1}{2}$ lb., 25c; 1 lb., 45c; 5 lbs., \$1.85; 15 lbs., \$5.25.

Horticultural (Wren's Egg, or Speckled Cranberry). This old favorite is an excellent Corn Bean, productive and tender. Pkt., 10c; $\frac{1}{2}$ lb., 25c; 1 lb., 45c; 5 lbs., \$1.85; 15 lbs., \$5.25.

Lazy Wife. An excellent late green podded pole bean. Pods of medium dark green color; thick, very fleshy and entirely stringless. The pods remain green and tender until nearly ripe. Beans are white, and excellent as shell beans for winter use. Pkt., 10c; $\frac{1}{2}$ lb., 30c; 1 lb., 50c; 5 lbs., \$2.25.

White Creaseback. A good grower and very productive. Pods 5 to 6 inches long, perfectly round, with a crease in the back. The pods are stringless, fleshy and of good quality. Pkt., 10c; $\frac{1}{2}$ lb., 25c; 1 lb., 45c; 5 lbs., \$1.85; 15 lbs., \$5.25.

White Sickle. Somewhat like the Kentucky Wonder, but has a nice white bean when dry and makes an excellent shell bean for winter. Very popular in the South. Pkt., 10c; $\frac{1}{2}$ lb., 25c; 1 lb., 45c; 5 lbs., \$1.85; 15 lbs., \$5.25.

Scarlet Runner. An ornamental climber. Bright scarlet flowers; pods are edible when picked young. Pkt., 10c; $\frac{1}{2}$ lb., 30c; 1 lb., 50c.

Tennessee Wonder, or Egg Harbor. Large green pods, curved, double barreled, tinged with purple and wrinkled, depressed between each of the eight or nine seeds. Considered one of the largest of all cultivated beans. Pkt., 10c; $\frac{1}{2}$ lb., 30c; 1 lb., 50c; 5 lbs., \$2.25.

Ohio Wax Pole. Large podded variety, usually 7 inches or more in length, and are so fleshy that they are frequently greater in width than breadth. They are solidly meaty, entirely stringless, and when cooked, deliciously rich and buttery. It commences to bear when scarcely higher than the bush variety, and keeps on producing until killed by frost. It is a rampant grower, one plant filling a pole with a mass of vines densely loaded with luscious beans, almost a solid mass of pods from bottom to top. The finest Wax Pole Bean. Pkt., 10c; $\frac{1}{2}$ lb., 30c; 1 lb., 50c; 5 lbs., \$2.25.

Golden Cluster Wax. The pods are from 6 to 8 inches long, stringless, very tender and of delicate flavor. Pkt., 10c; $\frac{1}{2}$ lb., 30c; 1 lb., 50c; 5 lbs., \$2.25.

BEANS—Continued

POLE LIMA

All varieties of Beans, pkt. 10c.

All packets and half pounds of Beans are sent postpaid; for larger quantities by mail, see "Postage" page 11.

Of all the Pole Beans, Limas are considered to have the greatest economic value. The culture is the same as for other Pole Beans except that being more tender, the seed is usually planted one to two weeks later. Plant in hills about three feet apart, and one to two inches deep, using five or six seeds to each hill, and set a pole firmly in the center. Manure liberally in the hill with well-decomposed fertilizer. Thin the plants, leaving three in each hill. Many cultivators consider it best, in planting Limas and other flat beans, to place the eye down, claiming in this way that they will germinate more quickly. Lima Beans for early use may be grown in frames and transplanted.

A choice selection of the Large Lima. It produces pods and beans of large size and in great abundance.

This variety is without doubt the best for private gardens. The quality is much better than any other variety, the Beans cooking rich and meaty.

Pkt., 10c; ½ lb., 25c; 1 lb., 45c; 5 lbs., \$2.00; 15 lbs., \$5.25.

Early Leviathan Lima. The earliest variety of Pole Lima; produces pods in clusters. A good variety where the season is short.

Pkt., 10c; ½ lb., 25c; 1 lb., 45c; 5 lbs., \$2.00; 15 lbs., \$5.25.

King of the Garden Lima. A vigorous grower, bearing profusely. The beans are large and of rich flavor.

Pkt., 10c; ½ lb., 25c; 1 lb., 45c; 5 lbs., \$2.00; 15 lbs., \$5.25.

Broccoli

Seibert's Early Lima. The earliest of all the large Limas. Vine is hardy and vigorous, continues in bearing longer than any other, fine quality.

Pkt., 10c; ½ lb., 25c; 1 lb., 45c; 5 lbs., \$2.00; 15 lbs., \$5.25.

BROCCOLI (Spargel Kohl, Ger.)

Sow in beds middle of spring, transplant and cultivate the same as Cabbage.

Early Large White. Pkt., 5c; oz., 25c.

Early Purple Cape. Pkt., 5c; oz., 25c.

BRUSSELS SPROUTS

(Sprossen Kohl, Ger.)

Sow seed for plants in frames or open ground. Set plants in early spring, and for succession up to July, making rows 3 feet apart and having the plants stand 1½ to 2 feet apart in the row. Cultivate same as Cabbages.

Dwarf Improved. Pkt., 5c; oz., 25c.

B E E T

Swiss Chard or Spinach Beet. This variety of Beet does not make a large root, and is grown only for its leaves, which make splendid "greens." Can be cut close to the ground and new shoots will spring up and make a fast growth. The broad, white stalks or midribs are cooked and served like Asparagus.

Seed planted early in Spring will quickly produce plants from which cuttings can be made all summer.

Pkt., 5c; oz., 15c; ¼ lb., 50c; lb., \$1.75.

Giant Lucullus.

This is a decided improvement over the common variety.

The plants grow from 2 to 2½ feet tall and when fully developed, produce about a dozen creamy white, curled leaves, which are carried on broad thick stalks about 12 inches long. The leafy portion of the plant should be cooked like Spinach and the stalks like Asparagus.

Pkt., 5c; oz., 20c; ¼ lb., 60c; lb., \$2.00.

Brussels Sprouts

BEETS

(Rothe Rube,
Ger.).

THE soil which is best suited is that which is rather light and thoroughly enriched with manure. For an early supply sow in spring as soon as the ground becomes fit to work, in drills twelve to sixteen inches apart and one inch deep. Or seed may be sown under glass four weeks sooner, and the young seedlings transplanted to open ground, to give an extra early crop.

For main crop, sow the first week in May, and for winter use sow in June.

When the plants have attained three or four leaves, thin out so they may stand five or six inches apart. Keep free from weeds by hand-weeding or hoeing.

In October roots may be taken up and stored in the cellar or in pits outside like potatoes, care being taken that they are not bruised or injured in the process.

One ounce will sow 50 feet of drill—5 to 6 pounds for an acre.

McCullough's "Norwood"

A superb early maincrop Beet. Both for market and the home garden. The roots are of neat turnip shape, growing three or four inches in diameter, deep through, smooth and entirely free from small rootlets. Flesh deep blood-red, tender, and of rich flavor. The roots can be used early in the season when only partially grown, being ready for use almost as quickly as the Extra Early sorts and of better quality. It retains its choice quality and freedom from woodiness until the beets have reached their full size. Foliage is small, of a rich bronze color.
Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 60c; per lb., \$2.00.

Arlington. A dark-leaved, early blood variety, closely following Eclipse in maturing, but of darker color and superior quality. An excellent Beet for market gardeners.
Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 60c; per lb., \$2.00.

Bassano. (The Table Sugar Beet.) A very early flat variety, tender, juicy; flesh white and rose-colored, very sweet.
Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; per lb., \$1.75.

Columbia. One of the finest main-crop Beets. Flesh deep blood-red and of rich flavor. The roots can be used when only partially grown.
Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 60c; per lb., \$2.00.

Crimson Globe. A handsome early or main-crop variety, of medium size, almost globe shaped and entirely free from rootlets. Foliage rich bronzy purple. The flesh is blood-red, slightly zoned.
Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 60c; per lb., \$2.00.

Crosby's Improved Egyptian. An improved strain of the Egyptian Beet, especially recommended as an extra early sort. It is much thicker than the original strain.
Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; per lb., \$1.75.

Detroit. Color of skin dark blood-red; flesh bright-red, zoned with a lighter shade, very crisp, tender and sweet.
Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; per lb., \$1.75.

Early Blood. Flesh dark red, a standard round variety with small top.
Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; per lb., \$1.75.

Eclipse. One of the best early sorts, with a small tap root and small collar. Flesh dark red, zoned with a lighter shade, sweet, crisp and tender.
Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; per lb., \$1.75.

Edmand's Early. Uniform small top, bronzy red; exceedingly tender and sweet; skin blood-red; flesh dark red.
Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; per lb., \$1.75.

Egyptian Extra Early. One of the earliest, of good quality and medium size; a fine forcer, small top.
Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; per lb., \$1.75.

Fireball. This is a new and distinct extra early Turnip-rooted variety of the finest table quality. The flesh is solid, crisp, sweet, and of a brilliant fiery red color. It is perfectly globular in form with smooth skin, a tiny tap root, and very slender leaf stalks.
Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 60c; per lb., \$2.00.

Half Long Blood. One of the best for winter use. Roots are only half as long as the Long Blood, but weigh as much on account of their thickness.

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; per lb., \$1.75.

Long Dark Blood. A good late variety for fall and winter use; sweet and tender.

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; per lb., \$1.75.

Swiss Chard or Spinach Beet, See page 16.

BEETS—Cattle and Sugar SUGAR BEETS FOR STOCK

Sugar Beets are not as heavy yielders as the Mangels, but are of superior quality, containing a large amount of sugar. They are excellent for feeding cows, improving wonderfully the quantity and quality of the milk. Five to six pounds of seed required per acre.

Vilmorin's Improved. A medium sized white Sugar Beet brought by the most careful selection to the highest perfection, both in shape and color of roots. Greatly esteemed by sugar manufacturers.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 35c; per lb., \$1.00.

Lane's Imperial. One of the best for field culture; early, large and productive.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 35c; per lb., \$1.00.

Giant Half-Sugar Green Top. Longish ovoid; red skin; white flesh; crisp and fine.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 35c; per lb., \$1.00.

MANGEL-WURZELS

Fattening, breeding and milk cattle do equally well on them. About one-fourth of the daily rations should be of roots. Sow in rows 2 $\frac{1}{2}$ feet apart as soon as the ground can be thoroughly worked. Cover seed about 1 $\frac{1}{2}$ inches, making ground firm over the seed. When 4 inches high, thin to 8 inches apart. Six pounds sow one acre.

Mammoth Long Red. Roots of large size and excellent quality.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 35c; per lb., \$1.00.

Yellow Globe. Of large size and globular form; very productive.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 35c; per lb., \$1.00.

Golden Tankard. Bright yellow, large, handsome, heavy cropper, splendid quality.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 35c; per lb., \$1.00.

CABBAGE (Kohi, Ger.)

FOR plants of the earliest sorts, sow seed in January or February under glass, and prick out in flats or frames about 2 inches apart each way. Transplant to open ground as soon in Spring as the land can be properly prepared. A rich, warm, fibrous loam is best. Have the plants in the rows 20 to 24 inches apart, and rows at least 2 feet apart. Give thorough cultivation and irrigate in dry weather if practicable. Protect from the ravages of cutworm, maggot and green worm. A little nitrate of soda applied around the plant is of great benefit. For late Cabbage plants, sow seed in drills in open ground during April and May, and transplant in June and July, giving the plants more room than allowed for earliest Cabbages. Dusting with tobacco dust, insect powder, etc., or splashing with hot soapsuds, especially Fish Oil Soap solution, are good and safe remedies for some of the insect pests attacking plants of the Cabbage. **Sow one ounce for 2,000 to 2,500 plants; five ounces for one acre.**

NOTE:—McCullough's "Louisville Drumhead" Cabbage is so well known and so much sought after that many firms are offering cheap stocks. We have tested many of these and find some entirely untrue and others of inferior strains. Be sure to get our highly selected, genuine type direct from us.

McCullough's Early Louisville Drumhead Originated by us many years ago, and is still the peer of all other varieties for early market purposes throughout this section. It is highly esteemed by the market gardeners, and it will stand hot weather better than any other sort; will stand the entire summer without bursting; in fact, we produced heads that weighed 18 pounds on September 1, having been planted with Jersey Wakefield, which was long unfit for use. Our Louisville forms large, solid heads, and is the earliest large-heading variety, while, if planted later, it makes excellent heads for winter. The quality is very fine, and is remarkable for its certainty to head. For winter use, sow later in the season. We have received expressions of unanimous praise from all parts of the country, and could fill many pages of our catalogue with testimonials.....Pkt., 5c; oz., 40c; $\frac{1}{4}$ lb., \$1.50.

McCullough's Early Market A new, early, round head Cabbage. Will produce double the crop of any other early variety; always extremely solid and fine ribbed. Once known, it will hold its own with the market gardeners and home growers alike. It is exceedingly tender, fine grained, and as a cropper no earlier Cabbage will approach it. Planted side by side with Early Jersey Wakefield, under the same conditions, the Early Market produced heads of marketable size five to six days earlier and in size fully double that of the Early Jersey Wakefield; was more solid and better flavored and kept in fine condition much longer. It is very dwarf and compact, allowing of close planting. Heads fine, ball-shaped, and with few outside leaves. Size ideal for marketing. (Supply limited.)

Pkt., 10c; oz., 50c; $\frac{1}{4}$ lb., \$1.75;

Early Jersey Wakefield. This Cabbage, though introduced years ago, still holds its undisputed lead as one of the best extra early varieties in cultivation, and is largely grown as a First Early Cabbage. It is the good, old reliable; always depended upon for its uniformity in earliness and crop. Among its merits may also be mentioned its large size of head for so early a variety and the small outside foliage, allowing it to be closely planted; the heads are pyramidal in shape, having a blunted or rounded peak. We believe our selected stock has no equal.

Pkt., 5c; oz., 40c; $\frac{1}{4}$ lb., \$1.50.

Charleston, or Large Wakefield. For some years past customers have requested us to procure for them, if possible, a Cabbage which had all the characteristics of the Early Jersey Wakefield, but of greater size. The Charleston Wakefield is a larger type, which is now so fixed in its character that we can offer it with confidence to those desiring a Cabbage of this kind. This selection will average about 50 per cent larger in size than the old type of Wakefield, and is only a few days later.

Pkt., 5c; oz., 40c; $\frac{1}{4}$ lb., \$1.50.

CABBAGE—Continued

Early Winningstadt. Heads are conical in shape, but more pointed than the Jersey Wakefield and not so early. The leaves are a rich, dark, slightly glossy green and tightly folded, the heads being the hardest of any early Cabbage. Pkt., 5c; oz., 35c; $\frac{1}{4}$ lb., \$1.25.

Early Summer. A second early with large, solid, flattish heads, coming in a few days later than the Wakefield; a sure header. The plant has a peculiar bluish tinge. Pkt., 5c; oz., 35c; $\frac{1}{4}$ lb., \$1.25.

All Head, Early. The largest heading of the second early sorts. The deep, flat heads are remarkably solid and uniform in color, form and size.

Pkt., 5c; oz., 35c; $\frac{1}{4}$ lb., \$1.25.

Glory of Enkhuizen. Has become a remarkably popular early, and is regarded as amongst the most important introductions in the cabbage line for some years. It is a splendid sort for the private garden and market gardener who grows for high-class trade. It has received popular favor on account of exceptional merit, in several important points. The heads are globe-shaped, medium size and handsome dark-green color, just right for market; it is sure heading and is a splendid keeper and early. The quality is excellent, the leaves being fine ribbed.Pkt., 5c; oz., 40c; $\frac{1}{4}$ lb., \$1.50.

Early Dwarf Flat Dutch. This variety has for years been popular among growers, both for home use and market. Heads are borne on short stems and are very large, solid and nearly flat on top. One of the best second earlies as it stands a long time without bursting.

Pkt., 5c; oz., 35c; $\frac{1}{4}$ lb., \$1.25.

Succession. A good second early, round-head sort. Heads are solid, keep well and are of splendid quality; the color is a beautiful light green.

Pkt., 5c; oz., 35c; $\frac{1}{4}$ lb., \$1.25.

All-Seasons. (Vandergaw). An early Drumhead Cabbage, yielding large, hard, solid and slightly flattened heads. As good for Autumn or Winter as for early Summer.

Pkt., 5c; oz., 35c; $\frac{1}{4}$ lb., \$1.25.

Copenhagen Market. It is the earliest large, round headed sort. The ripening is early and uniform, maturing at one time and almost with Early Jersey Wakefield. Considering its early season, the heads are remarkably large. One of its chief features is compactness; its leaves, which are light green, are round, dish-shape and fold tightly together in remarkably compact and solid form; it is so solid that many more plants can be grown on an acre than is possible with most sorts. It has few outer leaves, which permits close planting, and it grows close to the ground on a short stem.Pkt., 10c; oz., 50c; $\frac{1}{4}$ lb., \$1.75.

Danish Ballhead. (Danish Grown). Heads of good marketable size, averaging about 8 pounds, nearly round, solid and superior quality. The strong growth of this variety enables it to withstand dry weather well. As a keeper it excels all others, the heads taken out in the spring being in every way in as good condition as when stored. .Pkt., 5c; oz., 40c; $\frac{1}{4}$ lb., \$1.50.

Danish "Roundhead." It is slightly larger and produces more weight to the acre than Ballhead. The foliage is rather lighter in color; the handsome hard heads are beautifully white when trimmed. The heads are produced about ten days earlier, and while perfectly globular or round in form are not quite so deep through; that is, not so elongated or balloon-shaped as the Ballhead. It is shorter stemmed than the Short-Stemmed Ballhead, which is sometimes sold as Danish Roundhead. The magnificent hard heads are splendid keepers and bring the highest prices on market in winter.

Pkt., 5c; oz., 40c; $\frac{1}{4}$ lb., \$1.50.

Large Late Drumhead. A favorite winter variety. The heads grow to very large size and heavy weight. They are solid, of good quality and texture, and have few loose leaves.Pkt., 5c; oz., 35c; $\frac{1}{4}$ lb., \$1.25.

Surehead. This is a good strain of late Flat Dutch, having great reliability for heading. The heads grow large and are of good texture. It is also a good keeping variety.Pkt., 5c; oz., 35c; $\frac{1}{4}$ lb., \$1.25.

Autumn King. A fine strain of late Cabbage. It produces regular, even heads of enormous size, with few outer leaves.Pkt., 5c; oz., 35c; $\frac{1}{4}$ lb., \$1.25.

McCullough's Premium Late Flat Dutch

A variety for winter market; has no superior. Heads large, round, solid, broad and flat on top. They open white and crisp, are tender and well-flavored. The best variety for keeping. Our stock has been carefully selected for several years. No better strain on the market.

Pkt., 5c; oz., 35c; $\frac{1}{4}$ lb., \$1.25.

CABBAGE—Continued

SAVOY CABBAGE

THEY are particularly adapted to private use, where quality rather than quantity is desired. Grown in fall and allowed to be touched by frost, it is one of the most delicious of all vegetables.

Early Dwarf Ulm Savoy. One of the finest flavored sorts. Heads solid and with few outer leaves.

Pkt., 5c; oz., 40c; $\frac{1}{4}$ lb., \$1.50.

American Drumhead Savoy. Heads large and very finely curled; short stalk and compact grower; an excellent keeper. Pkt., 5c; oz., 40c; $\frac{1}{4}$ lb., \$1.50.

RED CABBAGE

Early Red. Extremely early and valuable for pickling. Pkt., 5c; oz., 40c; $\frac{1}{4}$ lb., \$1.50.

Late Giant Red. A large heading, late variety, fine for pickling. Pkt., 5c; oz., 40c; $\frac{1}{4}$ lb., \$1.50.

Mammoth Rock Red. The largest and most solid of the red varieties; a sure heading sort and tender. Pkt., 5c; oz., 40c; $\frac{1}{4}$ lb., \$1.50.

PE-TSAI, CHINESE OR CELERY CABBAGE

THE Seed we offer is the true variety which has been grown in China for many years.

This new vegetable is a species of Cabbage with a fine delicate flavor and resembles a stalk of Celery more than a head of Cabbage. It is as tender as Head Lettuce and is rapidly coming into general use for salads or cold slaw. Can also be eaten raw or may be cooked. The many uses to which it can be put as a "high toned vegetable" is bound to make it popular with the public as well as the market gardener.

This delicious vegetable may be grown in any soil that will grow good Cabbage, but to attain perfection should be grown in cool, moist and very rich soil.

Seed should be sown about the first of August in rows 24 to 36 inches apart, thinning to 15 inches apart in the rows.

If weather is warm at time of heading tie up like Endive and keep well watered. As this variety will not stand frost it should be stored in a cool, frost-proof cellar. Early sowing is not recommended. Pkt., 10c; oz., 50c; $\frac{1}{4}$ lb., \$1.75.

CAULIFLOWER (Blumenkohl, Ger.)

FOR early use, sow in hotbeds in January and February. When plants are large enough, transplant three inches apart in boxes or other hotbeds until time to plant out. If hardened off they are seldom injured by planting out as early as the ground can be worked, 2 $\frac{1}{2}$ feet apart each way. When practicable, seed may be sown in rich soil from the middle of September to middle of October, and transplanted in frames; protect during severe weather and give light and air on mild days. The early varieties should be brought to maturity before summer heat sets in. The late sorts mature in the autumn and are cultivated same as winter Cabbages.

One ounce of seed will produce about 3,000 plants.

Is beyond question the best for all purposes. It heads where others fail. Year after year this has become more popular, until leading market gardeners now grow it entirely, having discarded all the older varieties, as they find our strain of Erfurt to be the surest-heading. On account of its dwarf and compact habit, the plants may be set out 20 to 22 inches each way, so that from 12,000 to 14,000 can be planted on an acre. For pickling it is the standard variety. The compact and solid texture of the snow-white heads, combined with delicious flavor, surpass all others.

Pkt., 25c; $\frac{1}{4}$ oz., \$1.25.

Early Snowball. (True.) An extremely early dwarf variety; producing magnificent white heads, of fine quality. Well adapted to hot-bed culture. Pkt., 20c; $\frac{1}{4}$ oz., 90c; oz., \$3.00.

Danish Giant. A large heavy sort, maturing soon after Dwarf Erfurt. It is without exception the best and surest heading of all for summer use. Pkt., 20c; $\frac{1}{4}$ oz., 90c.

Early Paris. Heads large, white, compact and solid; tender and delicious. Pkt., 5c; $\frac{1}{4}$ oz., 20c; oz., 60c.

Lenormand's. A large, late short-stemmed variety, with well-formed white heads. Pkt., 5c; $\frac{1}{4}$ oz., 20c; oz., 60c.

Veitch's Autumn Giant. One of the finest late varieties, of robust habit, heads large, compact and thoroughly protected by leaves. Pkt., 5c; $\frac{1}{4}$ oz., 20c. Special price to market gardeners.

CARROTS

(Mohre,
Ger.)

A Light sandy loam, well-tilled and manured the previous year, best suits the Carrot. For early crop sow as early as the ground can be worked, in drills 10 inches apart, and thin, 5 inches in the rows. The Early Market, owing to its extreme earliness, is used for hotbed culture. The late sorts, long and half-long varieties (main crop), sow from middle of May until first of July in drills 12 to 14 inches apart. Thin out to 6 and 7 inches in row. Keep the hoe at work. Carrot seed is slow to germinate. **One ounce will sow 100 feet of drill—3 to 4 pounds for an acre.**

Chantenay. It is about 6 inches long, thick through and decidedly stump-rooted. In size it is between the Oxheart and Danvers. The flesh is a deep orange red, fine-grained and of a splendid flavor. It is very early and always produces smooth, shapely roots. Its fine appearance finds for it a ready market; its splendid table qualities keep it in demand. Our strain of seed is unsurpassed.....Pkt., 5c; Oz., 20c; $\frac{1}{4}$ lb., 70c.

Danvers. A cylindrical-shaped Carrot of good size and stump-rooted, rich, dark orange color, grows to a large size, smooth and the flesh very close in texture with little core.....Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 70c.

Oxheart or Guerande. Intermediate length; is fully 3 to 5 inches in diameter; quality extra good. Some sorts require digging, but the Oxheart can be easily pulled. It is especially adapted to shallow soils, where the longer sorts would not thrive as well.
Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 70c.

Improved Rubicon. It grows about same length as the Danvers, but thicker and a rich, dark orange color. It is an enormous cropper and a splendid variety for the market gardener.....Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 70c.

Half-Long Scarlet Nantes. A stump-rooted variety, having little or no core. Flesh red and of fine flavor.
Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 70c.

Improved Long Orange. A standard late variety; deep orange color. It is of excellent table quality and is highly nutritious for stock.....Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 60c.

Improved Giant Short White. The heaviest cropping Carrot grown. The flesh is white, solid, crisp and sweet; the roots are short and heavy at the shoulder, which allows them to be harvested easily. Grown for stock.
Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c.

Large White Belgian. The lower part of the root is white; that growing and exposed aboveground, green. It is exclusively grown for stock. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c.

A large, handsome main-crop variety. It is the connecting link between half-long and long Carrots, with a yielding capacity in deep soils equal to any of the longs. The root, 10 or 12 inches in length, is very broad at the neck, 2 to 3 inches through, and tapers evenly to the small tap-root. It grows smoothly and uniformly and combines with its other merits rich reddish-orange flesh, tender, sweet and entirely free from woody coarseness even at maturity.....Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 60c.

Early Market, Stump-rooted. A very choice strain, tender, fine-grained flesh. An enormous producer, handsome, uniform stumped roots. Considered by many to be the best table Carrot, because of its quality and shape; free from core and of a deep golden yellow color. Can be sown thick, and consequently well adapted for frame culture. A most excellent forcer..Pkt., 5c; oz., 25c; $\frac{1}{4}$ lb., 75c.

Early Scarlet Horn. An early red summer variety; fine grained and good flavor.....Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 70c.

CELERY

(Sellerie, Ger.)

TO grow early Celery, sow the seed late in March in a hotbed or box and for later crops, in the open ground, as soon as the weather becomes warm, cover lightly, or better still, roll or press it in. Shade the young plants for a week or ten days, and do not let the soil dry out. The tops may be shorn off once or twice before planting, so as to insure "stocky" plants, which will suffer less on being transplanted. When from four to six inches high, transplant into broad, shallow trenches, or on the level ground, setting the dwarf sorts into rows three feet apart, and the tall varieties four feet apart and six inches apart in the rows. The soil should be light, highly manured, partially shaded and moist, or near water, as the plant must be freely watered in dry weather, but it should not be put directly on them. Earthing up checks growth and should not begin until quite well grown, then earth up gradually keeping the leaf stalks close together, so that the soil may not fall into the center of the plant, but never earth up in wet weather, nor when dew is on them. That intended for winter and spring use needs little banking; when stored for winter it will naturally blanch beautifully white.

One Ounce Will Produce About 2,500 Plants.

McCullough's Paris Golden Yellow.

Extra selected stock, unsurpassed. We have been furnishing our customers this strain of Paris Golden Yellow Celery

for a number of years and it is pronounced by one and all the finest strain they have ever seen. The color is a rich golden yellow, stalks are very solid and tender, flavor is delicious, has large heart, grows medium height, and is without doubt the best early Celery on the market. The demand for our strain of this variety is increasing every year and we advise our customers to order early, as supply is limited. We are confident you can not obtain anywhere a strain of Paris Golden Yellow Celery superior to our own particular selected stock.

Pkt., 10c; oz., \$1.25.

Golden Self-Blanching. An early, desirable sort, requiring but little labor to blanch. The heart is a rich, golden yellow, with light, yellowish-green outer leaves.

Pkt., 5c; oz., 35c; ¼ lb., \$1.25.

White Plume. Is unsurpassed for fall and early winter use, requiring very little earthing up to blanch it.

Boston Market. The stalks when blanched are nearly white—solid, crisp and tender. Pkt., 5c; oz., 20c; ¼ lb., 60c.

Giant Pascal. A superior keeping sort. The stalks are very large, thick, solid, crisp, and of rich nutty flavor. It blanches very easily and quickly, and retains its freshness a long time. Pkt., 5c; oz., 25c; ¼ lb., 75c.

Giant White Solid. The best of the large growing sorts. This variety is suitable for Southern sections of the country, as it grows freely in a hot or dry atmosphere. Pkt., 5c; oz., 25c; ¼ lb., 75c.

Golden-Hearted Dwarf. A popular variety. Handsome color, medium size, fine flavor. Pkt., 5c; oz., 25c; ¼ lb., 75c.

Snow White. A pure white, self-blanching variety, vigorous growth, ease of blanching, size, richness of flavor, crispness and purity, makes it an ideal Celery. Pkt., 5c; oz., 35c; ¼ lb., \$1.00.

Triumph. The best late Celery. A strong and vigorous grower, with very large but crisp, brittle, tender and fine flavored stalks. Pkt., 5c; oz., 25c; ¼ lb., 75c.

Celeriac, Turnip Rooted Celery

Sow early in spring. Transplant in May into rich, mellow soil in rows eighteen inches apart and six inches in the row. Grown mostly for its bulbous root.

Large Erfurt. When sliced, with vinegar and oil, makes a delicious salad. Pkt., 5c; oz., 25c; ¼ lb., 75c.

COLLARDS (Blaetter Kohl, Ger.)

A species of Cabbage, forming a mass of leaves on a tall stem, very popular in the Southern States, as boiling-greens during the winter months and also furnishes green forage for poultry and stock during winter. Cultivation same as Cabbage.

Pkt., 5c; oz., 15c; ¼ lb., 40c.

CORN, Sweet or Sugar (Welschkorn, Ger.)

THE Sweet or Sugar varieties, being liable to rot in cold or wet ground, should not be planted before May or until the ground has become warm, and for a succession continue planting every two weeks until the middle of July, in rich, well manured ground, in hills 3 feet apart each way, covering about half an inch, and then thin out 3 plants to a hill, or plant in rows 4 feet apart, and to stand 8 inches apart in the rows.

One pound will plant 200 hills—10 to 12 pounds per acre. All varieties of Corn, pkt. 10c. All packets and half pounds of Sugar Corn are sent postpaid; for larger quantities by mail see "Postage" page 11.

McCULLOUGH'S CINCINNATI MARKET

OR CLUB ZIG-ZAG EVERGREEN CORN

The illustration represents a matured ear of our Cincinnati Market or Club Zig-Zag Evergreen Corn. Our patrons can readily infer how juicy this Corn is when the kernels are filled with milk.

† McCullough's Cincinnati Market or Club Zig-Zag Evergreen. † This variety, which we offered for the first time last season is a distinct variety and in a class by itself. Originated in this market and has been the best seller on the Cincinnati market for several years, but so closely has the seed been guarded, that until last year, we have been unable to obtain any.

A late Zig-Zag Evergreen Corn, the ear ordinarily being twice the size in diameter of any other sort, while in sweetness and flavor it cannot be excelled.

Pkt., 10c; ½ lb., 25c; 1 lb., 45c; 5 lbs., \$2.00; 15 lbs., \$5.50.

Adams' Extra Early. The hardest and earliest variety for table use, but not a Sugar Corn; can be planted earlier than any other corn.

Pkt., 10c; ½ lb., 15c; 1 lb., 25c; 5 lbs., \$1.15; 15 lbs., \$3.00.

Adams' Early. While not a Sugar Corn, is a tender white Corn for the table; can be planted earlier and will be ready in sixty days.

Pkt., 10c; ½ lb., 15c; 1 lb., 25c; 5 lbs., \$1.15; 15 lbs., \$3.00.

Premo. The best extra early variety. It can be planted early, as the young plants will withstand slight frosts. The stalks are strong and vigorous, growing about 5 feet in height, bearing one or two fine ears to a stalk. The ears are large for so early a variety. The grains are of medium size, well filled to each end of the ear, and of a fine sweet flavor.

Pkt., 10c; ½ lb., 25c; 1 lb., 45c; 5 lbs., \$2.00; 15 lbs., \$5.50.

Early Sheffield. Very early variety. The stalks are strong and vigorous, bearing one or two fine ears to a stalk. The ears are large and entirely free from smut. The grains are of medium size, 10 or 12 rowed, well filled to each end of the ear; juicy, and of a fine sweet flavor.

Pkt., 10c; ½ lb., 25c; 1 lb., 45c; 5 lbs., \$2.00; 15 lbs., \$5.50.

Kendal's Early Giant. Very early, fit for use 60 days from planting. Ears large, 8 to 10 inches in length, twelve rows to a cob. Kernels pure white, sweet and tender.

Pkt., 10c; ½ lb., 25c; 1 lb., 45c; 5 lbs., \$2.00; 15 lbs., \$5.50.

Golden Bantam. It is not only the sweetest, but also one of the hardiest. The ears are from 6 to 7 inches long, eight rowed, filled with broad, sweet, golden yellow kernels of a delightful flavor. It may be planted with perfect safety ten days earlier than other Sweet Corn. One of the best sorts for successive plantings.

Pkt., 10c; ½ lb., 25c; 1 lb., 45c; 5 lbs., \$2.00; 15 lbs., \$5.50.

Mammoth White Cory. An extra early sweet corn. Ears, twelve-rowed; twice the size of the old Cory, white-cobbed and covered with large white grains of extra quality.

Pkt., 10c; ½ lb., 25c; 1 lb., 45c; 5 lbs., \$2.00; 15 lbs., \$5.50.

Early Minnesota. Very early, ears of fair size and good quality.

Pkt., 10c; ½ lb., 25c; 1 lb., 45c; 5 lbs., \$2.00; 15 lbs., \$5.50.

Crosby's Early. A great favorite; productive and of excellent quality.

Pkt., 10c; ½ lb., 25c; 1 lb., 45c; 5 lbs., \$2.00; 15 lbs., \$5.50.

Early Mammoth. A second early variety. The ears are of large size, kernels large and very sweet.

Pkt., 10c; ½ lb., 25c; 1 lb., 45c; 5 lbs., \$2.00; 15 lbs., \$5.50.

Early Evergreen. An early strain of Evergreen of great value. This variety resembles the Stowell's Evergreen, but is ready for use much earlier, and remains in good condition equally as long. The ears grow to a good size, usually about 7 inches long, and contain from 16 to 18 rows of deep, sweet grains.

Pkt., 10c; ½ lb., 25c; 1 lb., 45c; 5 lbs., \$2.00; 15 lbs., \$5.50.

Long Island Beauty. A most prolific variety, quality extra good. One of the most desirable sorts for late planting. A great favorite with Long Island market growers.

Pkt., 10c; ½ lb., 25c; 1 lb., 45c; 5 lbs., \$2.00; 15 lbs., \$5.50.

Country Gentleman. One of the richest flavored of all the late varieties. As a table Corn this variety stands unrivaled, and without doubt is the most luscious of all varieties of Sweet Corn. The plump, pearly-white kernels are of great depth. We have selected this sort for many years and it comes as true to type as any we have ever seen. Ears average 9 inches long by 2 inches in diameter.

Pkt., 10c; ½ lb., 25c; 1 lb., 45c; 5 lbs., \$2.00; 15 lbs., \$5.50.

COUNTRY GENTLEMAN

CORN, Sweet or Sugar—Continued

Stowell's Evergreen. Standard variety, both for home use and market, and is the general favorite. The ears are of a large size, grains deep, exceptionally tender and sugary, and has the advantage of remaining longer in the green state than any other.

Pkt., 10c; $\frac{1}{2}$ lb., 25c; 1 lb., 45c; 5 lbs., \$2.00; 15 lbs., \$5.50.

Narrow Grain Evergreen. Similar in all respects to Stowell's Evergreen, but having very narrow grains.

Pkt., 10c; $\frac{1}{2}$ lb., 25c; 1 lb., 45c; 5 lbs., \$2.00; 15 lbs., \$5.50.

White Evergreen. A valuable main crop variety, vigorous growth. The ears very large and uniformly well filled to the tip with long, slender grains of the purest whiteness and most delicious sweet flavor.

Pkt., 10c; $\frac{1}{2}$ lb., 25c; 1 lb., 45c; 5 lbs., \$2.00; 15 lbs., \$5.50.

Zig-Zag Evergreen. This is one of the sweetest and best late Sweet Corns. The ears are as large as those of the Evergreen, but the kernels are placed irregularly or zig-zag upon the cob, which is always an indication of great sweetness.

Pkt., 10c; $\frac{1}{2}$ lb., 25c; 1 lb., 45c; 5 lbs., \$2.00; 15 lbs., \$5.50.

Mammoth Sugar. A late variety, producing ears of very large size and fine flavor.

Pkt., 10c; $\frac{1}{2}$ lb., 25c; 1 lb., 40c; 5 lbs., \$1.75; 15 lbs., \$5.00.

Black Mexican. Black-grained variety; sweet, tender; must be picked young to avoid a black appearance when cooked.

Pkt., 10c; $\frac{1}{2}$ lb., 25c; 1 lb., 40c; 5 lbs., \$1.75; 15 lbs., \$5.00.

CORN SALAD, or Feticus

(Stecksalat, Ger.)

USED as a salad winter and spring. Sow in spring, in drills one foot apart; will mature in six to eight weeks.

For winter and early spring use sow in drills in August and September. Cover with straw on the approach of winter, the same as Spinach.

One ounce will sow 20 square feet—6 pounds for an acre.

Large Seeded. The most satisfactory to grow;

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c.

CHIVES

Chives are of the onion type. Are grown early in the Spring for giving a mild flavor to various dishes. When planted in small clumps they will grow rapidly and increase so as to render division necessary. If not allowed to flower will produce longer.

Per pkt., 10c.....3 pts., 25c

Clumps, 10c each.....per dozen, \$1.00

CHICORY

Large Rooted or Coffee. Grown for the large, thick roots which are dried, roasted and ground as a substitute for Coffee. Soil should be light, rich and deeply worked. Cultivation the same as Carrots.

Pkt., 5c; oz., 15c.

Witloof Chicory, or French Endive. Seed should be sown in the open ground not later than June in drills twelve to eighteen inches apart, thinning plants so they will stand about three inches apart. The plant forms long, parsnip-shaped roots, which should be lifted in the Fall, and after cutting off the leaves store in soil in a cool place until wanted for forcing. To force, plant closely in trenches deep enough to permit covering the roots with soil 8 inches deep. If quicker growth is desired mulch with manure 2 feet deep. Requires four to five weeks to force. The blanched head is the edible portion and should be cut with a portion of the neck attached to it. The principal use of Witloof is as a winter salad, and it is most delicious served with French dressing and eaten like Cos Lettuce.

Pkt., 5c; oz., 25c.

CUCUMBERS

(Gurken, Ger.)

FOR very early Cucumbers, sow April 1st, in a hotbed upon pieces of sod (grass side down), so that they can be readily transplanted to the open ground, in rich soil, when danger of frost is over, or protect by hand-glasses. For early use, plant, if the weather has become settled and warm, in hills 4 to 6 feet apart each way; thin out to four of the strongest plants to each hill, after all danger from insects is over. They succeed best in a warm, moist, rich, loamy soil. Continue planting at intervals for a succession. The Cucumbers should be gathered when large enough for use, whether required or not; if left to ripen, it destroys their productiveness. For pickles, plant from June until the middle of July. The yellow-striped cucumber or squash beetle is the most serious insect enemy of this crop.

Bordeaux Arsenate of Lead Mixture is by far the best remedy yet discovered.

Dilute it with water, 3 ounces to the gallon, and spray it on the vines when in danger of the beetle or blight.

Use one ounce of seed to 50 hills, 2 to 3 pounds per acre.

McCullough's Special An excellent Cucumber for both forcing and outdoor use. The fruits grow 11 to 15 inches long, slim, slightly pointed, a dark glossy green color, which they keep until ripe. In quality it is very tender, brittle and of fine flavor. A vigorous grower, withstanding blight better than other long sorts.

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; per lb., \$1.50.

Ohio White Spine. This is the best strain of extra early White Spine for the market gardener's out-door growing. It is hardy and an excellent shipper. It is

Davis Perfect. Splendidly adapted for growing either under glass or in the garden. In color, a dark, glossy green; shape, slim and symmetrical, with an average length of 10

to 12 inches. They are as early as the earliest strain of White Spine.

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.25.

Early Cluster. A much esteemed early variety; growing in clusters; is extremely productive.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00.

Improved White Spine. The favorite market variety, and extensively grown South for shipping North early in the Season. The fruit grows from 7 to 10 inches long, is quite smooth, of a deep green color and full at both ends.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 35c; per lb., \$1.00.

Clondike. This variety is the latest addition to the White Spine class. Color of fruits is a rich dark green and grow to a uniform size, measuring about seven inches in length and two inches thick when in good condition for use.

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.25.

Early Frame. A good variety for pickling and table. Of medium size.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; per lb., \$1.00.

Green Prolific. One of the best pickling varieties; dark green, tender, and crisp; very productive. Good for table use. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; per lb., \$1.00.

Evergreen. One of the best varieties for slicing, as it is crisp and of good quality; and as it produces fruit of medium size, it is good for pickling purposes.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; per lb., \$1.00.

Jersey Pickle. As a pickling variety is unsurpassed. Its characteristics are its uniform growth and its immense productiveness.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; per lb., \$1.00.

London or Long Green. A standard late sort, crisp and tender, very prolific, excellent for the table and makes a hard, brittle pickle.

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; per lb., \$1.25.

Nichol's Medium Green. One of the best for pickling, and excellent for forcing or slicing. Always straight and smooth. In length it is between White Spine and Long Green.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; per lb., \$1.00.

Japanese Climbing. It is suitable for growing either in frames or in the open ground. It is very early and exceedingly productive. The fruit is excellent either for the table or pickling.

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c.

Cherkin. A very small prickly variety, used exclusively for pickling, for which purpose they should be gathered while young and tender.

Pkt., 5c; oz., 25c; $\frac{1}{4}$ lb., 75c.

ENGLISH FORCING CUCUMBER.

The best for forcing, attaining a length of twenty to thirty inches. They can be grown in hotbeds, where the temperature does not fall below 65 degrees at night.

Duke of Edinburgh. Very large and long, dull green, quite smooth; packet of 10 seeds. 25c.

Telegraph. Free bearing, long and extensively grown; packet of 10 seeds. 25c.

CRESS, Water and Garden

(Brunnenkresse, Ger.)

SOW thickly in shallow drills early in the Spring, and at intervals throughout the season for a succession, as it soon runs to seed. Water Cress requires a stream of running water, ditch, or pond, in which it will grow without care, except at first keeping weeds from interfering with it.

Extra Curled or Peppergrass. Fine flavor, and the best sort for dry soils....Pkt., 5c; oz., 10c; ¼ lb., 30c.

Erfurt Water Cress. A most desirable and appetizing salad, thriving best in shallow water, on the edges of streams.....Pkt., 10c; oz., 35c.

EGG PLANT

(Eierpflanze, Ger.)

SEED are of slow germination; require moderate amount of heat. Should be started in hotbeds and not checked after starting to grow. When 2 or 3 inches high they should be potted in 3-inch pots and not set out in the open until nights are warm. Plant about 3 feet apart and keep well watered.

One ounce of seed will produce about 1,000 plants.

Black Beauty. This new variety is an excellent market sort. It is about the same size and shape as the New York Improved, except a little fuller at the top; is a few days earlier and a heavier yielder. Its color is a rich purplish black, which it retains even after becoming ripe.....Pkt., 10c; oz., 50c; ¼ lb., \$1.75.

New York Improved. A leading market variety. Pkt., 10c; oz., 50c; ¼ lb., \$1.75.

ENDIVE (Endivien, Ger.)

ONE of the best and most wholesome salads for fall and winter use. Sow in shallow drills in April for early use, or for late use in June or July. When 2 or 3 inches high, transplant into good ground, or thin out to one foot apart. When nearly full grown they must be blanched. This is done by gathering the leaves together, and tying with yarn or bass, to exclude the light and air from the inner leaves, which must be done when quite dry, or they will rot. One ounce of seed to 150 feet of row.

Broad-Leaved Batavian. Leaves broad, light green, nearly plain, used in stews and soups. Pkt., 5c; oz., 15c; ¼ lb., 40c.

Green Curled. Very hardy, crisp and tender. Pkt., 5c; oz., 15c; ¼ lb., 40c.

Moss Curled. It is excellent for winter use. Pkt., 5c; oz., 15c; ¼ lb., 40c.

White Curled. Coarser than Green Curled, but the mid-rib is yellow and the leaves frequently almost white.....Pkt., 5c; oz., 15c; ¼ lb., 40c.

French Endive. ((Witloof Chicory.) See Chicory.

GARLIC

ABULBOUS rooted plant of the Onion family; very desirable for flavoring both cooked vegetables, soups, etc., as well as salads. Garlic does not have seed, and is planted from small bulbs only. Plant same as Onions in rows 8 to 12 inches apart; set bulbs 4 inches apart in the row, covering 2 inches deep. When the leaves turn yellow, take up the bulbs, lay in the shade and store in a dry loft as you would onions. Bulbs..... ¼ lb., 15c; per lb., 40c.

HERB SEEDS

Sow early in April or May in a sheltered, well-prepared spot in the open ground, either broadcast or in shallow drills about 7 inches apart. Thin out the plants thus raised, and keep clear from weeds.

Anise. Biennial.....Pkt., 5c; oz., 10c
Balm, Sweet. Perennial, 1 foot.....Pkt., 5c; oz., 30c
Basil, Sweet. Annual, 1 foot.....Pkt., 5c; oz., 20c
Caraway. Perennial, 2 feet.....Pkt., 5c; oz., 10c
Dill. Biennial, 3 feet.....Pkt., 5c; oz., 10c
Fennel, Sweet. Perennial, 6 feet.....Pkt., 5c; oz., 10c
Horehound. Perennial, 2 feet.....Pkt., 5c; oz., 25c
Hyssop. Perennial, 3 feet.....Pkt., 5c; oz., 25c
Lavender. Perennial, 2 feet.....Pkt., 5c; oz., 20c
Rosemary. Perennial, 4 feet.....Pkt., 5c; oz., 30c
Saffron. Annual, 3 feet.....Pkt., 5c; oz., 10c
Sage. Annual, 1 foot.....Pkt., 5c; oz., 15c
Sweet Marjoram......Pkt., 5c; oz., 20c
Thyme. Annual, 1 foot.....Pkt., 5c; oz., 30c

KOHL-RABI (Turnip Rooted Cabbage)

FOR an early crop, start in a hotbed and treat the same as early cabbage. May also be sown as soon as the ground can be worked in Spring. For Winter use, sow the middle of June.

The edible part is the bulb, which grows on a stalk a few inches above the ground.

One ounce of seed for 1,500 plants.

Early White Vienna. The flesh is white and tender. Pkt., 5c; oz., 20c; ¼ lb., 60c.

Early Purple Vienna. Differs from the above in color. Pkt., 5c; oz., 20c; ¼ lb., 60c.

White Giant. A large late growing sort with large leaves. Pkt., 5c; oz., 20c; ¼ lb., 60c.

KALE OR BORECOLE

(Blatter-Kohl, Ger.)

THE Kales are more hardy than Cabbage, and make excellent greens for winter and spring use, and are improved by frost. Sow from May to June, and cultivate the same as Cabbage. For early spring use, sow in September, and protect during the winter.

One ounce to 300 ft. of row—4 pounds to an acre.

McCullough's Market Gardener's Special

A beautiful curled and crimped variety of strong, vigorous habit, perfectly hardy, bright green color and very attractive in appearance.

Pkt., 5c; oz., 20c; ¼ lb., 60c; per lb., \$2.00.

Norwood Dwarf Curled. A beautiful curled and crimped sort, of strong, vigorous habit, attractive appearance and a bright green color. It is superior to all other sorts, and is, undoubtedly, the best for private gardens. It rarely exceeds 12 inches in height, but spreads out under good cultivation to 2 feet in diameter. Pkt., 5c; oz., 20c; ¼ lb., 60c; per lb., \$2.00.

Dwarf Curled German or Siberian. Leaves yellowish-green, finely curled. Sow in September for the early winter and spring use. Pkt., 5c; oz., 15c; ¼ lb., 50c; per lb., \$1.50.

Tall Scotch. Leaves green, beautifully curled and wrinkled—grows about 2 feet in height; hardy, being improved by frost..Pkt., 5c; oz., 20c; ¼ lb., 60c; per lb., \$2.00.

LETTUCE (Gartensalat, Ger.)

SOW the seed in hotbeds or flats during February or early March, prick the young seedlings out in flats or cold frame 4 inches apart each way, and as soon as a nice, rich, warm spot can be prepared in open ground in Spring, transplant the well hardened plants in rows a foot apart, allowing 8 to 12 inches space between the plants in the row. For succession, sow seed thinly in open ground, and thin the plants to 5 or more inches apart. Sow for succession every few weeks until the fall.

One ounce will produce about 3,000 plants.

Head Varieties

McCullough's Selected Nonpareil

The finest home garden and market variety. Its beautiful yellowish-green color, crimped, curled and well formed heads, tender quality and sweet flavor, place it at the head of the list for the market gardener or for family use. It withstands the heat of summer and retains its sweetness for a long time. Pkt., 5c; oz., 15c; ¼ lb., 50c.

Big Boston. Probably better known and more largely planted than any other variety. Very solid with broad leaves; the best for outdoor or for forcing. Color light green, very attractive. We have made a specialty of this variety and have a stock of this most desirable and popular Lettuce that can not be surpassed. Pkt., 5c; oz., 15c; ¼ lb., 50c.

May King. A very early and extra fine variety for spring and fall use in the open garden; also for growing in cold frames during the winter months. The heads are 6 to 7 inches in diameter, with the light green outer leaves folding closely about the round, solid heads. The inner leaves are blanched to a golden yellow and have a fine, rich, buttery flavor. Pkt., 5c; oz., 15c; ¼ lb., 50c.

Wayahead. It is not only earlier than May King, and other fine early varieties, but the tightly folded heads are generally larger in size. The outer leaves are a light green, with the inner head finely blanched to a rich buttery yellow. "Wayahead" stands a longer time before running to seed than any other early head variety. Pkt., 5c; oz., 15c; ¼ lb., 50c.

Denver Market. This Lettuce is highly recommended either for forcing or open ground; forms large, solid heads of light green color; is slow to seed. The leaves are curled and crimped; very crisp and tender. Pkt., 5c; oz., 15c; ¼ lb., 50c.

Hanson. Heads green with white heart. Large size; crisp, tender. Pkt., 5c; oz., 15c; ¼ lb., 40c.

Boston Market. This is an improved variety of the Tennis Ball, and attains a large size. Pkt., 5c; oz., 15c; ¼ lb., 40c.

Tennis Ball, Black Seeded. A favorite forcing variety, forming a large head. It makes but few outer leaves. Pkt., 5c; oz., 15c; ¼ lb., 40c.

Tennis Ball, White Seeded. Extensively grown for forcing under glass; good size, firm heads. Pkt., 5c; oz., 15c; ¼ lb., 40c.

Yellow-Seeded Butter. A distinct sort, making a compact yellow head, of excellent flavor, withstands heat well and remains crisp and tender. Pkt., 5c; oz., 15c; ¼ lb., 40c.

Curled Varieties

Grand Rapids. The great Lettuce—for indoors or out—the easiest of all to grow. This is probably the best of the loose-leaved varieties. It never forms a head, but produces an abundant crop of pale green leaves, slightly but closely crumpled, which, even when old, retain their characteristic tenderness and brittle character. In this respect it excels many of the best heading varieties. We strongly urge those who cannot succeed in getting lettuce to head to grow Grand Rapids. Pkt., 5c; oz., 15c; ¼ lb., 50c.

Bon Ton. The plants stand a long time, even in hot weather, before going to seed. For the home garden and market gardener, who raises Lettuce under glass for the winter market, the Bon-Ton is extremely valuable by reason of its quick growth and large size. Pkt., 5c; oz., 15c; ¼ lb., 40c.

Black Seeded Simpson. One of the most popular sorts. It forms large, loose leaves of ideal color; the leaves are large, thin, very tender and of very good quality. It is one of the best sorts for use under glass as well as for early outdoor planting. Pkt., 5c; oz., 15c; ¼ lb., 40c.

Early Curled Simpson. Does not head, but forms a close, compact mass of leaves; very early, excellent for forcing. Pkt., 5c; oz., 15c; ¼ lb., 40c.

Early Curled Silesian. Early, loose heads, curled, tender and fine flavor. Pkt., 5c; oz., 15c; ¼ lb., 40c.

Prize Head. Produces large, loose heads, finely crimped and fringed leaves, outer portions shaded brown; crisp, sweet and tender. Pkt., 5c; oz., 15c; ¼ lb., 40c.

Oak Leaved. Very distinct, excellent for summer use and for growing in the South. Pkt., 5c; oz., 15c; ¼ lb., 50c.

Romaine, Cos, or Celery Lettuce

These are distinct from the ordinary Lettuce, and much liked on account of their crisp, tender quality and delicate flavor. They produce long, narrow leaves, which are blanched by drawing in the outer leaves and tying.

Paris White Cos. One of the best varieties for blanching; very tender. Pkt., 5c; oz., 15c; ¼ lb., 50c.

Trianan Self-Folding. A self-blanching Cos Lettuce, very crisp and tender, and of excellent flavor. If the leaves are tied up the plant soon forms a solid head and bleaches to a pure white. Pkt., 5c; oz., 15c; ¼ lb., 50c.

LEEK (Lauch, Ger.)

SOW early in April, in drills one foot apart, one inch deep. When the plants are six to eight inches high, transplant in a deep, rich soil in rows twelve inches apart and six inches in the rows, as deep as possible, so that the neck may be covered and blanched. Draw the earth to them as they grow. The seed may also be sown in September, and the young plants transplanted in the spring.

Large American Flag. This is by far the best variety. It grows to a good size and is wonderfully uniform. Pkt., 5c; oz., 20c; ¼ lb., 75c.

London Flag. An old and popular sort; one of the hardiest; best for winter use. Pkt., 5c; oz., 20c; ¼ lb., 75c.

Large Musselburgh. Of enormous size; leaves large and broad; very mild; pleasant flavor. Pkt., 5c; oz., 20c; ¼ lb., 75c.

MUSKMELONS

(Zucker Melone, Ger.)

IN selecting a patch for melons be careful to have it at a safe distance from your Squashes, Cucumbers, Pumpkins, etc., or they will certainly mix. In preparing the hills fork in plenty of manure, and about the middle of May, when the ground is warm, plant in each hill eight or ten seeds, and cover half an inch deep. After the danger from bugs is over, pull all but three or four of the strongest plants. As soon as the vines have run sufficiently and spread their branches—stop them by pinching the top off the first running bud. This will strengthen the plants and promote their perfecting fruit early. The ground should be kept free from weeds and frequently cultivated.

One ounce will plant about 50 hills; 2 to 3 pounds in hills per acre.

Honey Dew. All the claims of the introducer of this delicious Melon have been fully realized. Average size is about six to eight inches in diameter and they weigh five to six pounds. Skin smooth with little netting and of creamy yellow color when ripe. Flesh is green, thick, melting, fine grained and can be eaten almost to the rind. Not easily bruised and stands shipping long distances. Easily pulled when ripe and will keep for several weeks. Matures about ten days later than the Rocky Ford. Pkt., 10c; oz., 30c; $\frac{1}{4}$ lb., \$1.00.

Rocky Ford. A variety extensively grown in Colorado. The reasons for the widespread popularity of these melons are their superb table and wonderful shipping qualities, which enable them to be carried great distances, and yet arrive in first-class condition for market. The fruit is of medium size, oval shaped, heavily netted and very solid. The flesh is green, thick and juicy. It is early and wonderfully productive. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c.

Delicious Gold Lined. It is the result of several years' careful selection by a progressive grower. The shape of this Melon is ideal, being slightly oval and it is heavily netted over the entire surface. The flesh is as thick at the bloom end as elsewhere, and the flesh of the entire Melon is noticeably thick, fine grained and sweet. The color is green with a gold margin next to the seed cavity. It is attractive, both as to outward appearance and when cut. Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 60c.

Bush Musk Melon. Grows a true bush and is different from any existing kind. There are just as many leaves on the plant as on other kinds, but these grow so compactly that the plant can be grown on one-half the space usually required. Notwithstanding its departure from existing types it is by no means a freak. The fruit is fully equal in quality to the old and justly esteemed Jenny Lind, which is probably the best flavored of all green-fleshed sorts. They are produced in abundance, in fact we advise that each plant be allowed to ripen only about one-half of the fruit, as it is apt to bear too many. Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 60c.

Extra Early Hackensack. A careful selection from Hackensack. Produces melons two weeks earlier than the well-known Hackensack; heavily netted, and has light green flesh of most delicious flavor; a splendid Cantaloupe melon. Its shape and solidity admit of its being packed very closely in crates for shipment, and it will keep in good condition for several days after picking. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c.

Hackensack. Melons grow to large size and attractive appearance. Flesh green, very sweet and sugary. Outer skin is heavily netted. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c.

Paul Rose. Cross between the old Netted Gem and Miller's Cream and combines the good qualities of both. The flesh is salmon colored, very deep and of fine melting character, with thin tough rind and small seed cavity. The flavor is excellent, sweet and rich. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c.

Tip-Top. A yellow-fleshed melon of handsome appearance and excellent quality. A medium sized Muskmelon, nearly round in shape, with shallow netting on skin. The flesh is deep yellow and has a rich flavor. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c.

Osage, or Miller's Cream. A favorite salmon-fleshed variety. Large, oval, slightly ribbed and netted; skin is very dark green. Flesh is very thick and sweet flavored, most delicious to the rind. A great favorite for both market purposes, and the home garden. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 30c.

Defender. Medium size, salmon flesh, and delicious flavor; oval shape, slightly ribbed and covered with a slight netting. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 30c.

Burrell Gem. A superior new orange-fleshed shipping melon. Of splendid flavor, sweet and aromatic; oblong in shape, smoothly rounded ends, closely netted and slightly ribbed, dark green skin. Rind thin, but very tough; flesh exceptionally deep rich salmon-orange color. Fruits average 6 inches long by 4 inches deep. Very fine for marketing. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c.

Emerald Gem. Ripens early; medium size; nearly round; flesh a delicate light salmon color, very thick, fine grained, and very few melons can compare with it in superb flavor. The rind is thin, dark green, ribbed, slightly netted. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c.

Jenny Lind. The earliest variety; netted, of small round size; excellent flavor. The vines do not grow as large as some of the other varieties, but are quite productive, and it is a favorite early variety. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c.

Improved Green Nutmeg. A large melon, nearly round, deeply ribbed, flesh thick, light green, delicious flavor. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c.

Acme. Medium size, oval, slightly pointed at end, ribbed, covered when ripe with coarse netting. Flesh thick, green, very fine flavored and sweet. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c.

Banana. A long, smooth skinned variety, growing something in the shape of long squash. Fruit about 12 inches long, salmon flesh, which is very sweet, luscious and tender. Rather late maturing. Has a delicious odor. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 30c.

WATERMELONS (Wasser Melone, Ger.)

One ounce for 30 hills—4 to 5 pounds for an acre.

WHILE a sandy loam is preferable for Watermelons they can be grown on a loamy soil having a clay subsoil, provided it is deeply plowed. When ground is warm, plant 6 to 8 seeds in hills 6 to 10 feet apart each way and cover about 1 inch deep. When well up, thin out to 2 vines in each hill. Do not plant on land where Watermelons were grown before, as the vines exhaust elements in the soil which makes succeeding crops defective.

Watermelons are slightly less subject to "bug" depredations and disease attacks than Muskmelons. At the same time they are more easily hurt by strong spray mixtures, and caution in the use of such mixtures is advisable.

Excel. Will produce more large, marketable melons under the same conditions than any of the other sorts of the long variety and its carrying and keeping qualities are unsurpassed. Fruits oblong in shape, dark green color with tracings of light green. Flesh deep red, crisp and tender. Weight, 35 to 60 pounds.
Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; per lb., \$1.00.

Tom Watson. An extra long melon of attractive appearance, uniform in shape and quality. The luscious crimson flesh is "as sweet as honey" and of superb flavor. The average melon will weigh 30 to 40 pounds and measure about 28 inches long and about 12 inches in diameter. It is very prolific.
Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; per lb., \$1.00.

Mckley's Sweet. While the skin is perhaps too thin to admit of the melons being shipped very great distances to market, it is most desirable to plant for home use or local markets. The melons themselves are very large, oblong in form, with dark green skin, thin rind, which is very brittle. Flesh is bright scarlet, with solid heart, deliciously crisp.
Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 35c; per lb., \$1.20.

Cole's Early. A very early variety. Large heart, flesh of fine texture and good flavor. Rind thin. Fine for the home garden.
Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; per lb., \$1.00.

Jumbo or Shakers Blue. Melons grow very large and are a round oval in form, from 16 to 18 inches long by 12 to 15 inches in diameter. The skin is dark green, striped with narrow bands of a lighter green, and when ready for shipping the melons are seemingly of a solid dark-green color. Flesh is red, the heart large with no core, and the flavor superb.
Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; per lb., \$1.00.

Fordhook Early. The fruits are of good size, rather short and blocky in form, with large diameter. Skin dark green, occasionally with faint stripes of lighter green. Rind quite thin, but skin tough, making an excellent shipping variety. Flesh bright red, crisp, sweet, and of splendid quality.
Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; per lb., \$1.00.

Kolb Gem. Probably the most extensively grown for long distance shipping of any Watermelon ever originated. The flesh is bright red and of good flavor. Melons large, of very thick, oval, blocky form; skin handsomely marked in stripes of light and dark green.
Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; per lb., \$1.00.

Dixie. A cross between the Kolb Gem and old-fashioned Mountain Sweet, surpassing the former in earliness, productiveness and shipping qualities.
Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; per lb., \$1.00.

Gray Monarch. Large size; the skin is a mottled gray; shape long; flesh bright crimson and of sweet, delicious flavor.... Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; per lb., \$1.00.

Kentucky Wonder. Shape oblong, attaining a good size; skin dark green and beautifully marked. Flesh a beautiful rich scarlet color, crisp, rich, sugary, always firm and solid.
Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; per lb., \$1.00.

Halbert Honey. A very sweet, long dark green variety. Fruits average 18 to 20 inches long, have a thin rind and deep red meat of delightfully delicious flavor; seeds white. One of the finest for the home garden.
Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 35c; per lb., \$1.20.

Duke Jones. The color of the skin is solid green, flesh bright red, sweet, juicy and melting.
Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; per lb., \$1.00.

Florida Favorite. Oblong in shape, growing to large size; rind dark, with light green stripes; flesh light crimson, crisp and deliciously sweet.
Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; per lb., \$1.00.

Sweetheart. Flesh bright red, solid, and tender.
Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; per lb., \$1.00.

Cuban Queen. Flesh bright red, tender and melting, luscious, crisp, very sugary.
Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; per lb., \$1.00.

Dark Icing, or Ice Rind. A very solid sort with a thin rind, and possesses most delicious flavor.
Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; per lb., \$1.00.

Blue Gem, or Iceberg. Grows large. Flesh a beautiful shade of pink, darker than Kolb's Gem, heart large and flesh extends close to the outer skin, sweet and delicious. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; per lb., \$1.00.

Long Light Icing. The skin a mottled gray color, shape long, flesh bright crimson and sweet.
Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; per lb., \$1.00.

Peerless, or Ice Cream. Of medium size; skin light mottled green; flesh scarlet.
Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; per lb., \$1.00.

Pride of Georgia. Dark green color, almost oval.
Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; per lb., \$1.00.

Rattlesnake, or Gypsy. Fruit large, oblong, striped; flesh red.
Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; per lb., \$1.00.

Colorado Preserving Citron. Flesh white and firm.
Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c.

MUSHROOM SPAWN

MUSHROOMS can be successfully and profitably grown during the winter and spring months in frames under greenhouse benches, in the open fields, or in cellars or out-houses. To cultivate mushrooms successfully does not always require extensive experience. Some care is necessary, however, in the selection of materials, and in forming the beds; but the matter of securing and maintaining the proper temperature in the room and in the beds needs close attention, for success depends very much upon this point. Mushrooms may be grown in a great variety of situations—a dark room, cellar, stable or elsewhere. Any place in which an even temperature of about 50 to 60 degrees can be kept is suitable. For material for the bed, use fresh horse manure, free from straw or chips, and good loamy soil. Some growers use the manure mixed with loam, after first having well fermented it by alternately piling it and mixing for a few weeks, but it is undoubtedly better not to allow

the manure to heat much before forming a bed. Use one-fourth to one-third loam, the rest manure. Mix very thoroughly and upon a dry, firm bottom make the bed of this mixture, about four feet wide and of any desired length. Build it up evenly, press it down firmly, and leave it about a foot high. It will shortly begin to heat. Use a thermometer to thrust into the bed and note the temperature. When the heat has partially subsided, leaving a temperature of 80 degrees put in the spawn. Pieces from the size of walnuts to that of eggs are placed in the bed about a foot apart, deep enough to cover them well, and the manure pressed down. Let it remain thus ten or twelve days, then cover with two inches of fresh loam, and make this moderately firm. The bed is finished by covering all with four or five inches of straw or other litter. Watering is not necessary, unless the surface of the bed gets very dry; in this event moisten freely with water at a temperature of about 90 degrees. In gathering the crop, do not cut, but twist them off carefully, filling up the holes carefully with loam to keep insects from the roots. In six or eight weeks from spawning the beds, mushrooms should appear.

One pound of Spawn is sufficient for a bed 2 x 6 feet.

We supply many of the largest commercial growers in the United States and have on hand at all times in the season fresh Spawn of the best manufacture.

English Milltrack Mushroom Spawn. Our celebrated English Milltrack brand (made by the best maker in England specially for our trade) has gained an enviable reputation among critical growers for its uniform good quality, and can be thoroughly relied upon to produce a good crop of the best Mushrooms. Commercially, it is more planted than any other Spawn. It comes in pressed bricks weighing about 20 ounces. They are broken into pieces the size of a walnut and put sideways in the beds 10 to 12 inches apart each way. Prices, by express—customer to pay charges. Per brick, 20c; per lb., 15c; 10 lbs., \$1.20; 100 lbs., \$10.00. By mail, 25c per brick, postpaid.

American Made Pure Culture Mushroom Spawn. A very superior article, made in this country from carefully selected spawn, which it is claimed is much more vigorous than the imported article, and will produce Mushrooms of a very superior quality and flavor. The popularity of Pure Culture Spawn is increasing rapidly and many of the large growers are now using it. They claim it is a surer crop. Amateurs have much the best results with this kind. By express—customer to pay charges—per brick, 25c; 5 bricks, \$1.00; 100 bricks, \$17.50; By mail, 30c per brick; 5 bricks, \$1.25, postpaid.

Mushroom Culture. (Wm. Falconer.) The most practical work on the subject; \$1.00.

Treatise on Mushroom Culture. 10c, or given with an order of 10 lbs. of Mushroom Spawn.

Special prices will be given to those who use Mushroom Spawn in quantity.

MARTYNIA—For Pickles

(Gemsborn, Ger.)

The young and tender seed pods make a very fancy pickle. These pods are of curious shapes and bear abundantly. They should be gathered when less than half grown. Sow in the open ground in May, in hills 3 feet apart each way.

Martynia Proboscidea.....Pkt., 5c; oz., 30c.

MUSTARD (Senf, Ger.)

One ounce will sow 100 feet of drill

A small, pungent salad used like Cress. The seed is also used for flavoring pickles, pepper sauce, etc. For salads sow thickly in shallow drills, 6 inches apart, or in frames or boxes during the winter, where frost can be partially excluded. Successive sowings can be made every week or two. To grow seed, sow in April, in rows 1 foot apart, and thin out to 3 inches apart when 2 inches high.

White English. Best for salads.

Pkt., 5c; oz., 10c; ¼ lb., 25c.

Chinese, or Giant Southern Curled. The large leaves, which often measure 14 inches, are ready for use in about six weeks after sowing. Leaves are eaten boiled, like Spinach.....Pkt., 5c; oz., 10c; ¼ lb., 25c.

OKRA, OR GUMBO (Ocker, Ger.)

This vegetable is extensively grown for its green pods, which are used in soups, stews, etc., to which they impart a rich flavor, and are considered nutritious. Sow the seed thickly in rich ground, about the middle of May, or when the ground has become warm, in drills 3 feet apart, 1 inch deep; thin to 12 inches apart in drills. Culture otherwise much like Corn.

Perkins Mammoth. An exceedingly handsome variety of Okra, which is a great improvement upon other varieties heretofore grown. The pods grow 4 to 5 inches in length and are very tender, long, slim and of a beautiful deep green color. The habit of growth of plant is dwarf, and it is very productive.

Pkt., 5c; oz., 10c; ¼ lb., 25c.

White Velvet. Distinct in appearance; the large pods are perfectly round, smooth, an attractive velvety white, of superior flavor and tenderness. Plants dwarf, of compact, branching growth; very prolific.

Pkt., 5c; oz., 10c; ¼ lb., 25c.

Dwarf Green. The best of the dwarf sorts. It makes a stocky growth of plant and is very productive. The pods are long, slender and of a light green color.

Pkt., 5c; oz., 10c; ¼ lb., 25c.

Long Green. Taller than the preceding, bearing long, ridged pods. Highly esteemed in the South.

Pkt., 5c; oz., 10c; ¼ lb., 25c.

ONION SEED

(Zwiebel, Ger.)

FOR sets, drill the seed thickly as early as possible in the spring. As soon as the tops dry off in the summer, remove to a dry, airy place. May also be grown to full size the first season by sowing thinly in drills one foot apart and one-quarter inch deep, in March or early April, thinning to three or four inches apart.

By sowing in frames in February or March and transplanting in April, onions of immense size can be obtained. For this purpose the Southport Globe varieties (white and yellow) and Prizetaker are usually preferred. Onions delight in a strong, rich, deep loamy soil, and succeed well if grown successive years on the same ground.

One ounce for 150 feet of drill. 5 to 6 pounds for one acre. Onion seed for sets, 30 to 40 pounds per acre.

Yellow Globe Danvers. The best onion for general use. A standard sort and one of the most desirable; an excellent keeper and very productive. Our strain of this variety is the true globe shape, and not of the flat type. Onion growers throughout the country prefer this type of onion to all others, and it is with this in view that the bulbs from which our seed is grown are specially and carefully selected as to shape. It is the best paying onion that is grown for general crop, and has been the leading variety for years.

Pkt., 5c; oz., 35c; $\frac{1}{4}$ lb., \$1.25.

Prizetaker. The large size and handsome appearance of this Onion makes it equally desirable for the home garden or for market. It is strictly "fancy", and will be found on fruit stands during the fall, where it is sold as Spanish Onion. The true Prizetaker is globe-shaped, has pale-yellow skin and white flesh, which is very mild and of delicate flavor. No sets are required, as the large Onions are grown the first year from seed sown during early spring.

Pkt., 5c; oz., 40c; $\frac{1}{4}$ lb., \$1.50.

Yellow Danvers. Bulb of good size and flat, the standard yellow onion for market or home use, being both early and an enormous yielder as well as good keeper.

Pkt., 5c; oz., 30c; $\frac{1}{4}$ lb., \$1.00.

Southport Yellow Globe. A very large, handsome, globular-shaped yellow variety, very productive, of mild flavor. The outer skin is beautiful pale yellow; the bulbs are of a beautiful globe-shape and good keepers.

Pkt., 5c; oz., 35c; $\frac{1}{4}$ lb., \$1.25.

Southport White Globe. Pure white color, mild flavor. A good keeper and very productive. It is best to dry

these Onions in a shady place, where they will get plenty of air. Pkt., 5c; oz., 40c; $\frac{1}{4}$ lb., \$1.50.

Southport Red Globe. Beautiful globe-shaped; of medium size, a good keeper and of superior quality. This variety is very popular in some sections.

Pkt., 5c; oz., 40c; $\frac{1}{4}$ lb., \$1.50.

Yellow Dutch, or Strasburg. A good keeper and well flavored; bright straw colored skin and somewhat flattened shape. The Onions grow to a good size and are very mild. This variety is largely grown for sets on account of its excellent keeping qualities.

Pkt., 5c; oz., 30c; $\frac{1}{4}$ lb., \$1.00.

Large Red Wethersfield. Grows to full size the first season from seed. The Onions are large, flat in shape, with skin of a purplish-red color and flesh of a purplish-white color, rather strong-flavored; an excellent keeper.

Pkt., 5c; oz., 30c; $\frac{1}{4}$ lb., \$1.00.

White Queen. A rapid-growing variety of mild flavor; pure white, and splendid for pickling.

Pkt., 5c; oz., 40c; $\frac{1}{4}$ lb., \$1.50.

White Barletta. An extra early small white Onion; similar to White Queen.

Pkt., 5c; oz., 40c; $\frac{1}{4}$ lb., \$1.50.

Mammoth Silver King. A large, flat variety. Specimens have been grown to weigh as high as 4 pounds. Skin pure white and flesh tender.

Pkt., 5c; oz., 50c; $\frac{1}{4}$ lb., \$1.75.

White Portugal, or Silver Skin. This variety is one of the leading white sorts. The bulbs are flat in shape and mature early. Largely used for growing sets.

Pkt., 5c; oz., 40c; $\frac{1}{4}$ lb., \$1.50.

Early White Bunch. Used largely for pulling when young, as a bunch Onion. If left to mature, grows to good size; very showy. Pearly white skin. Flesh of good quality and a good keeper.

Pkt., 5c; oz., 40c; $\frac{1}{4}$ lb., \$1.50.

Early White Welsh Onion. The best kind for green onions, forms no bulb. Plants can be propagated from seed or divisions, a great saving in cost over top sets.

Pkt., 5c; oz., 40c; $\frac{1}{4}$ lb., \$1.50.

ONION SETS

IN private gardens the cultivation of the family supply of Onions from sets has much to recommend it. The amount of labor involved is less, the danger of loss from maggots and other insects is considerably reduced, the crop is surer to grow, and is ready for use weeks in advance of that grown from seed. On a small scale where the cost of sets is not a serious item we urge customers to use them. In fact, the ideal way is to use both sets and seed—the sets for use in the spring and summer, and seed to grow bulbs for winter keeping.

Onion Sets should be planted out as early in the spring as the ground is dry enough to work; plant them in rows 12 inches apart, with sets 2 inches apart in the row. We handle sets of the standard varieties.

Prices subject to market changes.

Lowest market price will be given upon application.

PARSNIP (Pastinake, Ger.)

SOW seed early in Spring, in deep, rich soil in drills. Scatter the seeds thinly and cover evenly with the rake. After the appearance of the plant the soil must be stirred frequently until the leaves cover the ground. The seed is slow to germinate, and is frequently a long time in coming up; will vegetate sooner by steeping 6 to 12 hours in a liquid manure, diluted with water, and mixed with sand before sowing. When well up thin out to 5 or 6 inches apart in the rows. Unlike Carrots, they are improved by frost, and it is usual to take up in fall a certain quantity for winter use, leaving the rest in the ground until Spring, to be dug as required.

One ounce for 200 feet of drill—5 to 6 pounds for an acre.

Large Sugar, or Hollow Crown. The best variety; roots long, very smooth, white, tender, sugary and of excellent flavor. This strain was made by careful selection of roots growing to an ideal shape and having the distinct hollow crown.

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 45c.

Student, or Guernsey. A good half-long variety, smooth, sweet and of delicate flavor.....Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 45c.

PARSLEY (Petersilie, Ger.)

SOW thickly early in April, in rows one foot apart and one-half inch deep; thin out the plants to stand six inches apart in the rows. The seed is of slow germination, taking from three to four weeks to make its appearance, and often failing to come up in dry weather. To assist its coming up quicker, soak the seed a few hours in warm water or sprout in damp earth, and sow when it swells or bursts. For winter use protect in frame or light cellar.

One ounce to 150 feet of drill.

Norwood. Fine curled leaves of rich dark green, compact growth, finest quality.....Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c.

Extra Double Curled. Beautifully crimped and curled.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 35c.

Moss Curled. Fine for garnishing...Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 35c.

Plain. A hardy variety having dark green leaves which are not curled. It is a little stronger in taste and much esteemed for flavoring soups, stews, as well as for drying.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c.

Hamburg Turnip Rooted. The fleshy roots resemble a parsnip and is used for flavoring soup, stews, etc.

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c.

Hollow Crown

PEPPER (Pfeffer, Ger.)

SOW early in the Spring in hotbeds, if possible, and transplant to the open ground when the weather is favorable, or sow in drills in warm, mellow soil, late in the Spring and then thin out so as to stand 18 inches apart. One ounce of seed for 1,500 plants.

Golden Dawn. Of same shape and size of Large Bell, but of more delicate flavor; color yellow.....Pkt., 10c; oz., 50c; $\frac{1}{4}$ lb., \$1.75.

Celestial. Fruit conical in shape, one to two inches long; green from the blossom, turning alternately to lemon, golden and scarlet.

Pkt., 10c; oz., 50c; $\frac{1}{4}$ lb., \$1.75.

Chinese Giant. Flesh is thick, mild and very sweet. Largest Pepper grown.....Pkt., 10c; oz., 60c; $\frac{1}{4}$ lb., \$2.25.

Ruby King. Large size, ruby red pods; flesh exceedingly thick, sweet and mild.....Pkt., 10c; oz., 50c; $\frac{1}{4}$ lb., \$1.75.

Spanish Monstrous. Early and productive; flesh very sweet and mild.....Pkt., 10c; oz., 50c; $\frac{1}{4}$ lb., \$1.75.

Sweet Mountain. Similar in shape to the Bell, but grows larger; rind thick, tender and fleshy.....Pkt., 10c; oz., 50c; $\frac{1}{4}$ lb., \$1.75.

Large Bell, or Bull Nose. Large and early, rind very thick; color glossy red; flavor mild and pleasant..Pkt., 10c; oz., 50c; $\frac{1}{4}$ lb., \$1.75.

Pimento. The fruits are of good size, medium length and attractive color. The flesh is thick and solid, mild and of fine flavor. Desirable for salads and stuffed peppers. The plants are vigorous and upright, about two to two and one-half feet high, with short, broad, dark green leaves. The fruits are deep green when young, becoming deep red as they mature.....Pkt., 10c; oz., 50c; $\frac{1}{4}$ lb., \$1.75.

Long Red Cayenne. From 3 to 4 inches long, bright-red color, very productive and hot.....Pkt., 10c; oz., 50c; $\frac{1}{4}$ lb., \$1.75.

Small Cayenne, or Red Chili. Pods $1\frac{1}{2}$ to 2 inches long, very hot; used for making pepper sauce....Pkt., 10c; oz., 50c; $\frac{1}{4}$ lb., \$1.75.

PEANUTS

Shell the nuts and plant in April or May in drills 2 to 2 $\frac{1}{2}$ feet apart, dropping 2 seeds 12 to 15 inches apart in the drills. If to be sent by mail, see "Postage", page 11

Spanish. The earliest variety grown; pods are small, but remarkably solid and well filled...Pkt., 5c; $\frac{1}{2}$ lb., 15c; lb., 25c.

Mammoth Virginia. The most profitable variety to grow as a market crop, though not so early as Spanish; more easily cultivated; very erect stems and upright foliage with large pods and kernels...Pkt., 5c; $\frac{1}{2}$ lb., 15c; per lb., 25c.

GARDEN PEAS

(Erbsen, Ger.)

One pound will plant about 50 feet of drill—90 to 120 pounds per acre.

PEA S succeed best in light, dry, loamy soil. Early and Dwarf sorts require richer soil than the late varieties.

If manure is used, let it be old and well rotted, or there will be a rank growth of vines with few pods. Sow the early smooth, round sorts as early in spring as the ground can be worked. Seeds of wrinkled varieties are more liable to rot if the ground is cold, and must be planted later. From the first sowing, sow every two weeks until June for a succession. After that there is danger of mildew. Discontinue then until August, when a planting of extra early or early sorts will often produce a good crop. Sow the seed in single drills, three feet apart for dwarf sorts and four for tall sorts, or in double drills six or eight inches apart, one inch apart in the drill, and not less than four inches deep, since deep planting prevents mildew and prolongs the season. Cultivate well, and draw the earth twice to the vines during growth. Stake the tall varieties when they begin to vine. Pick the pods as soon as fit, and allow none to ripen on the vines, as they will then cease bearing. All kinds of Peas do best when supported with brush or wire.

All varieties of Peas, pkt. 10c. All packets and half pounds of Peas are sent postpaid; for larger quantities by mail, see "Postage" page 11.

Early Varieties

The earliest and most prolific Pea known. The pod is of a dark green color, of a full, round shape, and of strong texture which especially fits it for shipping long distances. For a late fall crop it has few equals, and is the market gardener's favorite for all seasons. The far northern point at which our Peas are grown renders them almost proof against cold, and the best for early spring or late fall crop. Thousands of market gardeners have pronounced this Pea unequalled in earliness, yield and regularity of growth. Make first planting as early in the spring as the ground will permit and cover well.

Pkt., 10c; ½ lb., 20c; 1 lb., 35c; 5 lbs., \$1.50; 15 lbs., \$3.75.

This new Pea is of the extra early type, and from our trials and observation it promises to prove the earliest Pea in the market. It grows about

two feet high, stem strong, very vigorous and bears well-filled, round pods about three and a half inches long. It is a white seeded variety. All growers of Peas should give it a trial.

Pkt., 10c; ½ lb., 20c; 1 lb., 35c; 5 lbs., \$1.50; 15 lbs., \$3.75.

Market Surprise. This new variety is another addition to the extra early type of Peas, but pods are larger and contain 6 to 8 large peas of excellent quality. The seed resembles the "Maud S" in color while it is not quite as smooth nor yet is it a wrinkled Pea. We urge all growers to give this variety a trial and as the supply is limited we can only offer in small quantities this season.

Pkt., 10c; ½ lb., 25c; 1 lb., 40c; 5 lbs., \$1.75; 15 lbs., \$4.50.

Little Marvel. As early as American Wonder and Nott's Excelsior, the pods are larger and the vines produce a heavier crop. For quality and productiveness it is away ahead of everything in the way of extra early wrinkled peas. It is dwarf, growing about 15 inches high, and the plants are very productive, bearing many twin pods, which are dark green in color.

Pkt., 10c; ½ lb., 25c; 1 lb., 40c; 5 lbs., \$1.50; 15 lbs., \$4.00.

Nott's Excelsior. A dwarf wrinkled Pea of the highest excellence. The pods average three inches in length and are well filled with peas of large size and unusually sweet flavor; height one and one-fourth feet.

Pkt., 10c; ½ lb., 20c; 1 lb., 35c; 5 lbs., \$1.50; 15 lbs., \$4.00.

Laxtonian. The pods of Laxtonian are very large, and are produced on a low-growing, sturdy vine, without support of any kind. The flavor is just as rich and good as any of the later varieties. It is ready for use about a week later than the very early sorts, and is incomparably good in quality. Pods and plant are rich, dark green in color.

Pkt., 10c; ½ lb., 25c; 1 lb., 40c; 5 lbs., \$1.75; 15 lbs., \$4.50.

Thomas Laxton. A cross between Gradus and one of the extra early sorts. It ripens within a day or two of the earliest round varieties, and is extremely productive. The pods are very large and contain 7 or 8 large-sized wrinkled peas of the finest flavor. It is darker colored than the Gradus and harder in constitution; height, three feet.

Pkt., 10c; ½ lb., 25c; 1 lb., 40c; 5 lbs., \$1.75; 15 lbs., \$4.50.

Alaska. A wonderful early, smooth, blue Pea; vines slender; pods very dark green, about three inches long, well filled with small, smooth, blue-green peas. The earliness, uniformity in ripening and deep color render it a desirable market and canning pea; height, 2 feet.

Pkt., 10c; ½ lb., 20c; 1 lb., 35c; 5 lbs., \$1.50; 15 lbs., \$3.75.

Extra Early Premium Gem. An improved Little Gem Dwarf, green wrinkled, very prolific, fine flavored, large pods, excellent either for market or home use; height, one and one-half feet.

Pkt., 10c; ½ lb., 20c; 1 lb., 35c; 5 lbs., \$1.50; 15 lbs., \$4.00.

American Wonder. This variety stands unrivaled in point of flavor and quality. It is dwarf and robust in habit, growing from 10 to 15 inches in height, according to the soil.

Pkt., 10c; ½ lb., 20c; 1 lb., 35c; 5 lbs., \$1.50; 15 lbs., \$4.00.

WE HANDLE PEAS BY THE CARLOAD—Write for Special Prices if You Use Them in Quantity

GARDEN PEAS—Continued

All varieties of Peas, pkt., 10c. All packets and half pounds of Peas are sent postpaid, for larger quantities by mail, see "Postage", page 11.

Early Varieties—Continued

Gradus or Prosperity. This remarkable Pea is not only large and of the best quality, but is within two or three days as early as the small, round, extra early sorts. Gradus is a wrinkled Pea, growing about 30 inches high; the pods are of a bright green color, measuring 4 inches or more in length, as large as Telephone, well filled with luscious peas, 8 to 10 or more in a pod. The peas are of the highest table quality and retain in a remarkable manner their color and attractive appearance after cooking. Make the earliest sowing in the warmest spot in the garden.
Pkt., 10c; $\frac{1}{2}$ lb., 25c; 1 lb., 40c; 5 lbs., \$1.75; 15 lbs., \$4.50.

Second Early and Main Crop

Boston Unrivalled. An improved Telephone. Vines grow nearly five feet high and are covered with fine large pods. The pods are about 5 inches in length by three-quarters of an inch broad, each containing seven or eight large peas of finest flavor.

Pkt., 10c; $\frac{1}{2}$ lb., 25c; 1 lb., 40c; 5 lbs., \$1.75; 15 lbs., \$4.50.

Buttercup. The pods of this variety are long, rounded or curved at the end and well filled with large peas, which are sweet, tender and of excellent flavor. Vines make a rapid growth to about two feet in height and produce a large crop of pods, ready for use in about 65 days from time of planting.

Pkt., 10c; $\frac{1}{2}$ lb., 25c; 1 lb., 40c; 5 lbs., \$1.75; 15 lbs., \$4.50.

Abundance. Pods containing 6 to 8 large wrinkled Peas. It ripens about one week after the earliest kinds. A feature of this variety is its remarkable tendency to branch out at the roots, and for this reason the seed should be planted thinly; height, 1 $\frac{1}{2}$ feet.
Pkt., 10c; $\frac{1}{2}$ lb., 20c; 1 lb., 35c; 5 lbs., \$1.50; 15 lbs., \$4.00.

Advancer. This Pea is used very extensively by market gardeners on account of its productiveness, the fine appearance of its pods and its exceedingly fine flavor. It is a wrinkled variety, grows about two feet in height, but needs no brushing as it stands up very strong itself. Has broad, long pods, which are abundantly produced and well filled to the end.

Pkt., 10c; $\frac{1}{2}$ lb., 20c; 1 lb., 40c; 5 lbs., \$1.50; 15 lbs., \$4.00.

Admiral Dewey. The largest podded Pea yet introduced. Height, 3 $\frac{1}{2}$ feet; pods a rich, dark-green color, frequently 6 inches long, beautifully shaped. Peas large, tender and of fine flavor.

Pkt., 10c; $\frac{1}{2}$ lb., 25c; 1 lb., 40c; 5 lbs., \$1.75; 15 lbs., \$4.50.

Duke of Albany. A large pea of Telephone type, growing about four feet high, producing heavy crops of pods which are of a deep green color, this characteristic making it very popular in some sections as a market garden variety. Its fine appearance and good quality have given it a place amongst the late varieties.

Pkt., 10c; $\frac{1}{2}$ lb., 25c; 1 lb., 40c; 5 lbs., \$1.75; 15 lbs., \$4.50.

Telephone. The favorite late variety; extra large pods. This Pea has proven to be a most valuable introduction. Vine large, coarse leaves, height about 4 feet. The pods are very large and filled with immense peas, which are largest of any. Tender, sweet and of splendid quality and flavor. A valuable feature of this variety is that it continues in bearing for an extremely long time. The stock we offer has been selected with every care, and will give satisfaction to the most exacting grower.

Pkt., 10c; $\frac{1}{2}$ lb., 25c; 1 lb., 40c; 5 lbs., \$1.75; 15 lbs., \$4.50.

Improved Stratagem. A favorite with market gardeners and for the kitchen garden. Strong vines, immense pods, large peas, heavy cropper. The vines are strong, vigorous and covered with immense pods, many of which measure 5 $\frac{1}{2}$ inches in length and containing as high as 10 large, richly flavored, wrinkled peas. Vines very strong and needing but slight support. Height, 2 to 2 $\frac{1}{2}$ feet.

Pkt., 10c; $\frac{1}{2}$ lb., 25c; 1 lb., 40c; 5 lbs., \$1.75; 15 lbs., \$4.50.

GARDEN PEAS—Continued

All varieties of Peas, Pkt., 10c. All packets and half pounds of Peas are sent postpaid, for larger quantities by mail, see "Postage" page 11.

Main Crop Varieties—Continued

Alderman. A new Pea like the Telephone only better. The vine is extra vigorous, and the pods of Alderman are dark green and always well filled with fine large peas. For a pea which should be staked there is none quite so good as Alderman. It is one of the finest of the large-podded summer varieties. The haulm grows five feet in height and is of a rich, dark green coloring, as are also the large pods. Pods frequently measure nearly six inches in length and contain from ten to twelve very large peas of superior flavor.

Pkt., 10c; ½ lb., 25c; 1 lb., 40c; 5 lbs., \$1.75; 15 lbs., \$4.50.

Everbearing. A prolific and continuous-bearing Pea, giving it special value for both summer and autumn use; pods 3 to 4 inches long, containing 6 to 8 large, wrinkled peas, of rich flavor, sweet and tender. Three feet.

Pkt., 10c; ½ lb., 25c; 1 lb., 35c; 5 lbs., \$1.50; 15 lbs., \$4.00.

Improved Champion of England. One of the best known of the older varieties; a tall-growing, green, wrinkled marrow; quality unsurpassed; pods medium; peas large. Five feet.

Pkt., 10c; ½ lb., 25c; 1 lb., 35c; 5 lbs., \$1.50; 15 lbs., \$4.00.

Telegraph. A second early variety, very robust in habit, bearing immense pods. The peas when cooked, are of a deep green color. A great bearer and of fine flavor. Three and one-half feet.

Pkt., 10c; ½ lb., 25c; 1 lb., 40c; 5 lbs., \$1.75; 15 lbs., \$4.50.

Long Island Mammoth. A strong grower, producing mammoth pods containing 10 to 12 large peas. When cooked they are a deep, dark green color and fine flavor. Three and one-half feet.

Pkt., 10c; ½ lb., 25c; 1 lb., 45c; 5 lbs., \$1.75; 15 lbs., \$4.50.

Black-Eyed Marrowfat. This and the White Marrowfat are extensively grown as field peas, as they are hardy, productive, and bear well-filled pods. Four feet.

Pkt., 10c; ½ lb., 20c; 1 lb., 30c; 5 lbs., \$1.40; 15 lbs., \$3.75.

Large White Marrowfat. A favorite variety; large well-filled pods. Five feet.

Pkt., 10c; ½ lb., 20c; 1 lb., 30c; 5 lbs., \$1.40; 15 lbs., \$3.75.

Dwarf Sugar. Edible pods. Can be used in a green state like string beans. Height, five feet.

Pkt., 10c; ½ lb., 25c; 1 lb., 40c; 5 lbs., \$1.75; 15 lbs., \$4.50.

Melting Sugar. This variety grows to the height of five feet, bears a profusion of large, broad, handsome, light green pods which are generally found in pairs, and are so brittle that they snap without any strings. Sweet and tender; cooked like wax beans.

Pkt., 10c; ½ lb., 25c; 1 lb., 40c; 5 lbs., \$1.75; 15 lbs., \$4.50.

Prices subject to market changes.

PUMPKIN (Kuerbis, Ger.)

THEY are generally planted in cornfields, but they can not grow as large or fine as if the vines were not shaded. A good plan would be to plant a few seeds in the potato patch, as they are less apt to injure the crop of potatoes than the corn.

One ounce for 15 hills.

Calhoun. The outside is a creamy brown; the inside flesh is a deep salmon yellow; thick and fine grained, and the seed cavity very small. It cooks very yellow and makes pies of high, rich color.

Pkt., 5c; oz., 10c; ¼ lb., 30c; per lb., \$1.00.

Small Sugar. Fruits of small size, averaging about ten inches in diameter, of excellent keeping qualities, flattened or slightly ribbed. Skin deep orange-yellow, flesh very sweet. This should be more generally grown, as it is really one of the best for pies.

Pkt., 5c; oz., 10c; ¼ lb., 30c; per lb., \$1.00.

Cashaw Crook-Neck Striped. Grows to a medium size; flesh light yellow, and is the best variety for table use.

Pkt., 5c; oz., 15c; ¼ lb., 40c; per lb., \$1.50.

Golden Cashaw. Beautiful golden-orange color; an improvement on the old Cashaw.

Pkt., 5c; oz., 15c; ¼ lb., 40c; per lb., \$1.50.

Tennessee Sweet Potato. Medium size, pear-shaped, a little ribbed, color creamy white, sometimes lightly striped with green.

Pkt., 5c; oz., 10c; ¼ lb., 30c; per lb., \$1.00.

Japanese Pie. Is very productive, ripens early, of medium size, good keeper, and weighs 15 to 20 pounds each. The flesh is a rich salmon color.

Pkt., 5c; oz., 10c; ¼ lb., 35c; per lb., \$1.25.

Large Cheese. An excellent keeper, color bright orange.

Pkt., 5c; oz., 10c; ¼ lb., 25c; per lb., 75c.

Mammoth Tours. A productive French variety, which grows to an immense size.

Pkt., 5c; oz., 15c; ¼ lb., 35c; per lb., \$1.25.

Kentucky Field. Good for cooking purposes and for feeding stock. Pkt., 5c; oz., 10c; ¼ lb., 20c; per lb., 60c.

Connecticut Field. A large, yellow variety.

Pkt., 5c; oz., 10c; ¼ lb., 20c; per lb., 60c.

RADISH (Bettig, Ger.)

SOW early and often. In good, warm, fibrous loam, especially if quite sandy, summer Radishes will make a crop in 4 to 6 weeks from sowing. The soil should be well prepared, and fertilizers may be used freely. Have the rows a foot apart, and sow just seed enough so that they will not require thinning. Any little spot that becomes available during summer may be utilized for planting Radishes. The short or turnip-rooted sorts are quickest and easiest to grow, and good for forcing also. On greenhouse bench or in frames the rows need not be more than 4 inches apart. Sow winter Radishes in July and August. They grow best in the cooler Autumn weather. Take them up before severe freezing and store in sand in the cellar or in a pit, where they will keep tender and crisp all winter.

One ounce to 100 feet of drill—8 to 10 pounds for an acre

Special prices given to market gardeners.

**McCullough's
Cincinnati Market**

We were the introducers of this remarkable radish, which has proven one of the best long Radishes ever offered. It is largely grown by the Cincinnati market gardeners. The tops are so small that the radishes may stand touching each other in the rows. They grow perfectly straight and smooth and from six to seven inches in length. Their attractive, glossy, scarlet skin is very thin and the flesh crisp and brittle, and of delightful pungent flavor. It is the finest Long Red Radish for forcing and out sells any other that is put in competition with it on the market. Being long standing, it is also an extra fine sort for the home garden, entirely exempt from any tendency to become pithy or hollow.

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; per lb., \$1.50.

Crimson Giant Forcing. This variety is suitable both for forcing or early planting out of doors. A remarkable feature of this Radish is that it will grow double the size of other round red forcing Radishes and still remain solid. The ordinary forcing Radish, after growing to the size of 2 inches in circumference, becomes pithy, while the Crimson Giant will grow to 6 inches in circumference, and still remain solid and juicy, free from all signs of becoming soft.

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; per lb., \$1.50.

Non Plus Ultra. The smallest topped and earliest forcing Radish. Roots small, round; deep rich scarlet; very crisp and tender, white flesh.

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; per lb., \$1.50.

Rosy Gem. We have a very clean and beautiful strain of this popular sort. It is extremely early, maturing in 25 days, and is largely used for growing both under glass and outdoors. It is round, bright scarlet and has a handsome white tip.

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; per lb., \$1.50.

Earliest White Globe Forcing. The earliest white olive-shaped Radish in existence, beautiful transparent ivory-white, very small root, small top; flesh white, tender and crisp. It is particularly adapted to forcing in greenhouse or hot-bed, also does well in open ground.

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; per lb., \$1.50.

Sparkler-Coopers. A comparatively new, early variety. Globular in shape, rosy carmine with white tip. Solid and crisp with short tops. Suitable either for open or for forcing.

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; per lb., \$1.50.

Early Scarlet Globe. One of the earliest and best sorts for forcing; flavor mild; crisp and juicy; also good for garden culture.

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; per lb., \$1.50.

Early Scarlet Turnip. A small top variety, of quick growth, mild and crisp. It is a standard sort for early planting in the open ground.

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; per lb., \$1.50.

Scarlet Turnip, White Tipped. Bright scarlet color, gradually fading off to pure white at the base, tender and mild in flavor, early.

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; per lb., \$1.50.

Early White Turnip. An early, crisp, turnip-shaped Radish of pure white color.

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; per lb., \$1.50.

RADISH—Continued

French Breakfast. A variety of quick growth, mild and tender, and one of the best for forcing. Oval form, scarlet, tipped with white.Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; per lb., \$1.50.

Scarlet Olive-Shaped. Very handsome, quick-growing. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; per lb., \$1.50.

White Olive-Shaped. Olive-shaped, pure white, crisp and tender.Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; per lb., \$1.50.

**McCullough's
Norwood Long White**

Fine long white Radish, with beautiful shape; skin and flesh pure white. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; per lb., \$1.50.

Long Scarlet, Short Top. Long, of a deep scarlet color; flesh white, crisp and of good flavor. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; per lb., \$1.50.

White Icicle. The finest long, white Radish; the young Radishes are ready for use in 25 days, and continue to grow, fully retaining their crisp tenderness and mild flavor until quite large. These Radishes are transparent white, have small tops, allowing close planting, and are very crisp and brittle. A feature greatly in its favor is that it remains in good condition while growing for a long time, thus allowing a continuous pulling from the same planting.

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; per lb., \$1.50.

Giant White Stuttgart. Quick growing and therefore early, of the largest size, and both flesh and skin are pure white.

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; per lb., \$1.50.

Large Rose, White Tipped. An extra large Turnip-shaped Radish, but notwithstanding its immense size, does not get pithy.

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; per lb., \$1.50.

White Summer Turnip. A very desirable Summer Radish. Grows a round, smooth root, crisp and firm. A favorite family radish.

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; per lb., \$1.50.

White Strasburg. Oblong, tapering shape, skin and flesh pure white, firm and brittle, fine for winter use. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; per lb., \$1.50.

Chartier. Half-long, of quick growth; color deep pink above and gradually blending into a pure waxy white to root.

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; per lb., \$1.50.

Radish—Winter Varieties

THESE grow to large size, have firm, hard flesh, and can be kept in good condition for use all winter by packing the roots in moist sand or soil in a cold cellar before the ground freezes in the fall. To have them crisp and free from woodiness the seed should not be planted until late in the summer, as if planted too early the roots would be apt to become hard and woody before it is time to put them away in the fall. A good rule to follow would be to sow the seed at the same time as you would plant seed for winter turnips, and where only a small supply is needed the seed could be sown in the same patch with the turnips.

Black Spanish, Oval Shape. A black valuable winter sort.Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; per lb., \$1.50.

Black Spanish Long. Differs from the above only in shape.Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; per lb., \$1.50.

Celestial. An all-season white Radish.

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; per lb., \$1.50.

Chinese Scarlet. Half-long, fine winter sort, keeps well.

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; per lb., \$1.50.

Mammoth White Winter. A giant white-fleshed fall Radish.Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; per lb., \$1.50.

RHUBARB

(Rhabarber, Ger.)

stalks. For winter forcing take up two-year roots in fall, leave out to freeze, then bed close together on cellar bottom or under greenhouse bench in the dark.

One ounce will produce 600 plants.

Linnaeus. Best sort for general purposes; early, large and tender.Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 60c.

Victoria. Very large; later than Linnaeus.

Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 60c.

Rhubarb Roots

We specialize on Rhubarb Roots, grown from seed, as our experience has demonstrated them to be far superior to divided clumps.

We supply two varieties Linnaeus and Victoria described above. Unless otherwise specified, will send the Linnaeus variety on all orders.

Single Eye. Each, 5c; doz., 50c; (by mail, per doz., 75c.)

Small Clumps. Each, 10c; doz., \$1.00; (by express or freight only).

Large Clumps. Each, 25c; doz., \$2.50; (by express or freight only)

GOOD plants are easily grown in any good garden soil. Sow seed thinly in shallow drills a foot apart, thin to 4 or 5 inches. Keep soil loose and free from weeds. The plants are liable to vary considerably. Pick out the strongest and best. In fall or spring following, transplant to the permanent bed, 4 feet apart each way, in deep, warm and very rich soil. The more manure the better

SALSIFY OR VEGETABLE OYSTER

(Hafer Wurzel, Ger.)

COMMONLY called Vegetable Oyster. The cultivation is precisely the same as directed for Parsnips, and it will keep over winter, in the ground where grown, in the same way as Parsnips, but should be taken up before it starts growing.

One Ounce Will Sow 50 Feet of Drill

Long White French. Roots of medium size, white and smooth.

Pkt., 5c; oz., 20c; ¼ lb., 60c.

Mammoth Sandwich Island. This variety will average nearly double the size of the White French, and is of excellent quality. The best variety for market gardeners' use.....Pkt., 5c; oz., 20c; ¼ lb., 60c.

SPINACH

(Spinat, Ger.)

FOR spring and summer use, sow either broadcast or in drills as early as the ground can be worked. The fall sowing is the main one with our market gardeners, which is done from August to October, and by careful attention they have it in marketable condition throughout the entire winter and spring.

If the land is dry the seed should always be rolled or trampled in, for if the soil is loose the hot air shrivels the seed, so that it will not germinate.

One ounce for 100 feet of drill—10 to 12 pounds for an acre.

This variety is one of the most important for market gardeners, also one of the best for the kitchen garden. A quick-growing, round-seeded variety, producing in abundance, thick, dark green, slightly crumpled leaves, in large demand for either Spring or Fall sowing.

Pkt., 5c; oz., 15c; ¼ lb., 50c.

Bloomsdale Savoy. The hardest large Savoy leaved, curled and crimped with thick, fleshy leaves, good for family and market purposes.

Pkt., 5c; oz., 15c; ¼ lb., 50c.

Longest Season. A distinct hardy variety, with large, thick, fleshy, dark green leaves, which are produced in great abundance in any season. It is slower in running to seed than any other variety now in use.

Pkt., 5c; oz., 15c; ¼ lb., 50c.

Victoria. A variety with heavy, broad, dark green leaves. Two or three weeks later than other sorts in going to seed. Valuable for Spring sowing.

Pkt., 5c; oz., 15c; ¼ lb., 50c.

Prickly Seeded, or Fall. The hardest variety, having smaller leaves; is not so productive as the above.

Pkt., 5c; oz., 15c; ¼ lb., 50c.

New Zealand. Yields an abundance of the tenderest Spinach during the hottest months of the year, or in dry arid localities where the ordinary Spinach runs to seed. The seed is sown where the plants are to stand, in May, or earlier in a hotbed and transplanted, and the plants will continue to yield a supply of good leaves of excellent quality during the entire Summer, requiring scarcely any attention.....Pkt., 5c; oz., 15c; ¼ lb., 50c.

SQUASH (Kurbiss, Ger.)

It is useless to sow until the weather has become settled and warm. Light soils are best suited for its growth. Prepare hills for the seeds by incorporating 2 or 3 shovelfuls of well-rotted manure with the soil for each hill. Plant the bush varieties, from 3 to 4 feet each way, and the running sorts from 6 to 8 feet. Eight or ten seeds should be sown in each hill, thinning out after they have attained their rough leaves, leaving 3 or 4 of the strongest plants, after which cultivate same as Cucumbers.

To repel the Squash vine borer put a handful of tobacco dust close around the plants.

For Yellow-striped beetle and blight, spray early and often with Bordeaux Arsenate of Lead Mixture.

One Ounce of the Bush Varieties for 40 Hills, or of the Large-Seeded Kinds, 15 Hills. Two or Three Pounds of the Bush, and 3 to 4 Pounds of the Large-Seeded for an Acre.

Summer Varieties

Mammoth White Bush. The best early variety for market or shipping. It grows to a large size; scalloped like a patty-pan.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; per lb., \$1.00.

Early Yellow Bush. An early, flat, scallop-shaped variety; color yellow; flesh pale yellow and well flavored.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; per lb., \$1.00.

Summer Crook-Neck. Covered with warty excrescences; color bright yellow; shell very hard when ripe.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; per lb., \$1.00.

Vegetable Marrow. Skin a greenish-yellow, flesh white, grows 9 to 18 inches long.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; per lb., \$1.00.

Fall or Winter Varieties

Hubbard. Standard Winter Squash; grown more extensively than any other late variety; color dark green; shell extremely hard; flesh dry, fine grained and sweet; excellent keeper.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 35c; per lb., \$1.25.

Warted Hubbard. This strain, without doubt, grows the finest Hubbard in existence. The wartiness indicates a very hard shell, which is one of the features in a long-keeping Squash; it also denotes extra choice quality—the harder and more warty the shell of a Hubbard Squash is the more delicate and sweet the flesh will be found to be.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 35c; per lb., \$1.25.

Marblehead. Resembling the Hubbard, but of a lighter color, and is remarkable for its sweetness, dryness and delicious flavor, as well as its keeping qualities.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 35c; per lb., \$1.25.

Delicious. Resembles the old Hubbard, having a dark olive-green hard shell, weight from 5 to 10 lbs. For table use it can not be excelled, the flesh being remarkably thick, fine grained, sweet and of rich flavor.

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; per lb., \$1.25.

Fordhook. A winter Squash of great merit. Of handsome bright yellow color outside and straw-yellow within. The flesh is dry and sweet.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 35c; per lb., \$1.25.

Mammoth Chili. Rich orange-yellow; flesh thick and of good quality for making pies; grows to an enormous size; a valuable sort for feeding stock.

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; per lb., \$1.25.

Boston Marrow. A popular winter variety; quality unexcelled.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 35c; per lb., \$1.25.

Essex Hybrid. Very prolific, fine grained, orange-red flesh.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 35c; per lb., \$1.25.

TOMATO (Liebesapfel, Ger.)

SOW in a hotbed, green-house or window in a sitting room, where night temperature is not less than sixty degrees, about the first week in March, in drills five inches apart and half an inch deep. When the plants are about two inches high they should be set out in boxes three inches deep, four or five inches apart, in same temperature, or removed into small pots, allowing a single plant to a pot.

They are sometimes transplanted a second time into larger pots, by which process the plants are rendered more sturdy and branching. About the middle of May, the plants may be set in the open ground. They are planted for early crops on light, sandy soil, at a distance of three feet apart, in hills in which a good shovelful of rotted manure has been mixed. On heavy soils, which are not suited for an early crop, they should be planted four feet apart. Water freely at the time of transplanting and shelter from the sun a few days until the plants are established. For late use, sow in a sheltered border in May, and set out the plants in July; the green fruit can be picked off before frost, and ripened under glass. By training the tomato vines on trellises or tying to stakes, they will increase in productiveness, the fruit will ripen better, and be of finer quality.

One ounce of Seed Will Produce about 2,000 Plants; $\frac{1}{4}$ Pound to the Acre

Acme. Very early and productive; fruit medium sized, and of a dark, rich red, slightly tinged with purple; very solid and smooth....Pkt., 5c; oz., 25c; $\frac{1}{4}$ lb., 75c.

Beauty. Rich, glossy crimson, with a slight purple tinge. The fruit grows in clusters of four to five, is of large size, very smooth, and retains its character until late in the season.....Pkt., 5c; oz., 25c; $\frac{1}{4}$ lb., 75c.

Earliana. The earliest smooth tomato, of good size and flavor. Tomatoes are deep scarlet and grow closely together in clusters of five to eight, all of medium size, averaging 2 $\frac{1}{2}$ inches in diameter; they are smooth and solid, quite thick through and free from rough ribs or cracks. The flesh is deep red, with solid center and small seed cells, slightly acid flavor.

Pkt., 5c; oz., 30c; $\frac{1}{4}$ lb., 85c.

June Pink. This variety closely resembles the Earliana in the habit of growth and shape of fruit, but the color is pink. The fruits grow in clusters and begin to mature very early; measure 3 inches in diameter and are of excellent quality. As a rule it continues bearing until vines are killed by frost.

Pkt., 5c; oz., 30c; $\frac{1}{4}$ lb., 85c.

Detroit. Both the Amateur and the Market Gardener will be interested in this new variety. As a second early purple tomato the Detroit is equal if not superior to any other second early purple tomato yet introduced. This variety matures medium early in season and bears uniformly large, handsome, smooth, globe-shaped fruits of excellent quality through the long season, yielding in the aggregate more marketable tomatoes than any other variety we know. In consequence of its firmness, is also a desirable variety for shipping. Pkt., 5c; oz., 25c; $\frac{1}{4}$ lb., 75c.

Ponderosa. One of the largest fruited tomatoes. The fruits are of a purplish pink color, very solid and ripen early; nearly seedless, with firm, meaty, rich red flesh; unequaled and delicious either sliced, cooked or canned; a healthy, luxuriant grower and continuous yielder from early in the season until frost.

Pkt., 5c; oz., 40c; $\frac{1}{4}$ lb., \$1.35.

Comet Forcing. Superior red variety for forcing under glass. Rich scarlet-red; fruits are solid, round, smooth; strong grower; exceedingly heavy cropper; medium sized fruits; flavor excellent.

Pkt., 5c; oz., 40c; $\frac{1}{4}$ lb., \$1.35.

Dwarf-Giant New. This is much the largest fruited of all dwarf Tomatoes. They are produced in clusters of four to six. The color is a rich purple-crimson, and the depth of color is maintained throughout the entire season.....Pkt., 5c; oz., 40c; $\frac{1}{4}$ lb., \$1.25.

The plants are strong and vigorous, bearing an abundance of large, smooth fruit of a beautiful purplish crimson color, which is produced in clusters of four to six; is large, of perfect shape, and retains its size until late in the season. The flesh is remarkably thick, firm and solid and of the finest quality, with few seeds.

Pkt., 5c; oz., 30c; $\frac{1}{4}$ lb., \$1.00.

Dwarf Stone. Foliage heavy and a rich dark green. The fruits are produced in clusters of 3 to 5, averaging 4 inches in diameter, and 2 $\frac{1}{2}$ inches in depth, bright scarlet color, smooth and regular.

Pkt., 5c; oz., 30c; $\frac{1}{4}$ lb., 85c.

TOMATO—Continued

John Baer. An early tomato of recent introduction. Not only produces large, bright red, solid Tomatoes early in the season, but continues bearing until frost. With us the vines grow about six feet high, fruit ripens right up to the stem and has a mild and deliciously sweet flavor. Fruit is solid and makes a good shipping Tomato. Having tried it out we are prepared to recommend it either to the Amateur or Market Gardener.

Pkt., 10c; oz., 50c; $\frac{1}{4}$ lb., \$1.50.

Buckeye State. The tomatoes are borne in immense clusters of four to eight large fruits. Color rich, glossy crimson, with a slight purple tinge.

Pkt., 5c; oz., 30c; $\frac{1}{4}$ lb., \$1.00.

Dwarf Champion. Of dwarf, stiff, distinct, upright growth, scarcely needing support; early and prolific; smooth, medium-sized fruits of pinkish purple color...Pkt., 5c; oz., 30c; $\frac{1}{4}$ lb., 75c.

The Stone. Fruit very large and deep; bright scarlet; smooth; ripening evenly to the stem without a crack; exceedingly solid and firm-fleshed, of the finest quality.

Pkt., 5c; oz., 25c; $\frac{1}{4}$ lb., 75c.

Cincinnati Purple. A valuable variety, especially adapted for canning and shipping. It is very large, color a dark purplish red.....Pkt., 5c; oz., 25c; $\frac{1}{4}$ lb., 75c.

Perfection. Almost round fruits; smooth, tough skin of brilliant scarlet; ripens thoroughly; solid and of rich flavor.
Pkt., 5c; oz., 25c; $\frac{1}{4}$ lb., 75c.

Trucker's Favorite. One of the finest large-fruited purple sort. The plants are of strong growth and productive. The tomatoes are of large size, deep through, very smooth and regular, free from cracks, solid, meaty with small seed cells and fine flavor.
Pkt., 5c; oz., 30c; $\frac{1}{4}$ lb., 85c.

Favorite. A large, handsome and uniform-shaped tomato; solid, smooth and bright scarlet; ripens early.

Pkt., 5c; oz., 25c; $\frac{1}{4}$ lb., 75c.

Globe. A beautiful globe-shaped variety. Large size, smooth, firm fleshed, few seeds. Ripens evenly, color, a beautiful glossy rose, tinged purple.... Pkt., 5c; oz., 40c; $\frac{1}{4}$ lb., \$1.25.

Coreless. A perfect shaped canning variety, large size, globe shaped, full at stem end, bright red, a strong grower and a big cropper. In shape it is almost round. It is immensely productive, clusters of four to seven fruits are produced at six to eight inches apart along the stem.
Pkt., 5c; oz., 40c; $\frac{1}{4}$ lb., \$1.25.

Matchless. A standard main crop, bright red variety, producing enormous crops of finest scarlet fruits.....Pkt., 5c; oz., 25c; $\frac{1}{4}$ lb., 75c.

Golden Queen. Large, smooth fruits, of a beautiful golden color; quality excellent; attractive for slicing, and mixing with sliced red sorts.
Pkt., 5c; oz., 30c; $\frac{1}{4}$ lb., \$1.00.

Small-Fruited Tomatoes

THE following small-fruited varieties are used for making preserves, and are also quite ornamental while growing in the garden:

Pear-Shaped. A small preserving tomato, of pear shape, and bright red color...Pkt., 5c; oz., 30c.

Red Cherry. Small, round fruit, resembling cherries; used for preserves.....Pkt., 5c; oz., 30c.

Yellow Plum. Bright lemon-colored; oval; small sized; used for preserves....Pkt., 5c; oz., 30c.

Strawberry, Winter Cherry or Husk. Low, spreading plants, bearing yellow fruits $\frac{1}{2}$ -inch in diameter, surrounded by a husk; for preserving.
Pkt., 5c; oz., 30c.

Special prices given to market gardeners and truckers.

TOMATO PLANTS are a specialty of ours.

See Vegetable Plants.

TURNIP

(Ruben, Ger.)

THE soil for Turnips should be rich and mellow. For an early crop, sow early in the spring, in drills about a foot apart or broadcast and thin out. For a general crop, sow from the first of July to the last of August, in drills 18 to 20 inches apart, and thin out the plants to 8 or 10 inches. To destroy the fly, which is very destructive to the Turnip crop, use "Hammond's Slug Shot." Sow an abundance of seed and thin out. Should the crop be destroyed, harrow the ground immediately and sow again.

One ounce
will sow 150
feet of drill; 1
to 1 1/2 pounds
to the acre.

Purple-Top White Globe. A variety of decided merit. Of globular shape, very handsome and of superior quality, either for the table or stock. It is a heavy producer, early, of rapid growth and an excellent keeper. Pkt., 5c; oz., 15c; 1/4 lb., 55c; per lb., \$2.00.

Red or Purple Top, Strap-Leaf. This is the most popular variety grown for table purposes; an early, flat, white Turnip, with purple top, of excellent quality. The best variety for general use.

Pkt., 5c; oz., 15c; 1/4 lb., 40c; per lb., \$1.40.

Early White Flat Dutch. An early white-fleshed variety, of quick growth, mild flavor and excellent quality.

Pkt., 5c; oz., 15c; 1/4 lb., 40c; per lb., \$1.40.

Large White Globe, Strap-Leaf. Flesh white, firm and crisp; a very desirable early variety.

Pkt., 5c; oz., 15c; 1/4 lb., 40c; per lb., \$1.40.

Snowball. Extra early. A variety of sterling merit, perfectly round, early, pure white, very solid, sweet, short top. Pkt., 5c; oz., 15c; 1/4 lb., 40c; per lb., \$1.40.

Extra Early Purple Top Milan. This variety is at least two weeks earlier than any other. It is of a handsome appearance, somewhat flattened, white with purple top; flesh snow-white, fine grained and delicate flavor.

Pkt., 5c; oz., 20c; 1/4 lb., 60c; per lb., \$2.00.

Amber Globe. A beautifully formed variety, quite productive, solid flesh and attractive color; it keeps well and is desirable for either table use or for stock feeding.

Pkt., 5c; oz., 15c; 1/4 lb., 40c; per lb., \$1.40.

Golden Ball, or Orange Jelly. A rapid grower, of excellent flavor, globe-shaped, bright yellow color, good keeper and a superior table variety or for stock. Pkt., 5c; oz., 15c; 1/4 lb., 40c; per lb., \$1.40.

White Egg. An egg-shaped variety for spring or fall sowing; flesh white, firm, fine grained, mild and sweet. Pkt., 5c; oz., 15c; 1/4 lb., 50c; per lb., \$1.60.

Long White, or Cow Horn. Grows quickly, partly above ground, very productive; flesh white, fine grained, sweet, excellent quality for family and market gardener's use. Pkt., 5c; oz., 15c; 1/4 lb., 50c; per lb., \$1.60.

Seven Top. Cultivated extensively in the South for the tops, which are used for greens. It is very hardy and will grow all winter. Does not produce a good root. Pkt., 5c; oz., 15c; 1/4 lb., 40c; per lb., \$1.40.

Purple Top Yellow Aberdeen. A large, globe-shaped Turnip, with yellow flesh of fine quality, a good keeper, popular for table or stock.

Pkt., 5c; oz., 15c; 1/4 lb., 40c; per lb., \$1.40.

Swede or Rutabaga Turnip

FOR Rutabagas, sow seed in seed-bed in spring and transplant to good, warm soil, in rows at least 2 feet apart and 8 or 10 inches apart in the rows, or sow in open ground during June and early July. Take up the roots just before winter, top and store in cool cellar or pit outdoors.

American Purple Top. Very hardy and productive; flesh yellow, solid, sweet, good for stock or table use.

Pkt., 5c; oz., 15c; 1/4 lb., 55c; per lb., \$2.00.

Skirving's Purple Top. An important variety of large size and strong growth, a heavy cropper and one of the best for field culture.

Pkt., 5c; oz., 15c; 1/4 lb., 55c; per lb., \$2.00.

Budlong's Improved. White, very sweet, much milder flavor than any of the other sorts, globe-shaped, skin a cream yellow.

Pkt., 5c; oz., 15c; 1/4 lb., 55c; per lb., \$2.00.

Long Island Improved Purple Top. A uniform large rooted, quick growing, yellow fleshed sort.

Pkt., 5c; oz., 15c; 1/4 lb., 55c; per lb., \$2.00.

TOBACCO

(Tabac, Ger.)

THE seed should be sown as early as possible after danger of frost is over. A good plan is to burn a quantity of brush and rubbish in the spring on the ground intended for the seed-bed, then dig and thoroughly pulverize the earth and mix the ashes, after which the seed may be sown and covered very lightly.

Connecticut Seed Leaf. A long leaf, fine in texture. Pkt., 10c; oz., 40c.

Conqueror. It ripens early, and is easily cured to the brightest color. Pkt., 10c; oz., 40c.

Havana. A medium leaf, fine texture. Commands a high price. Pkt., 10c; oz., 40c.

White Burley. Extra stock, grown largely for the manufacture of fine-cut. Pkt., 10c; oz., 40c.

Stand-Up Burley. The leaves instead of drooping have a more erect position on the plant, turning upward rather than down—hence the name "Stand-up." It is fast becoming the most popular type of Burley and largely grown by planters in all Burley sections. Pkt., 10c; oz., 40c.

Zimmer's Spanish. One of the most popular and extensively grown. Pkt., 10c; oz., 40c.

BIRD AND SUNDRY SEEDS

Prices fluctuate considerably throughout the year. The prices now quoted are those ruling as we go to press, and may be higher or lower as the season advances.

Per lb.	Per lb.	Per lb.
Canary Seed (2 lbs. 25c).....15c	Sunflower Seed (3 lbs. 25c).....10c	Flax Seed (2 lbs. 25c).....15c
Hemp Seed (2 lbs. 25c).....15c	Bird Gravel (3 lbs. pkg.).....15c	Flax Seed (crushed).....15c
Lettuce Seed, for birds.....20c	Cuttle Bone (1 oz. 5c).....50c	Mustard Seed, white, for pickles 30c
Millet, for birds (3 lbs. 25c).....10c	Black Locust.....40c	Mustard Seed, black.....30c
Mixed Bird Seed (3 lbs. 25c).....10c	Honey Locust.....40c	Pumpkin Seed.....25c
Rape Seed (2 lbs. 35c).....20c	Celery Seed, for flavoring.....30c	Watermelon Seed.....15c

Postage must be added if wanted by mail. See Postal Rates, second page of cover.

VEGETABLE PLANTS AND ROOTS

We are large growers of Vegetable Plants. Have them fresh every day in season. Special prices given on large quantities.

POSTAGE:—Prices do not include prepayment by mail or express. If wanted by mail, add for postage, 5c per dozen; 25c per 100 on Cabbage, Cauliflower, Celery and Sweet Potato Plants; 10c per dozen on Egg Plants, Pepper and Tomato Plants. Cannot assume any responsibility for Vegetable Plants sent via Parcel Post.

ASPARAGUS ROOTS

DEEP, warm, rich, loamy soil, deeply and thoroughly stirred, is required for permanent bed. Use manure and fertilizers freely. Make furrows 2 or 4 feet apart and 8 to 10 inches deep. Set the two-year-old roots 18 to 24 inches apart in the bottom of furrows and cover lightly at first. Gradually fill in with soil and old compost. In early Spring, fork or plow the bed shallow and carefully, or pulverize the surface by harrowing. Give clean cultivation until fall; then cover with manure or compost. Second season after planting hill up the rows, especially for blanched "grass", and cut sparingly for use. After that the bed will give full crops. In the fall, as soon as the tops are ripe and yellow, they should be cut and burned. Two-year-old roots will insure the best and earliest results.

Strong two-year-old Roots of the following varieties—Argenteuil, Barr's Mammoth, Columbian Mammoth White, Conover's Colossal, Palmetto.

All the above varieties, per doz, 25c; per 100, \$1.00. If wanted by mail, add 5c per doz., 15c per 100 for postage.

CELERY PLANTS

(Ready June and July.)

McCullough's Paris Golden Yellow, Golden Self-Blanching, Golden-Hearted Dwarf, Giant Pascal, Triumph.

All the above, per 100 60c.

CABBAGE PLANTS

(Ready about April 1st.)

Early Jersey Wakefield.....Per 100, 60c.

Louisville Drumhead.
Per 100, 60c.

Premium Late Flat Dutch,
Per 100, 60c.

CAULIFLOWER PLANTS

(Ready April 1st.)

Earliest Dwarf Erfurt.
Per doz., 25c; per 100, \$1.75.

Early Snowball.
Per doz., 25c; per 100, \$1.75.

CHIVES

(Ready April 1st.)

Good Clumps
10c each; per doz., \$1.00.

EGG PLANTS

(Ready about May 15th.)

Black Beauty. Per doz., 50c.

HORSERADISH SETS

(Ready April 1st.)

Per doz., 15c; per 100 75c. (By mail—
per doz., 25c; per 100 \$1.00—postpaid.)

PEPPER PLANTS

(Ready about May 15th.)

Large Bell, or Bull Nose..Per doz. 30c.

Ruby King.....Per doz., 30c.

Long Red Cayenne.....Per doz., 30c.

SWEET POTATO PLANTS

(Ready about June 1st.)

Jersey Yellow or Nansemond.....Per 100, 50c.

Red Bermuda.....Per 100, 50c.

TOMATO PLANTS

(Ready about May 1st.)

Transplanted plants offer many advantages over seedlings; they produce fruit much earlier and are more easily shipped.

TRANSPLANTED TOMATO PLANTS

Earliana, June Pink, Detroit, Beauty, McCullough's Norwood, Trucker's Favorite, The Stone, Ponderosa, Cincinnati Purple, Dwarf Champion, Golden Queen.

All the above—Per doz., 25c; per 100, \$1.75.

RHUBARB ROOTS

(Ready April 1st.)

We specialize on Rhubarb Roots grown from seed. They are far superior to divided clumps.

Small Roots (by express or freight only),

Each, 10c; per doz., \$1.00.

Large Roots (by express or freight only),

Each, 25c; per doz., \$2.50.

Potatoes. (See Field Seed, etc.)

McGULOUGH'S SELECTED FLOWER SEEDS

Distinctive
In Quality

EVERY year we carefully revise our list of flower seeds, add a number of new sorts and discard all inferior varieties. Our collection will be found to contain everything really desirable, embracing the latest and best in the floral world. Our stock of seeds is of the highest possible quality.

YOU will notice that all of our descriptions of flowers are classified as "annual," "hardy annual," "tender annual," "perennial," "biennial," etc. These descriptions, when properly understood, will tell much about planting. These classifications are for the latitude of Cincinnati.

ANNUALS attain full growth from seed, bloom and die in one season. Sow **HARDY ANNUALS** outside in March or April, or earlier indoors for transplanting outside. Hardy Annuals may be sown in the fall for earlier Spring blooming.

HALF HARDY and TENDER ANNUALS should be sown in the house or hot-bed and not be sown or transplanted outside until the weather is settled and warm.

BIENNIALS are plants that bloom the second year from seed, and then die. Many of these will bloom the first year if sown early. Sow under same conditions as perennials.

PERENNIALS are plants that bloom the second year from seed, and the plant lives and blooms for many years. If sown in early Spring, many perennials will bloom the first year from seed. Tender and half-hardy perennials are best sown in Spring after frost is over. Hardy perennials may be sown in the late summer and early Fall (July to October) for next year's flowers.

TENDER or GREENHOUSE means the plant will not stand the least frost. All such must be planted late in Spring, or in a greenhouse.

HARD SHELLED SEEDS like Canna, Brazilian and Japanese Morning Glory, Moon Vine, etc., should be soaked in warm water 36 hours before planting.

HOW TO SOW FLOWER SEED. A common mistake in sowing flower, as well as other seeds, is covering too deeply. The exception to this is the Sweet Pea, which is seldom planted deep enough. As a general rule, cover small seeds only to the depth of the thickness of the seeds; or, with medium-sized seeds, like Balsams, Zinnias, etc., half an inch or so is none too much. Such fine seeds as Petunias, Portulacas, etc., need only to be pressed into the soil with a piece of board. Always press the earth after sowing all flower seeds, else there is danger of their drying up before the roots can get firm hold of the soil. Seeds of the hardier Annuals may be sown where they are to grow; but, as a rule, it is preferable to transplant, as the plants are generally stronger and stand the drought better. During very dry weather, and when the seedlings are first set out, they should be watered frequently. Provide some support for all such plants as require it.

The weeds should be kept down and the ground loosened often, so that the plants will receive the full benefit of the rains and dews, which they will not if the ground is allowed to become hard and baked.

"United States Food Administration License Number G-18737."

McCullough's Selected Flower Seeds

Abutilon

ABUTILON

(Flowering Maple)

ELEGANT flowering plants of strong growth and easy cultivation, producing various colored, drooping bell-shaped flowers.

Sown indoors any time before April, they will produce plants that will flower outdoors the first season and indoors all Winter. *Half-hardy Perennial.*

1—**Fine Mixed.** Of choice varieties and colors. (See cut.) 10c pkt.

ACHILLEA

(Milfoil, or Yarrow)

2—**Parmica "The Pearl."** One of the best hardy white blooming plants; grows about two feet high, and

from Spring till frost is covered with heads of purest white double flowers. A grand plant for cemetery decoration. Easily grown from seed, flowering the first season if sown early. *Hardy Perennial...* 10c pkt.

Agrostemma

ACONITUM

(Monk's Hood, or Wolfsbane)

3—**Napellus.** Grows in any good garden soil producing long spikes of curiously-shaped blue and white flowers. Well adapted for planting among shrubbery or in shady corners of the garden; 3 to 5 feet. *Hardy Perennial* 5c pkt.

ACROCLINIUM

A pretty "Everlasting," growing about 15 inches high, bearing lovely white or rosy-pink flowers, which, when cut in the bud state, can be dried and used in winter bouquets. *Half-hardy Annual.*

4—**Double Mixed.**..... ¼ oz., 15c; 5c pkt.

AGERATUM
PERFECTION

ADLUMIA

(Mountain Fringe, Allegheny Vine, or Climbing Fumitory)

5—**Cirrrosa.** A graceful climber, but, as it resows itself year after year, it might be considered perennial. The feathery foliage closely resembles that of the Maiden-hair Fern. The flowers are tube-shaped, flesh-colored, and completely cover the plant. For covering trellises, stumps of trees, etc., it is very desirable. Flowers the first year from seed. *Hardy Biennial.*..... 5c pkt.

AGROSTEMMA

(Rose of Heaven, Mullein Pink)

AN attractive, free-flowering plant of easy culture, producing flowers on long slender stems like a single pink. Blooms the first season. Fine for cutting; 1 to 2 feet. *Hardy Perennial.* (See cut.)

6—**Mixed Varieties.**..... 5c pkt.

African Golden Daisy. (See *Dimorphotheca Aurantiaca.*)

Allegheny Vine. (See *Adlumia.*)

AGERATUM (Floss Flower)

ONE of the very best bedding plants, being literally a sheet of bloom from early summer till frost. Unlike many bedding plants, their flowers are not liable to be spoiled by rain, nor do the colors fade out. The blue varieties are without doubt the most satisfactory bedding plants of this color for our trying climate. Easily raised from seed, which is usually started in a hotbed or window and transferred to the open ground in May. Can also be sown outdoors in May. *Half-hardy Annual.*

7—**Blue Perfection.** This is the darkest-colored of all large flowering Ageratums. Color, deep amethyst-blue; compact growth; fine bedder. (See cut.)..... ¼ oz., 40c; 5c pkt.

8—**Little Blue Star.** A variety of exceedingly dwarf and even growth; the tiny bushes, not over 4 to 5 inches high, are densely covered with bright blue flowers; a fine variety for edging.

3 pkts., 25c; 10c pkt.

9—**Little Dorrit.** Azure blue, very floriferous, 9 inches ¼ oz., 30c; 5c pkt.

10—**Album.** White, profuse bloomer, 18 inches. 5c pkt.

ALYSSUM (Mad-Wort)

PRETTY little plants for beds, vases, baskets, edgings or rockwork, blooming profusely all Summer; useful also for Winter-flowering. Very sweetly scented. *Hardy Annual.*

- 11—**Little Gem, or Carpet of Snow.** This should really be called the "Snow-White Carpet Plant," for the plants, which are only a few inches high, grow so dense and are so completely covered with snow-white blossoms they create the impression of a beautiful carpet spread over the ground. We know of no other flower which is so particularly well adapted for borders, ribbons, etc., as our "Little Gem" Alyssum. The plants commence to bloom when quite small, and will flower all Summer long until late in the Fall. This habit, with its fragrance, makes it indispensable. Keep the seed pods sheared off the plants and they will bloom until killed by frost. Sow the seeds wherever the plants are to remain. If too thick, thin out. To prevent sowing too thickly mix the seed with sand before sowing. (See cut.)..... $\frac{1}{4}$ oz., 15c; oz., 50c; 5c pkt.
- 12—**Sweet Alyssum.** Of trailing habit; flowers white. The popular old-fashioned sort, the best for broad edges and vases. It begins to bloom early in the season, and blooms until frost. It is a neat, thrifty, healthy grower and should be cultivated by everyone who wants an all around good plant. The same notes given with "Little Gem" will apply to this variety.
 $\frac{1}{4}$ oz., 10c; oz., 25c; 5c pkt.

AMARANTHUS

BRILLIANT foliaged plants, easily raised from seed, either by starting them early indoors or sown outdoors in May. Grow from 2 to 4 feet high, some of the varieties bearing curious racemes of flowers. All are useful in borders of tall plants or for the center of large beds. They thrive best in a hot, sunny location, not too rich soil, and given sufficient room to develop their full beauty. *Hardy Annual.* (See cut.)

Amaranthus

- 13—**Caudatus.** (Love Lies Bleeding.) Bloodred; drooping racemes..... 5c pkt.
- 14—**Tricolor Splendens-Joseph's Coat.**—2 $\frac{1}{2}$ feet. The inner foliage is of blackest bronze, tipped with green, while the outer foliage is bright scarlet and gold. The colors are especially brilliant if grown in poor soil. 5c pkt.

AMMOBIUM

ONE of the hardiest of everlastings, valuable for forming Winter bouquets in connection with grasses and other everlastings. The flowers should be gathered before fully opened. *Hardy Annual.*

- 15—**Alatum Grandiflorum.** White, large flower..... 5c pkt.

AMPELOPSIS

(Boston or Japanese Ivy)

- 16—**Veitchi.** A *Hardy Perennial* climber from Japan. The best and most popular climber for covering brick or stone walls. (See cut.)
 $\frac{1}{4}$ oz., 15c; oz., 50c; 10c pkt.

ARABIS (Rock Cress)

- 17—**Alpina.** Early Spring flowering plant, especially adapted for edging and rockery; plants form a dense carpet completely covered with pure white blossoms in May; 6 inches. *Hardy Perennial*..... 5c pkt.

ARCTOTIS (African Daisy)

- 18—**Grandis.** A handsome annual from Southwest Africa. It forms much-branched bushes 2 to 3 feet high; its flowers are large and showy, being pure white on the upper surface, the reverse of petals pale lilac-blue. Daisy-shaped flowers of all kinds are always popular with flower lovers, and in the Arctotis we have one of the very best. It is easily grown from seed, and may be started in hotbed, in the house, or in the open ground, and the plants may be expected to come into bloom early in July and continue until quite hard frost. It delights in a sunny situation. As a cut flower it is especially valuable, the blooms lasting a week or ten days in water, and if undeveloped buds are cut and placed in a sunny window, every one will open. *Half-hardy Annual*..... 10c pkt.

ASPARAGUS

- 19—**Plumosus Nanus.** (Asparagus Fern.) This graceful climbing Asparagus has fine foliage, and will last for weeks after being cut. It is an excellent house plant. *Greenhouse Perennial*..... 10c pkt.
- 20—**Sprengeri.** (Emerald Feather.) One of the best plants to grow in baskets, for greenhouse or for outdoors in the summer. The fronds frequently grow 4 feet long, and are now considered indispensable in all fine decorations; grows readily from seed. *Greenhouse Perennial*..... 10c pkt.

ANTIRRHINUM (Snapdragon)

For gorgeous coloring few flowers can match Snapdragons.

ANTIRRHINUMS or Snapdragons are now receiving the attention they deserve. They are undoubtedly one of the best cut flowers which can readily be grown from seed, while for beds or borders they are a constant source of pleasure, being in flower all the time. They succeed best in a rather light soil, in a sunny position. For early flowering, sow in fall, protecting the plants with a covering of leaves through the winter. Sown in spring they bloom by midsummer, and if the flowers are cut freely the flowering is continuous till fall. If intended for winter flowering in the house, cut them well back in September. The Snapdragon, like most perennials and biennials which bloom the first year, is treated like an annual and sown every year. *Half-hardy Perennials.* (See cut.)

Tall Giant Flowering Antirrhinum

Flowers nearly double the size of the older sorts.

- 21—**Rose Queen.** The color of the flowers is an exceedingly fine rosy-pink with chamois lustre and a beautiful silky gloss. An important point is that the flower is absolutely one colored without other shades about the lip or throat; it is uniformly rosy-pink, which makes it so attractive and so valuable for cutting purposes.....10c pkt.
- 22—**Queen Victoria.** Very beautiful, bearing immense flowers, white shaded cream, with lemon-colored lip. The best white.....10c pkt.
- 23—**Silver Pink.** Delicate rosy pink, seemingly covered with a silver sheen.....10c pkt.
- 24—**Nelrose.** Long, pink spikes, fine variety, profuse bloomer....10c pkt.
- 25—**Brilliant Scarlet.**.....10c pkt.
- 26—**Fire King.** Scarlet with orange.....10c pkt.
- 27—**Venus.** Beautiful light rose, white throat.....10c pkt.
- 28—**Golden King.** Beautiful golden yellow flowers.....10c pkt.
- 29—**Special Collection.** One packet each of the above 8 varieties...60c.
- 30—**Tall Giant Mixed.** A splendid mixture, containing all the colors; magnificent spikes of large individual flowers.
 $\frac{1}{4}$ oz., 30c; oz., \$1.00; 5c pkt.

ANTIRRHINUM OR SNAPDRAGON

Semi-Dwarf Giant Flowering Antirrhinum

Are particularly good for bedding, as they require no staking. The flowers are most wonderful, in many new shades and tints.

- 31—**Queen of the North.** Grows 1 foot in height, and densely covered with large white flowers. A gem for beds and borders and valuable for pot culture...10c pkt.

- 32—**Golden Queen.** Pure yellow, very fine...10c pkt.
- 33—**Ruby.** Brilliant red.....10c pkt.
- 34—**Half-Dwarf Mixed.** Large variety of colors; best for bedding..... $\frac{1}{4}$ oz., 20c; 5c pkt.

AQUILEGIA, OR COLUMBINE

CHARMING hardy plants, bearing in countless numbers through May and June exquisite clear blue, white, rose, yellow, purple and striped blossoms. For planting in permanent borders or edges of shrubbery this old-fashioned favorite is one of the best. They thrive well with ordinary garden culture, but do best in partially shaded nooks. Few hardy plants are so easily grown from seed. Will bloom first season if sown very early. *Hardy Biennials.*

- 35—**Coerulea.** (Rocky Mountain Columbine.) Sepals deep blue, petals white; extra fine, 2 feet.....3 pkts., 25c; 10c pkt.
- 36—**Coerulea Hybrida, "Rose Queen."** A beautiful variety, producing in great profusion very graceful, large-flowered, long-spurred flowers, shading from light pink to dark rose with white center and yellow anthers....3 pkts., 25c; 10c pkt.

37—**McCullough's Long-Spurred Hybrids.**

A beautiful strain, comprising shades and combinations of blue, white, yellow, orange, scarlet and bright rose pink in large flowers with long spurs; the finest to be had. (See cut.)
3 pkts., 25c; 10c pkt.

- 38—**Double,** all colors, mixed..... $\frac{1}{4}$ oz., 20c; 5c pkt.
- 39—**Single,** all colors, mixed..... $\frac{1}{4}$ oz., 20c; 5c pkt.

ASTERS

ASTERS are one of the most important summer and autumn flowers, and receive special care at our hands.

Our list comprises only such sorts as can be planted with perfect confidence that nothing better is procurable, no matter at what price or from what source.

The early sorts begin blooming in July, followed by the midseason kinds, which flower during August; then the late-flowering varieties, which are at their best through September. It is quite easy, therefore, with a little care in the selection of the varieties, to have Asters in flower from the first days in July until hard frost.

Asters will thrive in any good soil, prepared in the same way as you would for a crop of vegetables, but it is well to remember that any extra care taken in the preparation of the soil is repaid by finer plants, larger blooms, with longer stems and more profuse flowering. They should have an open, sunny position, and prefer a good, heavy, loamy soil, enriched with a liberal quantity of thoroughly rotted manure, and the addition of wood ashes or air-slaked lime, and we do not advise growing them on the same ground two years in succession. Sow either in the open ground in May, or in March or April in cold frame, spent hotbed or pots or boxes in the house, covering the seed with about one-fourth inch of good soil. When the plants are strong enough transplant about 18 inches apart in deeply dug, well-prepared beds. *Half-hardy Annuals.*

McCullough's "Premier"

40—This is a mixture of the most beautiful, striking and distinct colors. Selected from the cream of those varieties especially purchased for this mixture. This is the finest mixture of Asters in existence, and the most critical lover of this flower will be astonished at the wide range of colors and varieties given in this strain. $\frac{1}{8}$ oz., 40c; $\frac{1}{4}$ oz., 75c; 10c. pkt.

Giant Branching Asters

This superb strain is of American origin and is especially adapted to our climatic conditions.

The plants form strong, branching bushes, 2 to 2½ feet high, bearing on long, strong stems their handsome Chrysanthemum-like flowers, which, under ordinary cultivation, average 4 inches across. The form of the flowers, together with the length of the stems, places them at the head of Asters for cutting. They come into bloom from two to three weeks after the average type, usually being at their best during September.

41—Crimson 10c pkt.
42—Lavender 10c pkt.
43—Deep Purple 10c pkt.
44—Rose 10c pkt.
45—Shell Pink 10c pkt.
46—Pure White 10c pkt.
47—Collection. One pkt. each of the above 6 varieties, 50c.
48—Finest Mixed. Containing many more colors than mentioned above. . . $\frac{1}{8}$ oz., 25c; $\frac{1}{4}$ oz., 40c; 10c pkt.

Carlson or Invincible

(The Early Branching Aster)

The flowers are large and firm; the stems long and stiff and the colors are decided and pleasing. The plants grow about 24 inches high and come into bloom about 10 days before the Giant Branching Aster.

49—Lavender 10c pkt.
50—Pink 10c pkt.
51—White 10c pkt.
52—Collection. One pkt. each of the above 3 varieties, 25c.
53—Finest Mixed. Many colors.
 $\frac{1}{8}$ oz., 25c; $\frac{1}{4}$ oz., 40c; 10c pkt.

Improved Giant Comet Asters

The finest type of the Giant Comet, or Ostrich Feather Asters. Much larger than the Giant Comet, the petals longer, more curled and twisted, and produced in greater abundance. Borne on long stems.

54—Crimson 10c pkt.
55—Rose 10c pkt.
56—Light Blue 10c pkt.
57—Dark Blue 10c pkt.
58—Pink 10c pkt.
59—White 10c pkt.
60—Collection. One pkt. each of the above 6 varieties, 50c.
61—Finest Mixed. All colors. 10c pkt.

King Asters

The habit is similar to the popular Giant Branching, vigorous in growth, long stiff stems. In form the flower is entirely distinct from any other variety; petals somewhat resemble the quilled varieties, but are much larger and broader, those in the center being curled and incurved, completely covering the crown. In shape and size the bloom is round, full and very large.

62—Crimson 10c pkt.
63—Rose 10c pkt.
64—Violet 10c pkt.
65—Lavender 10c pkt.
66—Pink 10c pkt.
67—White 10c pkt.
68—Collection. One pkt. each of the above 6 varieties, 50c.
69—Finest Mixed 10c pkt.

Crego's Giant Asters

We consider this the finest and largest of all Comet Asters, bearing immense fluffy flowers five inches and over in diameter, as fine as any Chrysanthemum, and when cut keep in good condition longer than any other of this type.

70—Crimson 10c pkt.
71—White. Pure 10c pkt.
72—Pink. Shell-pink 10c pkt.
73—Purple. Bright 10c pkt.
74—Lavender 10c pkt.
75—Rose. Dark 10c pkt.
76—Collection. One pkt. each of the above 6 varieties, 50c.
77—Finest Mixed 10c pkt.

Queen of the Market Asters

A first-class early flowering Aster, coming into flower in July, of branching habit; flowers of good size and borne on long stems, making them exceedingly valuable for cutting; one foot.

78—Rose 5c pkt.
79—Crimson 5c pkt.
80—Light Blue 5c pkt.
81—Dark Blue 5c pkt.
82—Pink 5c pkt.
83—White 5c pkt.
84—Collection. One pkt. each of the above 6 varieties, 25c.
85—Finest Mixed All colors. . $\frac{1}{4}$ oz., 35c; 5c pkt.

Improved Victoria Asters

An unrivaled and favorite class. The flowers are of great size, measuring four inches and over across; beautifully imbricated and perfect in form, of great richness and variety of color; from twenty to forty on a plant; height, 1½ feet

86—Crimson 10c pkt.
87—Dark Blue 10c pkt.
88—Light Blue 10c pkt.
89—Rose 10c pkt.
90—White 10c pkt.
91—Collection. One pkt. each of the above 5 varieties, 40c.
92—Finest Mixed All colors. . $\frac{1}{8}$ oz., 30c; 10c pkt.

See Special Offer of Asters on Next Page.

ASTERS—Continued

Miscellaneous Asters

- 93—**Pink Beauty.** A magnificent variety of strong, free, upright growth; color a soft delicate, bluish pink. 10c pkt.
- 94—**Daybreak.** Of symmetrical growth; attains a height of 18 inches, globe-shaped flowers, of a delicate pink tint. 10c pkt.
- 95—**Purity.** Identical in every way to Daybreak, but of pure glistening white. 10c pkt.
- 96—**Lavender Gem.** One of the most beautiful Asters. Of comet type, with large, artistic, loosely-arranged flowers of the most charming shade of lavender imaginable. 10c pkt.
- 97—**Pink Enchantress.** The color is a very delicate pink. It is a mid-season variety. 10c pkt.
- 98—**China Asters, Mixed.** A general mixture of fine sorts and colors. $\frac{1}{4}$ oz., 25c; 5c pkt.

SPECIAL OFFER

Select 6 packets of Asters, any varieties, for 50c; 13 pkts. for \$1.00.

Improved
Giant
Comet

BALLOON VINE

(Love-in-a-Puff)
(Cardiospermum)

A RAPID growing annual climber; succeeds best in light soil and warm situation; flowers white; seed vessels look like miniature balloons and are of great interest to children. *Half-hardy Annual.*

99..... 5c pkt.

BRACHYCOME

(Swan River Daisy)

FREE-FLOWERING, dwarf-growing plants covered during the greater part of the summer with a profusion of pretty, Cineraria-like flowers. Suitable for edgings and small beds or pot culture. *Half-hardy Annual.*

100—Mixed. Light blue and white. (See cut.) 5c pkt.

Brachycome

BALSAM

(Lady Slipper, or Touch-Me-Not)

ONE of the oldest and best known summer-blooming annuals, of easy culture. Desirable for garden or pot culture. The soil should be of the richest and best quality. Set about 15 inches apart, and give them plenty of manure-water. *Tender Annuals*; two feet.

101—McCullough's "Premier Mixed." Valued for variety of color and size of flower; includes all the most desirable shades. (See cut.) $\frac{1}{4}$ oz., 30c; 10c pkt.

102—**Salmon Pink.** Brilliant salmon rose flowers; very double, of finest camellia flowered type. 10c pkt.

103—**White Perfection.** The finest pure white grown; flowers unusually large, solid and double. 10c pkt.

104—**Scarlet.** Brilliant fiery scarlet. 5c pkt.

105—**Double Camellia Flowered, Mixed.** Of perfect form, beautiful colors. $\frac{1}{4}$ oz., 20c; 10c pkt.

106—**Choice Double Mixed.** $\frac{1}{4}$ oz., 15c; oz., 50c; 5c pkt.

BALSAM, Apple or Pear

VERY curious climbing vine, with ornamental foliage, fruit golden yellow, warted, and when ripe opens, showing the seed and its brilliant carmine interior; ten feet. *Tender Annuals.*

107—**Balsam Pear.** (Momordica Charantia.) Pear-shaped fruit; the fruits are long and used medicinally. (See cut.) Oz., 40c; 5c pkt.

108—**Balsam Apple.** (Momordica Balsamina.) Round apple-shaped fruit with very fine glossy green foliage. Oz., 40c; 5c pkt.

BROWALLIA

(Amethyst)

FREE-FLOWERING plants, covered with bright blue flowers, which continue to bloom during the Summer and Autumn. Sow during April and May in good, light, rich soil. *Half-hardy Annual.*

109—Mixed. 5c pkt.

BRYONOPSIS

- 110—Laciniosa.** 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 scarlet, striped white. *Half-hardy Annual*....5c pkt.

BELLIS (English Daisy)

A FAVORITE perennial plant, which will stand the winter if given the protection of a few leaves or litter; in bloom from early Spring until well on in the Summer. The seed we offer is saved from the finest double varieties; easily raised from seed; usually sown in August, but can be sown in Spring, and for best results should be sown each year; 4 inches. *Half-hardy Perennials.* (See cut.)

- 111—Longfellow.** Large, double, dark pink flowers; with long, stiff stems.....10c pkt.
- 112—Snowball.** A beautiful white variety with long stems, and very double flowers; fine for cutting.....10c pkt.
- 113—Giant Double.** Beautifully and densely imbricated flowers, 1 ½ inches in diameter. Finest mixed.10c pkt.

BEGONIAS

Everblooming Bedding Varieties

THE following are varieties of Begonia Semperflorens, and take rank as bedding plants with Geraniums and Coleus, doing equally well in full sunlight, and surpassing both in positions partially or wholly in shade. They are of sturdy growth, growing about one foot high and forming dense bushes, which, from May until frost, are completely hidden with flowers. As pot plants for winter flowering they are superb, remaining a sheet of bloom throughout the entire year. Easily raised from seed, which should be started either indoors or in a hotbed. *Tender Perennials.*

- 114—Erfordia.** Bright rosy carmine.10c pkt.

- 115—Gracilis Luminosa.** This differs from Begonia Gracilis in the lustrous reddish-brown color of the foliage, while the flowers measuring 1 to 1 ½ inches across, are of a fiery dark scarlet. It is very free flowering, and where massed produces a splendid effect. No better sort for groups and bedding has yet been seen. (See cut.).....10c pkt.

- 116—Vernon.** Bright orange carmine flowers, deep red foliage.....10c pkt.

- 117—Vernon Grandiflora.** A large-flowering form of the above, with which it is identical in growth, floriferousness and color. The flower is nearly twice the size of the type.15c pkt.

- 118—Semperflorens, Single Mixed.** This mixture contains all the best varieties, ranging in color from pure white to the deepest crimson; splendid.....10c pkt.

TUBEROUS-ROOTED BEGONIAS

(See Bulbs.)

Begonia Gracilis Luminosa

Bachelor's Button, Blue-Bottle or Ragged Sailor.
(See Cyanus.)

Black-Eyed Susan. (See Thunbergia.)

CANARY-BIRD VINE

(Tropaeolum Canariense)

A BEAUTIFUL rapid annual climber, the charming little canary-colored blossoms bearing a fancied resemblance to a bird with its wings expanded. *Half-hardy Annual.*

- 119.....Oz., 25c; 5c pkt.

CACTUS

BEAUTIFUL plants for pot culture in the window or greenhouse. The flowers of some are very beautiful, and the foliage of others very curious. *Greenhouse Perennials.*

- 120—Mixed Varieties.
2 pkts., 25c; 15c pkt.

SEE McCULLOUGH'S "EASY-TO-GROW" FLOWER SEED COLLECTION, 4th page of cover.

Canary Bird Vine

CALENDULA (Pot Marigold)

THIS is the "Marygold" of Shakespeare'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 in bloom from early summer until killed by frost; valuable also for pot culture, blooming freely in winter and early spring; one foot. *Hardy Annuals.* (See cut.)

- 121—Orange King.** The outer petals are slightly imbricated, while those of the center are curved like those of the paeony. Color rich, dark orange. $\frac{1}{2}$ oz., 15c; 5c pkt.
- 122—Prince of Orange.** This variety surpasses in beauty the well known *Calendula Meteor*. The stripes around each petal are of a deep orange color, making a brilliant appearance. 5c pkt.
- 123—Lemon King.** A grand variety, with double, extra large yellow flowers. 5c pkt.
- 124—Fine Double Mixed.** Contains the choicest sorts. $\frac{1}{2}$ oz., 10c; oz., 15c; 5c pkt.

(See also Marigold.)

CALCEOLARIA

UNSURPASSED for pot culture in the greenhouse or conservatory, producing their brilliant flowers in great profusion and variety. *Greenhouse Perennial.* (See cut.)

- 125—Hybrida Grandiflora.** Mixed varieties, 25c pkt.

Castor Oil Bean. (See Ricinus.)

California Poppy. (See Eschscholtzia.)

CALLIOPSIS

SHOWY and beautiful free-flowering annuals, of the easiest culture, doing well in any sunny position, blooming all Summer and excellent for cutting and massing. It is best to sow them where they are to bloom, thinning out to stand 8 inches to 12 inches apart. By keeping the old flowers cut off the flowering season can be lengthened until late autumn. *Hardy Annuals.* (See Cut.)

126—Golden Wave.

A very showy sort, with bright, golden-yellow flowers, with small, dark centers, blooming profusely. 5c pkt.

127—Finest Mixed.

$\frac{1}{2}$ oz., 20c; 5c pkt.

COREOPSIS

128—Lanceolata Grandiflora.

This is one of the finest of hardy plants, with large, showy, bright yellow flowers produced in the greatest abundance from June till frost. As a cut flower they stand near the head among hardy plants, having long stems and lasting in good condition a week or more. Easily grown from seed, flowering the first year if sown early. *Hardy Perennial.* (See Cut.) $\frac{1}{4}$ oz., 25c; 10c pkt.

CANNA (Indian Shot)

SOAK the seeds in warm water until they show evidence of swelling; then sow in sandy loam, and place in a hotbed; when up to the second leaf, pot off singly. *Half-hardy Perennial.*

- 129—Mixed.** Crozy's finest sorts. Oz., 20c; 5c pkt.

CARDINAL CLIMBER

(*Ipomoea Quamoclit Hybrida*)

THE most brilliant, beautiful and distinct annual climber introduced for many years. Rapid grower with branching habit; flowers all summer cardinal-red clusters, 15 to 25 feet. *Tender Annual.*

- 130—Mixed.** Each 20c; by mail, each 25c.

CAMPANULA (Canterbury Bells)

THIS old-fashioned flower is a favorite with all. Stately and showy, and of the easiest growth. The seeds should be sown about April, in finely prepared, rich soil. By July the little plants should be transplanted, either to the places where they are to bloom the following Summer, or else they may be set out temporarily in rows about a foot apart, the plants eight inches apart, and finally transplanted early in October. Some evergreen branches, or a little straw or coarse hay, thrown over them when the ground begins to freeze, makes all the Winter covering these plants require. If the flowers are cut immediately upon fading, the period of blooming can be prolonged to about six weeks. *Hardy Biennials.*

Calycanthema. (Cup and Saucer Canterbury Bells.) This is unquestionably the finest type of this old-fashioned and much-prized garden plant. They differ from the ordinary type in having an extra large calyx, which is of the same color as the flower, giving the appearance of a cup and saucer. They are effective either in the garden or grown in pots for conservatory or table decoration.

131—Pink. Delicate rosy-pink.....10c pkt.

132—Blue. A fine, clear shade.....10c pkt.

133—White. Pure white.....10c pkt.

134—Finest Mixed. All colors of the Cup and Saucer type
¼ oz., 50c; 5c pkt.

Medium. (Single Canterbury Bells.) The old fashioned sort, with beautiful, large bell-shaped blossoms. (See cut.)

135—Blue......10c pkt.

136—Rose......10c pkt.

137—White......10c pkt.

138—Single Mixed. All colors.....¼ oz., 25c; 5c pkt.

139—Double Mixed. All the double-flowering Medium varieties.....¼ oz., 40c; 5c pkt.

CANDYTUFT

THE annual Candytufts are universally known and cultivated, and considered indispensable for cutting. All the varieties look best in beds or masses. Seed sown in autumn produce flowers early in Spring; when sown in April, flowers in June; successive sowings should be made at intervals. Hardy and easy to grow. Single plants transplanted look well and bloom profusely; one foot. *Hardy Annual.*

140—Empress. The finest of all the white varieties, being a complete mass of pure white flowers, in a pyramid of bloom. (See cut.)

¼ oz., 25c; oz., 40c; 5c pkt.

141—Little Prince. Very large heads of pure white flowers; fine for borders and pots; 6 inches.

5c pkt.

142—White Rocket. Good spikes, pure white.
Oz., 25c; 5c pkt.

143—Carmine. Bright carmine rose.
Oz., 40c; 5c pkt.

144—Mixed Colors. Oz., 25c; ½ oz., 15c; 5c pkt.
For Perennial Candytuft see Iberis.

CARNATION

CARNATIONS are general favorites for their delicious fragrance and richness of colors. They are indispensable, both for greenhouse culture in Winter and for the garden in Summer. The Marguerite type is the best for Summer flowering. *Half-hardy Perennial.*

145—Earliest French Mixed......¼ oz., 50c; 10c pkt.

146—Malmaison or Giant Mixed......¼ oz., 50c; 10c pkt.

Marguerite Carnation

These are deservedly the most popular Carnations with the amateur, as they begin flowering in a few weeks from time of sowing. The strain offered is of extra fine quality, producing on long, strong stems an abundance of large, double, beautifully fringed, highly scented flowers; with slight protection they will survive an ordinary winter and bloom freely the following spring. *Half-hardy Perennial.* (See cut.)

147—Mixed. All colors.....¼ oz., 50c; 5c pkt.

Marguerite Carnation

CELOSIA, or Cockscomb

GRACEFUL plants, growing best in rather light soil, not too rich, producing beautiful comb-shaped flowers; grown in pots, they are fine for the greenhouse or conservatory. *Half-hardy Annuals.*

- 148—**Glasgow Prize.** A superb sort with enormous rich, deep crimson combs. (See cut.).....10c pkt.
149—**Dwarf Mixed.** Large solid heads of bloom.....5c pkt.

Celosia Plumosa

(Feathered Cockscomb.)

Make fine plants for large beds or groups, and the plumes or flowers can be cut and dried for winter bouquets.

- 150—**Thompsoni Magnifica Crimson.** (Triomphe de l'Exposition.) Of pyramidal growth, attaining a height of 3 feet and producing graceful, feathery plumes of the most brilliant crimson.....10c pkt.
151—**Thompsoni Magnifica Yellow.**.....10c pkt.
152—**Plumosa, Mixed.**.....5c pkt.
CHILDSI. (See Chinese Woolflower.)

CENTAUREAS

UNDER this name is included such popular annuals as the Cornflowers, Sweet Sultans, etc. They are favorites in all sections of the country, are perfectly hardy, will grow and do well almost anywhere, and are much in demand as cut flowers.

Cornflowers (*Centaurea Cyanus*)

These are also known as Bachelor's Button, Blue Bottle, Ragged Sailor, Bluet. Very attractive flowers of easiest culture; one of the most graceful of all the old-fashioned flowers. Sow early in the Spring in the beds where they are to bloom. *Hardy Annuals.* (See cut.)

- 153—**Blue Emperor.** Single blue. ½ oz., 15c; oz., 25c; 5c pkt.
154—**Miniata.** Single pink. ½ oz., 15c; oz., 25c; 5c pkt.
155—**Single Mixed.** Blue, white, rose, etc. ½ oz., 15c; oz., 25c; 5c pkt.
156—**Double Blue.** Same shade as the Blue Emperor. Flowers semi-double with remarkable lasting qualities.5c pkt.
157—**Double Mixed.**.....½ oz., 15c; oz., 25c; 5c pkt.

Royal Sweet Sultans (*Centaurea Imperialis*)

This beautiful class is undoubtedly the finest of all Centaureas for cut flower purposes. The beautiful sweet-scented, artistic-shaped flowers are borne on long, strong stems, and when cut will stand for several days in good condition. It is best to sow very early in the Spring. *Hardy Annuals.* (See cut.)

- 158—**Rose.**.....10c pkt. | 160—**Purple.**.....10c pkt.
159—**Lavender.**.....10c pkt. | 161—**White.**.....10c pkt.
162—**Yellow.**.....10c pkt.
163—**Collection.** One packet each of the above 5 varieties, 40c.
164—**Finest Mixed Colors.**.....¼ oz., 20c; 5c pkt.

White-Leaved Centaureas

(Dusty Millers)

Fine for bedding, vases, hanging-baskets and pots; also extensively used for borders. As an edging to a bed of dark-leaved Canas or Scarlet Sage these are particularly effective. Sow the seed early indoors and transplant in May. *Tender Perennials.*

- 165—**Candidissima.** Silvery white; leaves broadly cut.10c pkt.
166—**Gymnocarpa.** Fine-cut silvery foliage; the kind used most for borders; 1 foot.....¼ oz., 20c; 10c pkt.

CENTROSEMA

(The Butterfly Pea)

INTERESTING and beautiful vine of rare and exquisite beauty. It blooms early in June from seed sown in April, and bears in the greatest profusion inverted pea shaped flowers, from

1½ to 2½ inches in diameter, ranging in color from a rosy violet to a reddish purple. *Hardy Perennial.*

- 167—**Grandiflora.** (See cut.).....10c pkt.

CHRYSANTHEMUMS

Hardy Annual Varieties

The hardy annuals are summer-flowering border plants, and quite distinct from the hardy perennial varieties. (See cut.)

- 168—**Bridal Robe.** (Double.) Of compact and upright habit. The plants grow about 12 inches high, and are covered the entire summer with their beautiful snow-white double flowers, which resemble the White English Daisy. Valuable for cutting.....5c pkt.
- 169—**The Sultan.** (Single.) Crimson maroon. 5c pkt.
- 170—**Silver Queen.** (Single.) Flowers pure white with a zone of clear bright yellow overlaid with silver.....5c pkt
- 171—**Evening Star.** (Single.) A splendid variety for cutting, flowers 3 inches across, of pure golden-yellow; in general appearance resembles the Yellow Paris Daisy.....5c pkt.
- 172—**Annual Double Mixed.** Yellow, white, etc. 5c pkt.
- 173—**Annual Single Mixed.** (Painted Daisies.) Many colors.....5c pkt

Seeds are different from other merchandise. The real value of seeds can only be known after months of labor. Buy your seeds of a reliable seed house with a reputation back of it. Seeds of real merit must be grown and sold by practical, trained seedsmen, with a reputation made and to be maintained.

Hardy Perennial Varieties

- 174—**Frutescens Grandiflorum.** ("Paris Daisy" or Marguerite.) White, yellow eye....10c pkt.

SHASTA DAISES

(*Chrysanthemum Leucanthemum.*)

- 175—**Alaska.** A splendid *hardy perennial* variety, with flowers rarely less than 4 inches across, of the purest glistening white, with broad, overlapping petals, and borne on long, strong stems; a beautiful cut flower, remaining in good condition a week or more. (See cut.).....10c pkt.
- 176—**Shasta Daisy.** A general mixture saved from a large number of extra choice hybrids, and certain to produce a large number of varieties of great merit.....10c pkt.

CHINESE WOOLFLOWER

(*Celosia Childsi.*)

THIS new *Celosia* is one of the most magnificent garden annuals ever introduced. Plants grow two to three feet high, the bloom starting early with a central head, round and globular, which often reaches an immense size. Scores of branches are thrown out, each bearing a ball of scarlet wool, but not so large as the central one. None of the blooms fade in any way until hit by frost.

Start seed if convenient under glass about four weeks before time to transplant to the garden. If the little plants remain too long in pots or seed beds, they will begin to set bloom, which is not desirable. Transplant to the garden as soon as danger of frost is passed. *Half-hardy Annual.* (See cut.)

- 177.....2 pkts., 25c; 15c pkt.

CINERARIA

A WELL-KNOWN greenhouse plant, having a range and brightness of color scarcely surpassed. It may be had in bloom through the greater part of the year. *Greenhouse or Tender Annual.*

178—Hybrida Grandiflora. This strain of Cineraria can not be surpassed, either for size of flowers or beauty of color. Many of the blooms measure $2\frac{1}{2}$ inches in diameter. We have received very flattering reports from florists and private gardeners of their success with our Cineraria seed. (See cut.)

25c pkt.

CLEOME (Giant Spider Flower)

179—Gigantea. Singular-looking, rose-colored flowers; the stamens look like spiders legs, and present a very attractive appearance. annual, 3 feet. This plant is now used extensively in many of the public parks, planted among shrubbery, and is very effective. *Half-hardy Annual.* (See cut.).... 5c pkt.

Cobaea Scandens

180—Purple Lilac...... 10c pkt.
Cobaea Scandens Plants. Each 25c; per doz., \$2.50; (by mail, each, 30c.)

Coleus

COBAEA SCANDENS

(Cathedral Bells)

A MAGNIFICENT summer climber, of rapid growth, and bearing large, bell-shaped, purple flowers. In sowing, place the seeds edgewise and cover lightly. *Tender Perennial.* (See cut.)

COLEUS

OUR strain of hybrid varieties produces the finest colored, most attractive and novel foliage plants for house or garden culture. A most interesting subject to grow from seed. Easily raised. Sow indoors in March or April and transplant to open ground in May. *Tender Perennial.* (See cut.)

181—Large Leaved Varieties.

2 pkts., 25c; 15c pkt.

CORN (Ornamental)

182—Zea Japonica Quadricolor Perfecta. This charming grass forms an object of great beauty in mixed beds and borders or isolated in groups on lawns, in sub-tropical gardens, etc.; it thrives in rich, light, warm soils. The leaves are striped in yellow, green, rose and dark red; four feet. *Tender Annual.*..... $\frac{1}{4}$ oz., 15c; 5c pkt.

Columbine (See Aquilegia)

CYCLAMEN

A popular pot-plant for Winter and Spring-flowering, blooms are very freely produced and last a long time. Seedlings bloom in eight to ten months. *Greenhouse Perennial.*

183—Giant-Flowered. (Persicum Giganteum.) Best strain; orchid-flowering. Mixed. (See cut.)..... 25c pkt.

CYPRESS VINE

(Ipomoea Quamoclit)

ONE of the most popular vines, with very delicate, fern-like foliage, and masses of beautiful, small, star-shaped flowers. Sow in May, first soaking the seeds in warm water for a few hours. 15 feet. *Half-hardy Annuals.* (See cut.)

184—Scarlet......oz., 40c; 5c pkt.

185—White......oz., 40c; 5c pkt.

186—Mixed. White and Scarlet.
oz., 40c; 5c pkt.

Quamoclit Hybrida

(See Cardinal Climber.)

Convolvulus

(See Morning Glory.)

Cypress Vine

GIGANTEUM

COSMOS

BEAUTIFUL autumn-blooming plants. They produce thousands of beautiful flowers in pure white, pink and crimson shades, furnishing an abundance of cut blooms for autumn decoration when other flowers are scarce. Should be sown in Spring in the open ground, when danger of frost is past, or the seed may be started under cover and afterwards transplanted. Plant not less than 18 inches apart in rows or in masses in beds. When the plants are about a foot high the tops should be pinched out to induce a bushy growth. They prefer a rather light not too rich soil, but do well almost anywhere. *Half-hardy Annual* (See cut.)

Double Crowned and Crested

We consider this one of the best flower novelties on recent years. The colors are similar to those of the old type and the habit of the plant is vigorous. They come into flower about the same time as the late flowering mammoth.

- 187—Double Pink..... 3 pkts., 25c; 10c pkt.
 188—Double White. 3 pkts., 25c; 10c pkt.
 189—Double Mixed Hybrids.
 3 pkts., 25c; 10c pkt.

Mammoth Perfection Cosmos

A magnificent selection, bearing flowers of mammoth size and perfect form.

- 190—Mammoth Crimson... ¼ oz., 20c; 5c pkt.
 191—Mammoth Light Pink.. ¼ oz., 20c; 5c pkt.
 192—Mammoth Pure White.. ¼ oz., 20c; 5c pkt.
 193—Mixed Mammoth Perfection.
 ¼ oz., 20c; 5c pkt.
 194—Pink "Lady Lenox." This, the latest development in this popular autumn flower, bears gigantic flowers, with wide, overlapping petals of splendid substance, making a perfectly circular flower, which is borne on very long stems, in color a beautiful deep rosy-pink. The plant is of strong, vigorous growth, 6 to 7 feet high.
 ¼ oz., 30c; 5c pkt.

- 195—White "Lady Lenox." Some years ago a gigantic early flowering pink variety was introduced under the name of Lady Lenox; since then hybridizers have been endeavoring to create a white companion, which fact has now been accomplished in this charming variety. Flowers measure four to five inches in diameter, which is about three times larger than the ordinary Cosmos. Habit of plant strong and vigorous, bushes growing to a height of seven feet..... ¼ oz., 30c; 5c pkt.

Extra Early Cosmos

Seeds sown in the open ground produced plants that were covered with bloom two months before the late-flowering kinds. While the flowers are not so large as the late sort, they are of good size, and will undoubtedly perfect their flowers in the most Northerly states.

- 196—Crimson. Rich..... ¼ oz., 25c; 5c pkt.
 197—Pink. A pretty shade..... ¼ oz., 25c; 5c pkt.
 198—Pure White..... ¼ oz., 25c; 5c pkt.
 199—Mixed, Early Cosmos. All colors. ¼ oz., 20c; 5c pkt.

DAHLIA

DAHLIAS are easily grown from seed and bloom the first season. The earlier they are started the better, which can be done nicely in a box in a sunny window or the greenhouse. Some specimens grown from seed are fully equal to many of the named sorts, and there is always the chance of getting some entirely new varieties. The Single Dahlias are being planted more extensively every year; they are quick and profuse bloomers, and their colors are especially rich and brilliant. Tuberos-rooted. Protect the roots during winter in a dry cellar in sand. *Half-hardy Perennials*.

Double Flowering

- 200—Cactus Varieties. Most popular at the present time; distinct and elegant; petals pointed..... 10c pkt.
 201—Double Large-Flowering. This mixture is composed of the finest large flowering double varieties, which, for size of flower, excellence of color and habit cannot be surpassed. Grown by specialists in Europe and America. (See cut.)
 10c pkt.

DAHLIA— Continued

Single Flowering

- 202—Colerette.** A novel type, having a row of short petals around the disc like a frill or collar, and which is always of a different color from the regular petals; mixed colors.

10c pkt.

- 203—Single Giant Perfection.** This strain produces flowers of immense size, averaging 6 inches across, in a great variety of coloring. $\frac{1}{4}$ oz., 50c; 10c pkt.

DELPHINIUM (Hardy Perennial Larkspur)

ONE of the most exquisite blue-tinted flowers that we have. Very effective planted in beds or masses, in borders, or better than all in combination with white lillies, blooming at the same time as the exquisite Liliun Candidum. If picked freely and not allowed to go to seed, they will continue blooming all summer. Plant $1\frac{1}{2}$ to 2 feet apart each way. Perennial varieties should be sown in the fall or very early in the Spring, transplanting to the open ground. *Hardy Perennials.*

- 204—New Giant-Flowering Hybrids.** These magnificent Hybrids, the grandest of Delphiniums in existence, produce beautiful spikes of immense flowers, single, semi-double and double. Flower spikes are from 2 to 3 feet in length. Colors are very beautiful, ranging from pure white through all shades of lavender and blue. (See cut.)

10c pkt.

- 205—Belladonna.** (Everblooming Hardy Larkspur.) This is the freest and most continuous blooming Hardy Larkspur, never being out of flower from the end of June until frost. The clear turquoise-blue of its flowers is not equaled for delicacy and beauty by any other flower, and no hardy border is complete without a liberal planting of this really exquisite Larkspur.....

10c pkt.

- 206—Elatum** (Giant Bee Larkspur). Clear, blue flowers, 3 feet. 5c pkt.

- 207—Formosum.** Elegant spikes of the richest dark-blue flowers, with a white center; especially fine for cutting; 4 feet.....

5c pkt.

- 208—Formosum Coelestinum.** Light, sky-blue flowers, with darker centers; a very fine variety; 4 feet.....

10c pkt.

- 209—Mixed Chinese Varieties.** This elegant mixture contains a great variety of shades, from pure white to gentian-blue. Plants are brilliantly showy.....

5c pkt.

Annual Delphiniums. (See Larkspur.)

DIMORPHOTHECA

(African Golden Daisy) *Half-hardy Annuals.*

- 210—Aurantiaca.** The bushy plants grow 12 to 15 inches high. The flowers, which are $2\frac{1}{2}$ inches and over across, are a unique, rich, glossy, orange-gold, with dark disc and halo.....

10c pkt.

- 211—Aurantiaca Hybrida.** Beautiful new hybrids varying in color from the purest white through the various shades of yellow and orange to rich salmon shades, many being zoned

10c pkt.

DIANTHUS, or Pinks

THIS elegant family contains many of the most valuable and popular flowers in cultivation. All the sorts classed as annuals may be sown directly in the garden as soon as danger from frost is past, and will in a short time become a mass of bloom, and so remain all Summer. Elegant as cut flowers for bouquets, as the stems are good. Grow about one foot high, and are of easiest culture. *Half-hardy Annuals.*

Double Annual Pinks

- 212—**China Pinks.** (*Chinensis* fl. pl.) Large, double, fragrant flowers. Mixed colors. (See cut.)...5c pkt.
 213—**Double Diadem Japan Pinks.** (*Heddewigi Diadematis* fl. pl.) Densely double flowers in beautiful tints of crimson, lilac, purple, outer edges fringed with white. (See cut.)...5c pkt.
 214—**Double Fringed Japan Pinks.** (*Laciniatus* fl. pl.) Large double, showy flowers, with fringed edges; various colors and beautifully striped...5c pkt.
 215—**Royal Pink.** (*Dianthus Heddewigi Nobilis.*) The flowers are very large and the petals are frilled and fringed. The colors are of a deep yet very bright blood-red, then shade to carmine and pink and even white...5c pkt.
 216—**Snowball.** Large double white, splendid for cutting or as a border...5c pkt.

Dianthus Chinensis

- 217—**Fireball.**
 Rich blood-red flowers.
 Makes a striking contrast to the pure white variety.
 Snowball.
 5c pkt.

Single Annual Pinks

- 218—**Salmon Queen.** The well-formed, nicely-fringed flowers are a brilliant salmon color, changing into a crimson rose...5c pkt.
 219—**Vesuvius.** Brilliant geranium-red, makes a very effective bed or border...5c pkt.

Hardy Garden Pinks

This splendid class of Pinks should be in all gardens. They have the delightful clove fragrance. *Half-hardy Perennials.*

- 220—**Double Large-Flowering Grass, or Spice Pinks.** (*Plumarius Sem-plorens.* fl. pl.) One foot high. The flowers, which are beautifully fringed, are much larger and more double than the old varieties, while the colors are far richer. They emit a delightful, sweet-scented, spicy odor. Perfectly hardy, requiring only the ordinary culture of Pinks...10c pkt.
 221—**Single Large-Flowering Grass, or Spice Pinks.** Mixed Same as above, only single.
 5c pkt.

FOX GLOVE

DIANTHUS BARBATUS. (See Sweet William.)

DIGITALIS (Foxglove)

HANDSOME and highly ornamental hardy plants of stately growth. They are now used extensively with good effect for naturalizing in shrubberies, the edge of woods and other half-shady places; 3 to 5 feet. *Hardy Biennials.* (See cut.)

- 222—**Monstrosa.** (Mammoth Foxglove.) Long spikes, surmounted by one enormous flower; very odd; all colors mixed...10c pkt.

GLOXINEAFLORA

- 223—Purple...5c pkt. 225—White...5c pkt.
 224—Rose...5c pkt. 226—Mixed...5c pkt.

See McCullough's Collection of

"Easy to Grow" Flower Seed. They may save you money

Illustrated on 4th page of cover

DOLICHOS (Hyacinth Bean.)

A RAPID-GROWING, annual climber, flowering freely in erect racemes, followed by ornamental seedpods; for covering arbors, trellises, etc. *Tender Annuals.*

227—"Daylight." This grand Hyacinth Bean comes from Japan. Seed sown late in May, had, by the middle of July, attained a height of over 10 feet, and was covered with spikes of snow-white, pea-shaped blossoms from then until late fall. Not affected by insect pests.

Oz., 25c; 5c pkt.

228—"Darkness." Identical in every way to the above, except in color, which is a rich, purple-violet.....Oz., 25c; 5c pkt.

229—Lablab, Mixed. Purple and white.

Oz., 15c; 5c pkt.

ESCHSCHOLTZIA

(California Poppy, Gold Cups.)

A SHOWY, free-flowering plant of low-spreading growth, with finely divided foliage, blooming throughout the season. Seed should be sown thinly in shallow drills early in Spring. *Hardy Annuals.* (See cut.)

230—Californica. Bright yellow, with orange center.....Oz., 25c; 5c pkt.

231—Carmine King. A beautiful carmine rose color, as intense on the inside as on the outside of the petals, which gives it an altogether novel and beautiful effect.....Oz., 50c; 5c pkt.

232—Golden West. The flowers measure from 3 to 6 inches in diameter; they have large, overlapping petals, often daintily waved at the edges. Color, light canary-yellow, with an orange blotch at the base of the petals, which blotch often suffuses almost the whole flower.

Oz., 30c; 5c pkt.

233—Mixed. Single cup-shaped flowers in shades of bright yellow, deep orange, pink and silvery white.

Oz., 25c; 5c pkt.

BUSH ESCHSCHOLTZIA.

(See Hunnemannia.)

EUPHORBIA

STRONG-GROWING annuals, suitable for beds of tall-growing plants or mixed borders; the flowers are inconspicuous; the foliage, however, is exceedingly ornamental. *Hardy Annuals.*

234—Variegata. (Snow on the Mountain.) Attractive foliage, veined and margined with white; 2 feet.. 5c pkt.

235—Heterophylla. (Annual Poinsettia, Mexican Fire Plant, Painted Leaf.) An annual resembling in habit and color the beautiful hothouse Poinsettia. The plants grow 2 to 3 feet high, of branching, bush-like form, with smooth, glossy-green leaves, which about mid-summer become a beautiful orange-scarlet, presenting a striking

and brilliant appearance. (See cut.....10c pkt.

EVERLASTING, ETERNAL, or STRAW FLOWERS. (See *Acroclinium*, *Ammobium*, *Gomphrena*, *Helichrysum*, *Rhodanthe* and *Xeranthemum*.)

FEVERFEW. (See *Pyrethrum* and *Matricaria*.)

FLAX, Scarlet. (See *Linum*.)

FORGET-ME-NOT. (See *Myosotis*.)

FOUR-O'CLOCKS. (See *Marvel* of Peru.)

FOXGLOVE. (See *Digitalis*.)

GAILLARDIA (Blanket Flower.)

ANNUAL VARIETIES.

Splendid, showy annuals; in bloom from early Summer till November; excellent for beds, borders or for cutting. *Half-hardy Annuals.*

236—Picta Lorenziana. Double-flowering mixed colors.. 5c pkt.

237—Picta Mixed. Single sorts; fine colors..... 5c pkt.

HARDY PERENNIAL VARIETIES.

THE following are among the showiest and most effective hardy perennial plants, and should find a place in every hardy border. They thrive in almost any position or soil, require little or no protection and take care of themselves. If sown early they begin flowering in July, continuing a mass of bloom until frost, fine for cutting. *Hardy Perennials.*

238—Kelway's Hybrids. The finest strain of Perennial Gaillardias. The flowers are of enormous size, and the colors are most varied. This is one of the hardy perennial plants that no garden should be without. In flower for about three months; 2 feet. (See cut.....10c pkt.

239—Grandiflora. A compact variety, forming bushy plants 12 to 15 inches high, and bearing its long-stemmed flowers well above the foliage..... 5c pkt.

Geranium

GERANIUM

(Pelargonium)

THE heads of gorgeous flowers, of many shades of color, borne continuously, render this one of the most popular plants grown, either for pot culture in Winter or for bedding out in Summer. *Tender Perennials.* (See cut.)

241—Zonale, Mixed. A superb strain of the largest and finest varieties.....10c pkt.

242—Apple-scented. This fragrant, favorite variety can only be grown from seed to form fine plants.....10c pkt.

GODETIA
The plants bloom profusely and bear showy flowers of satiny texture in many rich and varied colors. They do best in a rather poor soil. 1 foot. *Hardy Annual.* (See cut.)
240—Finest Mixed.....Oz., 30c; 5c pkt.

Godetia

Gomphrena

GOMPHRENA

(Globe Amaranth)

A desirable everlasting, valuable for its handsome globular heads of flowers. *Half-hardy Annual.* (See cut.)

243—Mixed.....5c pkt.

GOURDS (Ornamental)

CLIMBING plants with curiously shaped fruit in various colors. Being of rapid growth, they are fine to cover old fences, trellises, stumps, etc. The foliage is ornamental, and the marking of some of the fruit quite extraordinary. Do not plant the seed till all danger of frost is over, and select rich, mellow ground. *Tender Annual* climbers, 10 to 20 feet high. (See cut.)

- 248—Japanese Nest Egg. White; fac-simile of an egg; do not crack, and are not injured by heat or cold. Very ornamental climber.....5c pkt.
249—Orange. The well-known mock orange.....5c pkt.
250—Pear-Shaped. Green and white striped....5c pkt.

244—Calabash, or Dipper. Long, slim handle.....5c pkt.

245—Dish Cloth. This variety is very ornamental, with clusters of large, yellow flowers. The fruit, when dried, is used as a dish cloth.....5c pkt.

246—Giant Bottle. Large and ornamental, 5c pkt.

247—Hercules Club. A curious sort. Club-shaped.....5c pkt.

251—Sugar Trough. Used for buckets. Very large. 5c pkt.

252—African Pipe. The stem end of the fruits are much used in making pipes.....5c pkt.

253—Mixed Varieties. All kinds.....Oz., 25c; 5c pkt.

GRASSES (Ornamental)

THE Ornamental Grasses serve the double purpose of rendering the mixed flower bed or border attractive during the summer, and for the use of the spikes or panicles in a dried state in winter bouquets. For large beds or groups on lawns nothing gives a finer effect, and they are now largely used in prominent positions in many of the finest public parks, etc. When carefully dried, they are useful in making up winter bouquets. Cut when in full bloom, and before the flowers get too old; tie in small bunches and hang up in a dry, dark place, with the heads downward.

Cynerium Argenteum

254—Briza Maxima. (Large Quaking Grass.) A beautiful variety. *Hardy Annual*; 1 foot.....5c pkt.

255—Bromus Brizaeformis. A graceful variety, with drooping panicles. *Hardy Perennial*, flowering the first season; 1 foot. (See cut.).....5c pkt.

256—Coix Lachryma. (Job's Tears.) Broad, corn-like leaves, and hard, shining, pearly seeds, resembling tears; 2 feet; *Hardy Annual*.....Oz., 10c; 5c pkt.

257—Erianthus Ravennae. A *Hardy Perennial* noble grass, with exquisite white plumes; flowers the first season if sown very early; 10 feet.....5c pkt.

Bromus Brizaeformis

258—Eulalia Japonica. One of the most beautiful of the tall-growing grasses. *Hardy Perennial*; 5 feet. 5c pkt.

259—Gynerium Argenteum. (Pampas Grass.) The finest ornamental grass in cultivation. *Half-hardy Perennial*; 10 feet. (See cut.).....5c pkt.

260—Pennisetum Ruppelianum. Beautiful and graceful spikes of purple; this is one of the best. *Hardy Annual*; 2½ feet.....5c pkt.

261—Stipa Pennata. (Feather Grass.) A *Hardy Perennial*; 2 feet.....5c pkt.

262—Finest Mixed. Used for making Winter bouquets. 5c. pkt.

Gypsophila

GYPSOPHILA (Baby's Breath)

PRETTY free-flowering elegant plants, succeeding in any garden soil. Their misty white panicles of bloom are largely used for mixing with other cut flowers. (See cut.)

253—Elegans Alba Grandiflora. This is an improved large flowering, pure white form of the annual Baby's Breath; of free, easy growth, and grown by the acre in the suburbs of Paris and London, for use with other cut flowers. Several sowings should be made during the season to keep up a supply. *Half-hardy Annual*.oz., **25c; 5c pkt.**

264—Paniculata. White flowers, fine for bouquets; one of the favorite hardy flowers; blooms first year if sown early; *Hardy Perennial*; 2 feet. **5c pkt.**

HELICHRYSUM (Straw Flower)

Everlasting flowers, large and full. Colors, white, yellow and red. Cut before the flowers fully expand. *Hardy Annual*.

265—Monstrosum Mixed. **5c pkt.**

MALLOW MARVELS

HELIOTROPE (Cherry Pie)

A *HALF-HARDY Perennial*, flowering during the whole season; its delightful perfume makes it a most desirable bouquet flower; a splendid bedding plant, or can be trained as a greenhouse climber. Seed started indoors in the Spring will make fine plants for Summer blooming. (See cut.)

266—Lemoine's Giant. Mixed colors. **5c pkt.**

HIBISCUS (Marshmallow)

SHOWY ornamental perennial plants, for mixed beds or shrubbery borders, having large sized, beautifully colored flowers; blooms the first year if sown early.

267—Mallow Marvels. Immense flowers from 8 to 10 inches in diameter, in following colors; fiery crimson, blood red, shell pink and white. Their great beauty surpasses all other perennials in profusion of bloom and brilliancy of color. Of herbaceous character, they come up year after year and are absolutely hardy. *Hardy Perennial*. (See cut.) **10c pkt.**

268—Crimson Eye. Flowers of the largest size, pure white with large spot of velvety crimson in the center of each flower. *Hardy Perennial*; flowers the first year from seed sown early. **5c pkt.**

HOLLYHOCK

ONE of the most majestic of hardy plants, and a clump or line in any garden gives an effect not attainable with any other plant. For planting among shrubbery or forming a background for other flowers it is without an equal. Seed sown any time before mid-summer will produce fine plants for flowering next year. To get results this season it is necessary to get year-old plants. These we offer with other hardy plants under their proper heads. *Hardy Perennials*.

269—Chater's Double Pink. **10c pkt.**

270—Chater's Double Scarlet. **10c pkt.**

271—Chater's Double White. **10c pkt.**

272—Chater's Double Yellow. **10c pkt.**

273—Chater's Prize, Double Mixed. This strain stands unrivaled in richness and delicacy of coloring, with magnificent spikes of very double flowers. (See cut.) **3 pkts., 25c; 10c pkt.**

274—Choice Double Mixed. **5c pkt.**

275—Mammoth Fringed Allegheny. Mammoth flowers of loosely arranged fringed petals, which look as if made from the finest China silk. The colors vary from the palest shrimp pink to deep red. The plants are of strong growth, sending up spikes 6 to 7 feet high. **3 pkts., 25c; 10c pkt.**

276—Single. Many prefer the single flowering Hollyhocks. They are usually of freer growth and present a handsome appearance when covered with their artistic blossoms. Finest mixed; all colors. **5c pkt.**

HONESTY (Moonwort, Satin Flower)

Greatly admired for its silvery seed pouches, which are used for house ornaments; two feet. *Hardy Biennial*.

277.....5c pkt.

HUNNEMANNIA

(Giant Yellow Tulip Poppy, or Bush Eschscholtzia)

278—*Fumariaefolia*. This is by far the best of the poppy family for cutting, remaining in good condition for several days. Seed sown early in May will, by the middle of July, produce plants covered with their large buttercup-yellow, poppy-like blossoms, and never out of flower until hard frost. The plants grow about 2 feet high, are quite bushy, with beautiful feathery glaucous foliage. *Half-hardy Annual*.....5c pkt.

HUMULUS (Japanese Hop)

279—*Japonicus*. A very ornamental and fast-growing climbing plant. The foliage resembles in shape that of the common Hop, is very dense, and in color a lively green. *Hardy Annual*. . ¼ oz., 20c; 5c pkt.

Humulus Japonicus Variegatus

280—*Variegatus*. A variegated variety of the hop. The leaves are beautifully marbled and splashed with silvery-white, light and dark green; very effective for screens, arbors, trellises, etc. As with the green-leaved variety, it is never injured by insects nor affected by the heat, but retains its bright variegated foliage until frost. *Hardy Annual*. (See cut.)..... ¼ oz., 25c; 10c pkt.

HYACINTH BEAN. (See *Dolichos*)

IBERIS (Hardy Candytuft.)

281—*Sempervirens*. A profuse white-blooming plant, coming in flower early in the spring; much used for cemeteries, rockeries, etc.; 1 foot. *Hardy Perennial*.....5c pkt.

ICE PLANT

HANDSOME and curious plants for hanging baskets, rock-work, vases and edgings. The leaves and stems are covered with crystalline globules, giving it the appearance of being covered with ice. Succeeds best in a sandy soil and warm situation. *Tender Annual*.

282—(*Mesembryanthemum Crystallinum*).....5c pkt.

IPOMEA

(See Cypress Vine, Moonflower and Morning-Glory.)

JOB'S TEARS. (See Ornamental Grasses.)

"JACK AND THE BEAN STALK." (See Kudzu Vine Seed.)

KOCHIA

IMPATIENS (Sultan's or Zanzibar Balsam)

CHARMING plants for the decoration of the greenhouse or dinner table, producing bright, waxy-looking flowers profusely and almost continuously. The young seedlings should be carefully handled, as they are exceedingly brittle at the outset. *Tender Perennials*.

283—*Holstii*. It forms elegant bushes 1½ feet in height. The flowers measure 1½ inches across and are of a brilliant vermilion color. In a half-shady situation, the plants grow luxuriantly and form effective and showy flower beds, also an excellent pot plant.....10c pkt.

284—*Sultana Hybrida*. Beautiful hybrids. Varying shades of color, from delicate pink to the deepest red. (See cut.) .10c pkt.

KOCHIA

(Summer Cypress, Belvedere or Burning Bush)

A HIGHLY ornamental annual of rapid growth which forms regular pyramids about 3 feet high, having a cypress-like appearance. The leaves are slender and of a light green until September, when they change to carmine and blood red. The flowers are minute, but countless. Sow indoors in April and plant out in May, or sow in open ground about May 1. A splendid plant to divide the vegetable from the flower garden, or for forming a hedge for the Summer for any purpose. Plants do best in a sunny exposure. *Hardy Annual*. (See cut.)

285—*Kochia Tricophylla*.....5c pkt.

IMPATIENS

SULTANA

KENILWORTH IVY

- 286—*Linaria Cymbalaria*. A trailing plant suitable for vases, etc. Adapted to shady locations. Easily grown from seed. Lovely little lavender and purple flowers and an exquisite foliage. *Hardy Perennial*.....10c pkt.

KUDZU VINE

- 287—*Pueraria Thunbergiana*. This wonderful climber is of Japanese origin and is the most luxuriant and rapid-growing vine known in horticulture. It will grow 8 to 10 feet the first year from seed, and after becoming established will produce vines 50 feet high in a season, sometimes growing 12 inches in a single day. Produces a tuberous root which is perfectly hardy everywhere. Foliage is very luxuriant, quickly forming a dense shade. Unequaled for porches, arbors, trellises, etc. *Hardy Perennial*.....10c pkt.

LANTANA

One of the most desirable greenhouse or bedding plants, constantly in bloom. Verbena-like heads of orange, white, rose and other colored flowers; 2 to 3 feet. *Half-hardy Perennial*.

- 288—Mixed Colors.....5c pkt.

ANNUAL LARKSPURS

THIS is one of the best known of garden flowers, and in recent years a vast improvement has been effected, by careful selection in size and color of the blossoms and the general habit of the plant. Seeds sown in the open ground before the close of April will produce flowering plants by the beginning of July, and give a continuous succession of flowers from then until frost, a record that is not surpassed by any other annual. They make handsome beds or lines, and their free, graceful habit and bright colors are very effective when interspersed in the old-fashioned flower or shrubby border. They stand well when cut, and a vase of one or mixed colors is indeed charming. *Hardy Annuals*. (See cut.)

- 289—Double Stock-Flowered. The finest variety with splendid spikes of beautiful double flowers; 2½ to 3 feet. Finest Mixed.....¼ oz., 15c; oz., 50c; 5c pkt.

- 290—Dwarf Rocket. The flowers are large, double and of various beautiful colors, shadings and markings; long spikes of bloom.....Oz., 30c; 5c pkt.

- 291—Double Tall Rocket. This well-known mixture embraces the very choicest colors in the taller growing sorts.....Oz., 30c; 5c pkt.

(For Hardy Perennial Larkspurs see Delphinium)

(LADY SLIPPER See Balsam.)

LATHYRUS

(Everlasting, or Hardy Sweet Pea)

Showy, free-flowering climbers for covering old stumps, fences, etc.; continually in bloom; fine for cutting. *Hardy Perennials*.

- 292—*Latifolius* "White Pearl." The finest white variety.....10c pkt.
293—Pink Beauty. Rosy pink.....10c pkt.
294—Mixed. All colors. ¼ oz., 15c; oz., 40c; 5c pkt.

LAVENDER (*Lavandula Vera*)

Well known, sweet-scented *Hardy Perennial*; should be extensively grown in the mixed border; 2 feet.

- 295.....5c pkt.

LINUM (Flax)

- 296—*Grandiflorum Rubrum*. (Scarlet Flax.) One of the most effective and showy bedding plants, of long duration, having fine foliage and delicate stems, with brilliant scarlet-crimson flowers. *Hardy Annual*; 1 foot.....Oz., 25c; 5c pkt.

LOVE-IN-THE-MIST. (See *Nigella*.)

LOBELIA

THE following choice varieties of this popular and beautiful flowering plant will be found most desirable for pot culture, edgings, hanging baskets, etc., blooming profusely from June to November. *Half-hardy Annuals*. *Cardinalis* is one of the finest native *Hardy Perennials*. (See cut.)

- 297—Crystal Palace Compacta. Rich blue; finest for bedding. 10c pkt.
298—Gracilis. Pale blue; trailing; fine for vases.....5c pkt.
299—Speciosa. Dark blue; trailing; fine for vases.....5c pkt.
300—*Cardinalis* Hybrids. Splendid hybrids, mixed; highly recommended. *Hardy Perennial*; 2 feet.....10c pkt.

You can conveniently order Flower Seeds by the numbers alone.

LUPINUS (Lupine)

FREE-FLOWERING, with long, graceful spikes of rich and various colored pea-shaped flowers; valuable for mixed borders, beds and for cutting; prefers a little shade.

301—Annual Mixed. Free-flowering, easily grown annuals, with long, graceful spikes of rich and various colored pea-shaped flowers; 2 feet. *Hardy Annual.*

Oz., 25c; 5c pkt.

302—Polyphyllus Roseus. A fine variety of the perennial Lupine, with showy spikes of rose-colored flowers. *Hardy Perennial.*.....Oz., 50c; 10c pkt.

303—Perennial Mixed. *Hardy Perennial* varieties, in pink, blue and white mixed.Oz., 30c; 5c pkt.

MARIGOLD (See also Calendula)

THE African and French Marigolds are old favorite free-flowering annuals of easy culture; both are extremely effective. The former have uniformly large, yellow or orange colored flowers, (see cut) and are well adapted for large beds or mixed borders; the latter are dwarfer in growth, with beautifully striped flowers, and better suited for bedding purposes, or for pot culture (see cut); they succeed best in a light soil, with full exposure to the sun. *Half-hardy Annuals.*

African Varieties

Marigold—French

304—Orange Prince. A high bred type bearing densely double flowers a rich, deep golden orange color; very showy... $\frac{1}{4}$ oz., 20c; 5c pkt.

305—Lemon Queen. Another fine variety, with soft, lemon-yellow flowers, and forming a fine contrast to the preceding. $\frac{1}{4}$ oz., 20c; 5c pkt.

306—Pride of the Garden. Immense flowers, densely double. Color golden-yellow. A feature of this variety is the compact, dwarf habit. $\frac{1}{4}$ oz., 20c; 5c pkt.

307—El Dorado. Flowers very large, imbricated, double yellow. $\frac{1}{4}$ oz., 20c; 5c pkt.

308—African Mixed...... $\frac{1}{4}$ oz., 15c; 5c pkt.

French Varieties

309—Legion of Honor. Single Dwarf Marigold, forming compact bushes. Flowers golden yellow and brown; blossoms in great profusion. $\frac{1}{4}$ oz., 25c; 5c pkt.

310—French Gold Striped. Very double; 1 foot $\frac{1}{4}$ oz., 15c; 5c pkt.

MARVEL OF PERU, or Four O'Clocks

(Mirabilis Jalapa)

A well-known, handsome, free-flowering garden favorite; does well everywhere; give each plant 12 to 18 inches of room. Fine mixed colors; 2 feet. *Half-hardy Perennial.* (See cut.)

311—Finest Mixed.....Oz., 25c; 5c pkt.

MATRICARIA

312—Capensis Alba Plena (Double White Feverfew). Free-flowering plants, producing all season fine, double, white flowers. A fine bedding or pot plant. *Half-hardy Perennial.* 5c. pkt.

MAURANDIA

Beautiful, rapid, slender growing climbers, blooming profusely until late in the autumn; also fine for the conservatory or greenhouse; if desired for the house, take up before the approach of frost. A *Half-hardy Perennial*, flowering the first season if sown early. (See cut.)

313—Barclayana. Deep violet; fine. 10c pkt.
314—Finest Mixed. All colors. 10c pkt.

Maurandia

MIGNONETTE (Reseda)

A well-known favorite, and no garden is complete without a bed of Mignonette. *Half-hardy Annuals.* (See cut.)

- 315—**Defiance.** One of the finest sorts; excellent for forcing..... $\frac{1}{4}$ oz., 20c; 10c pkt.
 316—**Machet.** Dwarf pyramidal growth, with very large, thick spikes, fragrant. $\frac{1}{4}$ oz., 20c; 10c pkt.
 317—**Sweet-scented.** The old variety; but very sweetly scented..... oz., 15c; 5c pkt.

MIMULUS

Fine for shady situations; blooming the first year from seed if sown early; 1 foot. *Half-hardy Perennials.*

- 318—**Tigrinus.** (Monkey Flower.) Fine mixed spotted varieties..... 5c pkt.
 319—**Moschatus.** (Musk Plant.) Fine for hanging baskets, etc.; small yellow flowers, fragrant foliage..... 5c pkt.

MIMOSA (Sensitive, or Humble Plant)

- 320—**Pudica.** Curious and interesting annuals, with pinkish-white flowers; the leaves close and droop when touched or shaken. *Half-hardy Annual.*..... 5c pkt.

MOON FLOWER (Ipomoea Noctiflora)

Climbers of rapid growth, with beautiful and varied flowers; for covering walls, trellises, arbors or stumps of trees, they are invaluable.

- 321—**Cross Bred or Hybrid Moon Flower.** At night and during dull days the plants are covered with an abundance of large, pure-white, fragrant flowers 5 to 6 inches in diameter. It is a rapid grower, and within a few months will grow as much as 40 feet. To insure germination, take a sharp knife and cut a small nick in shell of each seed, and soak in warm water for about 4 hours before planting. *Tender Perennials.*..... $\frac{1}{4}$ oz., 20c; oz., 75c; 5c pkt.
 322—**Giant Pink Hybrids.** Similar to the above in habit of growth and bloom with pink flowers..... $\frac{1}{4}$ oz., 20c; oz., 75c; 5c pkt.
Moon Flower Plants...... Each, 20c; per doz., \$2.00; by mail, each 25c.

MORNING GLORIES, or Convolvulus

THE Morning Glory is too well known to need a description, and one seldom finds a more satisfactory vine. The amateur gardener can be sure of a fresh supply of bright colored, delicately tinted flowers. Succeeds under almost all circumstances. *Hardy Annuals.*

- 323—**Morning Glories.** (Convolvulus Major.) Climbing varieties, mixed..... oz., 10c; $\frac{1}{4}$ lb., 25c; 5c pkt.
 324—**Double Mixed Climbing.** The flowers are double and semi-double and some are fringed, which give an appearance of a double flower..... 5c pkt.
 325—**Imperial Japanese, or Emperor Morning Glories.** The flowers are of gigantic size and their colorings beyond description; the self or solid colors range from snow-white to black-purple, with all the possible intermediate shades; there is also an endless number having flowers spotted, marbled, striped, flaked, splashed, etc. $\frac{1}{2}$ oz., 15c; oz., 25c; 5c pkt.
 326—**Ipomoea Setosa.** (Brazilian Morning Glory.) Branches in all directions and presents a remarkable appearance. Rosy pink flowers..... Oz., 25c; 5c pkt.

MYOSOTIS (Forget-Me-Not)

The Forget-Me-Not succeeds best in shady, moist situations; perennials and hardy if given slight protection through the winter. *Half-hardy Perennials.*

- 327—**Alpestris Victoria.** Early flowering, of bushy habit, bearing large, bright, azure-blue flowers..... 10c pkt.
 328—**Dissitiflora.** Of dwarf compact habit, flowers rich blue, early..... 10c pkt.
 329—**Palustris.** The true Forget-Me-Not; beautiful blue flowers; 6 inches..... 10c pkt.
 330—**Palustris Semperflorens.** A dwarf Forget-Me-Not continuing in bloom from early Spring until autumn; blue; 8 inches..... 10c pkt.

NASTURTIIUMS

FOR ease of culture, duration of bloom, brilliancy of coloring and general excellence, nothing excels Nasturtiums.

All they need is a moderately good soil in a well-drained sunny position, and from within a few weeks from the time they are sown until hard frost comes there is an endless profusion of their gorgeous blossoms. The varieties offered below were selected, after exhaustive trials, from a very large number of sorts as being the best and most distinct. *Half-hardy Annuals.*

Tall, or Climbing Varieties

Elegant and luxurious climbers for verandas, trellises, etc. May be used to cover unsightly railings and to trail over rough ground with fine effect. The seedpods can be gathered while green and tender for pickling; 6 to 10 feet.

331—McCullough's "Premier" Mixture of Tall Nasturtiums

A gorgeous mixture, absolutely the finest produced. It contains all the new

Giant Flowering kinds together with many other grand new hybrids. A mixture positively without rival. A wonderful diversity of rich colors and new and striking combinations are found in this unequalled mixture. A row in full bloom is truly gorgeous, containing every shade and tint of yellow, rose, scarlet, orange, carmine, violet, purple, lemon, bronze, maroon, ruby, cream and pink, both in solid colors and mottled and striped in many ways.

Oz., 20c; $\frac{1}{4}$ lb., 60c; lb., \$2.00; 5c pkt.

Tall, or Climbing, Named Varieties

332—Chameleon. Different richly-colored flowers on the same plant.

333—Crimson. Rich and Velvety.

334—King Theodore. Deep crimson maroon dark foliage.

335—Lemon Yellow. Clear yellow white with few red veins.

336—Orange. Pure orange; no markings.

337—Pearl. Creamy white.

338—Prince Henry. Cream, spotted and tipped scarlet.

339—Purple. Rich shade of purplish crimson.

340—Scarlet. Glowing vermilion.

341—Straw Striped Scarlet. Effective.

342—Vesuvius. Salmon rose; an exquisite shade.

343—Spotted. Rich yellow, spotted garnet.

Price. Any of the above Tall sorts.

Oz., 20c; $\frac{1}{4}$ lb., 60c; 5c pkt.

344—Mixed Tall Nasturtiums. For the low price, this mixture is very choice but will not give as fine flowers as our "Premier" listed above.

Oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.25; 5c pkt.

345—Collection. 6 varieties. 25c

346—Collection. 12 varieties. 40c

Dwarf, or Bedding Varieties

THEY are suitable for hanging baskets, vases, window boxes, bedding and edging; grow quickly, thrive in the poorest soil and furnish the greatest abundance of long lasting, sweet-scented cut flowers.

There are few flowers that can compare with Nasturtiums in richness and variety of color, freedom of bloom, ease of culture and general usefulness.

347—McCullough's "Premier" Mixture of Dwarf Nasturtiums

Will give a larger variety of colors in even proportions than any

other Nasturtium mixture, for it is put up by ourselves from named sorts, and also contains a large share of the Liliput Nasturtium and of the Dwarf Chameleon which have the richest and most varied combination of colors ever produced, showing odd colors hitherto unknown among flowers.

Oz., 20c; $\frac{1}{4}$ lb., 60c; lb., \$2.00; 5c pkt.

Dwarf, or Bedding, Named Varieties

348—Aurora. Chrome-yellow, spotted and striped with deep crimson.

349—Beauty. Yellow-striped red.

350—Chameleon. This interesting variety produces flowers of different colors on the same plant.

351—Crystal Palace Gem. Sulphur, spotted maroon.

352—Golden King. Brilliant yellow.

353—King of Tom Thumbs. Intense deep scarlet flowers, dark foliage.

354—King Theodore. Dark Maroon, bluish-green foliage. One of the best.

355—Lady Bird. Rich golden yellow, barred with bright ruby crimson.

356—Pearl. Creamy white.

357—Prince Henry. Golden yellow, marbled and spotted with brilliant scarlet.

358—Ruby King. Brilliant crimson rose.

359—Vesuvius. Brilliant salmon pink.

360—Variegated Leaved Mixed. All colors.

Price. Any of the above Dwarf sorts.

Oz., 20c; $\frac{1}{4}$ lb., 60c; 5c pkt.

361—Collection. 6 varieties. 25c

362—Collection. 12 varieties. 40c

363—Dwarf Nasturtiums Mixed. We handle such large quantities of Dwarf Nasturtiums that we are able to offer this especially choice mixture at a very low price. See also our "Premier" mixture listed above.

Oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.25; 5c pkt.

NASTURTIIUMS—Continued

Lobb's Nasturtiums

(*Tropaeolum Lobbianum*)

THERE is little difference between these and the tall Nasturtiums. They are especially rich in the red shades, flower even freer, grow to the same height and are very desirable.

- 364—Asa Gray.** Pale primrose yellow, almost white, fine.
- 365—Cardinal.** Intense deep scarlet, dark foliage.
- 366—Giant of Battles.** Sulphur-yellow, blotched red.
- 367—Golden Queen.** Pure golden-orange.
- 368—Princess Victoria Louise.** Creamy white, with fine, conspicuous, ruby-rose blotches.
- 369—Roi des Noirs.** (King of the Blacks.) Deep, velvety garnet; very rich, dark foliage.
- 370—Spitfire.** Brilliant orange-vermilion.
- Price—Any of the above.....Oz., 20c; 5c pkt.**
- 371—Collection, 7 varieties.....30c.**

Miscellaneous Varieties

- 372—Hybrids of Madame Gunter.** A new climbing strain. For richness and variety of colors these new Hybrids have no equal among Nasturtiums. There are shades of rose, salmon, brightest red, pale yellow, either as self colors or spotted and striped. The foliage is mostly dark and contrasts very effectively with the rich colors, and are free and continuous bloomers.....Oz., 20c; 5c pkt.
- 373—Tall Ivy Leaved.** A new class with thick, green, lobed leaves, resembling those of the English Ivy. The flowers are of a delicate fringed formation. Oz., 20c; 5c pkt.
- 374—Tall Variegated Leaved.** The foliage is strikingly variegated, rendering the plants very ornamental even when not in flower.....Oz., 20c; 5c pkt.
- Tropaeolum Canariense.*** (See Canary Bird Flower.)

NICOTIANA (Sweet Scented Tobacco Plant)

One of the easiest annuals to raise and one of the most effective. The blossoms in shape are not unlike a Petunia blossom, but with a longer tube. The flowers open toward evening and emit a powerful perfume. *Hardy Annuals.*

- 375—Affinis.** Large, pure white flowers of delicious fragrance. If taken up in the fall, cut back and potted, they will bloom all winter.....5c pkt.
- 376—Affinis Hybrids.** These magnificent Hybrids have large flowers in many beautiful colors and brilliant shades, fragrant....5c pkt.
- 377—Sanderæ Hybrids.** A showy and profuse flowering half-hardy annual, giving a continuous display of brilliant flowers through Summer and Autumn. The plant is of branching, bushy habit, 2 to 3 feet high, and carries the flowers in clusters. The flowers measure from 1½ to 2 inches across and remain open all day. (See cut.) Many colors, mixed.....5c pkt.

NIGELLA

(Love in a Mist, or Devil in the Bush)

- 378—Miss Jekyll.** Lovely variety giving an abundance of long-stemmed flowers which are of a clear cornflower-blue, prettily set in slender elegant foliage. One of our most attractive annuals. The plants are extremely hardy, and an autumn sowing produces the best specimens for flowering in the following Summer. (See cut.) Height, 18 inches. *Hardy Annual*.....10c pkt.

- 379—Damasce-na.** A compact, free-flowering plant, with finely cut foliage, curious looking flowers and seed-pods; of easy culture, growing in any garden soil; blue and white mixed; 1 foot. *Hardy Annual.* 5c pkt.

Oxalis

OXALIS

A SPLENDID class of plants, with brilliant colored flowers and dark foliage, suitable for borders, greenhouse decoration, rock-work or baskets; flowering the first year. *Half-hardy Perennial.*

- 380—Finest Mixed.....5c pkt.**

PANSY

PANSY seed has always been a leading specialty with us. Seed germinates best while soil is still cool and moist. We would advise sowing in shallow drills in seed-bed early in Spring when the trees are starting out in leaf, and again in September when the weather becomes cool. As above stated, plants from the Spring-sown seed flower with great freedom throughout Spring, Summer and Fall, while the stocky young plants grown in Fall and Winter produce the largest and finest flowers early the following Spring. Take care of the weakest looking seedlings, as they usually give the finest flowers. *Half-hardy Perennials.*

TYPES OF McCULLOUGH'S PREMIER PANSIES

381—McCullough's "Premier" Pansies

The cream of American and European Specialists. In this magnificent mixture of mammoth-flowering Pansies the blossoms are borne on long stems well above the foliage and are distinguished for their gorgeous and varied colorings and beautiful markings; of fine substance, velvety texture, perfect form, and giant size, frequently measuring 3 inches in diameter. The colorings are wonderfully rich and varied; every shade and tint of rose, canary-yellow, black, white, cream, lavender, garnet, sky-blue and orange are produced in endless variation. $\frac{1}{2}$ oz., \$1.00; $\frac{1}{4}$ oz., \$1.75; 25c pkt.

382—McCullough's "Special" Mixture

A superior mixture selected from choice, large flowering strains of English, French and German growers. This strain is one of great excellence, the individual flowers being superb and

include many fine shades in a number of colorings, and is intended to supply the want of a first-class mixture at a moderate price. $\frac{1}{2}$ oz., 60c; $\frac{1}{4}$ oz., \$1.00; 15c pkt.

383—McCullough's Bedding Pansies

The old-fashioned Pansies for beds or borders. Our mixture contains all the most showy and distinctly marked varieties, and are noted for their almost endless variations, which include striped, blotched, bordered, veined and marbled combinations, in every possible color and shade. The plants are of compact growth, and flower most profusely.

$\frac{1}{2}$ oz., 20c; $\frac{1}{4}$ oz., 35c; 10c pkt.

384—McCullough's Choice Mixed

Great diversity of colors, free flowering, blossoms slightly smaller than the Giant sorts.

$\frac{1}{2}$ oz., 15c; $\frac{1}{4}$ oz., 25c; 5c pkt.

385—Giant Trimardeau, Mixed.

These are the largest flowered of all; a most showy class, of robust and very compact growth. The flowers are carried well above the leaves; splendid for bouquets, as the stems are long. Mixture of finest colors.

$\frac{1}{4}$ oz., 60c; 10c pkt.

386—Masterpiece. The enormous

large flowers are borne well above the foliage on strong stems. The petals of the flowers are waved or curled, and contain the richest colors. Each petal is distinctly marked with a large dark blotch, and most of the flowers are margined with a light, white or yellow edge. 15c pkt.

387—Bugnot's Superb Blotched.

A French strain of extra large size, choicest colors, and with beautiful broad blotches and delicate pencillings. Finest mixed. 20c pkt.

388—Cassier's Giant. A very

showy and rich strain saved from very large and beautifully blotched model flowers.

15c pkt.

389—New Princess. Of the Cassier and Masterpiece type. habit remarkably erect, which is its distinguishing characteristic. Extensive range of colors with yellow predominating. 15c pkt.

PANSIES

PANSY—Continued

Giant Trimardeau Pansies

- 390—Bridesmaid. White shining rose, beautifully blotched.
 391—Canary Bird. Giant five spotted yellow.
 392—Emperor William. Indigo blue.
 393—Golden Queen. Golden yellow. Very fine.
 394—King of the Blacks. Lustrous jet black.
 395—Lord Beaconsfield. Lavender, heliotrope and purple.
 396—Mme. Perret. Wine shades on white.
 397—Peacock. Garnet, cream and blue
 398—President Carnot. White, violet blotched.
 399—Snow-Flake. Spotless, snow-white.

Above Giant Pansies, each $\frac{1}{4}$ oz., 60c; 10c pkt.

BEDDING PANSIES IN SEPARATE COLORS

For liberal plantings in the garden beds, these fine sorts are desirable.

400—Azure Blue.	405—Pure White.
401—Black.	406—Purplish Violet.
402—Dark Purple.	407—Pure Yellow.
403—Red Shades.	408—Yellow, Black Center.
404—Psyche.	409—Rosy Lilac.

Above Bedding Pansies, each $\frac{1}{4}$ oz., 35c; 5c pkt.

Violas, or Tufted Pansies

(Also known as Pansy Violets, Johnny-Jump-Ups, etc.)
 OUR improved strain produces beautiful Pansy-like blossoms, of most brilliant colors and markings. The plants are more hardy than Pansies, and of vigorous growth, forming deep-rooting, compact, tufted clumps. Planted in masses or lines they form perfect mats covered with myriads of flowers from Spring until cold weather.

410—McCullough's Special Mixture

of Improved Tufted Pansies.
 $\frac{1}{4}$ oz., 35c; $\frac{1}{4}$ oz., 60c; 10c pkt.

PETUNIA

For outdoor decoration or house culture few plants equal the Petunia in effectiveness. Easily cultivated, only requiring a good soil and sunny position. *Hardy Annuals.*

Double Large-Flowering

IT is well known that seed saved from the most carefully hybridized flowers produces but a small percentage of double flowers, the balance being singles of unusually fine quality. The weaker seedlings should be carefully saved, as these invariably produce the finest double flowers.

411—McCullough's Splendid Double Fringed

One of the finest strains in existence. The double flowers are very large, full and beautifully formed, having the edges of the

petals elegantly fringed.....35c pkt.

412—Large Double Mixed. Choice strains of fine colors and large flowers.....25c pkt.

Single Large-Flowering

THE weaker seedlings produce the finest flowers of best colorings. It is best to sow Petunias indoors and transplant to the open in May. The Single Bedding kinds can be sown right out of doors in May.

This mixture is made by ourselves and includes, besides the Ruffled and California Giants, all the colors of the large-flowering and fringed sorts, and the unsurpassed Superbissima varieties, with their delicately veined throats in various colors, and their truly mammoth flowers.

3 pkts., 50c; 20c pkt.
 15c pkt.

- 414—Ruffled Giants. Very large flowered; ruffled, fluted and fringed, striped and mottled, blotched and solid self-colors.
 415—Large Flowering Single, Finest Mixed. Superb strain from show flowers; very large and of great substance.
 2 pkts., 25c; 15c pkt.

Single Bedding Petunias

- 416—Howard's Star. A beautiful free-flowering strain, crimson maroon with a clearly-defined five-pointed star of bluish white. (See cut).....3 pkts., 25c; 10c pkt.
 417—Rosy Morn. Soft carmine pink with white throat.
 10c pkt.
 418—Brilliant. Carmine pink.....10c pkt.
 419—Dwarf Inimitable. Compact growing variety; flowers cherry-red with a white center.....10c pkt.
 420—Pure White. For cemetery beds.....5c pkt.
 421—Striped and Blotched. Fine for massing.

$\frac{1}{4}$ oz., 30c; 5c pkt.

422—McCullough's "Selected" Bedding Varieties, Mixed

Superb strain.
 $\frac{1}{4}$ oz., 50c; 10c pkt.

423—Fine Mixed. Good..... $\frac{1}{4}$ oz., 25c; 5c pkt.

Howard's Star Petunia

McCULLOUGH'S ANNUAL PHLOX

THE annual Phlox is dazzling in effect, particularly so when sown in masses or ribbon beds of contrasting colors. Few flowers are so easy to grow from seed, so pretty and compact in habit, so quick to bloom, or give such a brilliant display of color for so little cost and care. For pot culture, and as an undergrowth for tall, bare-stemmed plants they are also valuable. The first sowing should be made as soon as the frost is out of the ground in Spring, later ones in May, either where the plants are to bloom, or in a seed-bed, as the Phlox transplants readily. In transplanting, set the taller kinds about a foot apart. Cutting away the flowers makes the plants more bushy and compact, and lengthens their blooming time. *Half-hardy Annuals.*

Select Large-Flowering Varieties

(Phlox Drummondii Grandiflora)

This is the finest type, having the largest heads of bloom, as well as the largest individual flowers. 15 inches.

424—Alba. Large, pure white.

425—Alba Oculata. Pure white, with claret eye.

426—Atropurpurea. Deep, purplish crimson.

427—Brilliant. Beautiful rose color.

428—Coccinea. Brilliant scarlet.

429—Kermesina Splendens. Vivid crimson, very bright.

430—Stellata Splendens. Vivid crimson with white star.

All the above. 1/8 oz., 20c; 1/4 oz., 30c; 10c pkt.

430 1/2—Collection. One packet each of the above 7 colors, 60c.

McCullough's Giant Phlox

Is a special mixture of Phlox; has very large, perfectly round flowers, and will produce immense trusses of flowers which will surpass every other variety in extreme richness of color and duration of bloom. Contains many varieties only to be had in this mixture, and will delight and astonish all with its extensive variety of colors. It grows very compact. To prolong blooming, the seed pods should be removed as soon as they form. A bed of McCullough's Giant Phlox makes a grand display all Summer.

1/8 oz., 20c; 1/4 oz., 30c; oz., \$1.00; 10c pkt.

432—Phlox Drummondii, Mixed Colors. Flowers not so large as the Grandiflora type offered, but are very free-flowering and effective.

1/4 oz., 20c; oz., 60c; 5c pkt.

LARGE-FLOWERING DWARF

A type combining the size of the individual flower and head of the Grandifloras, but of dwarf, compact growth.

433—Brilliant Rose. 10c pkt.

434—Fiery Scarlet (Fireball). 10c pkt.

435—Pure White (Snowball). 10c pkt.

436—Finest Mixed Colors (Dwarf Varieties). 10c pkt.

STAR PHLOX

437—Phlox Cuspidata. (Star of Quedlinburg.) Of dwarf habit with very pretty star-shaped flowers. A novel variety; mixed colors. 10c pkt.

HARDY PERENNIAL PHLOX (P. Decussata)

Hardy Herbaceous Perennial and quite distinct from the varieties of Phlox Drummondii, which are annuals. For best results should be sown as soon as frost is out of the ground in Spring or as soon as gathered in the Autumn.

438—Mixed. All varieties. 1/4 oz., 50c; 10c pkt.

PHYSALIS

439—Franchetti. (Chinese Lantern Plant.) Produces balloon-like husks, which turn bright red when ripe and resemble Chinese paper lanterns. *Half-hardy Perennial*, but blooms first season. 1 1/2 feet. 10c pkt.

PHYSOSTEGIA (False Dragon Head)

440—Virginica. One of the prettiest *Hardy Perennials*, and gaining in popularity as it becomes better known. It forms dense bushes, 3 to 4 feet high, bearing freely during the summer months spikes of delicate pink, tubular flowers not unlike a gigantic heather. 10c pkt.

PRIMULA

THE beautiful Chinese Fringed Primroses and Obconica and Forbesi varieties are indispensable for winter or spring decorations in the home or conservatory. They are one of the most important winter blooming pot plants. The seed we offer has been saved from the best strains of English and Continental growth. Sow in March, April or May. The hardy varieties are also deserving of wide cultivation.

Primula Chinensis Fimbriata

FRINGED CHINESE PRIMROSES

The seed should be sown in light soil, but for final potting a richer soil is necessary consisting of two parts loam to one each of well decayed manure and leafmold. *Greenhouse Perennials.*

441—*Alba Magnifica*. The finest pure white with bright yellow eye, beautifully fringed. 20c pkt.

442—*Chiswick Red*. Large brilliant scarlet, finely fringed. 20c pkt.

443—*Coerulea*. Fine blue; excellent. 20c pkt.

444—*Delicata*. Delicate rose; finely fringed. 20c pkt.

445—*McGullough's Choicest Mixed*. This mixture contains nothing but the finest sorts of Chinese Primroses. (See cut) 20c pkt.

Primula Obconica

THESE are of the easiest culture in greenhouses or light window of dwelling house, flowering abundantly and continuously with little care, and should be sown during the Spring in good, porous loam. They will not germinate well in any compost containing peat or leafmold. To develop the colors to the highest degree, grow in heavy soil, and at a temperature as near 60 degrees as possible. The *Grandiflora* varieties are the freest flowering, but lack the very large individual blooms of the newer *Gigantea* type. *Greenhouse Perennials.*

446—*Primula Obconica Grandiflora*. Very large flowers with nicely fringed and toothed petals. The flowers are produced in constant succession, ranging in color from white, red to rose. 10c pkt.

447—*Primula Obconica Gigantea*. This new variety is the finest yet introduced; of strong, vigorous growth with immense heads of large individual blooms. Varies in color from pale lilac to rose, white and red. 15c pkt.

Various Sorts

448—*Forbesi*. (Baby Primrose.) This is the freest-flowering primula we know of. The little plants throw up tiny rosy-lilac flowers when only a few weeks old. 10c pkt.

449—*Malacoides*. A fine house plant, somewhat like *P. Forbesi*, but larger in all its parts; flowers delicate lilac. 15c pkt.

Hardy Primroses

These are among the best of the early spring-blooming plants. *Half-hardy Perennials.*

450—*Auricula*. Finest mixed. Extra choice; saved from a prize collection. 10c pkt.

451—*Veris*. (Polyanthus.) Splendid colors; extra fine. 10c pkt.

452—*Vulgaris*. True English Primrose; canary yellow, fragrant flowers. 10c pkt.

PORTULACA

(Sun Plant or Rose Moss)

ONE of our finest *Hardy Annual* plants, of easy culture, thriving best in a light loam or sandy soil, and luxuriating in an exposed, sunny situation; the flowers are of the richest colors, and produced throughout the summer in great profusion; fine for massing in beds, edgings of rock-work; 6 inches. (See cut.)

PORTULACA SINGLE

453—*Alba*. Oz., 60c; 5c pkt.

454—*Rosea*. Oz., 60c; 5c pkt.

455—*Scarlet*. Oz., 60c; 5c pkt.

456—*Spendens*. Oz., 60c; 5c pkt.

457—*Single Mixed Colors*. Oz., 50c; 5c pkt.

458—*Double Mixed*. A large percentage of the flowers will come perfectly double. ¼ oz., 75c; 10c pkt.

POPPIES

A NNUAL Poppies should be sown as early in the spring as possible where they are to remain, as they do not stand transplanting. Sow very thinly. If they come up too thickly they must be thinned out to stand 3 to 4 inches or more apart if you wish best results. *Hardy Annuals.*

Single Annual Poppies

459—McCullough's
Select Shirley

They are single and occasionally semi-double, and range in color from

the purest white through the delicate shades of pale pink, rose and carmine to the deepest crimson and blood-red, while many are daintily edged and striped. In fact, so varied are they that scarcely any two flowers are exactly alike. (See cut.) $\frac{1}{4}$ oz., 15c; oz., 40c; 5c pkt.

460—Admiral. A single peacy-flowered variety of surpassing beauty, having large, smooth-edged flowers of glistening white, with a broad band of brilliant scarlet around the top. These two colors form a very striking contrast, and when planted in groups produce a magnificent effect.

Oz., 25c; 5c pkt.

461—Danebrog, or Danish Cross. Very showy variety, producing large flowers of brilliant scarlet, with a silvery-white spot on each petal, forming a white cross. Oz., 25c; 5c pkt.

462—Fire Dragon. Very showy flowers of brilliant deep scarlet, with black spots, margined white; 2 to 2 $\frac{1}{2}$ feet. $\frac{1}{4}$ oz., 25c; 5c pkt.

463—Tulip Poppy. (Papaver Glaucum.) One of the most brilliant; the flowers are 3 inches across and closely resemble the brilliant Scarlet Gesneriana Tulip; an elegant and distinct variety. Plants from 16 to 18 inches high, producing well above the foliage fifty to sixty large splendid flowers of the most vivid scarlet imaginable. From a mere description no adequate idea can be gained of its strikingly beautiful effect. The plant commences blooming early in June, and flowers abundantly for a period of from six to eight weeks. (See cut.) $\frac{1}{4}$ oz., 20c; oz., 60c; 5c pkt.

464—The Bride. A beautiful variety with very large, pure white, perfectly-formed flowers. Oz., 25c; 5c pkt.

465—McCullough's Special Mixture
of Single Poppies

This mixture includes all the above choice Poppies and many other kinds

not listed. It is really extra choice.

$\frac{1}{2}$ oz., 15c; oz., 25c; 5c pkt.

NOTE: Our list of flower seeds will be found to contain all varieties of real merit. Many times varieties are listed which are of little value in the garden, and others are so difficult to grow that unless one has every facility for propagation, disappointment is sure to follow the purchase of seed. We want our seeds to give satisfaction and our selection of varieties for this catalogue has been made with the greatest care. Cultural directions will be found on most of our seed packets.

POPPIES—Continued

Double Annual Poppies

THE same culture as given at the top of the preceding page should be followed in the case of the double-flowering annual sorts. They make a gorgeous show during their flowering period, and are largely used for beds and borders. *Hardy Annuals.*

- 466—**American Flag.** Beautiful variety; flowers very large and double, snow white, bordered with scarlet.....Oz., 30; 5c pkt.
- 467—**Fairy Blush.** Very double flowers of pure white, elegantly fringed and tipped with rose.....Oz., 25c; 5c pkt.
- 468—**Cardinal.** A splendid dwarf variety of the carnation-flowered type, growing about 2 feet high and bearing large globular, fringed flowers of an intense cardinal red.....Oz., 25c; 5c pkt.
- 469—**"Mikado"** (The Striped Japanese Poppy.) This beautiful Poppy is very distinct in character and color. The flowers are brilliant scarlet and white, with elegantly curved petals, like a Japanese Chrysanthemum.....Oz., 25c; 5c pkt.
- 470—**White Swan.** Immense double flowers, beautifully fringed and of purest white, of the same dwarf habit as Cardinal....Oz., 25c; 5c pkt.

- 471—**Carnation Flowered.** Splendid double fringed flowers, mixed colors..... 5c pkt.
- 472—**Paeony Flowered.** Large, showy, double globular flowers, resembling a double Peony; mixed colors....Oz., 20c; 5c pkt.

This includes all the above sorts and many others, and will produce charming flowers in an endless variety of colors.

½ oz., 15c; oz., 25c; 5c pkt.

Hardy Perennial Poppies

ORIENTAL and Bracteatum Poppies should be sown in early Spring in the open ground as soon as it is fit to work. The plants disappear during July and August, appearing again as soon as the weather gets cool. When this fall growth starts is the time they should be transplanted to their permanent flowering quarters. It is well to mark the places they are planted with a stake to insure the roots against disturbance during their annual resting period.

- 474—**Bracteatum.** Immense orange-scarlet flowers, similar to the Oriental Poppy..... ¼ oz., 20c; 5c pkt.
- 475—**Orientele** (The large Oriental Poppy.) A charming summer-flowering hardy plant, producing numerous leafy stems about 2½ feet high, with large, deep crimson flowers, having a conspicuous black blotch on each petal; exceedingly showy. ¼ oz., 25c; 5c pkt.

Contains all of the above and many more beautiful hybrids of the

Oriental Poppy, producing flowers of immense size, 6 inches and over in diameter, and of many novel colors.

¼ oz., 50c; 10c pkt.

Iceland Poppies (*Papaver Nudicaule*)

WHILE these are hardy perennials, they flower the first year from seed, blooming almost as quickly as the annual sorts. They are of graceful, neat habit, with bright green, fern-like foliage, formed in tufts, from which issue slender stalks about 12 inches high, bearing their brilliant flowers in endless profusion; most useful for cutting, for which purpose pick when in bud, for if the seed pods are picked off, they continue in flower the entire season. They remain evergreen throughout the Winter, coming into bloom early the following Spring. *Hardy Perennial.*

- 477—**Finest Mixed.** All colors..... ¼ oz., 25c; 5c pkt.

PYRETHRUM

ONE of the most valuable of our summer flowers. Charming shades of color, and wonderful lasting properties as a cut flower. They flower in May and June, and frequently in August and September the second time. *Hardy Perennials.*

- 478—**Hybridum Grandiflorum.** This new large flowering single strain is saved from a fine collection. Bear large Daisy or Cosmos-like flowers, ranging in color from light pink to deep red, with bright yellow centers; blooms in May and June and again in the Fall, and is one of the most graceful and long-lasting cut flowers. ¼ oz., 50c; 10c pkt.

- 479—**Hybridum Fl. Pl.** Large semi-double flowers, resembling a China Aster, only more refined; extra choice selected seed; mixed colors.....25c pkt.

- 480—**Pyrethrum Aureum.** It is the well-known Golden Feather used for edging, carpet-bedding, etc..5c pkt.

RICINUS (Castor Bean)

KNOWN as "Castor Oil Plant" and "Palma Christi." Highly ornamental and stately growing plants of tropical origin, with luxuriant foliage of varied colors and brilliant colored fruit. When grown on lawns or in the garden as single specimens, they form a magnificent showy plant. Sow as soon as the ground is warm. *Half-hardy Annuals.* (See cut.)

- 481—**Cambodgiensis.** The main stem and leaf stalks are of shining ebony black; the leaves are very large and richly colored, changing to different shades; 6 feet. Oz., 25c; 5c pkt.
- 482—**Gibsonii.** Dwarf, branching habit, deep red foliage; 4 feet. Oz., 25c; 5c pkt.
- 483—**Sanguineus.** Blood-red stalks and clusters of red fruit; 8 feet. Oz., 25c; 5c pkt.
- 484—**Zanzibariensis.** A distinct class, which surpasses in size and beauty all varieties. The plants attain great dimensions, presenting a splendid aspect with their gigantic leaves. The different varieties included in our mixture have light and dark green leaves and some of coppery-bronze, changing to dark green, with reddish ribs. The seeds are quite distinct in color and beautifully marked. 8 to 12 feet. Oz., 25c; 5c pkt.
- 485—**Mixed.** All sorts. Oz., 20c; 5c pkt.

RHODANTHE

(Swan River Everlasting)

IF wanted for bouquets the flowers should be gathered before they fully expand. If allowed to grow too long they open too much, and lose their beautiful bell form. Flowers everlasting. *Half-hardy Annuals.* (See cut.)

- 486—**Maculata.** Mixed, all colors. 5c pkt.

RUDBECKIA (Cone Flower)

- 487—**Bicolor Superba.** Fine free-flowering annual variety, growing about 2 feet high, forming a dense bush and producing its bright flowers in great abundance on long stems. The disc is brown, the florets golden-yellow, with large velvety-brown spots at the base; very effective and useful for cutting. *Half-hardy Annual.* 10c pkt.
- 488—**Newmanii.** One of the finest of autumn-flowering perennials, bearing large flowers. Bright orange-yellow petals, surrounding a large black cone; a showy flower. *Hardy Perennial.* 10c pkt.
- 489—**Purpurea.** (Giant Purple Cone-Flower.) An interesting flowering plant, producing all summer, large, showy, reddish-purple flowers; about 4 inches across, with a remarkably large cone-shaped center of brown; thickly set with golden tips in spiral lines. *Hardy Perennial.* 10c pkt.

SALPIGLOSSIS (Painted Trumpet)

UNDOUBTEDLY one of the most attractive annuals and should be in every garden. The blossoms are tube shaped much like a Petunia but rivaling the latter in the beautiful colors displayed. Seed should be sown early in Spring in a hotbed or window and transplanted when weather is settled or directly out-of-doors after danger of frost. *Half-hardy Annual.* (See cut.)

- 490—**McCullough's Special Mixture** This mixture is put up by ourselves of separate varieties and is without doubt the best mixture obtainable. 1/4 oz., 50c; 10c pkt.
- 491—**Emperor.** This variety forms only one leading stem, and bears on its summit a veritable bouquet of the most beautiful flowers, each one richly veined with gold. 10c pkt.
- 492—**Finest Mixed.** All colors. 1/4 oz., 30c; 5c pkt.

SCHIZANTHUS

(Poor Man's Orchid, or Butterfly Flower)

THIS is one of the daintiest flowers, especially adapted to bordering beds of taller flowers and those of a heavier growth. The seeds germinate quickly and come into bloom in a few weeks from sowing. The florescence is such as to completely obscure the foliage, making the plants a veritable pyramid of the most delicate and charming blooms. *Half-hardy Annuals.*

- 493—**Wisetonensis.** A charming annual with graceful fern-like foliage and a profusion of flowers varying from white with yellow eye to a brilliant rose with bronzy brown center. A really beautiful subject for the flower border and as a pot plant for the house or conservatory. It is remarkably free-flowering, and presents a beautiful appearance with its myriads of blooms. A very shy seeder. 10c pkt.
- 494—**Mixed.** A splendid mixture. Neat pyramidal bushes covered with a multitude of small butterfly-like flowers of the most brilliant and striking color designs. 5c pkt.

SALVIA (Flowering Sage)

THE Scarlet Sage seed 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. *Half-hardy Perennials.*

495—"Bonfire," or "Clara Bedman." This is one of the finest of the Scarlet Sages growing in a compact bush about 2 feet high by 2 feet in diameter. Its erect spikes of flowers of brilliant scarlet 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. (See cut.)..... $\frac{1}{4}$ oz., 75c; 10c pkt.

496—Ball of Fire. The most compact type of Scarlet Sage yet introduced, and more popular for beds or borders requiring a variety of dwarf habit, than the regular Scarlet Sage or the variety "Bonfire."..... 10c pkt.

497—Splendens. (Scarlet Sage.) One of the finest Summer and Fall plants with magnificent brilliant scarlet flowers; 2 feet. (See cut.)..... $\frac{1}{4}$ oz., 50c; 10c pkt.

Salvia—"Bonfire"

SCABIOSA

(Mourning Bride, Sweet Scabiosa, Pin-cushion Flower)

The beautiful flowers in exquisite shades are borne on long stems, and when cut keep in perfect condition for the best part of a week.

Hardy Annuals.

498—Azure Fairy. Lavender-blue.

499—Crimson.

500—Flesh Pink.

501—King of the Blacks.

502—Rose.

503—White.

Any of the above colors... $\frac{1}{4}$ oz., 20c; 5c pkt.

504—Collection. One packet each of the

above 6 varieties..... 25c.

505—Mixed. All colors of the Improved

Large-flowering... $\frac{1}{4}$ oz., 15c; oz., 50c; 5c pkt.

HARDY PERENNIAL SCABIOSA

506—Caucasica. (Blue Bonnet.) One of the handsomest of perennials; especially valuable for cutting, the blooms lasting a long time in water; lilac-blue; 3 feet. *Hardy Perennial.* (See cut.)..... 10c pkt.

507—Japonica. A *Hardy Perennial* variety from Japan, forming bushy plants 2 $\frac{1}{2}$ feet in height, and bearing on long wiry stems beautiful, artistic, lavender-blue flowers. A fine cut flower..... 10c pkt.

SCARLET RUNNER BEANS

A great favorite in Europe, not only as an ornamental climber, but for the delicious, edible pods which succeed the bright scarlet sprays of pea-shaped blossoms. *Tender Annual.*

508—..... Large pkt., 10c; small pkt., 5c.

SENSITIVE PLANT. (See Mimosa.)

SHASTA DAISY. (See Hardy Chrysanthemum.)

SMILAX (Myrsiphyllum Asparagoides)

Smilax is the most useful climber which adorns the greenhouse or conservatory. *Tender Perennial.*

509—..... $\frac{1}{4}$ oz., 20c; 10c pkt.

SOLANUM

510—Capsicastrum. (Jerusalem Cherry.) This is a very useful pot plant for Winter decoration. It is of dwarf, branching habit, leaves small and oval-shaped, bearing in the greatest profusion bright scarlet globular berries. Very ornamental; 1 foot. *Tender Perennial.*... 10c pkt.

STOKESIA

(Cornflower or Stokes' Aster)

PLANTS grow about 15 to 18 inches high, bearing freely from July to October handsome Centaurea-like blossoms, each measuring from 4 to 5 inches across; it is of easy culture, and one of the most desirable plants for the hardy border, and also for cutting. *Hardy Perennials.* (See cut.)

- 511—*Cyanea.* Light blue.....10c pkt.
512—*Cyanea Alba.* Pure white.....10c pkt.

STOCKS (Gilliflower)

STOCK seed may be sown in the open ground, or in the hotbed or cold frame, but if transplanted, let this be done when the plants are small, just out of the seed-leaf, or the plants become slender and never make good plants nor flower well.

513—McCullough's
Cincinnati Market

A fine perpetual blooming stock, producing one long, sturdy spike, closely set with enormous double flowers. A grand variety. 10c pkt.

- 514—*Dwarf German Mixed.* For outdoor bedding. All colors.....5c pkt.
515—*Princess Alice.* (Cut and Come Again.) If sown early it commences blooming in June and continues until frost. It throws out numerous side branches bearing clusters of very double, pure white, fragrant blossoms, and is excellent for cutting.....10c pkt.

Giant Perfection Ten Week Stock

This magnificent strain is without a rival for open-ground planting, attaining a height of 2 1/2 feet. The spikes of bloom are long and the individual flowers are enormous in size and very double. *Half-hardy Annuals* (See cut.)

- 516—*Light Blue.* 10c pkt. | 518—*Crimson.* 10c pkt.
517—*Rose.* 10c pkt. | 519—*White.* 10c pkt.
520—*Finest Mixed Perfection.* All colors.....10c pkt.

Mammoth-Flowering Beauty Stock

A magnificent recently developed strain of early flowering Winter Stocks, forming much-branched plants about 2 feet high and having numerous spikes of very large, double, delightfully fragrant flowers. If sown in March will produce plants that will bloom out of doors. *Half-hardy Biennial.*

- 521—*Almond Blossom.* White shaded carmine superb. 10c Pkt.

- 522—*Beauty of Nice.* Delicate flesh pink.....10c pkt.
523—*Lilac.* Deep lilac, beautiful color and large spikes. 10c pkt.
524—*Mont Blanc.* Purest white.....10c pkt.
525—*Queen Alexandra.* Soft rosy-lilac.....10c pkt.
526—*Beauty Stocks, Mixed.*.....10c pkt.

SUNFLOWER (Helianthus)

REMARKABLE for the stately growth, size and brilliancy of their flowers, making a very good effect among shrubbery and for screens. It is also raised as an absorbent of miasma in damp or ill drained situations, thus preventing fevers. The seed is good for feeding poultry. *Hardy Annuals.*

DOUBLE ANNUAL SUNFLOWERS

- 527—*Chrysanthemum-Flowered.* An excellent plant for the lawn or shrubberies where color effect is desired. The plants grow 6 to 7 feet and produce a great number of double flowers. On account of their size, long stems and color the flowers are well adapted for vases.....Oz., 25c; 5c pkt.
528—*Globosus Fistulosus.* (Dahlia Sunflower.) Flowers large, double, of a rich saffron color, 6 feet.....Oz., 25c; 5c pkt.
529—*Mammoth Russian.* Extra large flowers, with an abundance of seed.....Oz., 10c; 1/4 lb., 20c; 5c pkt.
530—*Double Varieties, Mixed.*.....Oz., 15c; 5c pkt.

HARDY PERENNIAL SUNFLOWERS

- 531—*Mixed.* Contains the finest single-flowering *Hardy Perennial* sorts. Seeds sown early will produce flowering plants the first year; as subjects for the hardy border as well as for cutting they are of great value.....1/4 oz., 65c; 10c pkt.

SINGLE ANNUAL SUNFLOWERS. (See next page.)

SUNFLOWER—Continued

(Dwarf-Branching "Cut-and-Come-Again")

- 532—Stella.** (Improved Miniature Sunflower.) Flowers of the purest golden yellow, with black disc. These improved branching Sunflowers (*Helianthus Cucumerifolius* types) are popular, not only for garden display, but for cut flowers. The plants form bushes 2 to 3 feet high, bearing a continuous succession of flowers from June until frost. The perfectly formed flowers, 3 to 4 inches across, are poised on long, graceful stems, which "vase" beautifully. They are easily grown, commencing to flower in a few weeks from seed. *Hardy Annuals.*

- 533—The "Red Sunflower."** The plants vary in height from five to eight feet and throw out many side branches. The flowers are very numerous, of good form, usually having large, long rays and small discs. The heads vary greatly in size—some are only two or three inches across while others are a foot or more. The color varies greatly—some plants produce flowers of a rich chestnut-red, others red flowers tipped with yellow, others washed with red. This variety, in size and color, makes a hedge or border of this annual especially interesting and attractive. Some few seeds will produce plants bearing yellow flowers. The plants likely to do this have no purple in stem or leaf and can be destroyed when seedlings. .3 pkts., 25c; 10c pkt.

- 534—Rainbow Hybrid Sunflowers.** It caused quite a sensation when the first Red Hybrid Sunflowers were introduced, but they were but the first step toward an entirely new race of this beautiful flower. Our wonderful Rainbow Hybrids are the results of bringing together the blood of three distinct types of Hybrids and combining the good points of all. The combination of colors runs from all shades of yellow through many combinations of yellow with brilliant reds and bronzes, and some solid reds. These grow 5 to 8 feet high, branch profusely and each plant bears several dozen beautiful flowers 5 to 8 inches in diameter on long stems. This is a novelty that will be in great demand..... $\frac{1}{4}$ oz., 40c; 10c pkt.

SWEET WILLIAM (*Dianthus Barbatus*)

WE are pleased to see that the merits of this sturdy, old-fashioned flower are being more generally recognized and its cultivation greatly extended. Beautiful, fragrant and easily grown, it is worthy of a place in every garden. The best varieties of Sweet William are of exceedingly beautiful colors, and the large fragrant flowers are borne in trusses of great size. They make a splendid show in the garden or hardy border and last well as cut flowers. Seed may be sown at any time from Spring to Midsummer. Seed planted early will bloom in the Fall. It is better to sow seed every year to have young plants, as they flower more freely. *Hardy Perennials.* Height 1 ½ to 2 feet.

- 535—Holborn Glory.** This strain is a large-flowered selection of the Auricula-Eyed section, the most beautiful and admired of all Sweet Williams. The individual flowers and trusses are of extraordinary size, and the range of color, all showing a clear, white eye, is superb. 5c pkt.

**536—McCullough's
Selected Single Mixed**

A very choice assortment
of all the best single-
flowering varieties.

¼ oz., 20c; 5c pkt.

- 537—Double Mixed.** This mixture you will find of very superior quality; containing all colors and shades. .5c pkt.

SWEET SULTANS. (See *Centaurea*.)

SNOW-ON-THE-MOUNTAIN. (See *Euphorbia*.)

SNAPDRAGON. (See *Antirrhinum*.)

HINTS ON THE CULTURE OF FLOWERS FROM SEED

Much annoyance and disappointment may be saved by giving close attention to the following: Avoid especially deep planting, over-watering, under-watering, or sowing too thickly.

See McCullough's Collection of
"Easy to Grow" Flower Seed. They
 may save you money.
 Illustrated on 4th page of cover

McCULLOUGH'S SELECT SWEET PEAS

It Would be an Easy Matter for Us to Greatly Extend Our List; but We Think it Best to Confine Our Offers to such Sorts as are Really First-Class.

HOW TO GROW SWEET PEAS.—The principal essential for the best success is a cool, deep, moist soil, and a sunny situation. The ground should be prepared deep and rich. Fall preparation, where possible, is preferable, but if done in the spring, use no green manure. Bone meal is good if old rotted manure can not be obtained. Sow early, as Sweet Peas need the cold, moist spring ground to make the root growth. In the latitude of Cincinnati, February is not too early. In the South, sow in the fall. Sow the seed in deep furrows, the bottom of which must be at least 6 inches below the level of the soil; this is to guard against a summer drought. Cover the seeds only one inch, after which the furrow is still five inches deep. When the plants are 2 or 3 inches high, thin out to 2 inches apart and fill in another inch or so of soil around the plants, always leaving a portion of the plant above the surface; do this at intervals until the furrow is nearly full; it should always remain a little hollow to hold the rains, and to allow water to be applied by the bucketful when necessary.

During dry weather they should be watered thoroughly and frequently and given an application of liquid manure once a week. A mulch of hay or rakings from the lawn will be found beneficial during hot weather. The flowers should be picked as often as possible, and all withered blooms should be removed, to prevent the plants from running to seed, which would stop them from blooming.

New Early Flowering Spencers

NOTHING within recent years can approach in importance the introduction of the "Spencer" Sweet Peas. They are distinguished from the standard sorts by the enormous flowers with crinkled and wavy petals, and also from the fact that they usually bear four blossoms on a long stout stem.

In presenting the following varieties of Spencer Sweet Peas we wish to emphasize the fact that these are the "Early Flowering Spencers"

and are separate and distinct from the late or standard Spencer types, as they continue blooming two to three weeks longer than the standard Spencer varieties.

Be sure to give these varieties a trial as the types are fixed and customers may rely on the descriptions.

538—Early Meadow Lark.
Cream colored.
Pkt. of 15 Seeds
25c.

539—Early Warbler. Mauve purple.
Pkt. of 25 Seeds..... 25c.

540—Early Liberty. Deep crimson.
Pkt. of 15 Seeds..... 25c.

541—Early Songster. Lavender.
Pkt. of 15 Seeds..... 25c.

542—Early Henrietta.
Rose pink.
Pkt. of 25 Seeds.... 25c.

543—Early Blanche Ferry.
Bright rose.
½ oz., 40c; oz., 75c;
10c pkt.

544—Early Mrs. A. A. Skaach. Shell pink.
½ oz., 40c; oz., 75c;
10c pkt.

For complete description of the above varieties, See "Novelties" page 10.

545—Heather Bell. The color is a rich but pleasing mauve, but after standing in water the color becomes a beautiful mauve lavender.
½ oz., \$1.00; oz., \$1.75;
10c pkt.

Margaret Atlee

546—Morning Star. The color is a deep orange scarlet or flame color in standard with rich orange-pink wings.
½ oz., \$1.00; oz., \$1.75; 10c pkt.

547—Snow Flake. This is the best Early Flowering White Seeded Spencer. The blossoms are very large and of the best wavy Spencer form.
½ oz., \$1.50; oz., \$2.50; 10c pkt.

548—Song Bird. Standard richly flushed with a beautiful distinct shade of pink on a white ground, wings soft light pink.
½ oz., \$1.00; oz., \$1.75; 10c pkt.

549—Yarra wa. The color on opening is rose, changing as the flower develops to light pink standard, tinted buff, blush wings.
½ oz., 40c; oz., 75c; 10c pkt.

NEW SPENCERS

550—Blue Picotee. Large, bold white flowers, with blue edgely wavy and borne in threes and fours on long stems.

½ oz., 20c; oz., 35c; 10c pkt.

551—Dobbies Cream. Deep cream or primrose colored, nicely wavy, with an abundance of four-bloom Sprays.
½ oz., 15c; oz., 25c; 10c pkt.

552—Dobbies Sunproof Crimson. As its name implies, this beautiful crimson flowering variety does not scorch or burn under intense sunshine. Flowers are freely borne on long stems in threes and fours.
½ oz., 20c; oz., 35c; 10c pkt.

553—Elfrida Pearson. Large pale pink flower margined with darker pink, the buds and young flowers having a distinct tint of buff.
½ oz., 20c; oz., 35c; 10c pkt.

McCULLOUGH'S SELECT SWEET PEAS

NEW SPENCERS—Continued

- 554—Fiery Cross.** Color a scorching fire-red, or scarlet. Unlike most of the orange-scarlet varieties, it does not scorch or burn even during extended periods of intense sunshine. The beautifully waved and fluted flowers are borne freely in threes and fours, well placed on long stout stems. $\frac{1}{2}$ oz., 60c; oz., \$1.00. Packets containing ten seeds each, 10c pkt.
- 555—Hercules.** A magnificent soft rose-pink, of giant proportions. A flower of great substance. The broad and beautifully waved standards frequently measure two and one-half inches in diameter
 $\frac{1}{2}$ oz., 20c; oz., 35c; 10c pkt.
- 556—Illuminator.** Ground color of salmony-orange, overlaid with bright cerise-pink, the effect being a glowing orange-scarlet; flowers large and borne on long, stout stems
 $\frac{1}{2}$ oz., 25c; oz., 40c; 10c pkt.
- 557—King dward Spencer.** The large flowers are waved and crinkled; standard and wings deep rich carmine scarlet.
 $\frac{1}{2}$ oz., 15c; oz., 25c; 10c pkt.
- 558—King White.** The grandest of all White Sweet Peas and of the most up-to-date Spencer form. It is manifestly the largest of White Spencers and the buds are of unusual size before opening. The stems are long and stout and bear practically always four blossoms. (See cut.)
 $\frac{1}{2}$ oz., 20c; oz., 35c 10c pkt.
- 559—Margaret Atlee.** The lovely flowers, uniformly of most advanced Spencer type, are a rich glowing pink on cream ground, softly suffused with salmon in the standard, while the wings are a pleasing shade of pinkish rose and salmon. The flowers are of extraordinary size, often measuring two and one-half inches across the standard, exquisitely waved, and freely produced in "fours" on long stout stems. So vigorous is the growth that the vines give many duplex or double blooms. It is not uncommon to see stems 22 inches long. (See cut.)
 $\frac{1}{2}$ oz., 20c; oz., 35c 10c pkt.
- 560—Margaret Madison.** A large perfect Spencer, of delicate azure blue, slightly tinted with mauve. The flowers are of good size, both standard and wings being delightfully waved and frilled.
 $\frac{1}{2}$ oz., 20c; oz., 35c; 10c pkt.
- 561—Miriam Beaver.** Light apricot and buff.
 $\frac{1}{2}$ oz., 20c; oz., 35c; 10c pkt.
- 562—Mrs. Cuthbertson.** The standard is a clear, rose-pink in color, wings white, slightly flushed light rose.
 $\frac{1}{2}$ oz., 20c; oz., 35c; 10c pkt.
- 563—R. F. Felton.** The color is a soft, pleasing shade of lavender suffused rose; wings French gray. Flowers large and exquisitely waved.
 $\frac{1}{2}$ oz., 20c; oz., 35c; 10c pkt.
- 564—Rosabelle.** A very fine large rose-colored flower, large size and a strong grower, producing abundance of sprays. $\frac{1}{2}$ oz., 20c; oz., 35c; 10c pkt.
- 565—Royal Purple.** A rich royal purple, a distinct color and large size. $\frac{1}{2}$ oz., 20c; oz., 35c; 10c pkt.
- 566—The President.** The flowers are scarlet, of largest size, carried on strong, stiff stems, usually in fours, always beautifully waved even when well expanded. Probably will never be surpassed in the orange-scarlet section. $\frac{1}{2}$ oz., 25c; oz., 40c; 10c pkt.

KING
WHITE

- 567—Thomas Stevenson.** The flowers of are an intense flaming orange throughout the wide, wavy standard, while the wings are rosy carmine, shaded orange.
 $\frac{1}{2}$ oz., 15c; oz., 25c; 10c pkt.

- 568—Wedgwood.** The best Blue Spencer. Is a unique shade of lovely light blue. The flowers, of good size and substance, are well waved in both standard and wings; they are borne almost uniformly in four-flowered sprays upon long stout stems. . . $\frac{1}{2}$ oz., 20c; oz., 35c; 10c pkt.

569—McCullough's Special Mixture of Spencer Varieties

This mixture is made up by ourselves from the cream of this class

in all possible color variations, and we are confident many surprises will result, as we have included in this not only the above sorts but many others which are new and striking in this class $\frac{1}{2}$ oz., 15c; oz., 30c; $\frac{1}{4}$ lb., \$1.00; 10c pkt.

See also McCullough's "Premier" Mixture on Following Page

McCULLOUGH'S SPECIAL COLLECTION OF "SPENCER" SWEET PEAS

One (regular size) packet of each of the Twenty-two Spencer Varieties for \$1.35 Postpaid, or 6 packets for 45c; 12 packets for 80c Customer's Selection, Postpaid.

McCULLOUGH'S SELECT SWEET PEAS

Continued

Grandiflora Varieties

Are considered easier to grow than the Spencers.

The varieties listed below are the cream of all known sorts. All inferior varieties have been discarded.

McCULLOUGH'S SELECTED LIST INCLUDES THE BEST VARIETIES IN ALL COLORS

Oz., 15c; $\frac{1}{4}$ lb., 40c; 5c pkt.

- 570—**America.** Crimson scarlet, striped on white. Large size.
- 571—**Black Knight.** Pure maroon, self-colored. Large size.
- 572—**Blanche Ferry.** Rose pink standard, white wings.
- 573—**Dorothy Eckford.** The finest pure white. The plant is short-jointed, and grows an enormous mass of bloom.
- 574—**Earliest of All.** Rose pink standard, with white wings.
- 575—**Flora Norton.** Pure bright self-blue; quite distinct.
- 576—**Gladys Unwin.** Bright light pink, a little deeper at the edges.
- 577—**Helen Pierce.** Pure white, veined, mottled and marbled with bright blue.
- 578—**King Edward VII.** A lovely, intense, bright crimson, giant flowering variety with strong stems and growth; does not burn in the sun.
- 579—**Lady Grisel Hamilton.** Beautiful pale lavender; in form it is one of the most advanced giant flowering type.
- 580—**Lord Nelson.** Standard, dark navy blue; wings shaded purple.
- 581—**Lottie Eckford.** White ground, shaded and edged with light blue and mauve; large size.
- 582—**Lovely.** Standard and wings, deep rose at base, shading to pale pink and blush at edges; large size.
- 583—**Miss Wilmott.** Standard, orange pink; wings rose, tinted orange.
- 584—**Mrs. E. Kenyon.** A beautiful primrose color; a bold giant flower; a most desirable variety.
- 585—**Mrs. Geo. Higginson, Jr.** A clear, delicate light blue.
- 586—**Prima Donna.** Bright blush pink; large size and fine form.
- 587—**Prince of Wales.** Bright rose; large flower; the prettiest of the bright red varieties.
- 588—**Queen Alexandra.** Intense scarlet; flower of finest form; very free flowering.
- 589—**St. George.** The bold expanded standard is a rich orange color, while the large wings are orange carmine.

McCullough's "PREMIER" Mixed Sweet Peas

THE FINEST AND MOST COMPLETE MIXTURE EVER OFFERED

This mixture contains all the best-named large-flowering varieties and novelties and is undoubtedly a truly superb mixture blended by us with extraordinary care from named varieties of the most approved large-flowering type including recent American and European varieties, as well as a great many Spencer and Unwin sorts and other hybrids insuring a gorgeous color effect.

- 590—.....Oz., 10c; $\frac{1}{4}$ lb., 35c; per lb., \$1.25; 5c pkt.
- 591—**Fine Mixed.** A very good mixture of over 30 large flowering varieties. (See also McCullough's "Premier" Mixture.)..Oz., 10c; $\frac{1}{4}$ lb., 25c; per lb., 80c; 5c pkt.

McCULLOUGH'S SPECIAL COLLECTIONS

Twenty Best Grandiflora or Large
Flowering Varieties for only..... **65c** Postpaid

(One regular Size packet of each variety
listed above)

or 6 packets for 25c; 12 for 40c;
customer's selection, postpaid

THUNBERGIA (Black-Eyed Susan)

Beautiful, rapid-growing annual climbers, preferring a warm, sunny situation; used extensively in hanging-baskets, vases, low fences, etc.; very pretty flowers in buff, white, orange, etc.; with dark eyes; mixed colors. *Half-hardy Annual.* 4 feet.

- 592—..... $\frac{1}{4}$ oz., 25c; 5c pkt.

TORENIA

- 593—**Fournieri.** A very fine annual; a splendid plant for vases, hanging-baskets, borders, etc.; covered the entire season with a mass of bloom. Sky-blue, with three spots of dark-blue, bright yellow center. *Half-hardy Annual.*.....10c pkt.

Thunbergia

VERBENAS

Nothing is easier to grow, and the display they give during the Summer is equaled only by the Phlox. To have the best results, seeds should be started early in the house and the young plants bedded out by the first of June. Set them a foot or more apart, and in a month, at least, they will be so grown and matted together that one can hardly tell one plant from another. A circular raised mound is a good place on which to plant Verbenas. The bed should have the full sun and a good supply of water. Verbenas are easier grown from seeds than from cuttings, and such plants are more vigorous and free flowering. Sow them early, and they will bloom constantly from June until frost. The lavish and showy display of flowers in a Verbena bed is one of the most attractive. *Half-hardy Annuals.*

- 594—**Mammoth Defiance.** Brilliant scarlet, fine for bedding.....10c pkt.
 595—**Mammoth Candidissima.** Large trusses of pure white flowers.....10c pkt.
 596—**Mammoth Blue.** Bright blue, in various shades. 10c pkt.
 597—**Mammoth Pink.** Bright shades of pink; fine 10c pkt.

598—**McCullough's Mammoth Mixed Verbenas** Our strain of these elegant mammoth-flowering Verbenas will make beds and borders in the garden of the greatest brilliancy. These are our best Verbenas, and for enormous flowers of rich and superb colors are unsurpassed. They bloom most profusely. Our mixture contains every desirable color and shades.
 $\frac{1}{8}$ oz., 25c; $\frac{1}{4}$ oz., 40c; 10c pkt.
 599—**Fine Mixed.** A very satisfactory assortment, containing many fine colors and shades.
 $\frac{1}{8}$ oz., 15c; $\frac{1}{4}$ oz., 25c; 5c pkt.

Various Verbenas

- 600—**Lemon Verbena.** (*Aloysia Citriodora.*) Every garden should have a few plants of this fragrant favorite. Its pale green delightfully scented foliage goes well with any flower. *Half-hardy Perennial*.....10c pkt.
 601—**Erinoides.** (*Moss Verbena.*) This lovely variety produces a mass of moss-like foliage, spreading over the ground like a carpet, above which are borne heads of purplish-blue blossoms in lavish profusion; comes into flower in June and continues until frost. For beds, baskets or rockeries, it is highly desirable. *Half-hardy Annuals*.....10c pkt.
 602—**Erinoides Alba.** The pure white form and a great favorite in many of the finest gardens.....10c pkt.

VIOLET (*Viola Odorata*)

A great favorite, suitable for groups, or borders, and much in demand on account of its profusion of bloom and delightful fragrance. Violet seeds germinate very slowly. *Hardy Perennial.*

- 603—**Finest Mixed**.....10c pkt.

VIOLAS, or TUFTED PANSIES. (See Pansies.)

VINCA (*Madagascar Periwinkle, or Old Maid*)

Ornamental, free-blooming plants and one of the most satisfactory flowering bedding plants we have. It is best to start the seed early indoors or in a hotbed, but they begin blooming in August from seed sown out of doors in May, or as soon as the ground is warm, continuing until frost; or they may be potted and kept in bloom through the winter; a fine cut flower, every bud opening when placed in water; 2 feet. *Tender Annuals.* (See cut.)

- 604—**Rosea.** Rose, dark eye.....10c pkt.
 605—**Alba Rosea.** White, crimson eye.....10c pkt.
 606—**Alba Pura.** Pure white.....10c pkt.
 607—**Mixed**..... $\frac{1}{4}$ oz., 25c; 5c pkt.

WALLFLOWER (*Goldlack*)

WELL-KNOWN, deliciously fragrant, half-hardy annuals and perennials, blooming early in the spring, with spikes of beautiful flowers. They should be protected in a cold frame in the winter and planted out in April.

- 608—**Extra Early Market.** A mixture of beautiful single annual varieties which flower through the summer from seeds sown in spring. *Half-hardy Annual.*
 $\frac{1}{4}$ oz., 25c; 5c pkt.
 609—**Single Mixed.** *Half-hardy Perennials* All colors. 5c pkt.
 610—**Double Finest Mixed.** *Half-hardy Perennials.* 10c pkt.

WILD CUCUMBER

(*Echinocystis Lobata*)

THIS is one of the quickest growing climbers on our list. Should be sown late in the fall or very early in the spring. It is thickly dotted over with pretty, white fragrant flowers followed by an abundance of ornamental and prickly seed pods. For a trellis or pillar no annual vine is more chaste, and it will quickly cover an old tree or an unsightly building. *Hardy Annual.*

- 611..... $\frac{1}{2}$ oz., 10c; oz., 15c; 5c pkt.

HINTS ON THE CULTURE OF FLOWERS FROM SEED

Much annoyance and disappointment may be saved by giving close attention to the following: Avoid especially deep planting, over-watering, under-watering, or sowing too thickly.

"WILD GARDEN" FLOWER SEED

EACH package contains about 100 varieties of hardy flower seeds mixed together, and wherever planted will insure something new almost every day. Is suitable for sowing in shrubbery, under trees, and in beds on which no care will be bestowed, or even for sowing in exposed situations, where wildness is preferred to order and precision.

To those who can not bestow the necessary care required in a neatly laid out flower garden, the "Wild Garden" presents a substitute, which, for its unusual and varied effect, for cheapness and small amount of labor necessary for its construction, has no rival.

612—Dwarf Sorts. Growing from 12 to 18 inches high. Oz., 25c; 5c pkt.

613—Climbing and Trailing Sorts. Fine for hiding fences, brush and rubbish heaps. . . . Oz., 25c; 5c pkt.

XERANTHEMUM

(Everlasting, or Immortelle)

614—Double Mixed. Bright and pretty "Everlasting" with silvery foliage and silky flowers in pink, white and purple. *Half-hardy Annual*. . . . ¼ oz., 15c; 5c pkt.

ZINNIAS

(Youth and Old Age)

THESE attractive and decorative hardy annuals are most desirable plants for mixed borders or bedding purposes, and are remarkable for the profusion and duration of their flowers, which are extremely useful for bouquets. The double Zinnias are exceedingly handsome, the flowers being notable for their large size, fine form, brilliancy and diversity of color. The seed can be sown early in the hotbed or light window and transplanted, or sown later in the open ground. They come into flower early in the summer and keep on blooming until hard frost. *Half-hardy Annuals*.

McCULLOUGH'S SUPERB MAMMOTH ZINNIAS

This is the finest strain obtainable. The flowers are of enormous size, thickly set with velvety petals. The plants are healthy, robust, vigorous growers, branching freely, and make excellent material for groups or cutting. McCullough's Superb Mammoth will be found very superior to ordinary Zinnias. New colors have been added, depth and size given to the blooms and a rich velvety lustre to the petals.

615—Mammoth White.

616—Mammoth Yellow.

617—Mammoth Flesh Color.

618—Mammoth Crimson.

619—Mammoth Scarlet.

620—Mammoth Violet.

Each of the above. 3 pkts., 25c; 10c pkt.

621—Collection. One packet of each of the above 6 varieties. 50c.

622—McCullough's Superb Mammoth Mixed Contains all the colors listed above together with many new shades. Be sure and try this wonderful strain of this grand old favorite flower. ¼ oz., 30c; 10c pkt.

Improved Large-Flowering Semi-Dwarf Zinnias

This we consider a good Zinnia for general use, forming bushy, compact plants not over 2 feet high, and bearing large, perfect, double flowers.

623—White.

626—Scarlet.

624—Yellow.

627—Crimson.

625—Rose.

628—Purple.

Each of the above. 6 pkts., 25c; 5c pkt.

629—Finest Mixed. Semi-dwarf varieties. Many colors. ¼ oz., 15c; oz., 50c; 5c pkt.

630—Queen Victoria. A pure white variety. The flowers are perfectly double, of fine form and measure about 4 inches across. This excellent variety comes true from seed. ¼ oz., 30c; 10c pkt.

631—Curled and Crested. A beautiful strain, the petals being twisted, curled and crested into the most fantastic and graceful forms. The colors comprise all the beautiful shades characteristic of the Zinnia. ¼ oz., 30c; 10c pkt.

632—Jacqueminot. A double deep blood red variety growing about two and one-half feet tall. Flowers are perfectly double, of fine form and plant is very free blooming. ¼ oz., 30c; 10c pkt.

633—Black Knight (Pompon.) This variety produces its striking dark flowers on handsome little bushes of compact form. As a border plant it is highly effective as it blooms all summer until late in the fall. ¼ oz., 30c; 10c pkt.

McCullough's Grass Seeds

We specialize in Grass Seed of all kinds and for every Purpose.

FOR many years Grass Seeds have been one of our most important specialties, and our improved and perfected facilities for handling same (at a minimum cost), either in small or car lots, enables us to offer our customers the best possible service, both as to quality and promptness in executing orders.

We have four or five different grades of Grass Seeds, especially of the kinds most in demand, such as Clovers, Timothy, Blue Grass, Red Top, Orchard Grass, etc.

We will be pleased to quote lowest market prices on application.

For best results, we advise the use of our highest grades; "XXXX" and "Buckeye."

We are the largest buyers in this section of high grade Seeds and will always pay the highest market price. Submit samples and name quantity to offer.

Our prices include delivery to freight or express depots here, purchaser paying transportation charges.

We make no charge for burlap bags for Blue Grass, Red Top in Chaff, Orchard Grass, Perennial Rye and other light Grass Seeds.

Kentucky Blue Grass

Seamless bags for Clover, Timothy, Fancy Red Top and other heavy Seeds and seed Grain are 40c each, extra.

The number of pounds to the bushel, in brackets, is the old way of offering Grasses, and is mentioned merely for reference.

While we expect to adhere closely to prices quoted in this list, but owing to market fluctuations, it is impossible to guarantee prices.

All orders will be filled at lowest market price on the day of receipt.

Postage Must be Added if Wanted by Mail. See Postal Rates, Second Page of Cover.

KENTUCKY BLUE GRASS (Poa Pratensis)

ALSO known as June Grass, Green Grass, etc. This is rated as the finest permanent pasture Grass. Especially suited to meadows and rich lands. It is the Grass of the famous and fertile lime-stone soils of Kentucky, and is no less a favorite all through the Northern States. A perfect lawn Grass. Sow 30 to 40 lbs. per acre for lawn; 2 bushels (28 lbs.) to the acre for pasture (14 lbs. per bushel.)

Kentucky Blue Grass Seed, Fancy Cleaned.

Per lb., 30c; 7 lbs., \$2.00; per bushel of 14 lbs., \$3.50.

NOTE:—We wish to call attention to the fact that Cincinnati is the leading market in the world for Kentucky Blue Grass Seed.

We export many carloads annually, the words "McCullough" and "Kentucky Blue Grass" being very familiar to the principal seed dealers of the world.

Prices Will be Quoted on Other Grades on Application.

ORCHARD GRASS (Dactylis Glomerata)

ROUGH Cocksfoot. Perennial. Height, 3 feet. It blossoms about the same time as Red Clover, making it, on that account a desirable mixture with that plant. It is exceedingly palatable to stock of all kinds, and its powers of enduring the cropping of cattle commend it as one of the very best pasture Grasses. Sow 25 to 35 lbs. to the acre. (14 lbs. per bushel.).....Per lb., 30c; 7 lbs., \$2.00; per bu. of 14 lbs., \$3.50. Lower qualities at their values.

Orchard Grass

RED TOP GRASS

(Agrostis Vulgaris)

HERD'S Grass, Quick Grass. Perennial; Height 1 to 2 feet. Valuable either for lawn mixtures, mixing in hay, or permanent pasture Grasses; succeeds almost everywhere, but reaches its highest state of perfection in a moist, rich soil, in which it attains a height of 2 to 2 1/2 feet. Sow, if alone, 40 to 50 lbs. per acre. (14 lbs. per bushel.)

Fancy Red Top Pure Seed.

Weight about 30 lbs., per bushel. Sow 10 to 12 lbs. per acre.

Per lb., 25c; 10 lbs., \$2.25; per 100 lbs., \$20.00.

Choice Red Top Seed in Chaff.

Per lb., 20c; 7 lbs., \$1.25; per bu. of 14 lbs., \$2.25.

Pulverized Sheep Manure and Pure Bone Meal are the Best Fertilizers for Grass. See Fertilizers.

For larger quantities, write for special prices.

Red Top Grass

Perennial Rye

GRASS SEEDS—Continued

Perennial or English Rye Grass (*Lolium Perenne*)

IMPORTED English Blue Grass. Height, 15 to 24 inches. Considered invaluable for permanent pastures. It produces an abundance of remarkably fine foliage, tillers out close to the ground, and soon forms a compact sward. After being cut it grows up in a very short time, and remains bright and green throughout the season, consequently is well adapted for lawn mixtures. Valuable for shady places. Also a good variety for hay if cut when in blossom, as it is then most nutritious. Sow, if alone, 50 to 60 lbs. per acre. (24 lbs. per bushel.) Per lb., 20c; 12 lbs., \$1.75; per bu. of 24 lbs., \$3.00.

Pacey's Improved Short Rye Grass

SIMILAR to Perennial Rye Grass, but does not grow so tall, consequently is superior for Lawn purposes. (24 lbs. per bushel.) Sow, if alone, 50 to 60 lbs. per acre. . . . Per lb., 25c; 12 lbs., \$2.25; per bu. of 24 lbs., \$3.75.

Awnless Brome Grass (*Bromus Inermis*)

A HARDY perennial, standing extremes of heat, cold and drought. In the South it remains green all winter. It will grow well on all kinds of soil. The seed should be sown as early in the Spring as the ground can be worked. (10 lbs. per bushel.) Sow 25 to 30 lbs. to the acre. Per lb., 25c; 10 lbs., \$2.00; per 100 lbs., \$18.00.

Bermuda Grass (*Cynodon Dactylon*)

A VALUABLE Grass for the South and for tropical climates; will not endure frost. Sow 10 to 15 lbs. per acre. . . . Per lb., 50c.

Canadian Blue Grass

(*Poa Compressa*)

A LSO called Flat-Stemmed Poa, Flat-Stalked Meadow Grass. Grows a foot or more high. Recommended for horses, cows and sheep. Thrives well on clay. Sow 30 to 40 lbs. per acre.

Per lb., 20c; 10 lbs., \$1.75.

Creeping Bent

(*Agrostis Stolonifera*)

VALUABLE in mixture with other Grasses for lawn, etc. Suitable also for moist localities. (12 lbs. per bushel.) Sow 30 to 40 lbs. per acre. Crop failed.

Crested Dogtail

(*Cynosurus Crystatus*)

Perennial. Height, 1 to 1½ feet.

AN excellent Grass for hard, dry soils; valuable for pastures and lawns, as it is very hardy, tender, nutritious and relished by all stock. (21 lbs., per bushel.) Sow, if alone, 30 to 35 lbs. per acre.

Per lb., 35c; 10 lbs., \$3.25.

Hard Fescue Grass

Meadow Fescue Grass

Meadow Fescue

(*Festuca Pratensis*)

(Erroneously called English Blue Grass)

HIGHLY valuable for permanent grass land. Does not, however, attain its full productive power till the second or third year. Relished by live stock, both in hay and permanent pasture, and is one of the most desirable grasses for general culture. Sow 30 to 40 lbs. to the acre. (24 lbs. per bushel.) This is the true Evergreen Grass of the South. Per lb., 30c; 10 lbs., \$2.75; per 100 lbs., \$25.00.

Fine-Leaved Sheep Fescue

(*Festuca Ovina Tenifolia*)

SIMILAR to the Sheep Fescue, except that the leaves are much finer. Sow, if alone, 40 lbs. per acre. (14 lbs. per bushel.) Perennial. Height varies from 8 to 24 inches. Write for prices.

Italian Rye Grass

Hard Fescue (*Festuca Duriuscula*)

PERENNIAL. Height, 12 to 24 inches. Thrives well in dry situations. The herbage is decidedly tender, but the flower heads, when ripe, become hard. Sow, if alone, 30 to 35 lbs. per acre. (12 lbs. per bushel.) Per lb., 45c; 10 lbs., \$4.00.

Italian Rye Grass (*Lolium Italicum*)

BIENNIAL. Height, 18 to 30 inches. As it is not perennial, it is not adapted for permanent pastures, but for one or two years hay it is unsurpassed. Sow, if alone, 45 to 50 lbs. per acre. (18 lbs. per bushel.) Per lb., 20c; 10 lbs., \$1.75; per 100 lbs., \$15.00.

Red Fescue (*Festuca Rubra*)

A CREEPING-ROOTED species, forming a close and lasting turf and especially adapted for dry sandy soils. It resists extreme drought and thrives on poor soils; also valuable for shady places in lawns as well as for golf-courses. 40 lbs. to the acre. (24 lbs. per bushel.) Per lb., 45c; 10 lbs., \$4.00.

Pulverized Sheep Manure and Pure Bone Meal are the Best Fertilizers for Grass. See Fertilizers. For larger quantities—write for Special Prices.

GRASS SEEDS—Continued

Rhode Island Bent (*Agrostis Canina*)

A fine Grass, chiefly used for pastures and lawns, for which it is one of the best. (12 lbs. per bushel.) Sow 25 to 40 lbs. per acre.

Per lb., 30c; 10 lbs., \$2.75; per 100 lbs., \$25.00.

Sheep Fescue (*Festuca Ovina*)

Perennial. Height varies from 6 to 20 inches. Grows naturally on light, dry, sandy soils. Sheep are very fond of it. (14 lbs. per bushel.) Sow 30 to 35 lbs. per acre.

Per lb., 45c; 10 lbs., \$4.00.

Sweet Vernal Grass

For a mixture with pasture Grasses it is valuable on account of its vernal growth, and also for continuing to throw up root foliage until late in the autumn. Its chief merit is its fragrant odor, which the leaves emit when partially dry, thus sweetening hay. Sow 3 to 5 lbs. per acre with other Grasses.

True Perennial. (*Anthoxanthum Odoratum*.)

Per lb., \$1.00; 10 lbs., \$8.00.

Annual. (*Anthoxanthum Odoratum Puelli*.) Much smaller than the perennial. Per lb., 60c; 10 lbs., \$5.50.

Tall Meadow Oat Grass (*Avena Elatior*)

A perennial. Has broad, flat leaves, and grows about 3 feet high; has an abundance of long, fibrous roots, penetrating deeply in the soil, enabling it to withstand drought and cold. Sow 25 to 30 lbs. per acre.

Per lb., 35c; 10 lbs., \$3.00.

Timothy (*Phleum Pratense*)

Herd's Grass, Cat-tail Grass. This Grass stands at the head for meadows. Never use less than a peck to the acre, then up to one-half bushel, as to circumstances. Market Price.

Various Leaved Fescue

(*Festuca Heterophylla*)

A very early hardy perennial, 2 to 3 feet high, thriving best in cold, moist soils. Yields heavily and is valuable in grass mixtures for permanent meadows. It grows very well in the shade, and is highly recommended for shaded lawns and woodland parks. 40 lbs. to the acre. Crop failed.

Wood Meadow Grass (*Poa Nemoralis*)

No Grass is better adapted for pleasure grounds, particularly under trees, as it will not only grow in such places, but forms a fine sward where few other Grasses can exist. Sow 20 to 25 lbs. to the acre. Crop failed.

McCULLOUGH'S MIXED GRASSES For Meadows and Pastures

AFTER years of experimenting we have aided largely in establishing the fact that a thicker and more prolonged growth is produced by a mixture of several varieties than when only one or two are used. There are always certain Grasses that are especially adapted to certain kinds of soils, and these are so carefully combined in our mixtures that in our **Mixture for Permanent Pastures** grasses will be found that mature at intervals during the season, thereby insuring continuous pasturage, while our **Mixture for Permanent Meadow** will furnish excellent hay as well as late pasturage.

We are prepared to furnish seeds adapted to all soils and all situations, and for all purposes, composed of Grasses for light, medium or heavy soils; by light soil we mean that which is more or less of a sandy or gravelly nature; the heavy, clay and heavy loams; while the medium is an intermediate between these two. A light, wet soil, with respect to the Grasses suited to it, may be considered same as to the heavy soils, and a dry, heavy soil, more as to light soils.

Our best mixture is made entirely with our choice re-cleaned seeds, while in our second quality we use the same seeds, but without re-cleaning, and will be equal to the qualities usually to be had on the market. Our mixtures will all have a uniform weight of 16 pounds to the bushel. Quantity to be used per acre, one and one-half to two bushels, and half this quantity for renovating. In ordering, always state the soil and position on which you wish to use it.

First Quality Mixtures

For Meadows

Per lb., 25c; 8 lbs., \$1.85; bu. of 16 lbs., \$3.50.

For Permanent Pasture

Per lb., 25c; 8 lbs., \$1.75; bu. of 16 lbs., \$3.25.

For Pasture and Hay in Orchard and Other Shady Places.

Per lb., 25c; 8 lbs., \$1.75; bu. of 16 lbs., \$3.25.

For Marshy Grounds.

Per lb., 25c; 8 lbs., \$1.75; bu. of 16 lbs., \$3.25.

For Sandy and Rocky Grounds.

Per lb., 25c; 8 lbs., \$1.75; bu. of 16 lbs., \$3.25.

Second Quality Mixtures

For Meadows

Per lb., 20c; 8 lbs., \$1.60; bu. of 16 lbs., \$3.00.

For Permanent Pasture.

Per lb., 20c; 8 lbs., \$1.60; bu. of 16 lbs., \$3.00.

For Pasture and Hay in Orchard and Other Shady Places.

Per lb., 20c; 8 lbs., \$1.60; bu. of 16 lbs., \$3.00.

For Marshy Grounds.

Per lb., 20c; 8 lbs., \$1.60; bu. of 16 lbs., \$3.00.

For Sandy or Rocky Grounds

Per lb., 20c; 8 lbs., \$1.60; bu. of 16 lbs., \$3.00.

Postage must be added if wanted by mail. See Postal Rates, second page of cover.

We specialize in Grass Seed of all kinds and for every purpose.

For larger quantities—write for special prices.

McCULLOUGH'S HIGH-GRADE CLOVER SEED

Where prices are given on Field Seeds

they only represent market values at time of going to press. Purchasers of large quantities should write for latest prices. Grain bags, holding two bushels, 40c each, extra. Postage must be added if wanted by mail.

View of a Field of Alfalfa Clover grown in territory contiguous to Cincinnati.

Alfalfa, or Lucerne (*Medicago Sativa*)

The Greatest Feed on Earth.

ALFALFA is being more generally grown as experience is teaching our farmers the proper methods to follow. Once established, it is such a profitable crop that every farmer can afford to take great pains to obtain a stand. It requires cutting at least twice the first season, even if not large enough to make hay. Cutting destroys any weeds that may come up in it, and gives the Alfalfa a chance. Must be sown at the rate of 20 to 25 lbs. per acre when sown broadcast. Different soils do not now seem so difficult to overcome, especially where they can be properly drained, pulverized, sweetened and inoculated.

Alfalfa does not thrive on acid or sour land, nor will it do its best without inoculation, on any kind of soil.

A liberal dressing of fine ground lime will be found a great benefit to the soil. May be sown from April 1st to June 15th for the early spring sowing, either drilled or sown broadcast. If broadcast cover lightly with a light drag or with single stroke of a harrow.

Much seeding is now done later, and many prefer sowing from July 15th to September 15th, when seeded late it gives the grower an opportunity to have his land clean and free from weeds, and if weather conditions are favorable, a crop is almost assured.

Alfalfa naturally prefers a deep, sandy or gravelly subsoil. Roots from 3 to 15 feet deep and a good stand on properly selected land should yield from 3 to 5 cuttings a year.

We offer **American grown seed** raised in the Northwest and West on non-irrigated land. It is free as possible from noxious weeds. (60 lbs. per bushel.) Per lb., 30c; 10 lbs., \$2.50.

Price on Imported Seed and cheaper Grades Given on Application.

Bokhara Clover

Bokhara or Sweet Clover

White Flowered. (*Melilotus Alba*.) A biennial plant and bears a close resemblance to Alfalfa, but is larger and coarser. It will make an excellent growth on any lime lands and stiffest clays, or any soils so hard and barren that they will sustain no other vegetation. It makes only a moderate growth and seldom blooms the first year, but during the second year it will reach from four to seven feet high, making stronger and heavier roots than any other forage plant. At the end of the second season it matures its seed and dies out; the roots decaying soon after.

The roots are very long, penetrating the soil to a depth of three to four feet, are large and being fleshy, decay more rapidly than alfalfa roots, hence their nitrogen becomes more quickly available for other crops. As they decay at the end of the second season, there is a good supply of humus.

Sweet Clover, on account of its strong odor, is not liked very much by stock at first, but since it starts very early in the Spring when other forage is scarce, animals turned into a pasture of it at that time soon acquire a taste for it and eat it readily throughout the remainder of the season.

If cut before it ripens its seed, it will not spread. However, it will reseed the ground thoroughly if not cut in due time. Sow 15 to 25 lbs. per acre.

White Flowered, Unhulled Seed

Per lb., 25c; 10 lbs., \$2.25;

White Flowered, Hulled Seed, Scarified

Per lb., 35c; 10 lbs., \$3.25.

Yellow Flowered. (*Melilotus Officinalis*.) Biennial. It resembles the White Sweet Clover, but blooms about three weeks earlier; produces finer stalks and does not grow as tall. It makes first class hay and excellent pasture for cattle and sheep. It will grow on any kind of soil, and being deep rooted, remains green in the driest season. It should be sown by bee keepers in localities where Alfalfa is not grown, as it is one of the best honey plants.

Yellow Flowered, Unhulled Seed

Per lb., 25c; 10 lbs., \$2.25.

Yellow Flowered, Hulled Seed, Scarified

Per lb., 35c; 10 lbs., \$3.25.

Unhulled Seed of both varieties is very slow to germinate. **Unhulled Seed** (30 lbs. per bushel). **Hulled Seed** (60 lbs. per bushel).

NOTE:—We have installed scarifying machinery, and our Hulled Sweet Clover is all scarified, which increases the germination 40 to 50 per cent.

For larger quantities—write for Special Prices.

McCULLOUGH'S HIGH-GRADE CLOVER SEED—Continued

Alsike or Swedish Clover

(*Trifolium Hybridum*)

THE botanical name of this variety is derived from the fact that this Clover is intermediate in its appearance between the Red and White Clovers, possessing qualities common to both, being productive, sweet and permanent.

This is one of the hardiest varieties known. Will grow well on poor soil, and will do better on moist land than any other variety of Clover.

This variety is perennial and on account of its fibrous root system does not winter kill. It is a valuable acquisition to the forage plants of this country and should be used in mixtures of Grasses and Clovers for pasture, and it will also improve the quality of the hay if mixed with the meadow Grasses.

Is highly esteemed as pasturage for bees.

Sow 6 to 8 lbs. per acre.....Per lb., 35c; 10 lbs. \$3.25.

Alsike or Swedish Clover

White or Dutch Clover

(*Trifolium Repens*)

THIS variety thrives on nearly all soils and succeeds where some other varieties of Clovers and Grasses fail, as it seldom dies out.

This is a low close-growing Clover with greenish-white heads, and on account of its earliness and hardness should be used in mixtures for permanent pastures.

Is very hardy, spreads rapidly and acts as a binder. Will stand close cutting and rapidly throws up an abundance of leaves and blossoms, and when mixed with other grasses for lawn purposes is very desirable for beautifying the lawn.

Is also excellent for bee food.

Sow 6 to 8 lbs. per acre. Per lb., 70c; 10 lbs., \$6.50.

Red Clover—Medium

(*Trifolium Pratense*)

SOW 10 to 12 pounds to the acre, according to quality of seed used and condition of the soil. In ordering, always state quality desired, otherwise will send the best. Market price.

Crimson or Scarlet Clover

Japan Clover (*Lespedeza Striata*)

THIS Clover is especially adapted for the South because it occupies the same position in pasture mixtures for the South that White Clover does in the North.

Will thrive on poor land and as it grows thickly, soon furnishes abundant pasturage.

Is adapted to waste lands, woodland pastures and poor soils and soon eradicates other wild growths.

While it is best to have the soil in good condition before sowing the seed, it is not absolutely necessary, as good stands have been secured by simply sowing the seed broadcast during March, April or May at the rate of 10 to 12 lbs per acre.

This Clover is a half-hardy annual without any objectionable root system, hence can be destroyed by plowing under.

Sow 15 to 20 lbs. per acre. (25 lbs. per bushel.) Crop failed.

Red Clover—Sapling or Mammoth

(*Trifolium Pratense Perenne*)

Also called English Clover, Cow Grass, Perennial Red Clover. Sow 10 to 12 lbs. per acre, Market price.

White or Dutch Clover

Crimson or Scarlet Clover

(*Trifolium Incarnatum*)

Crimson, Scarlet or Carnation Clover

AFIELD of this Clover in full bloom is a grand sight. Our experience with Crimson or Scarlet Clover establishes the fact in our minds that as a soil enricher it cannot be surpassed.

We have sown this seed in August on a field of very poor soil in this City, on which the yield of corn was almost a failure, and the next spring we sold several dollars worth of the flowers to Florists here, after which we cut a fine crop of hay, then turned under the stubble and planted Evergreen Corn in the most friable soil we have ever seen, (made so by the roots of this clover) and raised the finest roasting ears we have ever eaten. And all this was accomplished without displacing any crop.

This Clover grows about two feet high, makes good hay and is excellent for feeding green, the yield being immense, and after cutting, it at once commences to grow again, and continues until freezing weather, but being an annual, dies after maturing its seed. Should be sown in August to October, also early Spring. 12 to 15 lbs. per acre.

Per lb., 30c; 10 lbs., \$2.50.

For larger quantities—write for special prices

Farm, Field, Forage and Silo Seeds

Tennessee, or German
Golden Millet

WE give special attention to the quality of our FARM SEEDS and can furnish best quality of re-cleaned stocks.

This fact should be borne in mind when making comparisons of prices.

Trade Marks registered, McCullough's Seeds, XXXX, Buckeye, Suburban Lawn Grass, Central Park Lawn Grass.

The prices quoted are subject to market fluctuations.

When customers are in need of large quantities, we will be pleased to submit samples and quote, on application, the lowest prices that the market will justify at the time. Please specify quantities when writing for prices.

Grain Bags, holding two bushels, 40c each, extra.

Postage Must be Added if Wanted by Mail.

See Postal Rates, second page of Cover.

Japanese Barnyard Millet

TENNESSEE, OR GERMAN GOLDEN MILLET

FAR superior to Western grown. Will grow in any climate or soil, and make a large yield of most nutritious feed. Prepare the ground well before sowing; sow not less than 50 pounds per acre, at any time between May 1st and June 15th. Cover with a single stroke of a light harrow, or roll without harrowing, or it may be sown with a wheat drill, barely covering the seed. Cut the crop while in bloom, before the seed hardens. We have secured a full supply of Tennessee, or German Golden Millet (cultivated seed), which we know will give the best satisfaction. Sow one bushel per acre, (50 lbs. per bushel.) Per pk., 85c.

NORTHERN OR WESTERN GROWN MILLET

Does not yield so much hay nor so good hay as the German (Southern Seed). Sow about a bushel to the acre. (50 lbs., per bushel.) Per pk., 75c.

HUNGARIAN MILLET (Grass)

A valuable forage plant of the Millet family, but not so coarse. Sown and cultivated same as Millet. Quite a favorite with stockmen. It is of fine growth, and makes an excellent hay. Sow 1 bushel per acre. Very scarce; write for prices. (50 lbs. per bushel.)

HOG MILLET

Known also as Broom Corn Millet. The name Hog Millet has been applied to emphasize the use to which it is now being put as a valuable food for hogs; also good food for birds and poultry. Sow one bushel per acre. (50 lbs. per bushel.) Per pk., 85c.

PEARL MILLET, or "Pencillaria"

When sown broadcast or drilled in rows, 12 to 18 inches apart, 8 to 10 pounds per acre should be used.

Per lb., 25c; 10 lbs., \$2.00.

JAPANESE BARNYARD MILLET

SOMETIMES called Billion Dollar Grass. It has proven an enormous yielder in all sections of the United States, producing hay and fodder of most excellent quality and growing on any soil. It grows to a height of 6 to 8 feet and produces from 12 to 30 tons per acre. Cattle and horses eat it greedily and fatten rapidly. It is a remarkable stooler and should not be sown very thickly—15 pounds per acre broadcast being sufficient. In drills 3 pounds per acre. (35 lbs. per bushel.)

Per lb., 15c; 10 lbs., 75c; 100 lbs., \$6.00.

KAFIR-CORN

A Great Fodder Crop. The Finest Grain for Poultry and Pigeons.

White Kafir-Corn. The stalks keep green and are brittle and juicy, making excellent fodder, either green or dried, which is highly relished by cattle, horses and mules. The seed heads form at the top of each stalk, and as soon as these show the grain well, the joints next below the top send up shoots, which yield the second seed heads. For the grain sow in rows 3 feet apart; 5 lbs. of seed to the acre. For fodder sow 5 to 25 lbs., either broadcast or in drills. (50 lbs. per bushel.) Per lb., 10c; 10 lbs., 65c.

FETERITA

An Extra-Early Strain of White Kafir Corn. A New Nonsaccharine Cane

IT IS twenty to thirty days earlier than Kafir Corn and more productive, heads equally as large, withstands drought as well or better and branches from the root. One seed produces anywhere from 3 to 10 stalks usually 6 to 8 each bearing a full-sized head, all filled with fine white plump grains, a little larger than Kafir Corn. The stalks are well covered with large blades from the ground up, and after the heads are removed there is from two-thirds to three-fourths as much stover left as would be furnished by any average crop of corn. Plant a few acres to feed your hens and fill your egg basket. It is one of the surest croppers and one of the best feed for poultry and pigeons. (50 lbs. per bushel.) Per lb., 10c; 10 lbs., 80c.

The prices quoted are subject to market fluctuations.

In Ordering Farm Seeds, Always Allow 40 cents for each Two-Bushel Seamless Bag.

For larger quantities—write for Special Prices.

FARM, FIELD, FORAGE AND SILO SEEDS--Continued

SOY, OR SOJA BEANS

The Great Land Renovator.

The King of Summer Forage Crops

THIS very valuable farm plant enriches the ground in which it is planted by the free nitrogen gathered from the air and which is deposited in the ground by the roots, leaving it in ideal condition and rich in nitrogen for the next crop. Fodder is relished in either green or dry form by cattle and dairy cows.

The Soy or Soja Bean, is an annual. Its character or growth resembles ordinary field beans. During the past few years the United States Department of Agriculture and State Experiment Stations have tested many varieties of Soy Beans and pronounce it a forage and grain plant of great promise. They are grown chiefly for hay, grain, silage, soiling, pasture and as a soil renovator; are not hard to grow, not exacting to the character of soil and a valuable plant for forage; some claim they have a higher protein content than Alfalfa. These beans should not be seeded until all danger of frost is past and the ground is thoroughly warmed, and usually sown from the middle of May until July.

It is best to plant beans only about one or two inches deep, or as shallow as moisture supply will permit, for the formation of a crust may prevent the beans from growing. If grown for seed or silage, in drills 24 to 30 inches apart, sow about 3 pecks per acre. If grown for hay or soiling, the foliage will be of a finer quality and be consumed with less waste drilled solid, or sown broadcast, using from 1½ to 2 bushels per acre. For hay, cut when pod begins to form. For grain, cut just before beans are ripe, or, when pods are beginning to take on a brownish or black appearance. For Silage, cut as near maturing as possible without dropping the leaves.

Descriptions of the SOY or SOJA BEANS that we can furnish
Will Quote Prices on Application

Southern Grown

Early Black. Some times known as Tar Heel or Ebony Black. Mature considerably earlier than Mammoth Yellow and considered superior. Also produces a fine crop of Hay, and believe will mature in this section if sown early.

Early Brown. This is a good variety, producing a large crop of hay, but not quite as early as the Early Black.

Mammoth Yellow. One of the oldest and best known varieties, producing a large hay crop and a fine fertilizer, giving good satisfaction at all times.

Northern Grown

Itto San. Early Yellow seeded variety; being 10 to 15 days earlier than the Medium Green; will mature seed in this section, and a good hay producer.

Mongol. Early variety and of yellowish cast and produces both seed and hay in this section; recommended very highly.

Medium Brown. A few days later than the Medium Green, grows a little taller with seeds of somewhat larger size and does not shatter as badly. Will give a good yield of seed, also first class hay crop.

Medium Early Green. The earliest and one of the oldest and best known sorts, which has become quite a favorite North of the Ohio River both for seed and forage crop. Grows 24 to 38 inches in height; stems medium stout—¼ to ½ inch in diameter. The leaves are very dark green, full and large in center, while the edges are freely curled. Pods of medium size, 1 to 1½ inches long. Color of seeds, bright green. The branches are usually far enough above the ground to permit easy harvesting.

NITROGEN-GATHERING BACTERIA

Will be found a very valuable preparation in connection with plantings of

CLOVERS, VETCHES, COW PEAS, SOJA BEANS, PEAS, BEANS, And All Other Legumes.

See page 94 for price and full particulars.

COW PEAS

The Great Soil Improvers—Makes Poor Land Rich—Makes Good Land More Productive.

COW-PEAS make one of the largest yielding and most nutritious forage crops grown. There is also no surer or cheaper means of improving and increasing the productiveness of your soils than by sowing the Cow-Peas.

There is a wide difference between Cow Peas and Canadian Peas. Bear in mind that the Southern Cow Peas belong to the Bean family, therefore must not be sown until the ground is thoroughly warm and all danger from frost is past. The value as a fertilizing crop exceeds that of clover, for, in addition to being a larger nitrogen gatherer than the clover, they draw from the subsoil to the surface large amounts of potash and phosphoric acid, thus putting the soil in most excellent condition for following crops. The feeding value of Cow Peas, either green fed as hay, or preserved as ensilage, is very high, being considerably above that of Red Clover. The yield of green vines per acre runs ordinarily from 5 to 15 tons.

Sow 1¼ to 1½ bushels per acre, on land thoroughly pulverized and disc or plow with a cultivator or double shovel plow. If wanted for hay, cut when peas are forming; cure as clover. If peas are for fertilizer, sow same quantity after same preparation as for hay; turn-under when peas are in bloom. If farmers will first roll and disc peas they will turn under much easier and be more satisfactory. For a fertilizer, especially to be followed by wheat or corn, they are simply the best.

Will Quote Prices on Application. All orders accompanied with the money will be filled at the lowest market price, upon receipt.

Early Black. Matures quickly, best variety for the extreme northern sections of the country.

Whip-Poor-Will. An early variety, tall, upright, medium yield of vines, large yield of peas, for which they are particularly grown. Highly recommended for "hogging down."

Clay. The leading variety in the South. Large yield of vines and peas, but require longer season to mature than the former-named varieties.

New Era. Seed small, dun colored; earlier than Whip-Poor-Will, but more trailing in habit. A great favorite in many places.

Mixed Cow Peas. These are splendidly adapted for those who merely wish same for feeding purposes, and being mixed, we are able to offer them at a lower price.

SOJA BEANS and COW PEAS very scarce; will quote prices on application.

For larger quantities—write for Special Prices.

FARM, FIELD, FORAGE AND SILO SEEDS--Continued

SUDAN GRASS (*Andropogon Sorghum*)

A SWEET heavy-yielding grass, foliage and seed resembles Johnson Grass, but is an annual. Root system is like Oats. Seeds from 300 to 400 pounds per acre from Florida to Montana. Absolutely drought proof. Grows 6 to 10 feet high. Stems erect, unbranched, very leafy: and three to four cuttings, $4\frac{1}{2}$ to $6\frac{1}{4}$ tons per acre of dry, sweet hay that cattle prefer to Cow Pea hay. Ripe for hay cutting in 70 days, and cut every thirty days following. Plant from March to July in 18 to 30 inch rows, 5 to 6 pounds to the acre, or broadcast 15 to 20 pounds. Each seed stools wonderfully—20 to 40 stools per seed.

Sudan Grass is Without Doubt the Greatest Drought-Resistant Forage Crop Known. At the same time it does not blight where the moisture is heavy, and under good seasonable conditions it yields a larger tonnage of hay per acre than any other crop known. It recovers rapidly after cutting and the next crop is usually ready for harvest within thirty days from the first cutting. A revolution in haymaking.

Sweeter than Johnson Grass, makes more hay, and yet an annual with no objectionable root system. Early Cow Peas, and Early Soy Beans and Sudan mix well.

Note—On account of the similarity of this seed to Johnson Grass Seed, we have gone to a great deal of trouble and expense to procure seed that we have every reason to believe is free from this seed.

There are all kinds of Sudan Grass Seed on the market, and on this account you should be doubly careful. Buy your seed from a reputable house at a reasonable price. Lb., 40c; 10 lbs., \$3.50.

Sudan Grass

SORGHUM OR SUGAR CANE

Plant in drills $\frac{3}{4}$ to 1 bushel; broadcast, 1 to $1\frac{1}{2}$ bushels to the acre. Sorghum is being used extensively as a green food for cattle, horses and mules. (50 lbs. per bushel.)

Early Orange Cane. A strong grower; much more juicy than any other variety. The stalk is heavier and a little later than the Amber.

Per lb., 15c; 10 lbs., \$1.00.

Early Amber Cane. This popular and well known variety is the earliest and makes the finest quality of both sugar and syrup.

Per lb., 15c; 10 lbs., \$1.00.

BROOM CORN

Improved Evergreen. The best variety for general cultivation on account of the color and quality of brush. Ripens early; grows about 8 to 10 feet high; brush of good length, fine and straight, and always of green appearance when ripe. Plant 30 to 35 lbs. to the acre. Per lb., 20c; 10 lbs., \$1.50.

Sunflowers

Sunflower

Mammoth Russian

IMMENSE yielder—125 bushels of seed to the acre has been grown at less expense than corn. Very highly recommended for poultry. Best egg-producing food known. Good feed for horses as well.

May be grown to great advantage in waste ground, from early Spring to the latter part of July. Plant 10 to 12 lbs. per acre. Per lb., 10c; 10 lbs., 75c;

Prices Subject to Market Changes.

In Ordering Farm Seeds Always Allow 40 cents for each Two-Bushel Seamless Bag. For larger quantities—write for Special Prices.

BARLEY

BARLEY needs a rich land, more sandy and lighter than that adapted to Wheat. It is sown in the Spring, and can be grown farther North than any other grain. It should be cut before fully ripe (unless intended for seed) as it is then of better quality and less liable to shell. Sow $1\frac{1}{2}$ to 2 bushels if drilled; 2 to $2\frac{1}{2}$ bushels broadcast. (48 lbs. per bushel.)

Spring Barley. Market price.

Beardless Barley. Market price.

BUCKWHEAT

IN this locality it is sown anywhere from June 1st to July 15th; one bushel of 50 lbs., broadcast, to the acre. If one has the ground prepared and the opportunity, it can be sown as early as May 1st. It makes a very fine quality of flour, and is largely used for poultry food. For planting adjacent to game preserves, it provides excellent food for the birds. The flower makes ideal bee food; while the straw is very abundant. Any of the clover crops can be sown with buckwheat, these to mature the following season. Buckwheat frequently yields as much as 80 bushels to the acre. (50 lbs. per bushel.)

Japanese. This superior variety is earlier and more prolific and yields double the weight per acre of other sorts. The grains are nearly twice as large as those of Silver Hull, and of fine color.

Pk., 75c; per bushel of 50 lbs., \$2.50

Silver Hull. The grain is of light gray color.

Pk., 80c; per bushel of 50 lbs., \$2.75

CHOICE SEED OATS

Prices on Application.

Broadcast, $2\frac{1}{2}$ to 3 bushels to the acre.

We handle enormous quantities of these and trace the demand to the excellent quality we handle; they are grown especially for us in cool regions, where they grow to perfection. (32 lbs. per bushel.)

Red Rustproof. These are the standard oats of the Southern States, yielding large crops when all other sorts were destroyed by rust. It is a large, heavy reddish-looking berry.

Winter Turf. Perfectly hardy in the Southern and Middle States. Yields on good land, from 50 to 70 bushels to the acre of fine, heavy grain, weighing from 35 to 50 pounds to the measured bushel.

White, Black and Mixed. Market price.

FARM, FIELD, FORAGE AND SILO SEEDS--Continued

The prices quoted are subject to market fluctuations. Should any article seem high, or when customers are in need of large quantities, we will be pleased to submit samples and quote, on application, the lowest prices that the market will justify at the time. Please specify quantities when writing for prices.

SOWING RAPE

A FORAGE plant of highest value. It can be sown in April for an early crop, and for fall crop in July.

August and September, and still later further South. In a few weeks from the time of sowing, sheep, hogs or cattle can be turned on it. Under favorable conditions Rape is ready for pasturing sheep or cattle within six weeks from time of sowing, and on an average one acre will carry 12 to 15 sheep six weeks to two months. When on the Rape they should at all times have access to salt. Pigs and cattle are also very fond of it. Rape has a high feeding value. It is excellent for fattening sheep and swine, produces an abundant flow of milk in cows, and is the ideal pasture for weaning lambs. Its value as sheep pasture has been demonstrated in every State in the Union, and it is recommended by authorities everywhere as of superior value for hogs, furnishing the finest pasturage, or can be fed after cutting. Rape has strong-growing roots which penetrate the ground for a considerable depth. A rich, loamy soil is preferable, but it does well on sandy or stiff clays, and is excellent for sowing after a crop of wheat has been taken off, or when corn has been worked the last time. The plant is a rank grower and should have heavy manuring. Sow the seed by the end of June and the crop can be ready to feed at a season when it is most needed. It does well sown with oats. After oats are cut, the Rape grows rapidly. If the soil is rich and clean, sow broadcast; if not so clean, sow in drills and cultivate as for corn. When sown broadcast, use five to six pounds, and if in drills, two to three pounds to the acre. Per lb., 20c; 10 lbs., \$1.75.

Postage Must be Added if Wanted by Mail. See Postal Rates, Second Page of Cover.

VETCHES OR TARES

T HIS has been used in Europe for many years as a stock food and green manuring or cover crop. It does best if sown with rye, the latter gives it support and thus ensures enormous crops. It makes an ideal hay and it is a pity that every American farmer does not use it. It fertilizes the ground without further trouble or cost, on account of the free nitrogen it gathers from the air. It produces a peculiar vine plant with very narrow foliage and elongated flowers of pinkish white in clusters. The height when supported is frequently 4 feet.

Sand, Hairy, or Winter Vetch. (*Vicia Villosa*.) Our stock of this is the true type, which will absolutely live throughout the winter, and buyers should beware when buying that they procure the right article, which is a small, round, black seed; this is far superior to Crimson Clover, as it never winter-kills. Sow from August 1st to October 1st, broadcast, 1 to 1½ bushels per acre, to which we suggest adding half a bushel of winter rye or wheat. In the Spring it can be plowed in as green manure, or when in flower cut for hay. All stock relish it keenly. (60 lbs. per bushel.) Per lb., 25c; 10 lbs., \$2.25.

Spring Vetch. (*Vicia Sativa*.) The seed of this is larger and of a brownish gray color. It is not hardy and must, therefore, be sown in the Spring during May or June, 1 to 2 bushels per acre if broadcast and 1 bushel if in drills, with either Spring wheat, Spring Rye or Oats for support. It possesses very much the same desirable features as the Winter Vetch. (60 lbs. per bushel.) Per lb., 10c; 10 lbs., 85c.

SPELTZ OR EMMER

T HIS grain resembles wheat but is a much larger yielder, producing frequently as high as 80 bushels of grain per acre, and that on the poorest land. The hay, if cut green is desirable for horse or cattle feed, while the straw after thrashing, is equal to the best wheat straw. The heads are somewhat similar to two-rowed barley. For fattening cattle, poultry, horses, sheep, pigs, etc., it is claimed to be ahead of any other grains. Cultivation similar to wheat or oats. Sow at the rate of 50 to 60 lbs. per acre.

Per lb., 10c; 10 lbs., 65c; bushel of 40 lbs., \$2.00.

TEOSINTE (Reane Luxurians.)

Stalk can be cut several times during the season. Should not be planted until the soil is perfectly warm in Spring. Requires about 4 lbs. of seed per acre.

Per lb., 70c; 5 lbs., \$3.25.

CANADA FIELD PEAS

T HESE are used for various purposes, chief among them being a very early green food; when used this way they are sown with oats about April 1st at the rate of 1½ bushel of Peas and 1½ bushel of Oats to the acre either drilled or broadcast. The oats are intended as a support for the peas. They are cut just after the peas flower and fed green; sheep, hogs and cattle relish them keenly. They may be sown successively up to July if one has the available land. Peas may also be sown alone at the rate of 3 bushels per acre and furnishes excellent pea hay; horses like it very much when properly cured, as does all other stock. For plowing under as green manure, they add a vast amount of nitrogen to the soil and succeeding crops sown there the same year or even later, particularly wheat, are wonderfully benefited by producing a more luxuriant growth and larger yield. The dried peas are extensively fed to pigeons, while when ground as meal is an excellent addition to the regular soft food of cows, sheep and horses. (60 lbs. per bushel.) Per lb., \$1.65.

WHITE NAVY BEANS

P LANTED in June or July, these usually make a very profitable crop to grow as shelled white beans for market. Plant in rows three feet apart, dropping two or three beans together a foot apart in the rows. Cultivate early, as they grow rapidly, but do not work them while the dew is on the foliage. (60 lbs. per bushel.) Special price on application.

HEMP SEED

We will be pleased to quote market prices upon application. Sow at rate of ¾ to 1 bushel per acre. (44 lbs. per bushel.)

FLAX SEED

Northwestern. Sow at rate of ¾ to 1 bushel per acre. Market price. (56 lbs. per bushel.)

SEED WHEAT AND RYE

Prices on Application.
Prices Subject to Market Fluctuations.

VELVET BEANS

Velvet Beans make a larger growth of vines than any other known forage plant, far surpassing the Cow Pea in yield. They are usually planted in rows about five feet apart, at the rate of a peck to one and one-quarter pecks per acre. Grown mostly in the South. Write for prices.

Items on this page are shipped at buyers' expense.

In Ordering Farm Seeds, Always Allow 40c for each Two-Bushel Seamless Bag.

For larger quantities—write for Special Prices.

FIELD CORN

Northern Grown Seed

OUR strains of Corn are not the common kinds usually found in abundance on the market; we pay special attention to the selecting of stocks in all lines of farm seeds. This is particularly true of Field Corn where re-selection means the limit of crops with little or no increase in cost. It is amazing to realize that where the old unselected seed is used the average crop per acre is only half, compared to the more intelligent selection of strains. Our stock is selected for size of ear and fodder, which means a considerable increase in production. (56 lbs. per bushel.)

Plant 8 to 10 qts. per acre in hills, sow 2 ½ to 3 bushels broadcast for fodder.

Never use Feeding Corn for Seeding Purposes.

At time of printing our Catalogue, the market for Seed Corn was so unsettled, that it was impossible to quote prices; but we shall be pleased to quote firm prices on receipt of inquiry, specifying quantities wanted.

McCullough's Early Prolific.

The most prolific white Corn. Each stalk bears two to five ears, average length of ears 8 ½ inches. Stalks range

in height from 9 to 12 feet, according to season and fertility of soil. The corn is consequently ideal for ensilage and will be planted largely for that purpose. It matures in 100 days and yielded in 1912, 150 bushels per acre, and no fertilizer of any kind was applied to the land. The year before the same field yielded 50 bushels of Reid's Yellow Dent to the acre. In every test, the yield of McCullough's Early Prolific was at least twice that of the old-fashioned varieties. Supply limited—advise placing orders early.

McCullough's Champion White Dent.

The best White Dent Corn. If planted early, say May 10 to 20, it will come nearer making a crop

of corn without rain than any other known variety. Makes a wonderful growth as far South as Georgia. In fact, it will mature in any corn country. It grows a strong, vigorous, deep-rooted stalk, stands up well, and in strong land and good season will make from 100 to 125 bushels per acre. Ears 10 to 12 inches long, well filled at tip and butt.

Boone County White Dent. This early-maturing large yielding variety is becoming immensely popular. Ears contain from 18 to 24 rows and are well filled from butt to tip, with deep kernels. Has a good, strong stalk, with abundant foliage.

Peerless. (White.) Will mature in 90 days, therefore, may be sown later than any other variety, and still there is no danger of it being damaged by frost. Produces generally two large ears to the stalk and in good land will yield one hundred bushels to the acre.

Silver Mine. One of the best yielding White Dent Corns. Cylindrical shape, tapering a little at the tip end; 18 to 20 rows; kernels deep and cobs small. A fine shelling and high yielding variety.

Hickory King. An old favorite sort. The ears are rather small but as they are borne 2 to 3 on a stalk it is a fairly good yielder. It has the largest grains and the smallest cob of any white corn.

Reid's Yellow Dent. One of the best varieties of yellow corn grown. Ear medium in size, remarkably uniform, and of a bright yellow color, with solid, deep grain and small, red cob. Has from 18 to 24 rows of kernels on the cob, 50 to 60 grains in the row, and is well filled

over the ends, and especially the butt, leaving a small shank, which makes it a great favorite with huskers. Best shredding sort, as it shatters the least of any; actual test.

King of the Earliest Dent. An early yellow corn, adapted for high latitudes; will mature in 80 to 85 days.

Gold Mine. Early Yellow Dent, ripening only a few days later than King of the Earliest; ears are of good size and symmetrical; grain is very deep; cob small.

Leaming Yellow. Ears of good size, cob red and small. A strong grower, and very prolific. An extensively grown large Yellow Dent variety, which we have grown and sold with the greatest satisfaction for years. Our improved strain we do not believe is excelled, if equaled, by any other now offered. It has pure, glossy, yellow ears, growing low, on very strong, heavy stalks; grains square and deep; ripens quite early—frequently in 100 days from planting. Yields from 75 to 100 bushels per acre. Adapted to rich soils.

Red Cob Ensilage. A Southern type of large, white corn, with deep red cob, strong leafy stalks and short joints. Adapted to all sections of the country, and a general favorite with thousands of dairy farmers.

Sugar Corn for Ensilage. There is nothing better for green feed or curing for winter than sweet corn. Cattle highly relish it, and when fed on it, keep in fine condition, and give an abundance of milk. It has the great merit of being so sweet and palatable that cattle eat every part of the stalks and leaves, and consequently none is wasted. Also excellent for siloing. Sow thickly in drills or broadcast at the rate of 2 to 3 bushels per acre.

SEED POP CORN

Plant Two Quarts to the Acre.

White Rice. A handsome variety, kernels long and pointed, very prolific. . . . Per lb., 15c; 10 lbs., \$1.25

Queen's Golden. The stalks grow 6 feet high and the large ears are produced in abundance. It pops perfectly white. . . . Per lb., 15c; 10 lbs., \$1.25

Postage Must Be Added if Wanted by Mail.

Prices Subject to Market Changes.

In Ordering Field Corn, Always Allow 40c for each Two-Bushel Seamless Bag.

McCULLOUGH'S SELECTED SEED POTATOES

Northern Grown Stocks

Selected and Grown Specially for Seed Purposes, Superior Both in Quality and Productiveness.

They are put up in barrels of about 2 3/4 bushels each. No charge for barrels. Bags extra.

Prices of Potatoes are unsettled at time our Catalogue is printed. We will always fill orders from customers at our lowest prevailing prices for first-class seed potatoes, or we will cheerfully quote prices at any time upon request.

Any good well-drained, fibrous loam will produce Potatoes under right climatic conditions. For early Potatoes, which mature in 8 to 10 weeks from planting, the soil must be particularly rich. A rich clover sod, manured and broken the year before and planted to corn, beans, peas, oats, etc., is in best shape for giving a good yield of nice clean Potatoes. Stable manure had better be applied to the land the year before.

Potatoes are planted early and late. Cut 2 to 3 eyes to a piece. Plant in rows or hills about 3 feet apart and about 15 to 18 inches apart in the hills or rows. Cover the seed four inches, but not so deep in wet, cold land. When the sprouts appear, cultivate and hoe to keep the soil free and clear of weeds. As the vines increase, draw earth around them, forming a slight ridge. Just as soon as the bugs appear use Paris Green. One peck will plant about 100 feet of row, or 100 hills. Ten bushels are required to plant an acre.

Early Ohio (Red River Stock)

The Early Ohio is fully two weeks ahead of the Early Rose, and is a general favorite with potato growers and market-men alike and is the most profitable Potato they can possibly grow. The sprouts are very strong, the vines grow erect and are easy to cultivate. Maturing early, it brings the highest prices, and the land can be used for another crop after it; does well on any soil suitable for Potatoes. The tubers grow compact in the hill, are easily dug, with very few small ones—nearly every Potato is of marketable size; has few eyes, which are even with the surface. With heavy manuring, close planting and good culture, a very large and profitable crop can be expected. Cooks dry and mealy.

Early Rose

The Early Rose still continues one of the most popular varieties on our list. It is productive, of most excellent table qualities, and a most satisfactory all-around early variety. The stock which we offer is of extra quality and the best that can be obtained of this variety.

Beauty of Hebron

This is a very superior table variety. It is about a week later than the Early Rose, but claimed to be more productive. It is a white-fleshed Potato, and of most superior flavor, desirable for private growers and the home market.

Burbank

A white-skinned, medium early variety, with few eyes; flesh fine-grained and good flavor. Continues in good demand. It is of good size, of fine form and an excellent yielder. The flesh is white, very mealy and of fine flavor and quality. The best Potato for baking. This variety is well adapted to heavy soils.

Carman No. 3

Enormously prolific, averaging nearly a pound apiece; very uniform in shape, white skinned, few and shallow eyes; flesh snow-white and of exceptionally fine cooking qualities.

Chicago Market

Very popular, early, good quality and yields well.

Early Six Weeks

Extra early, oblong in shape; flesh solid; cooks dry and mealy.

Early Triumph

It is from seven to ten days earlier than the Ohio, and that often means a difference of many dollars in the crop. The Potato is of good size, squared at the ends. Skin is red, flesh is very white and firm. It is productive.

Irish Cobbler

One of the first varieties of Potatoes to be ready for market, and therefore will command a good price. The skin is creamy-white, sometimes netted, which is an indication of good quality; eyes are strong, well-developed, and but slightly indented. The flesh is white and of fine flavor.

Rural New Yorker

A valuable variety of large size; very smooth and a great cropper; in quality unexcelled. It is the best late long keeper, and we recommend it highly.

White Star

A medium early variety of fine quality and appearance; large, oblong, uniform-sized tubers, remarkably productive.

White Elephant

Late, large, enormously productive, and of excellent flavor.

Hoosier Boy

A late variety and very productive.

Seed Sweet Potatoes

Yellow and Red Jersey, Red Bermuda and Southern Queen. Write for prices. Ready for shipment about April 1. For plants, see page 43.

ORDER McCULLOUGH'S
"PROFIT SHARING BACK YARD"
COLLECTION

25 (Regular Size) Packets of Vegetable Seeds \$1.00

Illustrated on 4th page of cover

INCREASE YOUR YIELD OF ALFALFA, CLOVERS, VETCH COW PEAS, SOY BEANS

and other Legumes by inoculating your seed with

EDWARDS' LEGUME BACTERIA

The chief value of legumes for use either as food or as green manure lies in their high content of nitrogen. With the aid of certain kinds of bacteria, the legumes can get their supply of nitrogen from the air. These bacteria live and grow in the soil, and as the new plants start to grow, the bacteria "burrow into" the roots, grow there and produce nodules or tubercles, visible to the eye as little bunches on the smaller roots. During this process the bacteria take nitrogen from the air and give it to the plants. Unless the plants have these legume bacteria growing on their roots they will not make a successful growth.

On land where it is hard to get a good catch of legumes, or on which a new crop is to be sown, the right kind of bacteria must be supplied by inoculation. One method that has been recommended in times past is to spread over the field to be seeded, soil from a field that has grown the same crop. This method is cumbersome, expensive, and is apt to introduce into the soil seeds of bad weeds, or fungous or bacterial plant diseases, hence it is not a desirable method.

Seed Inoculation Simple

The best method of inoculation is to treat the seed before it is sown with a pure culture of the right kind of bacteria for that particular crop. By this method the inoculation can be done in a few minutes' time, and the bacteria are carried into the soil with the seed in ample numbers to insure inoculation of the roots with consequent increased growth of the crop, and with no risk of introducing seeds of bad weeds or germs of plant or animal diseases.

VALUABLE Results of Seed Inoculation

The pure culture method of seed inoculation is endorsed by the Federal Department of Agriculture and many of the State Experiment Stations. Experiments show that in practically every instance where the soil was inoculated, a more vigorous growth resulted. In many cases the difference was the difference between success and a total failure. Considering the ease and slight expense of inoculation a farmer can ill afford to risk a loss by not inoculating.

Another valuable result of inoculation is that the roots of a well-inoculated legume crop will contain much more nitrogen than those of a crop not inoculated, hence they would be of much greater benefit when such a field was ploughed for a succeeding crop. Still another point is that in case of a crop like alfalfa, well-inoculated plants being much more vigorous, do not winter-kill as easily as plants from uninoculated seed.

Alfalfa plants from inoculated and uninoculated seed. "The ruler is 12 inches long. The bunches of alfalfa are fair average samples from the treated and untreated plots."

Reliability of Edwards' Legume Bacteria

All the requirements for successful inoculation are met in the cultures of EDWARDS' LEGUME BACTERIA. These cultures are manufactured by the method originated and successfully followed for ten years at the Ontario Agricultural College and the stock cultures were secured from the Bacteriological Laboratory of that institution. **There can therefore, be no question as to their efficiency.** They are prepared under the personal supervision of S. F. Edwards, formerly instructor in Bacteriology at the Michigan Agricultural College, **Instructor in Bacteriology in the College of Medicine at the University of Michigan**, and for nine and one-half years Professor of Bacteriology at the Ontario Agricultural College. The cultures are made according to the best principles of the science of Bacteriology, and especial attention is given to keeping up the vigor and nitrogen-gathering power of the bacteria.

Portion of root of alfalfa plant showing the tubercles or nodules formed by the nitrogen gathering legume bacteria. (Photograph natural size.)

Cultures are made and kept in stock for legume crops as follows: Alfalfa, Sweet Clover, Red Clover, Alsike Clover, Crimson Clover, White Dutch Clover, Field or Garden Beans, Lima Beans, Soja Beans, Field or Garden Peas, Sweet Peas, Vetches, Cowpeas. Of this list the same culture can be used for either Alfalfa or Sweet Clover, and likewise, the same culture can be used for Red, Alsike, Crimson and Dutch Clovers. All the other crops require a different culture for each as named. The entire culture may be used on less than the amount of seed for which it is made without harm to the seed. The cultures are good for six months after leaving the laboratory. The cultures are sent by mail or express prepaid, with full directions for use.

EDWARDS' LEGUME BACTERIA cultures are made in two sizes:

To inoculate 30 pounds of seed.....\$0.60

To inoculate 60 pounds of seed..... 1.20

Trial package for Beans, Garden Peas and Sweet Peas, 30 cents each.

Directions for use on each package.

In ordering, be sure to name crop to be inoculated.

These prices mean a very low cost per acre, the exact amount depending on the amount of seed sown. The cost is less than to pay freight rates on soil from a distance, or even to haul it from a neighbor's field for soil inoculation, and the labor is much less, as seed for several acres can be inoculated in a few minutes with the pure cultures.

Summer Flowering Bulbs and Roots

AMARYLLIS

PLANT in equal parts sandy loam and leaf mould. If convenient, start in hotbed, beginning with fifty degrees of heat, increasing to sixty or seventy. When the leaves appear, water carefully and not in too great quantity. The Formosissima and Rosea planted in May make rich and showy border plants.

Rosea. (Zephyranthus.) These flower all summer. Small, delicate pink.....Each, 5c; per dozen, 50c.

Belladonna Major. White, turning to rose. Each, 25c; per dozen, \$2.75.

Formosissima. Crimson.....Each, 15c; per dozen, \$1.50.

Johnsonii. Large flower, crimson-scarlet, striped with white (see cut.) Each, 30c; per dozen, \$3.25.

Halli, Hardy Amaryllis. (Lycoris Squamigera.) Produces in early spring attractive green foliage which grows until July, when it ripens off and disappears. About one month later the flower stalks appear and grow to a height of two to three feet, developing an umbel of large and beautiful lily-shaped flowers three to four inches across and from eight to twelve in number, of a delicate lilac-pink, shaded with clear blue. In planting, cover the crown about four inches. Fine bulbs.....Each, 25c; five for \$1.00.

Vittata Hybrids. The flowers are exceedingly rich in colors and markings, spikes are usually from two to three feet in height, bearing from three to five enormous trumpet-shaped flowers. Each, 50c; per dozen, \$5.00.

TUBEROUS-ROOTED BEGONIAS

THEY are now used extensively for outdoor planting. Give them a partially shaded position in a light soil and well drained position, and they will give more bloom than any other plant which will grow in such a place. A soil that will grow it to perfection is turfy matter scraped from the bottom of old sod—one part, and one part sand. Mix these well together, and you have a compost that is friable, porous, and well adapted to any plants having fine, fibrous roots. It is more satisfactory to apply plant-food when needed, and in such quantities as seem to be required, than to make the soil very rich from the start. Water very cautiously until active growth begins, then increase the amount. But at no time during its existence will the plant require more than enough to make—and keep—the soil moist all through. Good drainage should be provided to guard against over-watering. (See cut).

SINGLE FLOWERING VARIETIES

Bertinii. The sun-proof orange-colored flowers are produced on graceful stems well above the foliage and for brilliancy of color cannot be surpassed. Are also well adapted for our climate. Large bulbs will make large showy plants. Each, 20c; per doz., \$2.00.

Cristata. Curious strain of single Begonias, with flowers of good size bearing on each petal a crest or beard composed of curiously twisted threads which give the flowers an interesting appearance. Each, 20c; per doz., \$2.00.

Single. Scarlet, white, pink, crimson, orange and yellow in separate colors. Each 10c; per doz., 75c; per 100, \$5.00.

Single, Mixed. Each, 10c; per doz., 65c; per 100, \$4.50.

DOUBLE FLOWERING VARIETIES

Duke Zeppelin. New, dwarf, double flowering. Intense pure vermilion-scarlet. Each, 20c; per doz., \$2.00.

Lafayette. New, dwarf, double flowering, brilliant crimson-scarlet.....Each, 20c; per doz., \$2.00.

Double. Scarlet, pink, white and yellow. Each, 15c; per doz., \$1.50.

Double Mixed.Each, 10c; per doz., \$1.00.

Hardy Begonias

Exceedingly useful plants for the garden, good for shady places. Lustrous bronze green foliage with small pink flowers.

Plants only, each, 15c; per dozen, \$1.50.
(If sent by mail, each 20c; per dozen \$2.00.)

CALADIUM ESCULENTUM

(Elephant's Ear)

ONE of the most effective plants in cultivation for the flower border, or for planting out upon the lawn. It will grow in any garden soil, and is one of easiest culture. It should be planted in a rich compost, where it will obtain plenty of water. Foliage light green. (see cut).

Size	Each	Doz.	By Mail
1. Small bulbs.....	10c	\$1.00	15c each
2. Large bulbs.....	15c	1.50	20c each
3. Extra large bulbs.....	25c	2.50	30c each
4. Selected extra large.....	35c	3.50	45c each
5. Monster bulbs.....	50c	5.00	60c each

Fancy-Leaved Caladium

CALADIUMS—Fancy Leaved

FANCY-LEAVED Caladiums have in recent years grown very rapidly in popular favor for the decoration of the conservatory, greenhouse and window boxes. They also succeed admirably if planted outside after the ground has become warm. Plant in light, rich soil in partly shaded locations. (See cut.)

We have a selection of the most showy varieties.

Each, 20c; per dozen, \$2.25, postpaid.

CANNAS

Select Large Flowering

THEY do well in all sections of the country, and stand preeminently at the head of the list, succeeding in any sunny position in any kind of soil, but responding quickly to liberal treatment. Cannas should be planted in good, rich garden soil mixed with half of old rotten stable manure, by the end of May, when danger from frost is past. Water sparingly for first two weeks after planting. When growing freely, water liberally. Set the plants about 18 inches apart each way, and if more than one kind is used be careful to plant the taller growing kinds in the center and the dwarf ones along the edge. This applies to planting in beds.

Named Varieties

Dormant Roots, as listed Each, 10c. per doz., \$1.00; (By mail, per doz., \$1.15.)

Alphonse Bouvier, Fine, tall, brilliant crimson; green foliage; six feet.

Charles Henderson, Vermilion red, penciled with yellow in the center. Very large flowers; green foliage; three and one-half feet.

CANNAS—Named Varieties—Continued

Duke of Marlborough. Very deep crimson; fine individual blooms in large trusses, and exceptionally free-flowering; green foliage; four feet.

Florence Vaughan. Bright, rich golden-yellow, spotted with red; of large size and perfect form; green foliage; four feet.

Italia. Orchid-flowered. Bright orange-scarlet, with broad golden-yellow border; the flowers are produced on massive stems, set well above the foliage; which is large and heavy; green foliage; four feet.

Jean Tissot. One of the brightest; color an intense, brilliant vermilion, with bright orange shadings, a color that can be seen as far as the eye will carry; massive green foliage; five feet.

King Humbert. In this grand Canna we have a combination of the highest type of flowers with the finest bronze foliage. Its flowers measure 6 inches in diameter, produced in gigantic trusses, a brilliant orange-scarlet with bright red markings; foliage broad and massive, of a rich coppery-bronze; four to five feet. (See cut.)

Louisiana. Very large, beautiful, vivid, scarlet, orchid-like flowers, often measuring five to six inches across. Foliage a glossy green, edged with a narrow purple band; six feet.

Mont Blanc. Large, beautiful white flowers on strong branching stalks, well above the foliage. It blooms early and continuously. Its great masses of snowy-white flowers contrast finely when planted with crimson and scarlet kinds. three feet.

Niagara. Great handsome trusses; color, deep crimson, with a border of golden-yellow; green foliage; height, three feet.

Pennsylvania. Intense vermilion-scarlet, overlaid with an orange sheen. Flowers measure fully 6 inches, are produced freely; foliage rich green; five feet.

Richard Wallace. A good free-flowering yellow Canna of vigorous growth, we believe this variety comes nearer to the ideal than any variety yet offered. In color it is a pleasing canary-yellow with exceptionally large flowers, which are carried well above the bright green foliage; four and one-half to five feet.

Souvenir d'Antoine Crozy. Intense crimson-scarlet, with a broad golden-yellow border, an exceptionally free-flowering variety, and the brightest of the gilt-edged sorts; green foliage; three and one-half feet.

Venus. One of the softest and most delicately colored varieties that has yet been introduced. The flowers are of fair size, of a soft rosy pink, with a pretty mottled border of creamy yellow. The plant always presents a clean, fresh appearance; green foliage; three and one-half feet.

Mixed Tall Varieties. Our selection; dormant roots. Each, 10c; per dozen 75c (per dozen by mail, 85c).

Mixed Dwarf Varieties. Our selection; dormant roots. Each, 10c; per dozen, 75c; (per dozen by mail, 85c)

CANNA PLANTS

CANNA PLANTS of the following varieties. Charles Henderson, Florence Vaughan, King Humbert, Mont Blanc, Pennsylvania, Richard Wallace, Venus. Small Plants, each 15c; per dozen, \$1.50. Large plants, each, 20c; per dozen, \$2.00.

Ready about May 10th. Sent by express only at purchaser's expense.

CALLA, SPOTTED

(*Richardia Alba Maculata*)

Leaves deep green, with many white spots. Flowers pure white, with black center. Culture easy, blooms freely. Each, 10c; per dozen \$1.00.

CINNAMON VINE

Beautiful Summer Climber, glossy foliage and fragrant flowers; stem dies down in Winter but the root is hardy. Large selected roots.....Each, 10c; per dozen, \$1.00.

MADEIRA or Mignonette Vine

A RAPID growing vine, covering a large space in a short time.

Fleshy, heart-shaped leaves of a light green and numerous racemes of feathery flowers of delicious fragrance. Each, 5c; per dozen, 40c.

OXALIS (Summer-Flowering)

VALUABLE for edging walks, flower beds, etc. Bulbs planted three inches apart form rounded rows of delicate foliage, about one foot high, which produce flowers in endless succession.

Deippi. Bright crimson.

Dieppi Alba. Pure white, very fine.

Lasandria. Fine, rose pink, beautiful cut foliage. The tallest.

Each variety.....Per dozen, 15c; per 100, 75c.

TUBEROSES

ONE of the most fragrant and beautiful of the summer flowering bulbs. For flowering in the open border, plant about the first of May.

Excelsior Pearl. Robust stem and long spikes of flowers, which are more double and twice as large as those of the old sort. Each, 5c; per dozen, 35c; per 100, \$1.50.

Dwarf Pearl. Large size.

Each, 3c; per dozen, 25c; per 100, \$1.25.

Single Ever-Blooming Tuberose. Is of the purest white, both inside and out.....Each, 5c; per dozen, 35c.

DAHLIAS

THE Dahlia is one of the most important summer and autumn flowers. Commencing to flower in July, they are a perfect blaze of bloom until stopped by frost. Especially fine for cut flowers.

One of the most important points in the cultivation of the Dahlia is to select a well-drained position where they will receive the full benefit of the sun during the greater part of the day.

As to soil, they are not at all particular, except that in the case of a stiff clay some loose material should be added, such as coarse sand, old mortar, or anything which will make the soil loose and friable. The soil must be deeply dug, if possible to a depth of two spades, and a liberal amount of suitable plant food incorporated. For this nothing is more satisfactory than well-decayed stable manure, but where this can not be conveniently procured pure bone meal, sheep manure, or any chemical fertilizer rich in ammonia and phosphoric acid will answer as a substitute.

The planting of dormant roots in the latitude of Cincinnati may be done at any time between April 25th and June 15th, the earlier planting being preferable. Plant the bulbs three inches below the surface of the ground, laying the bulb on its side. Do not crowd your plants, but plant at a distance of not less than two and one-half or three feet, and as soon as the shoots appear, remove all but two or three of the strongest, and these, when about a foot high should be secured to stout stakes.

Keep free from grass and weeds, and water regularly in dry weather.

NOTE:—We fill all orders with strong, divided dormant roots.

Named Varieties. Each, 15c; per dozen, \$1.50.

If wanted by mail, add 15c per dozen for postage.

Cactus Dahlias

Else. Base of petals yellow, gradually passing to amber, finished with a tip of tyrian rose. A charming variety.

Florence M. Stredwick. A beautifully formed pure white cactus dahlia, with long narrow petals with small florets at the base of each petal, distinct.

Floradora. Pure garnet. Splendid free bloomer.

Gabriel. Long, incurved twisted petals; color combination of scarlet and cinnamon shades, sometimes tipped white.

General Buller. Rich velvety maroon, tipped white.

Kriemhilde. Deep rosy pink with lighter center. A distinct and valuable variety as the flowers keep a long time after cutting. (See cut.)

Kriemhilde

Marjorie Castleton. Rosy pink, tinted lighter toward center and tips.

Mrs. H. J. Jones. Very large, perfect, rich bright scarlet, with cream-colored edge.

Mont Blanc. A pure white, of splendid form, long, stiff stems.

Mrs. J. P. Mace. Very large, of beautiful, regular form. Color, soft shell pink.

Prince of Yellows. Soft, golden yellow. Profuse bloomer.

Rosy Morn. Bright carmine rose, tinted lighter toward the base of the petals.

Standard Bearer. Intense cardinal-red with long twisted petals; early and profuse bloomer.

White Kriemhilde. The best commercial white cactus dahlia. It has the wonderful keeping qualities of Kriemhilde, in connection, with a rigid stem.

Show Dahlias

Are a perfectly full rounded regular form, cupped or quilled petals and solid color or tipped darker than the ground color.

Named Varieties. Each, 15c; per dozen \$1.50. If wanted by mail, add 15c per dozen for postage.

A. D. Livoni. A clear pink, beautifully quilled, of perfect form and very free-flowering (see cut.)

Arabella. One of the loveliest, soft primrose, shaded and tipped rose.

Dorothy Peacock. Large, perfect shaped flowers of a bright sea-shell pink color; very early, free and continuous blooming.

Miss Florence M. Shearer. A lovely variety, deep pink with light tips, giving it a soft, warm effect.

Princess Victoria. A sterling variety, being the earliest and freest flowering primrose yellow. In bloom early and late. Long stiff stems, fine for cutting.

Queen Victoria. Rich golden yellow; very fine.

Red Hussar. Richest dazzling cardinal red. Strong, vigorous grower and free bloomer on long stems.

Snowball. A large, pure white dahlia, of perfect ball form, on very long stems.

White Swan. Pure white, large and fine; the hardiest and easiest grown; long stems.

A. D. Livoni

DAHLIAS—Continued

Decorative Dahlias

MANY beautiful varieties of Decorative Dahlias have been introduced in recent years, and in the following varieties some will be found with flat petals, others reflexed, while others will be curiously twisted and incurved.

As cut flowers, these varieties will always maintain a leading place as their large and perfectly formed blooms are borne on long, stiff stems, continuing in good condition a long time and are of easy culture, succeeding under the most varied conditions of soil and climate. (See cultural directions for Dahlias.)

NOTE—We fill all orders with strong, divided, dormant roots.

Named Varieties: Each, 15c; per dozen, \$1.50. If wanted by mail, add 15c per dozen for postage.

Catherine Duer. Bright iridescent crimson scarlet.

Clifford W. Bruton. Large, clear canary yellow.

Delice. The best pure bright rose pink, entirely distinct.

Golden Wedding. The largest of all dahlias, the color is deep golden yellow.

Henry Patrick. Large snow-white.

Jack Rose. Brilliant crimson red.

Lyndhurst. The best bright red for cutting.

Minnie McCullough. Very striking. Soft golden yellow tipped bronzy red; effective.

Nymphaea. A very delicate shrimp pink.

Orange King. Rich, glowing orange-scarlet.

Perle de Lyon. Splendid pure white.

Princess Juliana. Pure white, fine for cutting.

Professor Mansfield. A giant of most unique coloring; a pleasing combination of yellow, red and white.

Souvenir de Gustav Doazon. Immense size, soft scarlet red.

Sylvia. Deep pink, tinting to flesh pink at center; large, perfect form, on long stiff stems.

Wm. Agnew. Very large, dazzling crimson scarlet.

Pompon, Fancy, Collarette, Paeony Flowered and Single Dahlias

PRICE—Same as Decorative.

Crimson Queen. (Pompon.) Deep crimson, shaded purple.

Klien Domitea. (Pompon.) Bright golden terra cotta.

Snowclad. (Pompon.) A snowy white free bloomer.

Penelope. (Fancy.) White flaked, rosy lake, beautiful and chaste.

Etenderd de Lyon. (Collarette.) Scarlet, with creamy white collar.

Mme. Viger. (Collarette.) Richest garnet. Collar petals white, faintly suffused carmine.

Big Chief. (Paeony.) Rich crimson, margined maroon.

Sensation. (Paeony.) Vermilion red, tipped snow white.

Queen Emma. (Paeony.) Flowers of a peculiar shade of pink.

Cardinal Century. (Single.) The best single red.

Eckford Century. (Single.) Pure white, spotted and pencilled with crimson.

Mrs. J. C. Hance. (Single.) Large, well rounded flowers; early in the season it is white, slightly flushed and tipped with pink; later in the season the entire flower is a tender rose pink.

Rose Pink Century. (Single.) The largest and best deep pink.

White Century. (Single.) Pure white with large, heavy, overlapping petals of good texture.

McCULLOUGH'S MIXED DAHLIAS.

Our mixtures are made from selected varieties and contain many more kinds than we list.

Double mixed, Cactus Mixed, Single Mixed and All Varieties Mixed, our selection. Per dozen, \$1.00. (\$1.15 per dozen by mail).

GLOXINIA

MAGNIFICENT for house culture, producing in great profusion, beautiful flowers of rich and beautiful colors. They succeed best in sandy loam and peat, and require a moist heat.

Large Flowering Varieties. Finest Mixed.

Each, 15c; per dozen, \$1.50.

GLADIOLUS

WITH its great diversity of color and splendid spikes of bloom which can be had from July until frost, the Gladiolus is preeminently the People's flower.

Bulbs can be planted from the middle of April to July and should be set about 3 to 4 inches deep and 8 to 10 inches apart, according to the effect to be produced. Can be planted in succession for different blooming periods.

If wanted by mail, add 5c per doz. for postage. Single bulbs mailed without additional charge.

Gladioli in quantity by Parcel Post. If to be sent by this means, estimate postage at rate of 8 lbs. per 100 bulbs.

America. Conceded to be one of the finest varieties for cutting or bedding ever sent out; color a beautiful soft flesh-pink; orchid-like in its coloring and texture; growth and habit perfect.

Each, 5c; per doz., 35c; per 100, \$2.00.

Attraction. Rich, deep crimson, with conspicuous pure white center and throat.

Each, 5c; per doz., 40c; per 100, \$2.50.

Augusta. A lovely and useful pure white variety.

Each, 5c; per doz., 35c; per 100, \$2.50.

Baron Hulot. Color a rich, royal violet blue, with well expanded flowers, very effective.

Each, 5c; per doz., 50c; per 100, \$3.00.

Chicago White. Pure white with faint lavender streaks in the lower petals. They are borne on tall straight stems and from 5 to 7 flowers are open at one time. It is one of the earliest to bloom, hence valuable as a cut flower sort.

Each, 10c; per doz., 75c; per 100, \$5.00.

Kunderi "Glory." The wide open flowers, all face in the same direction and are carried on straight stout stalks. The color is a delicate cream pink with a most attractive crimson stripe in the center of each lower petal. The ruffling of the petals in this new strain has attracted much attention.

Each, 10c; per dozen, 75c; per 100, \$5.00.

May. Lovely, pure white flowers, finely flaked bright rosy crimson; strong spike. Good forcing variety.

Each, 5c; per dozen, 50c; per 100, \$3.00.

Mrs. Francis King. A magnificent new variety. The large blooms are of a delightful light scarlet and are well placed on the large spikes, bearing six open flowers at one time. Each, 5c; per dozen, 35c; per 100, \$2.25.

Mrs. Frank Pendleton. Color a lovely salmon pink, with brilliant deep red blotches in the throat.

Each, 15c; per dozen, \$1.50; per 100, \$12.00.

Niagara. In color the flowers are a delightful cream shade with two lower inside petals or segments blending to canary yellow. The throat is splashed with carmine, and the lower ends of the outside petals are also blushed with carmine. The stamens are purple and the stigmas pale carmine, this little addition in the coloring relieving the creamy effect of the petals.

Each, 10c; per dozen, 75c; per 100, \$5.00.

Panama. A new seedling of America which resembles the parent variety in every way except that it is a much deeper pink. A grand variety. Spike very long with flowers large and well arranged.

Each, 10c; per dozen, 75c; per 100, \$5.00.

Peace. Tall, graceful spikes of large, pure white flowers with a touch of carmine in the lower petals.

Each, 10c; per dozen, \$1.00; per 100, \$7.50.

Princeps. An especially fine variety with immense wide-open amaryllis-like flowers, of a rich dazzling scarlet, marked with white on the lower portion, which serves to intensify the brilliancy of the scarlet.

Each, 5c; per dozen, 50c; per 100, \$3.00.

Sulphur King. The finest clear yellow yet introduced. Produces long spikes of attractive good sized flowers.

Each, 15c; per dozen, \$1.50; per 100, \$12.00.

COLLECTIONS OF CHOICE NAMED GLADIOLUS

1 each of the 14 varieties on this page.....	\$.85
3 each of the 14 varieties on this page.....	2.25
6 each of the 14 varieties on this page.....	4.25
12 each of the 14 varieties on this page.....	8.00

If wanted by mail, add 5c per dozen for postage.

Gladiolus in Separate Shades

	Ea.	Doz.	100
Scarlet and Crimson shades mixed.....	5c	25c	\$1.50
White and Light shades mixed.....	5c	35c	2.50
Yellow and Orange shades mixed.....	5c	50c	3.50
Striped and Variegated shades mixed.....	5c	35c	2.50
Pink and Rose shades mixed.....	5c	35c	2.50

McCullough's Superb Mixed Gladiolus

This superb mixture is composed exclusively of high-grade varieties, including many new and rare kinds. It embraces the greatest possible range of color, and contains the best large-flowering sorts.

Each, 5c; per doz., 35c; per 100, \$2.50.

Extra Fine Mixed

This mixture contains a very complete range of splendid varieties, and while not as fine as the preceding, the size and coloring of many of the sorts will be found out of the ordinary....Each 5c; per dozen, 25c; per 100, \$1.50.

If Gladioli are wanted by mail, add 5c per dozen for postage. Single bulbs mailed without additional charge.

Gladioli Bulbs weigh about 8 pounds per 100 and, if wanted in quantity by mail, include enough to cover postage in your remittance.

LILIES

THE soil should be rich, deep and mellow with good drainage. Do not put manure around the bulbs when setting, as it collects moisture and insects, and often causes the bulbs to decay. Top dressing is the better way to enrich the soil after the bulbs are set. Set bulbs four to six inches deep, according to size.

Auratum. (Golden Japan Lily.) This superb Lily has flowers 8 to 10 inches in diameter composed of six white petals, thickly studded with rich chocolate-crimson spots and a bright golden band through the center of each petal; exquisite vanilla-like perfume.

Extra strong bulbs.....Each, 20c; per dozen, \$2.00.

Large bulbs.....Each, 15c; per dozen, \$1.50.

SPECIOSUM. (Lancifolium.) Well known as Japan Lillies, and one of the most popular garden varieties; grows from two to four feet high and blooms in August.

Speciosum Album. Large white flowers of great substance.

Extra strong bulbs.....Each, 25c; per dozen, \$2.50.

Large bulbs.....Each, 15c; per dozen, \$1.50.

Speciosum Rubrum, or Roseum. White, heavily spotted with rich, rosy crimson spots.

Extra strong bulbs.....Each, 20c; per dozen, \$2.00.

Large bulbs.....Each, 15c; per dozen, \$1.50.

HEDGE PLANTS

California Privet Hedge
with Catalpa Bungei on Terrace

CALIFORNIA PRIVET. (Ligustrum Ovalifolium.) Its foliage is a rich dark-green, and is nearly evergreen remaining on the plant until mid-winter. It is of free growth and succeeds under the most adverse conditions, such as under dense shade of trees. The most advantageous manner of planting is in double rows, the two rows being about 8 inches apart. The plants should be set 12 to 15 inches apart in the row, alternating the plants. In order to secure a dense hedge from the base up, the plants should be severely pruned the first two seasons.

2 Year Old Plants 75c per doz., \$4.00 per 100, \$35.00 per 1000. 3 Year Old Plants \$1.00 per doz., \$6.00 per 100; \$50.00 per 1000.

Extra Large Bushy Plants, \$1.50 per doz.; \$10.00 per 100.

ALTEEA. (Rose of Sharon.) Few are aware of the strikingly attractive characteristics of this perfectly hardy and profuse flowering shrub, when used as a hedge plant or as a screen. Plant 15 to 18 inches apart.

Each, 25c; per dozen, \$2.50.

BERBERIS THUNBERGII. (Japan Barberry.) Where a low, dwarf deciduous hedge is wanted, nothing equals this beautiful Barberry. Requires but little pruning to keep it in shape. The leaves are small, light green and towards Fall assume rich, brilliant colors, the fruit or berries becoming scarlet. Absolutely hardy in all parts of the country. Plant 12 to 15 inches apart.

15 to 18 inches, per dozen, \$1.75; per 100, \$12.00.

18 to 24 inches, per dozen, \$2.25; per 100, \$16.00.

SPIREA VAN HOUTTEI. An ideal flowering shrub to use as a dividing line between properties. Plant 18 to 24 inches apart.....Each, 25c; per dozen, \$2.50.

BOXWOOD TREES

Pyramid Boxwood

PYRAMID-SHAPED

	Each
2 ½ feet high.....	\$3.00
3 feet high.....	3.50
3 ½ feet high.....	4.00
4 feet high.....	5.00
4 ½ feet high.....	6.00
5 feet high.....	8.00

BUSH-SHAPED

1 foot high—	60c to 75c each
1 ½ feet high—	\$1.00 to \$1.25 each
2 feet high—	\$2.00 to \$2.50 each
2 ½ feet high—	\$3.00 to \$4.00 each
3 feet high—	\$4.00 to \$5.00 each
3 ½ feet high—	\$4.50 to \$6.00 each

GLOBE-SHAPED

1 ½ feet high by 1 ½ feet in diameter—	\$5.00 to \$7.50 each
2 ½ feet high by 2 ½ feet in diameter—	\$7.50 to \$10.00 each

STANDARD OR TREE-SHAPED

Good crowns.....	\$3.50 to \$15.00 each
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Everblooming Hybrid-Tea Roses

WE especially recommend this collection of Roses to those who wish a supply of extra choice flowers for cutting throughout the summer and fall months. All roses thrive best when well watered, sprayed with Hellebore and Bordeaux Mixture for insects and fungus, and fed either by applications of manure water, or bone meal at the rate of two pounds per square yard. The Hybrid Perpetuals are particularly susceptible to such treatment and respond quickly.

WINTER PROTECTION. In this latitude, we have found that the most satisfactory protection is to draw up a mound of soil from eight to ten inches high around the base of the plants, then covering the entire beds after the ground begins to freeze with any loose material such as strawy manure, evergreen boughs, or corn stalks, and in more severe climates, heavier covering is all that is required.

The Newer Varieties

Strong (4-inch) Pot Plants on Own Roots ready about May 10th. If wanted by mail, within the third zone, add 5c each; 50c per dozen for postage.

British Queen. Surpasses in beauty and elegance of form all other white varieties. The freedom with which it blooms is remarkable. The type of flower is between White Maman Cochet and Frau Karl Druschki, with Tea Rose form and refinement.

Each, 35c; three for \$1.00; six for \$1.90; twelve for \$3.50.

Double Pink Killarney. Will supersede the Killarney now grown, as it possesses from ten to twelve more petals than its parent.

Each, 35c; three for \$1.00; six for \$1.90; twelve for \$3.50.

Double White Killarney. A pure white sport from White Killarney; has a much larger bud, double the size of the ordinary White Killarney.

Each, 40c; three for \$1.15; six for \$2.15; twelve for \$4.00.

Edward Mawley. Is the finest of all dark crimson roses. A true perpetual flowering Hybrid Tea.

Each, 35c; three for \$1.00; six for \$1.90; twelve for \$3.50.

Etoile de France. Color a lovely shade of clear, red-crimson velvet; very fragrant and keeps well. In England, where it has been tried extensively during the past season, it has caused quite a sensation. Our opinion is that it will become as much of a favorite as La France.

Each, 35c; three for \$1.00; six for \$1.90; twelve for \$3.50.

Florence Forrester. Clear snow-white with a lemon tinge. As the flowers age they become a pure white; the blooms are even larger than Paul Neyron. The grandest of all whites for bedding.

Each, 40c; three for \$1.15; six for \$2.15; twelve for \$4.00;

Florence Haswell Veitch. Flowers brilliant scarlet, shaded with black; large flowers of excellent shape, with petals of great substance. Has a remarkable fragrance. Very free flowering.

Each, 40c; three for \$1.15; six for \$2.15; twelve for \$4.00.

Hadley. In color it is a deep velvety-crimson, retaining its brilliancy at all times; very fragrant; flowers are borne on long, stiff stems.

Each, 45c; three for \$1.30; six for \$2.45; twelve for \$4.50.

Helen Taft. A rich cerise-pink. Very large, free bloomer. Growth very strong.

Each, 35c; three for \$1.00; six for \$1.90; twelve for \$3.50.

Herzogin Marie Antoinette. Long buds of pure orange or old gold; very large flowers of perfect form.

Each, 35c; three for \$1.00; six for \$1.90; twelve for \$3.50.

Killarney Brilliant. Has the same habit of growth and the same freedom of bloom as its parent, while the flower is more double. The color is a very brilliant pink.

Each, 40c; three for \$1.15; six for \$2.15; twelve for \$4.00.

Mabel Drew. The color is deep cream on the first opening, passing to intense canary-yellow in the center as the bloom develops.

Each, 35c; three for \$1.00; six for \$1.90; twelve for \$3.50.

Melody. The blooms are of good size; the color is an intense pure, deep, saffron-yellow, with primrose edges, a delightful color harmony.

Each, 35c; three for \$1.00; six for \$1.90; twelve for \$3.50.

Mrs. Aaron Ward. As a bud, it is a deep Indian yellow; as it opens, it adopts a broad margin of light yellow on the inner edge; when fully opened it is light yellow throughout. Very free bloomer.

Each 40c; three for \$1.15; six for \$2.15; twelve for \$4.00.

Killarney

Mrs. Andrew Carnegie. Handsome shape and delicious fragrance. Color pale lemon-yellow at base of the petals, shading to pure white.

Each, 40c; three for \$1.15; six for \$2.15; twelve for \$4.00.

Mrs. Cornwallis West. A magnificent rose of huge size. The purity of the transparent delicate pink, which is between a shell and rose-pink, on the purest white gives it an attraction that is difficult to convey.

Each, 35c; three for \$1.00; six for \$1.90; twelve for \$3.50.

Mrs. Charles Russell. A strong growing, free flowering rose. The bud is fully as large as American Beauty but longer and pointed. The color is bright rose pink deeper toward the center.

Each, 60c; three for \$1.75; six for \$3.30; twelve for \$6.00.

Ophelia. Very large flower of fine form and habit; salmon flesh shaded pink; the flowers are borne freely on stiff stems.

Each 40c; three for \$1.15; six for \$2.15; twelve for \$4.00.

Radiance. A brilliant, rosy-carmine, displaying beautiful rich and opaline-pink tints in the open flower. The form is fine, largest size and full, with cupped petals. It blooms constantly and is delightfully fragrant. This is a superior Rose.

Each, 35c; three for \$1.00; six for \$1.90; twelve for \$3.50.

Sunburst. Long pointed buds; golden orange flowers very free bloomer and a strong grower.

Each, 40c; three for \$1.15; six for \$2.15; twelve for \$4.00.

McCullough's "Novelty" Set

One plant each of above Twenty Roses for \$6.50. By parcel post within the third zone, \$7.00.

In addition we include as a premium in each "Novelty" Set one **PRESIDENT TAFT ROSE**, introduced by us a few years ago and is without question the most remarkable of all pink Roses. It has a shining, intense, deep pink color possessed by no other Rose. It is a fine grower, free bloomer, good size and form, fragrant, and in a class by itself as to color. Mr. Frank Good, who is probably familiar with more Roses than any man in America, says: "Talk all you want to about the Rose, President Taft, and then you will not say enough".

EVERBLOOMING HYBRID-TEA ROSES—Continued

Standard Varieties

STRONG 4-INCH POT PLANTS—On own roots, of all Standard Varieties Listed. Ready about May 10th.

Rose Plants Travel Best by Express—But if Wanted by Parcel Post within Third Zone, add 5c each; 50c per dozen, for postage.

American Beauty. Extra large, full and fragrant. The color is a fine deep pink, shaded toward the center a carmine crimson.

Each, 45c; three for \$1.30; six for \$2.45; twelve for \$4.50.

Etoile de Lyon. Deep golden yellow; very large and full buds; fine for outdoor summer blooming.

Each, 35c; three for \$1.00; six for \$1.90; twelve for \$3.50.

Bruss an Teplitz. Unquestionably the finest brilliant red, hardy, ever-blooming garden rose. The flowers are very showy and handsome. It blooms constantly and continues covered with flowers the whole season... Each, 35c; three for \$1.00; six for \$1.90; twelve for \$3.50.

Termosa. (China.) A popular bedding rose. It is a bright pink color, free-flowering and perfectly hardy.

Each, 35c; three for \$1.00; six for \$1.90; twelve for \$3.50.

Jonkheer Mock. One of the richest roses in cultivation. The flower is perfect, being a grand shade of deep pink, while the outer petals are silvery rose. A free bloomer.

Each, 40c; three for \$1.15; six for \$2.15; twelve for \$4.00.

Caiserin Augusta Victoria. Soft pearly-white, tinted with just enough lemon in the center to relieve the white; remarkably fragrant, beautifully formed flowers on long, graceful stems.

Each, 35c; three for \$1.00; six for \$1.90; twelve for \$3.50.

Killarney. In shape nothing can approach this beautiful rose; its long perfectly shaped bud, which on the outside is of a delicate pink, unfolds a flower with a deeper pink on the inside.

Each, 35c; three for \$1.00; six for \$1.90; twelve for \$3.50.

a France. Satiny rose, with reflexed petals, which are of a darker pink on the reverse side.

Each, 35c; three for \$1.00; six for \$1.90; twelve for \$3.50.

ady Ashtown. Delicate rose with a trace of yellow at the petal base. The outer flower leaves expand, while the center petals remain in exquisite bud form.

Each, 35c; three for \$1.00; six for \$1.90; twelve for \$3.50.

ady Hillingdon. (Tea.) Deep coppery yellow and an attractive long bud. It is very free in growth and a continuous bloomer.

Each, 35c; three for \$1.00; six for \$1.90; twelve for \$3.50.

aman Cochet, Pink. (Tea.) Is grown perhaps more than any other on account of its many good qualities. The individual large flowers are often on stems 2 feet long, which makes it grand as a cut flower. The shade of color is a "Bridesmaid Pink".

Each, 35c; three for \$1.00; six for \$1.90; twelve for \$3.50.

aman Cochet, White. The exact duplicate of the Pink Cochet except in color, which is white, occasionally tinted pink.

Each, 35c; three for \$1.00; six for \$1.90; twelve for \$3.50.

fy Maryland. Perfect form and exquisite fragrance. Salmon pink shade, which becomes lighter as the flower opens. It is an elegant grower, and sure to please.

Each, 40c; three for \$1.15; six for \$2.15; twelve for \$4.00.

hea Reid. Flower large and double; free flowering and exquisitely fragrant; rich, dark, velvety red. Fine bedding rose.

Each, 35c; three for \$1.00; six for \$1.90; twelve for \$3.50.

ichmond. A beautiful variety, a rich shade of crimson; should be in every collection.

Each, 35c; three for \$1.00; six for \$1.90; twelve for \$3.50.

White Killarney. A pure white sport from Killarney, with which it is identical. It is perfectly hardy with light protection. A strong, robust grower, flowering very freely throughout the season.

Each, 35c; three for \$1.00; six for \$1.90; twelve for \$3.50.

White La France, or Augustine Guinoiseau. Beautiful light fawn color, almost white; rightly described as an almost white La France. Extra fine.

Each, 35c; three for \$1.00; six for \$1.90; twelve for \$3.50.

Vm. R. Smith. The flowers are large and double. The petals softly curled, colored cream with flesh tint tips, buffy-yellow base and the center pink; fine bedding variety.

Each, 35c; three for \$1.00; six for \$1.90; twelve for \$3.50.

McCullough's "Premier" Set. One Each (Pot Plant) of the Eighteen Standard Hybrid Teas for \$5.50.

By Parcel Post within third zone, \$6.00.

La France

POLYANTHA

or Baby Rambler Roses

A CLASS of miniature Roses derived from the Climbing Polyantha. They are of dwarf habit and bloom so freely as to cover the entire plant with bloom all through Summer and Fall. The plants are splendid for bedding, or as edgings for borders. They form shapely, compact, bushy specimens about 18 inches high, producing in great profusion from early in the season until severe frost, immense trusses of small flowers. Pruning is not necessary; simply remove the past season's flower stems.

STRONG 4-INCH POT PLANTS. On own roots of all the following varieties. Ready about May 10th.

Each, 35c; three for \$1.00; six for \$2.15; twelve for \$3.50.

Baby Tausendschoen. It is a bush form of the "Climbing Tausendschoen" or "Thousand Beauties", having all the charm in the variable coloring in its flowers that its parent has, being firm white, delicately flushed pink, changing to deep rosy-carmine.

Cecile Brunner. The delicate buds are of perfect form and color, which at first is rose pink, shading to a deep salmon pink, and showing a rich orange center, toning to a pale flesh color when fully opened.

Clothilde Soupert. A grand bedding rose pearly white, shading to a pure rose pink.

Erna Teschendorff. The flowers are of a deep crimson color, flushed with carmine. This variety does not lose its color in the hottest sun and has no purple shades.

Orleans. The showiest and prettiest of all the Baby Ramblers. This charming and dainty Rose is of beautiful rounded habit and is a huge bouquet of deep cerise or Geranium-pink with distinct showy center of pure white; florets not crowded but of beautiful arrangement, making as a whole a charming combination that cannot be beaten. The color is irresistible.

Mrs. William H. Cutbush. One of the very finest types of the Baby Rambler Roses. It produces in constant profusion throughout the entire Summer its pleasing delicate pink blooms in large trusses; also extra fine for pot culture.

Rose Plants Travel Best by Express. If Wanted by Mail, within Third Zone, Add 5c Each, 50c per dozen for Postage.

HARDY HYBRID PERPETUAL ROSES

AMONG all the hardy plants few are so commonly well liked or more valuable than the roses, particularly the "June Roses," as the Hybrid Perpetuals are called. They are strong growers, bearing large globular flowers and are so hardy that they succeed in any locality. The severest winters will not kill them, but it is generally conceded that protection is beneficial when the straw, manure, cornstalks or other covering is not so thick as to be unnatural and smother them.

Strong two-year old plants ready for delivery from March 15th to May 1st.

PRICE:—Extra Strong Plants, each, 50c; per doz., \$5.00.
Sent by express at customer's expense.

Captain Christy. Delicate flesh pink, very free.

Eugene Furst. Flowers velvety crimson with maroon shading.

Frau Karl Druschki. An exquisite flower of the purest white.

General Jacqueminot. The old favorite; velvety crimson.

John Hopper. Brilliant crimson, large flowers, remarkable for their fragrance.

Mme. Plantier. Pure white, large and double, free bloomer, fine for cemetery planting.

Magna Charta. Deep pink, large sweet scented and of fine form; one of the hardiest.

Marshall P. Wilder. A grand rose of large full flowers of a bright carmine red.

Mrs. John Laing. Large beautiful pink blooms, borne on long sturdy stems.

Paul Neyron. An immense rose of a deep rose color.

Prince C. De Rohan. (The Black Rose.) Deep velvety crimson passing to intense maroon.

Ulrich Brunner. Cherry crimson, large fine form, strong grower and hardy.

Mme. Plantier

HARDY CLIMBING ROSES

We offer the Best and Most Distinct Varieties.

Strong two-year old plants ready for delivery from March 15th to May 1st.

PRICE:—Extra Strong Plants, each, 50c; per doz., \$5.00.
Sent by express at customer's expense.

American Pillar. The enormous flowers are a delightful shade of pink.

Climbing American Beauty. Same color, size and fragrance as American Beauty, with the addition of the climbing habit. Good foliage with abundant bloom in June and occasionally during the summer.

Crimson Rambler. The trusses of bright crimson flowers are freely produced.

White Rambler and Yellow Rambler. Similar to the Crimson Rambler, except in color.

Dorothy Perkins. The flowers are a most beautiful shell pink.

Dr. W. Van Fleet. The color is a delicate shade of flesh-pink on the outer surface, deepening to rosy-flesh in the center. Flowers are full and double, of delicate perfume; buds pointed.

Flower of Fairfield. A sport from Crimson Rambler with same climbing habit, hardiness and immense trusses of crimson flowers.

Gardenia. Buds bright yellow, opening double flowers of a cream color, known as the Hardy Marechal Niel. Suitable for climbing over walls, arbors, stumps of trees and for trailing over rocks or rough ground.

Hiawatha. The brilliant, ruby-carmine flowers with a clear, white eye are produced in long, pendulous sprays. Plant is of strong, vigorous growth.

Philadelphia Rambler. Identical with the Crimson Rambler, except the color is deeper and more lasting.

Lady Gay. A delicate cherry pink, changing to a soft white. Rich glossy foliage.

Silver Moon. Flowers large, pure white, petals of great substance. Plant is a strong grower and the delicately scented flowers are borne on strong stems.

Tausendschon. Flowers beautiful soft pink, same color as Clothilde Soupert, later on changes into rose carmine.

Veilchenblau. (Blue Rambler.) Bluish flowers.

Hardy Herbaceous Perennial Plants

THE steadily increasing demand for hardy plants has induced us to give them more attention and to increase our stock considerably. For such of our customers who are not acquainted with the different varieties, we shall be pleased to make suitable selections of the most desirable species, that when once planted, with very little care, will keep the garden gay with flowers from the time frost leaves the ground until late in autumn.

Cannot accept orders for Hardy Perennial Plants totaling less than one dollar.

ACHILLEA (Sneezewort)

Boule De Neige. (Ball of Snow.) An improved variety, bearing pure white flowers of perfect form all Summer. Fine for cut flowers.....Each, 20c; per dozen, \$2.00.

ANCHUSA ITALICA

Dromore Variety. Remarkable for its free and continual flowering all Summer and the beautiful gentian-blue of its flowers; grows about five feet high....Each, 20c; per dozen, \$2.00.

ANEMONE JAPONICA (Japanese Wind-flower)

THEY grow two to three feet high and are in bloom from August till mid-November, furnishing abundant cut flowers and a brilliant display.

Alce. This new pink variety has silvery-rose, shell-like petals suffused with carmine.....Each, 25c; per dozen, \$2.50.

Queen Charlotte. Very large, semi-double flowers of La France pink, a color that is rare among hardy plants.

Each, 25c; per dozen, \$2.50.

Whirlwind. Large, semi-double, white flowers.

Each, 25c; per dozen, \$2.50.

ANTIRRHINUM (Snap Dragon)

THESE popular plants for bedding and cut flowers are now receiving the attention they deserve. They are undoubtedly one of the best cut flowers which can be grown, while for beds or borders they are a constant source of pleasure, being in flower all the time. Our collection embraces several colors in mixture.

Each, 20c; per dozen, \$2.00.

AQUILEGIA (Columbine)

CHARMING hardy plants, with distinct clear-cut foliage, bearing in countless numbers through May and June exquisite clear blue, white, rose, yellow, purple and striped blossoms. For planting in permanent borders, or edges of shrubbery, this old-fashioned favorite is one of the best. They thrive well with ordinary garden culture, but do best in partially shaded nooks. In bloom during late Spring and early Summer.

Chrysantha. (Golden Columbine.) Golden yellow flowers with long spurs; one of the most distinct of the family....Each, 20c; per dozen, \$2.00.

Chrysantha Alba. A long spurred white variety.

Each, 20c; per dozen, \$2.00.

Coerulea. A beautiful Rocky Mountain species with broad flowers, often three inches in diameter; the outer sepals deep lilac or blue, petals white, the deep blue spur tipped green.....Each, 20c; per dozen, \$2.00.

Coerulea Hybrids. Beautiful variations from the standard type.

Each, 20c; per dozen, \$2.00.

Rose Queen. Pleasing shade of delicate pink, long spurred flowers.

Each, 20c; per dozen, \$2.00.

ASTERS (Michaelmas Daisies or Starworts)

THESE are among the showiest of our late flowering hardy plants, giving a wealth of bloom at a season when most other hardy flowers are past, and for the best effect should be planted in masses of one color. The hardy sorts are entirely distinct from Annual Asters, being smaller in bloom but produced in greater quantity.

Beauty of Colwall. A grand semi-double flowering type of a beautiful lavender shade; height about four feet; September...Each, 25c; per dozen, \$2.50

Grandiflorus. Flowers deep purple, large, borne on sturdy stems about three feet tall. A handsome variety. October...Each, 30c; per dozen, \$3.00.

Novi-Belgi, St. Egwin. Handsome flowers of cherry pink. September and October.....Each, 25c; per dozen, \$2.50.

Novae-Angliae. A tall growing species, bearing clear purple flowers.

September.....Each, 20c; per dozen, \$2.00.

Novae-Angliae Roseus. Similar to the preceding, but bearing pretty rose-colored flowers. September.....Each, 20c; per dozen, \$2.00.

Novae-Angliae. Mrs. F. W. Raynor. Large deep, crimson. September.

Each, 20c; per dozen, \$2.00.

Snowflake. Grows to nearly two feet. Flowers pure white. September.

Each, 20c; per dozen, \$2.00.

BEGONIAS, HARDY

EXCEEDINGLY useful plants, thriving best in a partially shaded, moist situation. Lustrous bronze green foliage with small pink flowers. Bloom all Summer.....Each, 20c; per dozen, \$2.00.

BOCCONIA (Plume Poppy)

Cordata. A splendid plant, growing sometimes six feet high, bearing panicles of creamy-white flowers in July and August; makes a grand effect as a center in a hardy bed or a border background.

Each, 20c; per dozen, \$2.00.

BOLTONIA (False Chamomile)

TALL growing, showy plants, with flowers resembling hardy asters; appearing in September.

Asteroides. Pure white; five to six feet....Each, 20c; per dozen, \$2.00.

Latisquama. Pink, tinted lavender; six feet. Each, 20c; per dozen, \$2.00.

HARDY HERBACEOUS PLANTS—Cont'd

CAMPANULAS (Bell Flower)

BELL-SHAPED flowers, well known and easily grown, of much variety of form, some being tall and suitable for planting in borders or among shrubbery, while others are dwarf and suitable for edging, rockwork, etc. (See cut.)

Carpatica. (Carpathian Hare Bell.) Ideal for border or rocky planting, being about eight inches high; flowers from June till frost. Blue and white, each separate. Each, 20c; per dozen, \$2.00.
Calycanthemum. (Cup and Saucer.) White, pink and blue; grows about two feet high and blooms from June to August. Each, 20c; per dozen, \$2.00.
Medium. (Canterbury Bell.) Single white, single blue and single pink; grows two to three feet high and blooms during late Spring and early Summer. [Each, 20c; per dozen, \$2.00.]

CHELONE (Shell Flower)

STATELY plants growing about two feet high and bearing numerous spikes of large flower-heads during the Summer and Fall.
Lyoni. Showy, purplish-red flowers. . . Each, 25c; per dozen, \$2.50.

CHRYSANTHEMUMS (Hardy)

THESE varieties are very popular for outdoor bedding. They will produce an abundance of bloom until killed by frost.

Old-Fashioned, Large Flowering Varieties: **Indian.** Brilliant red. **Golden Queen.** Yellow. **Old Homestead.** Delicate soft pink. **Victory.** White.
 All the above, each, 20c; per dozen, \$2.00.

Pompon Varieties: **Baby.** A miniature lemon-yellow. **Fairy Queen.** Soft cherry-pink; blooms in mid-season. **Golden Pheasant.** Rich, golden-yellow. **Model of Perfection.** Snowy white. **Rhoda.** Apple-blossom pink. **Rufus.** Light red. All of the above, . . . Each, 20c; per dozen, \$2.00.

COREOPSIS

LANCEOLATA GRANDIFLORA. A beautiful hardy border plant; grows eighteen inches high, and produces its bright golden yellow flowers in great profusion the entire season. (See cut.) Each, 20c; per dozen, \$2.00.

COREOPSIS

DELPHINIUMS (Perennial Larkspur)

THESE are deservedly one of the most popular subjects in the hardy border, bold, attractive, and highly prepossessing plants of easiest culture perfectly hardy. They will establish themselves in almost any garden soil, but respond quickly to liberal treatment. Will begin blooming about the middle of June. If stalks are cut off as soon as flowers fade, they will continue blooming all Summer. (See cut.)

Belladonna Hybrids. The freest and most continuous blooming of all. The clear turquoise-blue flowers are not surpassed by any. 3 feet. Each, 20c; per dozen, \$2.00.

Belladonna Semiplena. Clear blue flowers overlaid with pink. 3 feet. Each, 25c; per dozen, \$2.50.

Formosum. Dark blue, white center, spikes three to four feet tall, vigorous; free blooming. 3 feet. Each, 20c; per dozen, \$2.00.

DELPHINIUM

Moerheimi. This white hybrid is of vigorous growth with flowers of purest white. 3 feet. Each, 25c; per doz. \$2.50
Giant Hybrids. Unquestionably the finest strain of mixed hybrids ever offered. The original stock came from Europe, and consisted of the best-named varieties. The plants are of strong, vigorous habit, with large flowers on spikes two feet and over long, the majority running in the lighter shades of blue. Each, 20c; per dozen, \$2.00.

HARDY HERBACEOUS PLANTS—Cont'd.

DIELYTRA OR DICENTRA

Formosum. (Plumy Bleeding Heart.) Grows about fifteen inches high, with finely cut, ornamental foliage and produces its fine pink flowers from April to August.

Each, 20c; per dozen, \$2.00.

Spectabilis. (Bleeding Heart, or Seal Flower.) An old-fashioned favorite; its long racemes of graceful, heart-shaped pink flowers are always attractive; is perfectly at home in any part of the hardy border, and especially valuable for planting in the shade. (See cut.)

Each, 20c; per dozen, \$2.00.

DIGITALIS (Foxglove)

THE strong flowerstalks—frequently four to six feet high—rising from rich and luxuriant masses of leaves, always give an appearance of strength to the hardy border. (See cut.)

Florinaeflora. Finely-spotted varieties. White, purple, rose or mixed.
Each, 20c; per dozen, \$2.00.

FUNKIA (Plantain Lily)

THE Plantain Lilies are among the easiest plants to manage; their broad, massive foliage makes them attractive subjects for the border, even when not in flower. They succeed equally well in sun or shade.

perulea. (Blue Day Lily.) Blue flowers and broad green leaves.

Each, 20c; per dozen, \$2.00.

lauca. Purplish-white flowers with immense foliage.
Each, 20c; per dozen, \$2.00.

subcordata Grandiflora

Alba. (White Day Lily,

August Lily.) Pure white,

lily-shaped, fragrant flowers.

Each, 20c; per dozen, \$2.00.

Thomas Hogg. Leaves are

larger than Subcordata Alba

and variegated around edges.

with lavender flowers,

Each, 20c; per dozen, \$2.00.

undulata Variegata. Foliage green, striped

with white. Each, 20c; per dozen, \$2.00.

GAILLARDIA

(Blanket Flower)

Grandiflora. Beginning to flower in June, they continue one mass of blooms the entire Summer. Flower three inches in diameter; center dark reddish brown; petals orange to crimson. (See cut.)

Each, 20c; per dozen, \$2.00.

GYPSOPHILA

(Baby's Breath)

DURING August and September the plant is a mass of delicate feathery blooms. These may be used as fresh cut flowers, also for a semi-everlasting effect.

Paniculata. Loose, feathery sprays of white flowers, making a mist-like effect, fine for bouquets.

Each, 20c; per dozen, \$2.00.

Paniculata Flore Pleno. Produces double, pure white flowers. Splendid for bouquets.

Each, 25c; per dozen, \$2.50.

GRASSES, Ornamental. (See page 112)

HELIANTHUS (Hardy Sunflower)

THE perennial Sunflower is very effective either in borders, among shrubbery, or as clumps on the lawn, etc. (See cut.)

Multiflorus Fl. Pl. Large, double Dahlia-like golden-yellow flowers in great profusion during July and August; four feet.

Each, 20c; per dozen \$2.00.

Maximiliana. Flowers in long, graceful sprays during October, when all others have finished flowering; five to seven feet.

Each, 20c; per dozen, \$2.00.

Mollis. Large, single lemon-yellow flowers, with downy white foliage; blooms in August and September; four feet.

Each, 20c; per dozen, \$2.00.

Sparsifolius. A most gracefully formed single variety of large size, of a deep yellow color, on long stems; splendid for cutting; August to September; six to eight feet.

Each, 20c; per dozen, \$2.00.

HARDY HERBACEOUS PLANTS—Continued

HELENIUM (Sneezewort)

THESE are desirable border plants, succeeding in any soil in a sunny location; useful for cutting.

Riverton Beauty. Lemon-yellow, with large purplish-black cone.....Each, 20c; per dozen, \$2.00.

Autumnale Superbum. Flowers are deeper yellow, separate and distinct from Riverton Beauty.
Each, 20c; per dozen, \$2.00.

HELIOPSIS (Orange Sunflower)

Pitcheriana. Very similar to a small sunflower, but blooming earlier; deep golden yellow; all summer. June till frost; three feet high.

Each, 20c; per dozen, \$2.00.

Scabra Zinniaeflora. A new double flowering form of the Orange Sunflower, somewhat resembling a Zinnia in shape. Fine for cutting; July and August; two feet.....Each, 25c; per dozen, \$2.50.

HEMEROCALLIS (Yellow Day Lily)

Lily-like plants, which flower in greatest profusion during the Summer.

Aurantiaca Major. Grows two to three feet high and produces deep, orange-colored flowers during June and July.....Each, 20c; per dozen, \$2.00.

Flava. The best known variety, very fragrant, deep lemon-yellow flowers in June and July.

Each, 20c; per dozen, \$2.00.

Luteola. Blooms during July and August; flowers a pleasing shade of lemon-yellow.

Each, 20c; per dozen, \$2.00.

Sovereign. Cup-shaped flowers; inside of petals light yellow, outside brown; blooms during July and August.

Each, 20c; per dozen, \$2.00.

Thunbergii. Bears rich, buttercup-yellow, funnel-shaped flowers during July and August.

Each, 20c; per dozen, \$2.00.

HEUCHERA (Alum Root)

FOLIAGE remains close to the ground. During July and August, the graceful thin flower spikes, 2 feet high, appear in profusion.

Sanguinea. Bright scarlet. Each, 20c; per dozen, \$2.00.

GERMAN IRIS

MALLOW MARVELS

HIBISCUS (Mallow)

THESE are a mass of bloom during the entire Summer when they produce large flowers in gorgeous color (See cut.)

Mallow Marvels, Giant-flowering. Flowers of enormous size, frequently 10 to 12 inches in diameter have been developed. They appear to be equal at home in all positions, having the same vigor in dry and wet ground, and are perfectly hardy. They grow from 5 to 8 feet high, and are very floriferous, bloom from early in July until late in Autumn. We offer three distinct colors—red, pink and white—strong roots. One each of the 3 colors for \$1.00.

Each, 35c; per dozen, \$3.50.

Crimson Eye. Blooms of purest white with deep crimson eye; flowering in July; 4 feet.

Each, 20c; per dozen, \$2.00.

HOLLYHOCK

FOR planting in rows or groups on the lawn, or for interspersing among shrubbery, they are invaluable. They require rich, deep soil, well drained.

Double White, Double Rose, Double Yellow, Double Red, Double Mixed... Each, 20c; per dozen, \$2.00

Single Red, Single Rose, Single Yellow, Single Mixed.
Each, 20c; per dozen, \$2.00.

IBERIS (Hardy Candytuft)

Sempervirens. Low-growing, with evergreen foliage. Spring and early Summer, is completely covered with dense heads of pure white flowers.

Each, 20c; per dozen, \$2.00.

GERMAN IRIS (Iris Germanica)

THE German Iris is one of the most desirable early Spring flowering plants. The flowers are of large size and exquisite colors. No garden is complete without collection of these beautiful "flags." (See cut.)

For the best results plant in a well-drained sun position, barely covering the roots. Avoid fresh manure in preparing your border.

Baron von Humboldt. Dark blue.

Canary Bird. Light yellow or buff.

Coerulea. Sky blue.

Florentina Alba. White.

Florentina Coerulea. Blue, very fine.

King of Yellows. Yellow.

L'Innocence. White, veined with orange purple.

Mme. Chereau. Pure white, border of blue.

Mont Blanc. Pure white.

Purpurascens. Dark purple.

Queen Victoria. Blue, changing to bluish white.

Thorbecke. White and deep violet.

Price of above.....Each, 20c; per dozen, \$2.00

If by mail, add 5c each, 50c per dozen.

We can furnish large clumps of most of the above varieties from 50c to \$1.00 each.

HARDY HERBACEOUS PLANTS—Continued

IRIS PALLIDA DALMATICA

Iris Pallida Dalmatica. One of the finest of the Germanica type, of strong, vigorous habit, growing in good soil 4 feet high, with exceptionally large, fragrant flowers, standards lavender, falls lavender, shaded blue; exquisite in every way and fine for massing.

Each, 25c; per dozen, \$2.50.

IRIS SIBERICA

Orientalis. (Yale Blue.) A slender, graceful, tall-growing Iris, with flowers quite similar to those of the German Iris, but smaller and much more numerous. The plants form large, strong, compact clumps, and bloom so freely that the deep blue flowers give almost a solid color effect. Each, 20c; per dozen, \$2.00.

JAPANESE IRIS

(Iris Kaempferi)

A FEW years since, we began importing this beautiful class of plants from Japan, and the demand is yearly increasing as their beauty and value become better known. No place, however small, is now complete without a collection. They are most effective when planted in groups, and thrive best in a moist soil. The flowers are of immense size, from six to eight inches in diameter, and of the most beautiful and delicate shades. They are perfectly hardy, flowering in great profusion during June and July, (See cut). We offer the following list of named sorts:

Azuma Yuki, No. 81. Petals rosy purple with heavy white veins, standards brownish-red, striped with white, yellow star center.

Banrai Nami, No. 1. Petals pale pinkish white with white standards and yellow center.

Furomon, No. 28. Petals bright pink, shading to creamy white, with heavy purple veins, standards purple, yellow center.

Gosetsu No Mai, No. 12. Petals light blue, yellow star center, with dark bluish purple standards.

Kimino-Medmui, No. 97. Soft lilac, with dark purple veins, and purple standards.

Krishi-Ikari, No. 85. Petals brownish-red with light brown veins, center yellow, standards scarlet, striped with white.

Kyo-Dai-Yama, No. 59. Petals indigo, standards greenish blue, striped with white.

Okino-Kamome, No. 65. Petals recurved and creamy white, standards pure white.

Sassa No Koe, No. 34. Petals recurved and creamy white, veined pink and white, orange center, standards pure white, spotted deep pink.

Shiraito-Daki, No. 100. Petals creamy white with bluish tinge, finely veined, center yellow, standards white with deep blue edges.

Yezo-Nishiki, No. 16. Petals lavender, heavily spotted with dark purple, center yellow, standards lavender, bordered with purple.

Yodo No Kuruma, No. 8. Petals bright pink, shading to dark pink at center and heavily veined, standards purple, marbled with white.

Above named varieties, each, 30c; per dozen, \$3.00. By mail, Each, 35c; per dozen, \$3.50.

Finest Mixed (Our selection), Each, 20c; per dozen, \$2.00. By mail, each, 25c; per dozen, \$2.50.

We can furnish large clumps of most of the above varieties from \$1.00 to \$1.50 each.

LIATRIS (Blazing Star, or Gay Feather)

MOST showy and attractive native plants, succeeding anywhere and producing their large spikes of flowers from July to September.

Pycnostachya. Spikes of light, rosy-purple flowers; five feet. Each, 20c; per dozen, \$2.00.

Spicata. Deep purple flowers, in spikes two to three feet high. Each, 20c; per dozen, \$2.00.

LUPINUS POLYPHYLLUS (Lupine)

EFFECTIVE plants, producing large spikes of flowers. Will thrive in any good garden soil; grow about three feet high and bloom latter part of May and early June.

Polyphyllus. Clear blue. Each, 20c; per dozen, \$2.00.

Albus. A white variety of above. Each, 25c; per dozen, \$2.50.

Moerheimi. Its clean, bold growth always attracts attention. The spikes of flowers are frequently over a foot long, in color superb, being a combination of light and dark shades of pink, without a trace of magenta. Each, 25c; per dozen, \$2.50.

LYCHNIS

Chalcedonica. A desirable plant, grows two to three feet high; flowers brilliant orange scarlet. Each, 20c; per dozen, \$2.00.

Viscaria Splendens. (Catch Fly.) Is a brilliant border plant, the flowers being produced in dense spikes. Each, 20c; per dozen, \$2.00.

LYTHRUM

Roseum Superbum. (Rose Loose Strife.) A strong growing plant, three to four feet high, producing large spikes of rose colored flowers from July to September. Each, 20c; per dozen, \$2.00.

MERTENSIA (Blue Bells)

Virginica. An early spring-flowering plant, growing about one to one and one-half feet high, with drooping panicles of handsome, light blue flowers, fading to clear pink; one of the most interesting spring flowers, blooming in May and June. Each, 20c; per dozen, \$2.00.

MONARDA (Bergamot)

SHOWY plants, growing from two to three feet high, succeeding in any soil or position, with aromatic foliage, and producing their bright flowers during July and August.

Didyma. (Oswego Tea.) Flowers bright scarlet. Each, 20c; per dozen, \$2.00.

MYOSOTIS (Forge - Me - Not)

Palustris Semperflorens. A variety that is hardly ever out of flower. Useful in a shady spot in the border. Each, 20c; per dozen, \$2.00.

Alpestris Robusta Grandiflora. The large spring-flowering Forget-Me-Not, with intense sky-blue flowers. Each, 20c; per dozen, \$2.00.

OENOTHERA (Evening Primrose)

ELEGANT subjects for growing in an exposed, sunny position, either in the border, or on the rocky, blooming the entire Summer.

Pilgrimi. Large clusters of bright yellow flowers. Each, 20c; per dozen, \$2.00.

PLATYCODON

(Balloon Flower, or Japanese Bell-flower.)

THE Platycodons are closely allied to the Campanulas, and form neat, branched bushes of upright habit. **Grandiflorum.** Deep blue, cupped, star-shaped flowers, one and a half feet. Each, 20c; per dozen, \$2.00.

Album. A white-flowered form of the above. Each, 20c; per dozen, \$2.00.

Mariesi. Deep blue, bell-shaped flowers, nearly three inches across on one-foot-high plants. Each, 20c; per dozen, \$2.00.

HARDY HERBACEOUS PLANTS—Continued

HARDY PHLOX

(*Phlox Decussata*)

PROBABLY the most satisfactory of all perennials, and a good space, in proportion to the size of the garden, should always be given to these plants. These are justly esteemed as the finest herbaceous plants. They are of dwarf habit, perfectly hardy, of very easy culture, and yield a profusion of bright showy bloom. They are hardly equaled by any other hardy plant for the decoration of the garden. (See cut.)

Africa. Brilliant carmine-red with deeper eye.

Baron Von Dedem. Blood-red scarlet, immense trusses.

Beranger. White ground, delicately shaded with pink and distinct red eye.

Bridesmaid. Pure white, with crimson-carmine eye.

Coquilecot. Bright orange-scarlet, with crimson eye; extra large compact flower heads.

Daubigny. Rosy purple, with enormous florets.

Eclairer. Dark crimson, center rose, surrounded with white; an excellent variety.

Etna. Deep, fiery red; dark eye.

F. G. Von Lassburg. The finest white flowers; very large; strong, vigorous grower.

Frau Anton Buchner. The finest white yet introduced, having the largest truss and individual flower.

Geo. A. Strohlein. Bright scarlet, with crimson red eye; large flowers, does not bleach.

Henry Murger. White, with crimson-carmine center; a beautiful variety.

Independence. An early, pure white.

Le Soleil. Bright china rose, dark rose center.

Mme. Paul Dutrie. Delicate lilac-rose, in shade like a soft pink Orchid; flowers very large, borne in immense panicles.

Miss Lingard. (*Suffruticosa*.) Pearly white, very early and free.

Obergartner Wittig. Large, crimson-carmine flowers, vigorous grower.

Pantheon. Bright carmine rose; large and fine.

R. P. Struthers. Bright rosy-carmine, with claret-red eye.

Richard Wallace. White, with bright crimson center, large flowers in immense panicles.

Rosenburg. Bright, reddish violet with blood-red eye; individual flowers large.

Selma. Large trusses of very large pink flowers, with cherry-red eye; choice.

Snowflake. Large flowering, pure white.

Thebaide. Salmon, with carmine eye, dwarf.

Wm. Robinson. Bright pink. Tall growing variety.

PRICE—Any of the above, each, **20c**; per dozen, **\$2.00**. If wanted by mail, add **5c** each, **50c** per dozen for postage.

PHLOX SUBULATA

(Moss, or Mountain Pink)

An early spring-flowering type, with pretty moss-like evergreen foliage, which, during the flowering season, is hidden under the masses of bloom. An excellent plant for the rockery, the border, and invaluable for carpeting the ground, or covering graves.

Alba. Pure white. **Rosea.** Bright rose.

Each, **20c**; per dozen, **\$2.00**.

PHYSOSTEGIA (False Dragon-Head)

One of the most beautiful of our mid-summer flowering Perennials, forming dense bushes three to four feet high, bearing spikes of delicate tubular flowers not unlike a gigantic heather.

Virginica. Bright, but soft pink.

Each, **20c**; per dozen, **\$2.00**.

Virginica Alba. Pure white. Each, **20c**; per dozen, **\$2.00**.

ICELAND POPPIES

(*Papaver Nudicaule*)

THE plant is of neat habit, forming a tuft of bright green, fern-like foliage, from which spring, throughout the entire season, a profusion of slender, leafless stems one foot high, each graced with charming cup-shaped flowers. They flower the entire Summer.

Orange King, White, Yellow, Mixed Colors.

Each, **20c**; per dozen, **\$2.00**.

ORIENTAL POPPIES

(*Papaver Orientale*)

THESE are the regal representatives of this popular genus, far surpassing in splendor of bloom all the annual and biennial kinds, and for a gorgeous display of rich and brilliant coloring, nothing equals them during their period of flowering in May and June, and whether planted singly or in masses, their large flowers and freedom of bloom render them conspicuous in any position. After flowering, the plants die back, usually reappearing along in early September, or as soon as the weather gets cool. During this resting period, care should be taken in cultivating the beds, that the roots are not disturbed, any disturbance at this time usually resulting in failure. We offer the following distinct varieties:

Diana. Beautiful salmon flowers.

Goliath. Flowers scarlet, of enormous size.

Mahogany. Dark red, shading to crimson maroon.

Princess Victoria Louise. Soft lilac rose.

Procerpine. Dark lilac, with large black blotch.

Royal Scarlet. Scarlet flowers, with black center.

Salmon Queen. Soft, salmon-scarlet; very distinct.

Wittenbergia. Large scarlet flowers.

The above named varieties,

Each, **25c**; per dozen, **\$2.50**.

Finest Mixed Varieties, Each, **20c**; per dozen, **\$2.00**.

HARDY GARDEN PINKS

THESE old-fashioned favorites are absolutely perfect as an edging for the hardy border; as cut flowers, they are indispensable.

Her Majesty. A pleasing plant growing to about one foot and bearing large, snowy white flowers.

Each, **20c**; per dozen, **\$2.00**.

White Reserve. A pure white variety, possessing a spicy fragrance. Ever-blooming.

Each, **20c**; per dozen, **\$2.00**.

Mixed Hardy Garden Pinks. Seedlings grown from a very select strain, which should produce a good percentage of double flowers. Each, **20c**; per dozen, **\$2.00**.

HARDY HERBACEOUS PLANTS—Continued

DOUBLE HERBACEOUS
PAEONIES

MAGNIFICENT, hardy plants, almost rivaling the rose in perfume, brilliancy, color and perfection of bloom. They are perfectly hardy, require little or no care, and produce larger or finer blooms when well established. (See cut.)

Dorchester. A most beautiful, soft pink of fine form, dwarf grower. Each, 35c.

Duc de Wellington. Large bomb, white guards, sulphur center; fragrant. Each, 40c.

Edulis Superba. Bright, mauve pink color mixed with lilac; fragrant. Each, 25c.

Felix Crousse. Large, double, ball-shaped bloom; color brilliant red. Each, 50c

Festiva Maxima. White, with carmine tipped flakes to a few center petals. Each, 40c.

Floral Treasure. Large, full, clear pink, with lighter center. Each, 40c.

Hamlet. Color very dark red. Each, 25c.

Jeanne D'Arc. Outside petals rose colored, inside straw colored, with crimson spots. Each, 60c.

Livingstone. Rosy pink, silvery reflex. Each, 75c.

Louis Van Houtte. Deep carmine-rose, tipped silver with a brilliant, fiery reflex. Each, 30c.

Mme. Calot. Large, pale hydrangea-pink, with darker shadings in the center. Each, 40c.

Madame Boulanger. Color glossy, tender rose, shading to hellotrope, bordered with silvery flesh. Each, 40c.

Mathilde de Roseneck. Late, soft flesh-pink, shading deeper toward the center with tintings of lilac and chamois; petals bordered with silver and occasional narrow edgings of bright carmine. Each, 50c.

Marie Lemoine. Large, sulphur white, shaded with pink; magnificent. Each, 40c.

Meissionier. Broad outer petals, brilliant purple amaranth, inner petals crimson, free bloomer. Each, 35c.

Purpurea Superba. Large purplish-crimson, large guards. Each, 30c.

Queen Victoria. Large, full compact bloom, opening flesh, changing to white, center petals tipped with carmine. Each, 30c.

Rosa Magna. Beautiful, large, rose colored Paeony. Very free. Each, 25c.

Thorbeckii. Deep red pink, of fine form, lighter in center. Medium dwarf. Each, 35c.

Tricolor Rosea. Dark violet rose; large globular flower. Each, 40c.

McCULLOUGH'S PAEONY COLLECTION—one each of the above twenty named varieties for \$7.00, purchaser paying express charges.

We can supply large clumps of many varieties of Paeonies from \$1.00 to \$1.50 each.

If to be sent by mail, add 5c each, 50c per dozen.

Paeonies in Mixture

THEY are from our named varieties. We keep the colors separate and offer them to color as follows: White, red and pink in mixture.

Each, 25c; per dozen, \$2.50.

Paeonia Officinalis

THIS type is the real old-fashioned "Paeony," and comes into bloom from ten days to two weeks ahead of the named sorts. All are strong growers, with large, full, double, fragrant flowers.

Alba. Blush-white. **Rosea.** Rose. **Rubra.** Crimson. Each, 25c; per dozen, \$2.50.

Paeonies—Japanese Single

THE single Paeonies are even more beautiful than the double. They are larger in size of flowers and more delicate in coloring. No other plant flowering at the same season can vie with the Single Paeony. We offer the following colors: Carmine, Crimson, Magenta, Maroon, Purple and Rose. Each, 30c; per dozen, \$3.00.

PYRETHRUM

THE large daisy-like blooms appear as early as June and continue in abundance continuously until September. They delight in a rich soil with a natural drainage. They thrive best in the full sunlight. As the flowers die, the old stems should be cut off to encourage new blooms.

Hybridum Fl. Pl. Double flowering, mixed. Each, 20c; per dozen, \$2.00

Hybridum, Single Flowering. In choicest mixture. Each, 20c; per dozen, \$2.00.

Uliginosum. (Giant Daisy.) Grows four to five feet high, and is covered with large white daisy-like flowers three inches in diameter from July to September. Each, 20c; per dozen, \$2.00.

RUDBECKIA (Cone Flower)

A VARIETY of these will furnish a supply of cut flowers from early July until September. They are extremely hardy, doing well with every one. They could be termed "a city garden perennial," doing so well with little attention.

Golden Glow. Double; canary yellow; six feet; August. Each, 20c; per dozen, \$2.00.

Newmanni. Single dark orange, with deep purple cone center; three feet high; flowers from July to September. Each, 20c; per dozen, \$2.00.

Purpurea. (Giant Purple Cone Flower.) The flowers remain in perfect condition on the plants for weeks at a time. In fact, we do not know of any other perennial where the flowers last so long in perfect condition. Flowers from July to September; two and a half feet high (see cut.) Each, 20c; per dozen, \$2.00.

HARDY HERBACEOUS PLANTS—Continued

SALVIA AZUREA

Azurea. Grows two to three feet high and produces pretty sky-blue flowers in great profusion during August and September. Each, **25c**; per dozen, **\$2.50**.

SCABIOSA

Japonica. They last a long time when picked and placed in water. Bears lavender-blue flowers on long stems from July to September. (See cut.) Each, **25c**; per dozen, **\$2.50**.

SEDUM (Stone Crop)

Acre. (Golden Moss.) Much used for covering graves; foliage green, flowers bright yellow. Each, **20c**; per dozen, **\$2.00**.

Album. Green foliage, white flowers. Each, **20c**; per dozen, **\$2.00**.

Spectabilis. Erect growing; height 18 inches with broad, light-green foliage and immense heads of handsome, showy, rose colored flowers. Each, **20c**; per dozen, **\$2.00**.

Spectabilis Brilliant. Similar in growth to the above with bright, amaranth-red flowers. Each, **20c**; per dozen, **\$2.00**.

SHASTA DAISY

LARGE, snowy-white flowers, in bloom continuously throughout the Summer and Fall.

Alaska. A decided improvement on the original, very free-flowering, with blooms $4\frac{1}{2}$ to 5 inches across, of pure, glistening white... Each, **20c**; per dozen, **\$2.00**.

STATICE (Great Sea Lavender)

Latifolia. Immense heads, 2 to 3 feet across, small, blue flowers from June to September, which last for months, if cut and dried..... Each, **20c**; per dozen, **\$2.00**.

STOKESIA (Cornflower Aster)

Cyanea. Produces showy, aster-like, deep blue flowers which measure from 4 to 5 inches across. 18 to 24 inches high, blooming freely from July until frost. Each, **20c**; per dozen, **\$2.00**.

SWEET WILLIAM (Dianthus Barbatus)

Sweet William. (Dianthus Barbatus.) We offer a superb strain of mixed single and double-flowering sorts. Each, **20c**; per dozen, **\$2.00**.

TRITOMA

(Red-hot Poker, Flame Flower or Torch Lily)

Pfitzerii. (The Everblooming Flame Flower.) In bloom from August to November, a rich orange-scarlet producing a grand effect, either planted singly in the border or in masses.... Each, **25c**; per dozen, **\$2.50**.

VERONICA (Speedwell)

Spicata. An elegant border plant, growing about $1\frac{1}{2}$ feet high, producing long spikes of bright blue flowers. Each, **20c**; per dozen, **\$2.00**.

Longifolia Subsessilis. A pretty species with blue flowers, produced on spikes a foot long, continuing in bloom the entire Summer and Fall. Each, **20c**; per dozen, **\$2.00**.

VINCA MINOR

(Periwinkle or Trailing Myrtle)

Dwarf evergreen trailing plant, is used for carpeting the ground where it is too shady for other plants to thrive..... Each, **20c**; per dozen, **\$2.00**.

YUCCA FILAMENTOSA

(Adams's Needle)

Yucca Filamentosa. (Adams's Needle.) A hardy evergreen plant with long, narrow leaves that are bright-green the whole year round. The flowers are white, produced on long spikes. Each, **20c**; per dozen, **\$2.00**.

ORNAMENTAL GRASSES

Arundo Donax. (Great Reed.) An ornamental, giant grass, growing ten to twelve feet high.

Arundo Donax Variegata. A variegated form of the above, growing six to eight feet high.

Erianthus Ravennae. (Plume Grass.) Grows six to eight feet high, and produces plumes in Fall.

Eulalia Gracillima. (Japan Rush.) The most beautiful of all the Eulalias, with narrow, graceful foliage, entirely green without variegation, except that the mid-rib is of a silver sheen.

Eulalia Japonica Variegata. Leaves striped white and green longitudinally.

Eulalia Zebrina. (Zebra Grass.) A peculiar variegated grass, growing six feet high. The variegation is unlike that of any other plant, being across the leaf in regular bands, dark green and light.

Above, each, **25c**; per doz., **\$2.50**; extra by mail, **10c** each.

Cannot accept orders for Hardy Perennial plants totaling less than One Dollar.

Ornamental Flowering Shrubs

SHRUBS are as much a part of the garden as the lawn or flower borders, and a well arranged planting presents an attractive appearance throughout the entire year.

Shrubs have many uses. As a background to a flower border, for hiding an unsightly building, fence or foundation, or they may be planted in a mixed shrubbery border, in which case those of short, dense growth should be planted along the front of the border, graduating to the tall-growing kinds at the back.

Thorough preparation of the soil by spading, and the addition of a liberal quantity of sheep or stable manure or bone meal will be well repaid by strong, vigorous, healthy growth. In planting, care should be taken not to overcrowd, allowing sufficient room for future development, and unless an immediate effect is wanted—in which case they may be planted closer and some of them moved when necessary. The majority of the dwarf-growing kinds may be set about three feet apart, the tall, strong growers about five feet apart.

Our Shrubs are transplanted every two or three years and are furnished with plenty of fibrous roots and should not be compared to stock that is never moved from the cutting beds until sold

We can furnish Extra Strong Specimen Plants of most all sorts at \$1.00 to \$5.00 each.

We give no warranty, express or implied, as to description, quality, productiveness, or any other matter of any seeds, bulbs or plants we send out, and we will not be in any way responsible for the crop. If the purchaser does not accept the goods on these terms, they are at once to be returned.

We do not guarantee to replace plants, shrubs or trees at prices quoted.

ALMOND DOUBLE FLOWERING. A desirable class of early flowering shrubs, erect, slender branches, covered with small double pink flowers.

2 to 3 feet, each, **35c**; per dozen, **\$3.50.**

ALTHEA. (Rose of Sharon.) The Altheas are among the most valuable of our hardy shrubs on account of their late season of blooming, which is from August to October. Are also extensively used as hedge plants.

Boule-De-Feu. Double red.....Each, **50c**; per dozen, **\$5.00.**

Grandiflora Superba. Double blush white, shaded carmine.

Each, **50c**; per dozen, **\$5.00.**

Jeanne D'Arc. Double white.....Each, **50c**; per dozen, **\$5.00.**

Meehani. Beautiful variegated foliage with satiny, lavender colored, single flowers, open and free blooming.....Each, **50c**; per dozen, **\$5.00.**

Purpurea. Single purple.....Each, **50c**; per dozen, **\$5.00.**

Rosea. Single white, red center.....Each, **50c**; per dozen, **\$5.00.**

Totus Albus. Single, pure white.....Each, **50c**; per dozen, **\$5.00.**

Single Rose, White and Purple. Two to three feet, each, **30c**; per dozen, **\$3.00.**

Three to four feet, each, **50c**; per dozen, **\$5.00.**

Double Rose, White and Purple.

Two to three feet, each, **30c**; per dozen, **\$3.00.**

Three to four feet, each, **50c**; per dozen, **\$5.00.**

AZALEA, Mollis. Flowers yellow and different shades of red, in trusses (see cut.)

Each, **75c**; extra strong plants, each, **\$1.00.**

BERBERIS, Thunbergii. (Japanese Barberry.) One of the most beautiful shrubs either for hedging or general purposes. It is of a neat, compact growth and the foliage is beautiful at all times; and in the Fall turns to a most brilliant crimson color. The plant is covered with bright scarlet berries all the Fall and Winter. It seldom grows over four feet high.

15 to 18 inches, each, **20c**; per dozen, **\$2.00.**

18 to 24 inches, each, **30c**; per dozen, **\$3.00.**

BERBERIS, Purpurea. (Purple-leaved Barberry.) Especially remarkable for purple foliage and fruit. When full grown, plants attain a height of four feet.

Two to three feet, each, **35c**; per dozen, **\$3.50.**

Azalea Mollis

Clethra Alnifolia

BUDDLEYA. (Butterfly Shrub or Summer Lilac.) *Var.abilis Magnifica.* Flowers continuously all season. The flower racemes are composed of many little blossoms in the shape and color of lilacs.

Each, **25c**; per dozen, **\$2.50**; clumps, each, **50c.**

CALYCANTHUS FLORIDUS. (Sweet-Scented Shrub.) Flowers fragrant, double and of a chocolate color.

Two to three feet, each, **25c**; per dozen, **\$2.50.**

Three to four feet, each, **50c**; per dozen, **\$5.00.**

CARYOPTERIS MASTACANTHUS. (Blue Spirea.) Autumn blooming shrubby plant producing clusters of blue fragrant flowers from September until frost, Dies to the ground in Winter.

Each, **25c**; per dozen, **\$2.50.**

CERCIS CANADENSIS. (Judas Tree or Red Bud.) Very showy and beautiful when in bloom. All the branches and twigs are covered with a mass of small pink flowers early in the Spring, before the leaves appear.

Five to six feet, each, **\$1.00**; per dozen, **\$10.00.**

Six to eight feet, each, **\$1.25**; per dozen, **\$12.50.**

CHIONANTHUS VIRGINICA. (White Fringe Tree.) Large shrub or small tree with large, heavy leaves almost hidden in spring by a thick mist of fragrant, drooping white flowers.

Two to three feet, each, **50c**; per dozen, **\$5.00.**

Three to four feet, each, **75c**; per dozen, **\$7.50.**

CHESTNUT. (Horse Chestnut.) Dwarf.....Each, **\$1.25.**

CHERRY. (Ornamental.) Double Rose Flowering. Five to six feet. Each, **\$1.50**; per dozen, **\$15.00.**

CLETHRA ALNIFOLIA. (Sweet Pepper Bush.) Dark green foliage and upright spikes of creamy white fragrant flowers in August. (See cut.) Two to three feet.....Each, **25c**; per dozen, **\$2.50.**

CORCHORUS. (Kerria.) Globe Flower or Japanese Rose. Japonica. A shrub four to six feet tall. Native of Japan. Leaves bright green, fading in Autumn to tones of yellow. Flowers numerous, bright yellow, large and showy. A charming old-fashioned plant. Two to three feet.....Each, **30c**; per dozen, **\$3.00.**

Japonica Flore Pleno. Double flowered. This fine old shrub should be in all collections. It is of spreading habit. Its double yellow blossoms, which are about one inch in diameter appear early in May, one from each leaf axil. It is excellent for massing.

Two to three feet, Each, **30c**; per dozen, **\$3.00.**

Three to four feet, Each, **50c**; per dozen, **\$5.00.**

Argentea Variegata. A dwarf variety with small green foliage, edged with white. One of the prettiest and most valuable dwarf shrubs; two to three feet.....Each, **30c**; per dozen, **\$3.00.**

ORNAMENTAL FLOWERING SHRUBS—Continued

CORNUS FLORIDA. (White Flowering Dogwood.) The flowers, produced in Spring before the leaves appear, are from three to three and one-half inches in diameter, white and very showy. They begin to appear as the Magnolia flowers are fading, and are invaluable for maintaining a succession of bloom. Foliage grayish green, glossy, and handsome, and in the Autumn turns to a deep red; one of the most showy flowering trees (see cut.)

Four to five feet. Each, \$1.00; per dozen, \$10.00.

Cornus Florida Bubra. (Red Flowering Dogwood.) A rare variety, similar to the common type, except in color of the flowers, which are rich, rosy-red. The two varieties make a fine contrast.

Two to three feet. Each, \$1.25; per dozen, \$12.00.

Cornus Masculina. (Cornelian Cherry.) A small tree-like shrub, producing early in Spring, before the leaves appear, clusters of bright yellow flowers, are followed by red berries.

Two to three feet, each, 35c; per dozen, \$3.50.

Four to five feet, each, 50c; per dozen, \$5.00.

Cornus Sanguinea. (Red Twigged Dogwood.) A strong growing bush, with crimson-colored branches, especially attractive in Winter.

Four to five feet. Each, 30c; per dozen, \$3.00.

CORYLUS PURPUREA. (Purple Leaved Filbert.) Large dark leaves; distinct and fine.

Two to three feet. Each, 60c; per dozen, \$6.00.

CRAB. (Bechtel's Double Flowering.) Most beautiful of all the flowering Crabs; hardy. Trees are covered in early Spring with large, beautiful double fragrant flowers resembling small roses of a delicate pink.

Three to four feet. Each, \$1.25; per dozen, \$12.50.

DESMODIUM PENDULIFLORUM. A shrub-like plant that dies to the ground in Winter, but comes up vigorously in Spring. Bears during September sprays of rose-colored flowers.

Two to three feet. Each, 40c; per dozen, \$4.00.

Three to four feet. Each, 50c; per dozen, \$5.00.

DEUTZIA CRENATA FLORA PLENA. Flowers double white, tinged with pink.

Two to three feet. Each, 30c; per dozen, \$3.00.

Five to six feet. Each, 50c; per dozen, \$5.00.

DEUTZIA GRACILIS. A dwarf bush, covered with spikes of pure white flowers in early Summer.

Each, 30c; per dozen, \$3.00.

DEUTZIA LEMOINEI. Habit dwarf, flowers white.

One and one-half to two feet. Each, 30c; per doz. \$3.00.

Three to four feet. Each, 50c; per dozen, \$5.00.

DEUTZIA PRIDE OF ROCHESTER. Large, double white flowers, slightly tinted with rose.

Two to three feet. Each, 30c; per dozen, \$3.00.

Three to four feet. Each, 50c; per dozen, \$5.00.

ELDER GOLDEN. (Sambucus.) Golden yellow foliage.

Two to three feet. Each, 30c; per dozen, \$3.00.

Three to four feet. Each, 50c; per dozen, \$5.00.

ELEAGNUS LONGIPES. Nearly evergreen; foliage silvery on the under surface. The orange-scarlet berries are attractive during Summer.

Two to three feet. Each, 35c; per dozen, \$3.50.

Three to four feet. Each, 50c; per dozen, \$5.00.

Cornus Florida

EUONYMUS EUROPAEUS. (Burning Bush.) Conspicuous in Autumn and Winter, when loaded with scarlet seed pods, from which orange-colored berries hang on slender threads.

Two to three feet. Each, 30c; per dozen, \$3.00.

Three to four feet. Each, 50c; per dozen, \$5.00.

EXOCHORDA GRANDIFLORA. (Pearl Bush.) Bears white flowers in racemes in early Spring.

Two to three feet. Each, 30c; per dozen, \$3.00.

Three to four feet. Each, 50c; per dozen, \$5.00.

FORSYTHIA FORTUNEI. (Golden Bell.) Upright growth and bright yellow flowers in April.

Two to three feet. Each, 30c; per dozen, \$3.00.

Three to four feet. Each, 50c; per dozen, \$5.00.

FORSYTHIA SUSPENS. (Weeping Golden Bell.) Willowy growth and yellow flowers.

Two to three feet. Each, 30c; per dozen, \$3.00.

Three to four feet. Each, 50c; per dozen, \$5.00.

FORSYTHIA VIRIDISSIMA. (Golden Bell.) Erect growth and spreading branches; flowers bright yellow.

Two to three feet. Each, 30c; per dozen, \$3.00.

Three to four feet. Each, 50c; per dozen, \$5.00.

HALESIA TETRAPTERA. (Silver Bell.) White, bell shaped flowers in May. Bears four winged fruit from one to two inches long.

Two to three feet. Each, 30c; per dozen, \$3.00.

Three to four feet. Each, 50c; per dozen, \$5.00.

HYDRANGEA ARBORESCENS STERILIS. (Snowball-Hydrangea.) Snowy white blooms; will flower for fully three months. Two to three feet, each, 35c; per dozen, \$3.50. Three to four feet

Each, 60c; per dozen, \$6.00.

HYDRANGEA PANICULATA GRANDIFLORA.

The flowers, which are borne in dense pyramidal panicles in the greatest profusion, are white when they first open, but gradually change to rose and remain in good condition for weeks (see cut.) Two to three feet, each 30c; per doz. \$3.00. Three to four feet, each, 50c; per doz., \$5.00.

HYDRANGEA PANICULATA GRANDIFLORA.

Standard or Tree-Shaped Plants. These are four and five years old, trained to tree shape with about three feet of straight stem and nicely shaped heads. Three to four feet, each, 75c; per doz., \$7.50. Four to five feet, each, \$1.00; per doz. \$10.00.

Hydrangea Paniculata Grandiflora

ORNAMENTAL FLOWERING SHRUBS—Continued

Lilac

LILACS. (True Syringa.) (See cut.) **Purple.** (Syringa Vulgaris.) The common purple species, and one of the best;
Two to three feet, each, 30c; per dozen, \$3.00.
Three to four feet, each, 50c; per dozen, \$5.00.

White. (Syringa Vulgaris Alba.) Flowers pure white, very fragrant;
Two to three feet, each, 30c; per dozen, \$3.00.
Three to four feet, each, 50c; per dozen, \$5.00.

Price of any of the following named Lilacs, fine plants,
Each, \$1.00; extra strong,.....each, \$1.50.

Charles X. Rapid grower, reddish purple flower.

Josikaea. Blooms in June, flowers lilac purple.

Ludwig Spaeth. Long panicles of purplish-red flowers.

Madame Lemoine. Double white flowers.

Marie Legrave. Flowers pure white, extra.

Michael Buchner. Double pale lilac.

LONICERA. (Bush, or Upright Honeysuckle.) Handsome upright shrubs. They thrive in almost any soil.

Ledebouri. Very distinct, producing red flowers in May.
Two to three feet, each, 35c.

Morrowi. A handsome Japanese variety with white flowers during May, but especially valuable for its bright red fruit during the summer and autumn months.....Two to three feet, each, 30c.

Tartarica. (Tartarian Honeysuckle.) A large shrub with numerous upright or spreading branches. Flowers borne in great profusion in late Spring. Fruit red or orange, ripening in Summer. Red, white and pink.....Two to three feet, each, 30c.

MAHONIA AQUAFOLIA. (Holly-leaved Mahonia.) A native species of medium size, with purplish, shining leaves, and showy, bright yellow flowers succeeded by bluish berries.
18 to 24 inches, each, 40c; per dozen, \$4.00.

SPIREA. A large group of showy, free-flowering, hardy shrubs.

Anthony Waterer. Makes nice, round bushes three feet high and wide; beginning to bloom in Summer, continuing until fall. Rose red flowers in large, round clusters all over the bush;
18 to 24 inches, each, 30c; per dozen, \$3.00.

Billardii. Pink flowers; bloom nearly all Summer. It is grand for planting in masses.
Two to three feet, each, 30c; per dozen, \$3.00.
Three to four feet, each, 50c; per dozen, \$5.00.

Callosa Alba. A white flowering variety of dwarf, bushy symmetrical form. Flowers all Summer.
18 to 24 inches, each, 30c; per dozen, \$3.00.
Three to four feet, each, 50c; per dozen, \$5.00.

Spiraea Van Houttei

Van Houttei. (Improved Bridal Wreath.) This is without a doubt the most beautiful and useful of shrubs. Always effective if planted singly or in groups on the lawn, in front of the porch, in shrub borders or in a hedge. Handsome throughout the entire season. But when in flower it is a complete fountain of white bloom. Clusters of white florets are set close along the drooping stems (see cut).

Two to three feet, each, 25c; per dozen, \$2.50.

Three to four feet, each, 50c; per dozen, \$5.00.

Spires continued on next page.

OSMANTHUS AQUIFOLIUM. A very beautiful evergreen shrub, with dark green, spiny-toothed leaves, resembling the Holly. In the Fall, and sometimes in the Spring, it produces deliciously fragrant white flowers.
Strong plants, each, \$1.00.

PRIVET. See Hedge Plants.

PHILADELPHUS OR SYRINGA. (Mock Orange or Orange Blossoms.) A shrub that can always be depended upon to give splendid satisfaction. No insects bother it, and in May and June the bushes are literally covered with flowers.

Coronarius. (Garland Mock Orange.) This is the popular tall variety; very sweet and one of the first to flower.
Two to three feet, each, 30c; per dozen, \$3.00.

Coronarius Aurea. (Golden-leaved Mock Orange.) Fine golden-yellow foliage, contrasting beautifully with the dark leaves of other shrubs.

Two to three feet, each, 30c; per dozen, \$3.00.

Grandiflorus. (Large-flowered Mock Orange.) Without a doubt one of the most popular shrubs grown, and ought to be in every garden. Flowers are pure white and very large.

Two to three feet, each, 30c; per dozen, \$3.00.

Five to six feet, each, 50c; per dozen, \$5.00.

RHODODENDRON. Named Hardy Hybrids.

Each, \$1.25; three for \$3.50.

Extra strong plants, each, \$2.00; three for \$5.00.

RHODOTYPOS. (White Kerria.) **Kerrioides.** Handsome foliage and large single white flowers in the latter part of May, succeeded by numerous black berries.

Two to three feet, each, 30c; per dozen, \$3.00.

RHUS COTINUS. (Purple Fringe, or Smoke Tree.) A low shrubby tree, covered in midsummer with large clusters of feathery flowers, giving the appearance of a cloud of smoke or mist.

Two to three feet, each, 30c; per dozen, \$3.00.

Three to four feet, each, 50c; per dozen, \$5.00.

RHUS TYPHINA LACINIATA. (Cut-leaved Staghorn Sumac.) A large growing bold and effective shrub, with delicate fern-like foliage and brilliant scarlet fruit in the Autumn.

Two to three feet, each, 35c.

RIBES AUREUM. (Golden Currant.) Bright green foliage, beautifully tinted in the Autumn; fragrant yellow flowers in May, followed by dark brown fruit.

Two to three feet, each, 30c; per dozen, \$3.00.

Three to four feet, each, 50c; per dozen, \$5.00.

ROBINIA HISPIDA. (Rose Acacia.) A very handsome shrub. The leaves are similar to those of the Locust. In June and July long panicles of rose-colored flowers hang from the branches.

Two to three feet, each, 50c; per dozen, \$5.00.

SAMBUCUS. Aurea. (Golden Elder.) Attractive golden foliage and desirable to mix with other shrubs.

Two to three feet, each, 30c; per dozen, \$3.00.

Three to four feet, each, 50c; per dozen, \$5.00.

ORNAMENTAL FLOWERING SHRUBS—Continued

SPIREA—Continued.

Opulifolia Aurea. (Virginian Guelder Rose.) Golden-tinted foliage and large white flowers in June; two to three feet. Each, **30c**; per dozen, **\$3.00**.
Three to four feet, each, **50c**; per dozen, **\$5.00**.

Prunifolia Fl. Pl. (Old Bridal Wreath.) Blooms in May, with pure white, double flowers.
Two to three feet, each, **30c**; per dozen, **\$3.00**.
Three to four feet, each, **50c**; per dozen, **\$5.00**.

Reevesii Fl. Pl. Tall with dark, bluish green foliage, and large double, pure white flowers, in May and June.
Two to three feet, each, **30c**; per dozen, **\$3.00**.
Three to four feet, each, **50c**; per dozen, **\$5.00**.

Thunbergii. Of dwarf, graceful form. Branches slender and somewhat drooping; foliage narrow and yellowish green; flowers small, white, appearing early in spring.
15 to 18 inches, each, **30c**; per dozen, **\$3.00**.
18 to 24 inches, each, **50c**; per dozen, **\$5.00**.

SYMPHORICAR-
PUS. Snow-
berry and In-
dian Currant.—
Small native
shrubs much used
in shaded places
and in open mass-
es. Grow in al-
most any soil;
quite hardy.

Racemosus. (Snow-
berry.) A grace-
ful shrub, three
to five feet tall,
with slender
branches. Flowers
white or pinkish,
in loose racemes,
in Summer. Ber-
ries white, pro-
duced in showy,
profuse clusters,
the branches
bending under
their weight.
Two to three feet,
each, **30c**; per
doz., **\$3.00**.

Vulgaris. (Coral-Berry or Indian Currant.) A grand shrub, producing a wealth of red or purplish berries, which remain on the branches all Winter. Flowers greenish red, in Summer. Berries coloring, in early Autumn, very showy. Does well in shade.
Two to three feet, each, **30c**.

Snowball

TAMARIX. *Africana.* (Tamarisk.) Strong, slender, tall growing, irregular shrubs, with feathery foliage and small, delicate pink flowers.
Two to three feet, each, **35c**; per dozen, **\$3.50**.

VIBURNUM. (Snowballs and High Bush Cranberry.) The Viburnums are one of the most useful shrubs, being very hardy and of good habit. They all have white flowers mostly on flat heads and with a few exceptions are noted for their handsome clusters of berries (see cut).

Opulus. (High Bush Cranberry.) The white flowers in June are followed in Autumn by bright scarlet berries, which are very attractive until very late in Winter.
Two to three feet, each, **30c**; per dozen, **\$3.00**.
Three to four feet, each, **50c**; per dozen, **\$5.00**.

Opulus Sterilis. (Guelder Rose or Snowball.) Of spreading habit, bearing flat clusters of single white flowers, which afterwards produce brilliant red berries which hang to the plant all Winter; very decorative.
Two to three feet, each, **30c**; per dozen, **\$3.00**.
Three to four feet, each, **50c**; per dozen, **\$5.00**.

Plicatum. (Japan Snowball.) One of the choicest hardy shrubs, with healthy dark foliage; the perfect balls of pure white flowers are borne in great profusion in May. Two to three feet, each, **35c**; per dozen, **\$3.50**.

VITEX. *Agnus Castus.* (Chaste Tree.) A graceful shrub, growing from five to six feet high, with dense spikes six to eight inches long, of lilac-colored flowers late in Summer.
Two to three feet, each, **30c**; per dozen, **\$3.00**.

WEIGELIA. (*Diervilla.*) These shrubs bloom after the lilacs, in June and July. Their large flowers are of wide trumpet-shape, colors from white to red, and borne in clusters thickly along the branches.

Candida. White flowering Weigelia, flowering throughout the Summer.
Two to three feet, each, **30c**; per dozen, **\$3.00**.

Eva Rathke. The finest Weigelia in cultivation. Flowers continuously throughout the Summer and Autumn; of an entirely distinct color, being a rich, ruby carmine. Should be in every garden.
18 to 24 inches, each, **30c**; per dozen, **\$3.00**.
Two to three feet, each, **50c**; per dozen, **\$5.00**.

Rosea. A beautiful shrub, with rose-colored flowers in May and June.
Two to three feet, each, **30c**; per doz., **\$3.00**.
Four to five feet, each, **50c**; per doz., **\$5.00**.

Rosea Nana Variegata. A neat, dwarf shrub, valuable for the clearly defined variegation of green, yellow and pink in its leaves; flowers delicate rose and pink; one of the finest variegated-leaved shrubs; 18 to 24 inches, each, **30c**; per doz., **\$3.00**.
Two to three feet, each, **50c**; per doz., **\$5.00**.

ORNAMENTAL TREES

CATALPA BUNGEI. (Umbrella Catalpa.) Grafted on stems 6 to 9 feet high, it makes an umbrella shaped top without pruning. Perfectly hardy. Leaves large, glossy, heart-shaped, deep green; lay like shingles on a roof; always making a symmetrical head. One of the most unique trees; desirable for lawns, park and cemetery planting. 6 to 7 feet, each **\$1.50**. Specimen trees, each **\$2.50**.

MAPLES, JAPANESE. These are exceedingly beautiful, especially in Spring, when they burst into leaf.
Polymorphum Atropurpureum. Leaves deep blood red. Each, **\$2.50**.
Polymorphum Atropurpureum Dissectum. Dark maroon, deeply serrated, thread-like leaves. Each **\$3.50**.

MULBERRY, TEAS' WEEPING. The most graceful hardy weeping tree in existence. Forms a perfect-shaped head and the slender branches grow downward parallel with the stem, forming an umbrella-like shape. It takes the foremost place among weeping trees; has beautiful foliage and luscious fruit, is hardy, enduring the cold of the North and the heat of the South; safe and easy to transplant. Admirably adapted for ornamenting small or large grounds, or for cemetery planting. 1 year heads. Each, **\$1.50**; per dozen, **\$15.00**. 2 to 3 year heads, each, **\$2.50**.

CHESTNUT. (Horse Chestnut.) Dwarf. Each, **\$1.25**.

Catalpa Bungei

EVERGREEN TREES

WE OFFER the following Specimen Evergreens which have been grown in ample space and transplanted and are in the best condition to plant for immediate effect.

All our Evergreens are dug with a ball of earth around the roots and burlapped. This protects them in transit, and this fact should be borne in mind by purchasers when comparing prices.

ABIES (The Firs)

- A. **Balsamea.** (Balsam Fir.) A regular symmetrical tree assuming the cone shape when quite young. Leaves dark green, lighter beneath. 2 to 3 feet, each, **\$1.25**; 3 to 4 feet, each, **\$1.50**.
- A. **Nordmanniana.** (Nordmann's Fir.) A thick dense tree. The needles are wide, dark green, with a silvery under surface. One of the best evergreens. Specimen Trees, 2 feet, each, **\$3.00**.
- A. **Veitchii.** A magnificent tree of splendid habit. The needles are dark green above and silvery white beneath.
5 feet, each, **\$5.00**; 7 feet, each, **\$7.50**.

JUNIPERUS

(Junipers and Cedars)

- J. **Pfitzeriana.** Foliage is silvery green, with white markings on under side; light and thread-like. 1½ to 2 feet, each **\$2.00**; 2½ to 3 feet, each **\$5.00**.
- J. **Sabina.** (Savin Juniper.) A thickly branched, dwarf, spreading shrub with dark green foliage. 1½ to 2 feet, each **\$2.00**; 2 to 2½ feet, each **\$3.00**.
- J. **Virginiana Cannarti.** Foliage dark green and compact..... 2 to 3 feet, each, **\$3.00**.
3 to 4 feet, each, **\$4.50**.
- J. **Virginiana Glauca.** (Blue Virginia Cedar.) Beautiful blue, glaucous foliage.
2 to 3 feet, each, **\$3.00**; 3 to 4 feet, each, **\$5.00**.
- J. **Virginiana Shottel.** A distinct variety of pyramidal habit, with light-green foliage.
2 to 3 feet, each, **\$3.00**; 3 to 4 feet, each, **\$4.50**.

PICEA, (The Spruces)

- P. **Excelsa.** (Norway Spruce.) A rapid, vigorous growing tree, with dark-green foliage. One of the most popular evergreen trees. 1½ to 2 feet, each, **75c**; 2 to 3 feet, each **85c**; 3 to 4 feet, each, **\$1.00**; 4 to 5 feet, each, **\$1.50**; 5 to 6 feet, each, **\$2.00**.
- P. **Excelsa Remontii.** Dwarf, compact variety. 1 to 1½ feet, each, **\$2.25**; 1½ to 2 feet, each, **\$3.25**.
- P. **Orientalis.** (Oriental Spruce.) Habit compact and symmetrical, with short dark-green needles. 2 to 2½ feet, each, **\$3.00**; 2½ to 3 feet, each, **\$4.50**.
- P. **Pungens Glauca Kosteriana.** (Koster's Blue Spruce.) The finest ornamental evergreen grown. Foliage is the purest blue. 2 to 2½ feet, each, **\$5.00**; 2½ to 3 feet, each, **\$7.00**; 3 to 4 feet, each, **\$8.00**.

PINUS (The Pines)

- P. **Austriaca.** (Austrian Pine.) A tall tree, with spreading branches heavily plumed with long, stiff needles..... 2 to 3 feet, each, **\$1.75**.
6 to 7 feet, (specimens) each, **\$6.00**.
- P. **Cembra.** (Swiss Stone Pine.) A hardy, slow-growing tree of distinct habit..... 2 feet, each, **\$2.50**.
- P. **Mughus.** (Mugho Pine.) A unique alpine species; broader than its height, and sometimes almost prostrate..... 12 to 15 inches, each, **\$1.75**.
1½ to 2 feet, each, **\$2.50**.
- P. **Strobus.** (White Pine.) A beautiful ornamental tree, also used for shade and shelter belts. 2 to 3 feet, each, **\$1.50**; 3 to 4 feet, each, **\$1.75**; 4 to 5 feet, each, **\$2.25**.
- P. **Sylvestris.** (Scotch Pine.) A strong grower, with spreading branches and short stiff needles. 2 to 3 feet, each, **\$2.00**.

Koster's Blue Spruce

RETINOSPORA

(Japanese Cypress)

- R. **Filifera.** A broad, bushy tree, with dark-green foliage in pendulous thread-like strings. 2 to 2½ feet, each, **\$2.75**; 3 feet, each, **\$4.50**.
- R. **Pisifera.** The slender branches are open and graceful. Foliage, light-green above, silvery beneath. 3 feet, each, **\$6.00**.
- R. **Pisifera Aurea.** Golden evergreen, light airy foliage. 2 to 3 feet, each, **\$4.50**; 3 to 3½ feet, each, **\$7.00**.
- R. **Plumosa.** (Plume Cypress.) Light-green, feathery foliage. It stands shearing well. to 3 feet, each, **\$2.50**; 3 to 4 feet, each, **\$6.00**.
- R. **Plumosa Aurea.** (Gold Plume Cypress.) A dense, small-sized, graceful tree. The young growth is a bright, golden yellow..... 2 to 3 feet, each, **\$2.50**.
3 to 4 feet, each, **\$6.00**.

THUYA (Arborvitae)

- T. **Occidentalis.** (American Arborvitae.) Well known screen and hedge plant..... 2 to 3 feet, each, **\$1.00**; 3 to 4 feet, each, **\$1.25**; 4 to 5 feet, each, **\$2.00**.
- T. **Occidentalis Pyramidalis.** (Pyramidal Arborvitae.) Very shapely, suitable for tubs. 2 to 3 feet, each, **\$1.50**; 3 to 4 feet, each, **\$2.00**; 4 to 5 feet, each, **\$3.00**; 5 to 6 feet, each, **\$8.00**.
- T. **Occidentalis Globosa Nova.** Very dwarf and compact, grows naturally into a rounded, almost ball-like form..... 1½ to 2 feet, each, **\$2.75**.
- T. **Standishii.** A pyramidal tree of graceful, drooping habit. 4 to 5 feet, each, **\$3.50**; 5 to 6 feet, each, **\$5.00**; 6 to 7 feet, each, **\$6.00**.
- T. **Occidentalis Wareana.** A valuable species for cold climates, dense and shapely, medium height. 1½ to 2 feet, each, **\$1.75**; 2 to 2½ feet, each, **\$2.25**.

HARDY CLIMBING PLANTS

AMPELOPSIS VEITCHII. (Japan Creeper or Boston Ivy.) The best climbing plant for covering brick or stone walls.
Each, 25c; per dozen, \$2.50; by mail, each, 30c.

AMPELOPSIS QUINQUEFOLIA. (Virginia Creeper.) For covering walls, verandas and trunks of trees. Each 25c; per doz., \$2.50; by mail, each, 30c.

ARISTOLOCHIA SIPEO. (Dutchman's Pipe.) Large, heart-shaped leaves.
Each, 50c; per doz., \$5.00; by mail, each, 60c.

BIGNONIA RADICANS. (Trumpet Vine.) Flowers trumpet-shaped, bright scarlet.
Each, 25c; per doz., \$2.50; by mail, each, 30c.

CELASTRUS SCANDENS. (Climbing Bitter Sweet.) Yellow flowers, followed in the Autumn with orange fruit. Each, 25c; per doz., \$2.50; by mail, each, 30c.

CLEMATIS (Large Flowering)

- Duchess of Edinburg. Double white flowers.
- Gipsy Queen. Dark purple flowers.
- Henryii. Creamy white flowers.
- Jackmanii. Intense violet purple flowers.
- Miss Bateman. White flowers, with chocolate-red anthers.
- Seiboldi. Silvery lavender flowers.
- Ville de Lyon. Brilliant crimson flowers.

The above named Clematis, each 50c; per dozen, \$5.00; by mail each, 55c.

CLEMATIS (Small Flowering)

- Coccinea.** Bell-shaped flowers, bright coral red. Each, 25c; per doz., \$2.50; by mail, each, 30c.
- Paniculata.** (Japanese Clematis.) Pure white, very fragrant, borne in large clusters; small flowering. Each, 25c; per dozen, \$2.50; by mail, each, 30c.

HONEYSUCKLES

- Each, 25c; per dozen, \$2.50, except where noted; by mail, each, 30c.
- Aurea Reticulata.** Foliage variegated yellow and green with yellowish white, fragrant flowers.
- Monthly Fragrant or Dutch.** Blooms all Summer.

Clematis

IVY, English. Beautiful, evergreen vine. Each, 25c; per doz. \$2.50; by mail, each, 30c.

KUDZU VINE. (Or Jack-and-the-Bean-Stalk.) A rapid growing vine. Each, 25c; per doz., \$2.50. By mail, each, 30c.

MATRIMONY VINE. The branches may be trained over fences or trellises. Each, 25c; per doz., \$2.50. By mail, each, 30c.

VITIS HETEROPHYLLA VARIEGATA. Dark green foliage, variegated with white and pink. Each, 30c to \$1.00.

WISTARIA, CHINESE. Delicate, violet blue blossoms. Each, 50c; per doz., \$5.00. By mail, each, 60c.

WISTARIA, CHINESE, WHITE. Pure white flowers. Each, 50c; per doz., \$5.00.

Aristolochia

- Common Woodbine.** A strong, rapid grower; flowers red outside, buff within.
- Halleana.** Nearly evergreen; flowers pure white.
- Scarlet Trumpet.** Scarlet inodorous flowers
- Heckrotti.** (New Sweet Scented.) Flowers, dark rich red and creamy yellow in color. Blooms continually the whole season. Each, 35c; per dozen, \$3.50. By mail, each, 40c.

TENDER CLIMBING PLANTS

- CARDINAL CLIMBER.** Each, 20c; per dozen, \$2.00.
- COBAEA SCANDENS.** Each, 25c; per dozen, \$2.50.
- MOON FLOWER PLANTS.** Each, 20c; per dozen, \$2.00. If wanted by mail, add 5c each, 50c per doz. for postage.
- MADEIRA VINE.** Strong tubers. Each, 5c; per dozen, 40c. By mail, per doz., 50c.

BEDDING PLANTS

These cannot well be mailed, as we send out strong specimens, which travel best by express.

	Each	Per Doz.
Ageratum. Blue.....	10c	\$1.00
Alternanthera. All varieties.....	10c	1.00
Asters. Best varieties, all colors.....	7c	.75
Cannas. Large flowering kinds.....	15c	1.50
Centaurea. (Dusty Miller).....	10c	1.00
Coleus. Standard sorts.....	10c	1.00
Geraniums. Standard sorts.....	15c	1.50
Lantanas.....	10c	1.00

	Each	Per Doz.
Lobelias. Trailing.....	8c	\$0.75
Pansies. Fancy.....	7c	.60
Petunia. Double sorts.....	15c	1.50
Petunia. Single sorts.....	10c	1.00
Salvia. Scarlet varieties.....	15c	1.50
Verbenas. Finest.....	10c	1.00
Vincas. Bedding sorts.....	7c	.75
Vinca. Variegated, trailing.....	10c	1.00

Wistaria

FRUIT TREES, SMALL FRUITS AND GRAPE VINES

SELECT thrifty young trees in preference to old or very large ones; the roots are more tender and fibrous and they bear transplanting better and are more apt to live; they can also be more easily trimmed and shaped to any desired form, and in the course of a few years will usually outstrip the older ones in growth. If not prepared to plant when your stock arrives, "heel in" by digging a trench deep enough to admit all the roots, and setting the trees therein, carefully pack the earth about the roots.

By Express or Freight at Expense of Purchaser.

We do not guarantee or replace Trees or Shrubs at prices quoted.

While we make no charge for packing or delivery to freight or express offices here, still on account of increased cost of operation we cannot accept orders for Fruit Trees in smaller quantities than six, either straight or assorted, at prices quoted. In smaller quantities, add 15c per tree or make up a Club Order among your friends that can be shipped to one address.

MULBERRIES

5 to 6 feet, Each, 75c; per dozen, \$7.50.

DOWNING'S EVERBEARING. One of the most prolific varieties, bearing an abundance of large, black sub-acid fruits; hardy.

PEACHES

4 to 6 feet, Each, 35c; per dozen, \$3.50.

CHAMPION. Creamy white with red cheeks, freestone, excellent quality; early in August.

CRAWFORD'S EARLY. Large, yellow, of good quality, freestone; early in September.

CRAWFORD'S LATE. Large, yellow with red cheeks, freestone; last of September.

ELBERTA. Large, yellow with red cheek, flesh yellow; firm, juicy, of high quality, very prolific; September.

HEATH CLING. Large, flesh white, juicy and melting; October.

MOUNTAIN ROSE. Large, handsome red cheek, flesh white, juicy; one of the best—August.

OLD MIXON CLING. Large, yellow with red cheek; September.

OLD MIXON FREE. Large, yellow with red cheek; September.

MARION HAYWARD. This new peach embraces enough desirable qualities to make it the peer of all peaches introduced in the last few years; flesh yellow, slightly streaked with red, flavor pleasant and rich, freestone, August and September. By special arrangement with the introducer we are now able to offer strong, thrifty trees at prices within reach of all.

Each, 50c; per dozen, \$5.00.

PEARS

STANDARD AND DWARF

6 to 7 feet, first-class, Each, 60c; per dozen, \$6.00.

BARTLETT. Large, clear yellow, juicy; August.

FLEMISH BEAUTY. Large, juicy, rich and fine; September to October.

KIEFFER'S HYBRID. Large, rich color and good quality.

LAWRENCE. Yellow, thickly dotted, fine flavor.

SECKEL. Small, yellowish brown, one of the best.

PLUMS

STANDARD ON PLUM STOCKS

5 to 7 feet, Each, 60c; per dozen, \$6.00.

ABUNDANCE. Large, yellow with heavy bloom, good quality, very prolific.

BURBANK. The largest and best variety; color red; excellent quality; hardy and vigorous grower.

DAMSON. Small, oval fruit, purple, hardy, productive.

GREEN GAGE. Small, delicious, very prolific, fine quality.

PURPLE EGG. Rich purple, fine flavor; best market variety.

RED JUNE. Large, red, fine quality; strong, vigorous grower. Finest, extra early plum.

WILD GOOSE. Medium, purple, flesh juicy and sweet.

QUINCES

4 to 5 feet, Each, 60c; per dozen, \$6.00.

MEECH'S PROLIFIC. Fruit bright yellow; flesh very fragrant and tender; October.

ORANGE. Large bright golden yellow, fine quality

We do not guarantee or replace Trees or Shrubs at prices quoted.

Marion Hayward Peaches

APPLES, STANDARD

3 years old, 5 to 7 feet high. Each, 40c; per dozen, \$4.00.

SUMMER VARIETIES

EARLY HARVEST. Pale yellow, fine; August.

RED ASTRACHAN. Large, crimson, juicy, with rich sub-acid flavor; hardy; July.

SUMMER RAMBO. Green, striped red, sub-acid.

YELLOW TRANSPARENT. Pale yellow, good quality.

AUTUMN VARIETIES

DELICIOUS. Large, dark red, juicy, aromatic.

MAIDEN'S BLUSH. Large, beautiful, blush cheek.

RAMBO. Yellow, streaked with red; October to December.

WINTER VARIETIES

BANANA. Large, golden yellow, shaded crimson.

BALDWIN. Large, dark red, productive.

GRIMES GOLDEN. Medium to large, skin golden yellow.

JONATHAN. Medium, red and yellow, flesh tender; juicy.

NORTHERN SPY. Large, striped red; good keeper.

ROME BEAUTY. Large, yellow shaded red; tender.

WINE SAP. Medium, deep red, sub-acid.

YORK IMPERIAL. Medium, yellow shaded red; firm, juicy.

CRAB APPLES

5 to 7 feet, Each, 40c; per dozen, \$4.00.

HEWES CRAB FOR CIDER. Best cider crab grown.

YELLOW SIBERIAN. Amber, with red blush.

HYLOP. Deep crimson, very popular.

TRANSCENDENT. Skin yellow, striped with red.

CHERRIES

HEART AND BIGARREAU (Sweet)

5 to 7 feet, first-class, Each 60c; per dozen, \$6.00.

BLACK TARTARIAN. Very large, purplish black, juicy, rich, excellent, productive; last of June.

GOVERNOR WOOD. Large, light red, juicy, rich, delicious. Tree healthy and productive; June.

NAPOLEON. Large, pale yellow, firm, juicy.

ROCKPORT BIGARREAU. Large, yellow, juicy.

YELLOW SPANISH. Large, pale yellow with light red cheek; late June.

DUKE AND MORELLO (Sour)

4 to 6 feet, first-class, Each, 50c; per dozen, \$5.00.

DYEHOUSE. Ripens a week before Early Richmond; fine quality; June.

EARLY RICHMOND. Medium, dark red, fine.

ENGLISH MORELLO. Dark red, rich acid, juicy.

MAY DUKE. Large, red, an excellent variety.

SMALL FRUITS, GRAPE VINES, ETC.

By Express or Freight at Expense of Purchaser.

Impossible to Accept Orders for Small Fruits Totaling Less than One Dollar.

BLACKBERRIES

Per dozen, 50c; per 100, \$3.50

Ancient Briton. Large berries of fine quality.
Blower. Large berries. Very productive.
Early Harvest. Fruit, medium size. The first to ripen.
Eldorado. Large fruit, fine quality, good keeper.
Mersereau. Berries large; good keeper and shipper.
Rathbun. Fruit, very large, sweet and luscious.
Snyder. Medium size; sweet and juicy.
Taylor. Medium size fruit of fine flavor; ripens late.
Ward. Fine, large fruit of excellent quality, hardy.

CURRANTS

Two-Year-Old Plants

Cherry. Deep red.....Each, 10c; per dozen, \$1.00.
Black Prolific. Favorite sort for preserving.
 Each, 15c; per dozen, \$1.25.
Perfection. A new red variety combining size, color,
 high quality and productiveness.
 Each, 20c; per dozen, \$2.00.
White Grape. Best white. Each, 15c; per dozen, \$1.50.

DEWBERRY

Lucretia. One of the low-growing, trailing blackberries.
 It has proved highly satisfactory wherever tried, and
 many say it is the best of all the blackberry family.
 Per dozen, 50c; per 100, \$3.00.

GOOSEBERRIES

Downing. Large, pale green and of splendid quality for
 both cooking and table use.
 Each, 20c; per dozen, \$2.00.
Houghton's. Small to medium; roundish oval, pale red,
 sweet, tender.....Each, 15c; per dozen, \$1.50.
Industry. Berries large, dark red color when ripe.
 Each, 25c; per dozen, \$2.50.
Smith's Improved. Large, pale greenish yellow, skin
 thin, of excellent quality. Each, 25c; per dozen, \$2.50.

RASPBERRIES

St. Regis. It is wonderfully prolific; the first or main crop
 being far greater than that of any other red variety
 known. It fruits on the old canes in generous quanti-
 ties until late in August. By that date, berries begin
 to ripen upon the young canes, which continue to pro-
 duce berries in increasing numbers until severe frost.
 The berries are a bright crimson, of large size and sur-
 passing quality—rich, sugary with full raspberry flavor.
 They are of exceedingly meaty, firm texture and keep in
 good condition longer after being gathered, than any
 other red raspberry....Each, 10c; per dozen, \$1.00.

The following varieties are all, per doz. 50c
 per 100, \$2.50

Cumberland. The largest black cap.
Cuthbert. Large, firm, deep rich crimson.
Gregg. A large black variety, fruit firm.
Kansas. The hardest black cap; strong, vigorous.

STRAWBERRIES

Dip the plants in water as soon as received, and
 bury the roots in moist, shady ground till you are
 ready to set them out.

Superb. The Ever-bearing Strawberry—Superb is a truly
 wonderful, fall-bearing variety, and what makes it un-
 usually profitable is the fact that it also produces a
 heavy yield of choice fruit in the early Summer, along
 with the standard varieties. They continue to give
 large yields of choice berries throughout August, Sep-
 tember and in October up to the time the ground is
 slightly frozen. Plants of this variety which are set
 in the Spring should have the blossoms removed until
 the first of July. The remainder of the blossoms may
 be left to develop into berries, and a good crop of fruit
 will thus be secured the same season the plants are set
 without injury to the plants.

Per dozen 50c; per 100, \$2.50.

The following varieties are all, per dozen 50c;
 per 100, \$1.00; per 1000, \$7.50

Gandy. One of the best late varieties. Berries large, of
 fine form and excellent quality.
Glen Mary. Large to very large, sometimes flattened;
 sweet, rich, delightful.
Nick Ohmer. A fine, fancy market berry and always
 superb for the table. A giant in size.
Senator Dunlap. Exceedingly vigorous. Fruit large,
 regular and attractive in form, deep red to the center.
 Firm in substance.
Wm. Belt. Berries very large, conical, bright red; of good
 flavor. The plant is strong, healthy, very fruitful.
 Season, medium to late.

SELECT GRAPES

ALL TWO-YEAR OLD SELECTED STOCK

Black or Purple Grapes

***Concord.** Large, black grape, hardy and productive; juicy
 and sweet.....Each, 15c; per dozen, \$1.50.

***Ives' Seedling.** Dark purple,
 sweet.

Each, 15c; per dozen, \$1.50.

Moore's Early. Ripens ten
 days earlier than Concord;
 bunch and berry round and
 large.

Each, 20c; per dozen, \$2.00.

Red Grapes

***Catawba.** Berries large,
 round; when ripe a dark cop-
 per color; sweet, rich.

Each, 15c; per dozen, \$1.50.

Delaware. Small, light red,
 thin skin; very juicy, sweet,
 sprightly.

Each, 20c; per dozen, \$2.00.

White or Yellow Grapes

Niagara. Bunches very large
 and compact; berries large,
 light greenish white, slightly
 ambered in the sun.

Each, 15c; per dozen, \$1.50.

Pocklington. Bunch and berry
 very large; attractive golden
 yellow color.

Each, 20c; per dozen, \$2.00.

Varieties marked with a (*)
 are best for arbors.

McCullough's High Grade Fertilizers

All Fertilizers Delivered Free on Board Cincinnati. Prices Subject to Change Without Notice.

THE benefits arising from the use of Commercial Fertilizers are too well known, and their value too well established, to require any argument or explanation. Soils that have been almost entirely exhausted by successive croppings have, by their use, been restored to their former utility; in fact, bring larger crops than when the soil is new. The elements of fertility in commercial fertilizers may be briefly stated as follows:

Nitrogen (of which Ammonia is the equivalent term), produces leaves and stalks and gives vigor to the plant.

Phosphoric Acid develops root system, hastens maturity and gives strength and productive power to the plant.

Potash stiffens straw and stalk, promotes cellular growth and aids in starch formation.

It is impossible to produce large yields or good quality, if any of these elements of fertility are lacking.

HOW TO APPLY COMMERCIAL FERTILIZERS

For Cereals: Apply 200 to 500 lbs. per acre.
For Vegetables and Fruits: Apply 500 to 1,000 lbs. per acre.

For Meadows and Alfalfa: Apply 300 to 500 lbs. per acre at seeding time or as a top dressing.

For Corn: Drill 200 to 400 lbs. per acre all over the field before planting. Then apply 100 to 125 lbs. per acre along the row, (not in the hill) at planting.

If your land is sour, we recommend sweetening with lime some weeks before applying fertilizers.

SHEEP MANURE—Pulverized

THIS is a natural manure; excellent for mixing with the soil. Strewn over and dug into the vegetable garden or placed directly in drills or hills, it promotes a rapid, steady growth. Especially valuable for lawns, contains all the constituents for promoting a quick, luxuriant growth and a rich green color. Use at the rate of from 500 to 600 pounds per acre. For pot plants, mix one part of sheep manure to six parts of soil. For use in the vegetable garden, spread over the surface and dig in. Being soluble, it readily makes a safe liquid manure—one pound to five gallons of water can be used. 1 lb. carton, 10c; 5 lbs., 25c; 12 lbs., 50c; 25 lbs., \$1.00; 50 lbs., \$1.50; 100 lbs., \$2.25.

THE GRASS AND GARDEN TONIC

THIS lime is specially prepared for use on soil, as it is essentially a plant food, useful for correcting acid soils, also for binding sandy soils and loosening clay soils. Should be applied at the rate of 1,000 to 2,000 lbs. per acre for sandy soils and 2,000 to 3,000 lbs. per acre for clay soils, a few weeks before applying Commercial Fertilizers.

Evr Green will renovate old lawns and cure the acidity of the soil.

If the ground is covered with moss and the grass seems sour and unsightly, sprinkle **Evr Green** freely over the surface and watch the satisfying results.

It is a well-known fact that 90% of the lawns need **Evr Green**, which can be applied at any time with good results.

For renewing old lawns it is unequalled; rake the lawn thoroughly, sow your grass seed, then sprinkle thoroughly with **Evr Green** at the rate of 100 lbs. for each four hundred square feet.

To make a new lawn; after all grading is done and every stone and stick removed, cover with a generous coating of **Evr Green** as indicated above, which should be raked into the soil, then sow the seed and rake in well, after which it should receive a good rolling to bring the seed into close contact with the soil and conserve the moisture.

Evr Green is 99% pure, and contains 96% lime, some phosphorus and is guaranteed not to burn the sod.

Evr Green is packed in 50 lb. sacks, just the proper size for an ordinary sized **War Garden** and should be used by all Amateurs, as it has for sometime been used by professional Market Gardeners and Planters.

Per bag of 50 lbs., 65c; 2 bags (100 lbs.), \$1.25; 5 bags (250 lbs.), \$3.00; 10 bags (500 lbs.), \$5.00.

DESTROYS SOIL ACIDITY—LOOSENS UP CLAY SOILS—TIGHTENS UP SANDY SOILS

PUTS soils in better mechanical condition and therefore aids in the development of beneficial Soil Bacteria, which acts as a plant food for Leguminous Crops, such as Alfalfa, Sweet Clover, Red and Crimson Clovers, Soy Beans, Garden Beans and Peas, Cow Peas, Vetches, etc. Apply at the rate of 2,000 to 4,000 lbs. per acre, and may be applied at any season of the year.

Evr Sweet contains 87.97% Calcium Carbonate and 7.65% Magnesium Carbonate.

Evr Sweet is packed in 100 lb. bags.

Per bag of 100 lbs., \$1.00; 10 bags (1,000 lbs.), \$6.50.

PURE BONE MEAL

THIS pulverized ground bone is excellent for rose culture and lawns. It decomposes rapidly and is quickly effective. Should be applied at the rate of 400 to 500 lbs. per acre. Analysis: Ammonia, 2%; total phos. acid, 27%.

1 lb., 10c; 5 lbs., 30c; 10 lbs., 50c; 25 lbs., \$1.15; 50 lbs., \$2.00; per bag of 125 lbs., \$3.75.

AMMONIATED PHOSPHATE

A desirable fertilizer for all kinds of Garden Vegetables, Sugar Corn, etc. Should be applied at the rate of 400 to 500 lbs. per acre. Analysis: Ammonia 2%; Available Phosphoric Acid 12%.

5 lbs., 30c; 10 lbs., 50c; 25 lbs., \$1.00; 50 lbs., \$1.90; per bag of 125 lbs., \$3.50.

HALF AND HALF

IS especially valuable for Field Crops, Potatoes and Grain. Should be applied at the rate of 400 to 500 lbs. per acre.

Analysis: Ammonia, 2%; total phos. acid, 16%; potash K₂O, 1%.

5 lbs., 30c; 10 lbs., 50c; 25 lbs., \$1.00; 50 lbs., \$1.90; per bag of 125 lbs., \$3.50.

ACID PHOSPHATE 16%

SOME soils contain a large percentage of Nitrogen and some Potash, but still are deficient in Phosphoric Acid.

This must be supplied for the purpose of producing a balanced combination of fertilizer elements, by the application of 16% Acid Phosphate which produces a beneficial effect by supplying the proper proportion of Phosphoric Acid. Apply from 200 to 400 lbs. per acre. Analysis: Available phos. acid, 16%; insoluble, 1%.

5 lbs., 25c; 10 lbs., 40c; 25 lbs., 90c; 50 lbs., \$1.50; per bag of 125 lbs., \$2.75.

DRIED BLOOD MEAL

THIS is a splendid fertilizer for roses, carnations, chrysanthemums, etc., as well as for pot plants. Can be mixed with the soil or applied in liquid form.

1 lb., 15c; 3 lbs., 35c; 25 lbs., \$2.25; 50 lbs., \$4.05; 100 lbs., \$7.65.

LAND PLASTER

IF applied as a top dressing for grass or clover crops in the Spring, it greatly increases the growth and yield of same; sprinkled in stables, poultry houses and on manure piles it will prevent ammonia from vaporizing, thereby greatly increasing the value of farm manure. 200 lb. bag, \$2.00.

EXCELSIOR PLANT FOOD

For Ferns and Other House Plants

AN odorless preparation, combining in a concentrated and soluble form every element required in plants and flowers to produce vigorous growth and a profusion of flowers. It is immediately soluble in water, and available to plant life from the moment of application. Small package, 10c; medium size package, 20c; large package, 35c.

Write for Special Prices on Lots of 500 lbs. or Over.

FERTILIZERS—Continued

Prepared Humus

THIS article is prepared from deposits of decayed vegetable matter. It has been successfully used for years and has proven to be worthy of extensive use. It is desirable for greenhouse and flower garden work, also for lawns and vegetables.

Humus in some form is the most essential element of plant life. It is rich in ammonia, phosphoric acid, potash and lime.

For pot plants, mix about one-third humus with two-thirds regular potting soil.

For lawns and greenhouse benches, it is applied as a top dressing from one-half to one inch in depth, which should be then worked in.

If grass seed is to be sown, then is the time to apply it and on golf links it is used in a similar way.

For flower and vegetable garden, apply at the rate of one-half to two inches deep and fork in well in the soil, or apply it in trenches the same as you would well rotted manure.

The prepared Humus is dry, thoroughly pulverized, odorless and clean to handle and apply and absolutely free from weed growth.

The following quantities are required to effectively cover an acre. If applied $\frac{1}{2}$ -inch in thickness, thirty tons per acre; if 1-inch thick, sixty tons per acre, and for general lawn work as a top dressing, one hundred pounds will effectively treat about 800 square feet, or three tons per acre.

PRICE—6 lbs., 25c; 25 lbs., 65c; 50 lbs., \$1.00; 100 lbs., \$1.50; 500 lbs., \$6.00; 1,000 lbs., \$10.00; 2,000 lbs., \$17.00.

Nitrate of Soda

CONTAINS about 16% nitrogen, equal to 20% ammonia. We recommend it as the cheapest and best form in which to apply nitrogen to plants

How to use Nitrate of Soda

REMOVE the lumps before using and break them up, which can be done by pounding. Use a top dressing at the rate of 100 lbs. per acre on the following vegetables, when plants are well established: **Beets, Cabbage, Cauliflower, Cucumber, Egg Plant, Lettuce, Spinach, Onions, Celery.** For **Asparagus**, a top dressing of 250 lbs., per acre just as soon as the first shoots make their appearance. For **Strawberries**, a top dressing of about 100 lbs. per acre after the plants have blossomed. For the Home Garden, apply a solution one ounce to two gallons of water. 1 lb., 15c; 2 lbs., 25c; 10 lbs., \$1.15; 25 lbs., \$2.25; 50 lbs., \$4.00; 100 lbs., \$7.50.

Moss, Peat, Etc.

Moss, Green Sheet. For hanging baskets, etc. Per bale, 40c; bundle of five bales, \$1.50.

Moss, Sphagnum. For packing plants and growing orchids, etc. 1 lb., 10c; 3 lbs., 25c; 7 lbs., 50c.

Peat, Jersey. Per bushel, \$1.25; per bag of two measured bushels, \$2.00.

Potting Soil. Peck, 25c; per bushel, 75c.

INSECTICIDES AND FUNGICIDES

Liquid Insecticides and Poisons cannot be sent by mail

Insecticides and Their Uses

THE loss and damage sustained last season on account of the ravages of Insects prompts us to call attention to the fact that there are three distinct purposes for which spraying must be done.

Leaf-eating Insects can only be destroyed by eating poisonous Insecticides. Sucking Insects, such as the San Jose Scale, Oyster Shell Scale, Aphids, etc., must be destroyed with a solution sufficiently strong to kill by contact, while Blight and Fungus diseases can only be controlled by solutions compounded for that purpose.

In the following list we have endeavored to specify the particular use of each insecticide, as well as to give a brief description of each dilution.

Sterlingworth Ant-i-cide

A DRY powder for sprinkling. Useful against ants in lawns, gardens, etc. One pound covers 200 sq. ft. 1 lb. spr. box, 25c.

Aphine

KILLS plant lice such as Green, Black and White Fly, Red Spider, Thrip, Mealy Bug, White and Brown Scale.

This is a contact remedy and to be effective the spray must reach the insects. To destroy Green or Black Fly, Red Spider and Mealy Bug, use one part Aphine to 35 or 40 parts of water. For White Fly, Thrip, White and Brown Scale, use one part Aphine to 20 or 25 parts of water. $\frac{1}{4}$ lb. pkg., 25c; $\frac{1}{2}$ pt., 40c; qt., 65c; gal., \$1.00; gal., \$2.50.

Arsenate of Lead (Dry Powdered)

IT cannot dry out or deteriorate in any way, even if carried over indefinitely, does not contain 50 per cent of water on which freight must be paid, and in short, represents the ideal Arsenate of Lead.

For Potatoes use 2 to 3 pounds to 50 gallons of water; applying 50 gallons or more per acre. For all other purposes use 1 to 1 $\frac{1}{2}$ pounds to 50 gallons of water, or one teaspoonful to 1 gallon of water. It is best to reduce to a thin paste by mixing with a small amount of water, before putting into spray tank. On tender foliaged Trees and Plants add about two pounds of lime to each 50 gallons spray liquid. $\frac{1}{2}$ lb. pkg., 35c; 1 lb. pkg., 60c; 5 lb. pkg., \$2.50; 10 lb. pkg., \$4.50.

Arsenate of Lead (Paste)

THE most effective poisonous Insecticide for leaf-eating insects. It will not scorch, burn nor injure the most delicate foliage, but at the same time kills all kinds of leaf and fruit-eating insects.

For Potatoes use 4 to 6 pounds to 50 gallons of water, applying 50 gallons or more per acre. For all other purposes use 2 to 3 pounds to 50 gallons of water. Mix with the required amount, enough water to make a thin paste before putting into the spray tank. On tender foliaged Trees and Plants add about two pounds of lime to each 50 gallons of spray liquid. 1 lb. can, 35c; 5 lbs., \$1.50; 10 lbs., \$2.50; 20 lbs., \$4.50; 50 lbs., \$11.00; 100 lbs., \$20.00.

"Black Leaf 40"

IT is a concentrated solution of nicotine sulphate, guaranteed to contain not less than 40 per cent of nicotine by weight. Soft-bodied sucking insects may be effectively controlled by spraying with "Black Leaf 40."

For Aphids indoors use $\frac{1}{4}$ pint "BLACK LEAF 40" to 100 gallons of water or 1 teaspoonful to 1 gallon of water. For outside use apply solution double strength. Several formulas for destroying other sucking insects on each package. This is also a contact remedy. 1 oz. bottle, 25c; $\frac{1}{2}$ lb. tin, 75c; 2 lb. tin, \$2.50; 10 lb. tin, \$10.75.

Bordeaux Lead Arsenate Mixture

(Paste)

AN Insecticide and Fungicide combined in one very effective product. Sticks well to the foliage.

Use in the proportion of 5 to 10 lbs. to 50 gallons of water. Weigh the exact amount, place in a pail with water and mix; pour into the sprayer tank and add the necessary water. Agitate thoroughly. 1 lb. can, 35c; 5 lbs., \$1.25; 10 lbs., \$2.50; 25 lbs., \$5.00.

Bordeaux Mixture (Paste)

A FUNGICIDE for curing and preventing black rot, mildew, blight, leaf curl, scab, or other fungoid diseases on fruits and plants, ready for use by simply adding water.

Use in the proportion of 8 to 10 lbs. to 50 gallons of water. Do not use on Peach, Japanese Plum or other tender foliaged plants unless diluted to one-half strength. 1 lb., 30c; 5 lbs., \$1.25; 10 lbs., \$2.00; 20 lbs., \$3.50; 50 lbs., \$8.00; 100 lbs., \$15.00.

Bordeaux Mixture (Dry Powdered)

MANUFACTURED by a new process and will not dry out or deteriorate. Quantity to be used not over one-third the amount used in Bordeaux Paste Mixture.

Mix with the required amount enough water to make a thin paste before putting into the spray tank.

Do not use on Peach, Japanese Plum or other tender foliaged plants, unless diluted to one-half strength. 1 lb. can, 40c; 5 lbs., \$1.50; 10 lbs., \$2.50.

Bug Death

ESPECIALLY valuable for Cucumbers, Egg Plants, Melons, Rose Bushes, Currants and Potatoes. It drives ants from lawns, and won't injure the grass.

Apply with powder bellows and dust Bug Death evenly over the plant. The best time for applying dry is early in the morning while the plant is wet with dew, as the powder will adhere more readily. Bug Death will not injure any Plant, Tree or Vine. 1 lb., 20c; 3 lbs., 40c; 5 lbs., 60c; 12 $\frac{1}{2}$ lbs., \$1.25.

Contact Remedies to be Effective Must Reach the Insects.

INSECTICIDES AND FUNGICIDES—Continued

Cutworm Food

THE worm seeks the Food in preference to the plant. For plants transplanted from indoors, apply an even teaspoonful around each plant as soon as set out. Do not mix food with the soil.

For out-door grown stock, sprinkle the food one-fourth inch thick around the plants as soon as they are well through the ground.

One pound will protect 75 to 100 plants. 1 lb., 25c; 5 lbs., \$1.00; 10 lbs., \$1.50.

Fish Oil Soap

FOR destroying scale insects on Plants, Trees, Vines, etc., for washing down the bark of Trees, Grape Vines, etc.

Dissolve one pound in one gallon of hot water, then add 9 to 10 gallons of cold water; for trunks and branches of trees use a thicker solution and apply with a brush. This is also a contact remedy. 1 lb., 20c; 5 lbs., 90c; in bulk, 25 lbs. or over, per lb., 14c.

Fungine

A REMEDY for mildew, rust and other fungous diseases.

For Powdery Mildew apply as a spray using one part Fungine to fifty parts water. As a preventative for certain species of rust, use one part Fungine to thirty-five to forty parts water. ½ pt., 40c; 1 pt., 65c; 1 qt., \$1.00; 1 gal., \$3.50.

Grape Dust

A NON-POISONOUS powder for the remedy and control of mildew and rot on Grapes, Goose-berries, Roses, etc.

Apply with powder bellows and dust evenly over plants. 1 lb., 20c; 5 lbs., 75c; 10 lbs., \$1.40.

Hellebore Powder

FOR destruction of Slugs, Worms, Caterpillars, etc. Apply with powder bellows and dust evenly over plants, early in the morning while plants are wet with dew. ¼ lb., 20c; ½ lb., 30c; 1 lb., 50c; 5 lbs., \$2.25.

Insect Powder

FOR Worms, Flies, Aphids, and almost all kinds of insects. ¼ lb., 30c; 1 lb., \$1.00.

Lemon Oil Co.'s

Standard Insecticide

FOR all insects and soft scales. One of the best known Insecticides, and having a pleasant odor, is highly recommended for house plants.

Will be found very effective mixed with water in the proportion of ½ pt. Lemon Oil to 4 to 6 quarts of water, some discretion should be used whenever it is necessary to make the solution stronger or weaker as required. ½ pt., 30c; 1 pt., 50c; 1 qt., 90c; ½ gal., \$1.50.

Lime-Sulphur Solution

FOR Fall, Winter and early Spring spray. Destroys San Jose Scale, Peach Leaf Curl, Bud Moth, Apple Aphids, Blister Mite, any Scale Insects or Bark Lice. 1 gallon will make 12 gallons spraying liquid. 1 qt., 35c; ½ gal., 60c; 1 gal., 75c; 5 gals., \$2.75; ½ bbl., (25 gals.) \$6.50; 1 bbl., (50 gals.) \$11.00.

S. W. Dry Lime-Sulphur

IS a combination of Lime and Sulphur which can be used not only as a dormant spray but also as a summer spray in combination with Arsenate of Lead. The so-called soluble compounds are unstable and when combined with Arsenate of Lead, in a summer spray, burning invariably results.

Our Dry Lime-Sulphur has been tested by experimental Stations and found to be infinitely superior to the present dry compounds on the market, not only in safety but in effectiveness.

From 10 to 12 pounds of S. W. Dry Powered Lime-Sulphur should be used with 50 gallons of water, for a dormant spray. From 2 to 3 pounds to 50 gallons of water in combination with 1 ½ pounds of Dry Powered Arsenate of Lead or Paste Arsenate of Lead should be used for summer spraying on all seed fruits such as Apples, Pears and Quinces, and half this strength on all stonefruits. 1 lb. can, 25c; 5 lb. can, \$1.00; 10 lb. can, \$1.75; 25 lb. can, \$3.50; 50 lb. can, \$6.00.

Nico-Fume Liquid

FOR destroying Aphids, Thrip and Red Spider. Contains 40 per cent nicotine.

Use one to two teaspoonful of Liquid to each gallon of water. This is a contact remedy. ¼ lb., 50c; 1 lb., \$1.50; 4 lbs., \$5.50; 8 lbs., \$10.50.

Nico-Fume Paper

STRIPS of paper strongly saturated with Nicotine. These, when suspended and lighted, make one of the best and simplest methods of fumigating greenhouses. Use 4 to 6 sheets for ordinary house 100 feet long by 20 feet wide. Price, air-tight cans, 24 sheets, 85c; 144 sheets, \$4.00; 288 sheets, \$7.50.

Paris Green

A POISONOUS Insecticide in powder form for insects which chew. Largely used on Potatoes and Tobacco. Can be used as a spray or dry and applied with Dry Powder Dusters.

When used as a spray, dilute one pound Paris Green in 150 to 300 gallons of water. When used on Fruit Trees add two pounds lime. ¼ lb., 20c; 1 lb., 70c; 5 lbs., \$3.25.

Scale Destroyer, Target Brand

THIS preparation is a soluble, mineral oil, designed especially for destroying and preventing San Jose Scale. It is absolutely harmless to the most tender growth, and is instantly soluble in cold water.

One Gallon Target Brand Scale Destroyer makes Twenty Gallons Dilution, ready to apply. 1 qt., 50c; 1 gal., \$1.10; 5 gals., \$4.50; 30 gals., \$20.00; 50 gals., \$30.00.

Slug Shot

A NON-POISONOUS powder and a popular Insecticide. Very effective in destroying Caterpillars, Currant, Gooseberry and Cabbage Worms, Potato, Melon, Squash and Cucumber Bugs, Rose Slugs, Rose Lice, etc. When used on Melon, Squash and Cucumber Vines should be put on lightly. 1 lb. carton, 20c; 5 lbs., 50c; 10 lbs., 90c.

Sulfatine

A LIQUID weed killer. Kills weeds and coarse grasses in Roads, Walks, Railroad Tracks, Streets, Fence Rows and Corners, Ditchbanks, Meadows, Tennis Courts, Pavements, Vacant Lots, etc.

For Annual Weeds, use one gallon in 120 to 130 gallons of water. For Plantain and other Perennial Weeds use one gallon in 60 to 70 gallons of water.

For Roads, Walks, Tracks, etc., use one gallon in 20 to 30 gallons of water. 1 qt., 40c; 1 gal., \$1.00.

Sulphur, Powdered

USUED principally to prevent and cure mildew on Roses and Plants in greenhouses. 1 lb., 15c; 2 lbs., 25c; 5 lbs., 50c; 10 lbs., 90c.

Sulpho-Tobacco Soap

DESTROYS Black and Green Aphids, Mealy Bug, Red Spider, etc., on Plants, Shrubs and Trees; and for Lice, Fleas and other parasites on domestic animals.

For plants, shrubs and trees, dissolve two ounces in one gallon of hot water. Apply when cool. This is a contact remedy.

For use on animals, dissolve two ounces in from one to two gallons of hot water, and apply while warm, with a stiff brush. 3 oz. cake, 10c; (by mail 15c); 8 oz. cake, 20c; (by mail 25c.)

Tobacco Dust

A SURE remedy for Green Fly, Aphids, Fleas, Beetles, etc. 1 lb., 10c; 4 lbs., 25c; 10 lbs., 50c; 100 lbs., \$3.00.

TOBACCO DUST FOR FUMIGATING. 1 lb., 10c; 3 lbs., 25c; 10 lbs., 60c; 25 lbs., \$1.25; 100 lbs., \$4.00.

Tobacco Stems

USUED for fumigating plants to kill insects, and as a mulch for Roses, Asters, Lettuce, etc. 1 lb., 5c; bale of about 125 lbs., \$2.00.

Tree Tanglefoot

FOR protecting trees against climbing insect pests in a simple, economical and effective way; put a band of Tree Tanglefoot, from 3 to 5 inches wide completely around the tree. A perfect safeguard against Gypsy, Brown-tail and Tussock Moth, Canker Worms and Ants, and other creeping insects.

1 lb., 50c; 3 lbs., \$1.45; 10 lbs., \$4.50; 20 lbs., \$8.75.

Weed Killer, Target Brand

A HIGHLY concentrated solution which dilutes one part to 50 parts of water. It is effective within 12 hours after application and one application will keep paths and roadways free from weeds for an entire season. 1 qt., 65c; 1 gal., \$1.75; 5 gals., \$7.00.

Spraying Pumps and Appliances

SPRAYING is of such importance that the Experiment Stations all over this country have given much of their attention to it, and their findings have been of incalculable value. Diseases and insects can no longer exist if the proper Insecticide is applied through the medium of an up-to-date spray apparatus.

PARAGON SPRAYERS

No. 1 PARAGON

THESE Sprayers are strongly constructed and can be easily operated by one man. They can be brought in close proximity to the work, thereby eliminating the use of a long, expensive hose. Our patented, self-cleaning strainer prevents the necessity of first straining the liquid to be sprayed. The agitator also keeps the liquid thoroughly stirred.

The spray nozzle has only $\frac{1}{2}$ -inch outlet and spreads the liquid well, thereby covering a large surface with a small amount of liquid, making it a very economical sprayer.

All parts of the machine are made of the best material obtainable.

The reservoir is made of heavy galvanized iron. All essential fittings and valves are made of brass, making it strong and durable. The body of pump is cast iron, well ribbed to prevent breakage. The screen is of heavy perforated brass and will last many years. The pump frame can easily be removed from tank when it needs cleaning and by running water through machine after using, the entire machinery can be easily and thoroughly cleaned.

Suitable for spraying Insecticides and Fungicides on trees, shrubs and vines, as well as the application of Whitewash and Cold Water Paints.

Price List of Paragon Sprayers

- No. 0. Capacity, 3 gallons. Equipment, 4 feet 6-ply hose, 3 feet spray pipe, two spray nozzles. Price.....\$9.50
- No. 1. Capacity, 6 gallons. Equipment, 5 feet 6-ply hose, 5 feet spray pipe, two spray nozzles. Price.....\$12.00
- No. 3. Capacity, 12 gallons. Equipment, 10 feet 6-ply hose, 7 $\frac{1}{2}$ feet spray pipe, two spray nozzles. Mounted on strong steel truck and can easily be wheeled to any desired place. Truck is easily detached when desired. The cut of number three on next page, represents our most popular and best selling sprayer. Thousands are now in use and giving best of satisfaction. Price.....\$18.00
- This machine without truck. Price.....\$15.50
- No. 4. Capacity, 28 gallons. Equipment, 20 feet 6-ply hose, 10 feet spray pipe, two spray nozzles. This is a very convenient sprayer, mounted on two strong 30-inch wheels. Price....\$25.00
- This machine without wheels. Price.....20.00
- No. 5. Capacity, 50 gallons. Equipment, 25 feet 6-ply hose, 10 feet spray pipe, one 3-way spray nozzle, one single spray nozzle. This sprayer has solid cast brass pump and large air chamber. It is positively the very best hand power sprayer made for tree spraying. Price.....\$30.00
- Nos. 1 and 3 Sprayers can be furnished with solid all cast brass pumps for.....additional, \$4.00

Bamboo Brass Lined Spray Poles

- 12-foot lengths.....net price, \$4.00
- 10-foot lengths.....net price, 3.50
- 8-foot iron, wood-encased pipes . net price, 1.25

White Wash Formula

Take good, fresh, unslacked lime, cover well with water and leave it slack over night. Next day add water to thin. Also add five cents worth of ultra marine blue, (buy in paint store) and five cents worth of common salt to every twelve gallons. Add one-fourth pound dissolved ground glue to every two gallons. Dissolve glue in warm water. Mix and stir thoroughly.

When used with a Paragon Sprayer will save time, trouble and expense.

No. 0 PARAGON

PARAGON SPRAYERS

Continued

No. 3 PARAGON

Paragon
Sprayers
Do Not
Clog

No. 4 PARAGON

No. 5 PARAGON

MYER'S SPRAY PUMPS

MYER'S LEVER BUCKET BRASS SPRAY PUMP. It has all the advantages of the ordinary barrel pump and bucket pump combined. Is made of brass with ball valves; handle and foot rest are malleable iron. With agitator; complete with hose and graduating Vermorel fine, coarse spray and solid stream nozzle. \$6.00

MYER'S DEFIANCE BRASS SPRAY PUMP. With agitator; complete with hose and graduating Vermorel fine, coarse spray and solid stream nozzle. \$6.00

MYER'S LITTLE GIANT BRASS SPRAY PUMP. Is improved with a large air chamber. With agitator; complete with hose and Imperial combination, fine, coarse spray and solid stream nozzle, with malleable foot rest. \$4.50

MYER'S IMPROVED BRASS BARREL SPRAY PUMP. The pump sets inside the barrel. The working parts are entirely submerged, thereby avoiding all possibility of losing priming. Has bronze ball valves and brass seats; the plunger is brass, fitted with hemp packing. The cylinder and discharge pipe are all brass. The air chamber is 30 inches in length, enabling the pump to throw a uniform and constant spray. With fifteen feet of one half-inch discharge hose and Vermorel graduating nozzle. \$12.00

MYER'S O. K. BRASS SPRAY PUMP. Can be adjusted by clamps to fit any barrel. The cylinder is made of a solid brass tube with a closed end which passes through a circular hemp packing, which adapts it for pumping hot, cold or any other kind of mixture. The packing gland is adjusted by means of two heavy bolts with which all wear can readily be taken up. The valves can easily be taken out and repaired. The air chamber is made of 2 1/2 inch steel tube. The handle is wrought steel with adjustable stroke, so as to enable the operator to get up a pressure of 200 pounds or more, if necessary. It is fitted for one or two leads of discharge hose. Pump only, without hose or connections. \$18.00

Complete with one lead of fifteen feet discharge hose and graduating Vermorel nozzle. \$22.50

Complete with two leads of fifteen feet each discharge hose and graduating Vermorel Nozzles. \$25.00

Four-foot Pipe Extension. 40c

Myer's Power Nozzle. 85c

Bordeaux Nozzle. 85c

Imperial Nozzle. 50c

Graduating Vermorel Nozzle. 85c

Sprinkling Nozzle. 50c

AUTO SPRAY No. 5

THE pump is made entirely of brass. It has two ball valves so arranged that they may be instantly cleaned. The threads are all cut, not rolled, so that there is no chance for leakage. Pump is double acting and will generate a pressure of 180 lbs.

We furnish with this pump 3 1/2 ft. of 3/4 in. suction hose and a heavy strainer that keeps the hose from working out of a bucket or tank.

The extension is extra and is very useful for spraying field crops. The extension is curved so that the operator can direct the spray up or down while using the pump in a horizontal position. Extension can be used on any of the Auto-Sprayers.

Auto-Spray No. 5, pump, hose, nozzle and strainer, complete. \$5.00

Brass Extension, extra. 60c Elbow, extra. 25c

Gould's
Hand Sprayer

Lever Bucket Pump

GOULD'S "BORDEAUX" HAND SPRAYER

THE "Bordeaux" is a brass pump for garden or greenhouse work. It is fitted with brass ball-valves which are proof against the action of acids or oils. The discharge hose is attached to the pump by a brass coupling. No suction hose is needed, as the pump rests in the pail with the malleable iron foothold outside. Equipped with 3 feet of 3/4 inch discharge hose and "Seneca" nozzle, price. \$5.50

Auto Spray No. 1

SPRAYERS, POWDER DUSTERS, Etc.—Continued

AUTO COMPRESSED AIR SPRAY. Can be suspended from the shoulder, allowing the free use of the arms. A few strokes of plunger in air chamber will compress enough air to discharge the entire contents. A practical machine for potatoes, tobacco, small fruits, vineyards, poultry houses, green houses, etc. Extension pipes for spraying trees.

Auto Spray No. 1-B. Brass tank, with Auto-Pop Nozzle.....\$10.00
Auto Spray No. 1-D. Galvanized tank, with Auto-Pop Nozzle..... 6.75
Brass Extension. Two feet, per length..... .60
Elbow..... .25

BRANDT EASY SPRAYER. A compressed air sprayer made of Galvanized Steel. Holds one gallon. Is equipped with automatic shut-off nozzle and is found a very satisfactory sprayer where gardens are not too large. Price, each, \$2.50

THE ROBERTSON COMPRESSED AIR SPRAYER

Are easy to operate and do not require one-half the labor that it takes to work an ordinary sprayer. A woman or child can use them as well as a man. They give a continuous spray, reduce the liquid to a fine mist-like vapor and throw it with great force so that it is driven into the smallest cracks and crevices. By means of the universal nozzle the spray can be thrown on the under side of the leaves of plants and shrubs, the under side of beds and other furniture, into corners, behind doors, on top of mouldings, window casings, behind steam pipes, and other difficult places inaccessible with the ordinary sprayers. Capacity one quart. Tin Pump and Reservoir, each 75c. Brass Pump and Reservoir, Price, each, \$1.50

ACME CONTINUOUS ATOMIZER. Spray produced on both in and out stroke of the plunger. Twice the work with the same effort. No lost motions. No wasted time. Invaluable in potato fields, hen houses, stables, etc. Sprayer fitted with $\frac{1}{8}$ inch brass ball

ACME CYCLONE ATOMIZER. Well made of heavy bright tin plate. Tank 4 by 5 inches, air chamber 14½ inches long, 1¾ inches in diameter, fitted with coppered steel plunger rod, our

own special type. Neat funnel mouth on air tube for directing the spray, a desirable feature in spraying "Fly Repellent" on cattle, horses, etc. Capacity, 5 pints. Price, each 50c

ACME GLASS TANK ATOMIZER. Tank, standard quart Mason jar, air chamber 1¾ inches in diameter, 18½ inches long.

Plunger rod copper bessemer of our own special type. Will not corrode or rust, and if accidentally broken can be replaced at once with a Mason Fruit Jar. Price, each, 75c

MIDGET ATOMIZER.

A small, compact, substantial and very efficient Tin Sprayer. Tank, 3 inches in diameter, 3 inches deep.

Throws a fine, dense, uniform spray, and is an indispensable aid to the florist and housewife. Capacity, 1 pint.....Price, each 35c

ACME FOG ATOMIZER. Strong, durable and satisfactory. Price, each, 50c

Acme Powder Bellows

ACME POWDER BELLOWS. It requires no base of supplies; all you need carry is a can of dry Insecticide and bellows. Without stooping—the elbow does it—it applies any powdered poison on any plant in any desired quantity. The elbow may be detached, if desired. We also furnish a spreader for distributing the blast.....each, \$1.25

WOODASON'S POWDER BELLOWS.

Single cone; small, \$1.50. Single cone, large \$2.50

DICKEY BUG DEATH DUSTER. Practical and effective; for applying Bug Death Powder.....Price, each, 40c

LITTLE GIANT DRY POWDER DUSTER. For Farm, Garden, Vineyard, Tobacco Fields, etc. Machine weighs about six pounds; furnished with three tubes, five nozzles and strap. Distributes any dry powder.....Price, each, \$10.00

All Prices Subject to Market Changes.

Horticultural Tools and Sundries

BARROWS, GARDEN. No. 2, small.....\$4.25
 " " No. 3, medium.....5.00
 " " No. 4, large.....6.00
RAILROAD, patent wheel and bolted, 3.25

BASKETS, WIRE HANGING. 8-inch, 15c; 10-inch, 20c; 12-inch, 25c; 14-inch, 30c; 16-inch, 35c; 18-inch, 50c; 20-inch, 60c; 24-inch, 80c; 24-inch, \$1.00.

BELLOWS, ACME. Well made, with a solid hard wood head block, hard wood handles, best leather for the bellows, and extra elbow is furnished to tilt the funnel for getting under the leaves of plants and shrubs. Each.....\$1.25

BELLOWS, WOODASON'S, Single cone, small.....\$1.50
 Single cone, large.....2.50

BLUE GRASS STRIPPER.
 Each...\$1.75

CULTIVATOR, NORCROSS
CROSS
Hand Garden. The Prongs are square spring steel, bent corner wise with forged shovels at the ends. The Socket Frame and Clamping Bar are made of toughest malleable. Handle best grade of White Ash. Four feet long. Each...\$1.00

Norcross Cultivators

CANES. Six to nine feet long, for plant stakes:
 Per 100.....\$1.25

CANES. Japanese, green dyed, 3 feet long.
 Per 100.....\$1.25

CUTTER, TWO-KNIFE TONY. Can be regulated to cut in lengths from $\frac{3}{4}$ to $1\frac{1}{2}$ inches. Capacity, 75 to 100 bushels of cut hay per hour. Price.....\$14.00

DIBBLE

DIBBLE. Iron, with wood handles. For transplanting plants. Price.....50

EDGING KNIFE. For cutting edges of walks and beds.....75c

DANDELION EXTERMINATOR, LIGHTNING.

The only quick, sure and easy way to rid your lawn of dandelions and keep it free.

The Exterminator is charged with gasoline or kerosene and in operation cuts the weed and deposits a few drops of the liquid on the root at the same time. Weeds once properly treated with the Exterminator never grow again, the root being eaten up or rotted by the liquid in a few hours, while if cut with a knife in the ordinary way and not treated, its growth is stimulated, and it grows stronger than ever.....\$1.50

FORKS, DIGGING OR SPADING......\$1.50

FORKS, HAND-WEEDING.
 Small size, 25c; large size, 35c

FRUIT PICKER. Made of galvanized steel wire; attaches to pole of any length. Price, without pole.....40c

GARDEN LINE. About 150 feet.....75c

GLASS CUTTER, ECLIPSE. The best cheap cutter on the market. For all around usefulness we prefer it to a diamond. Each, 15c; per dozen.....\$1.50

GLAZING POINTS, PEELESS.
 Will stop your glass from sliding. Made of galvanized steel wire. No rights or lefts. Can be used on either side.

Per 1,000

No. 1. For small single-thick glass.....65c
 No. 2. For large single-thick glass.....65c
 No. 2 1/2. For double-thick glass.....65c
PINCERS. For driving the points.....50c

GLAZING POINTS, ZINC CITY. Are positively the best; last forever; a sure preventative of glass slipping. Effective on large or small glass; easy to drive, easy to extract. Per lb.....50c

Grass Hook

GRASS HOOKS. American, Woods Perfect.....50c

GRASS HOOKS. English, riveted back.....60c

GRASS SHEARS. American.....60c

GRASS SHEARS. Imported.....\$1.25

GUNS, INSECT POWDER. CYCLONE.....15c

GUNS, INSECT POWDER. JUMBO.....30c

HEDGE SHEARS. English, 5 in. \$1.50; 8 in. \$2.50; 9 in. \$2.75.

HOES, ENGLISH SCUFFLE OR PUSH. Imported, six inches, without handle.....75c

HOES, STANDARD SOCKET GARDEN......75c

" **LADIES' LIGHT GARDEN.**.....50c

" **ONION.** One end square; opposite end one prong.....35c

" **ONION.** One end square; opposite end two prongs.....40c

" **GRUBBING.** With handle.....80c

" **SANDUSKY.**.....75c

HOSE, RUBBER. (See Lawn Requisites.)

KNIVES, PRUNING......75c to \$1.50

" **BUDDING.**.....75c to 1.50

" **ASPARAGUS.** American.....35

LABELS, WOOD. For pots, painted.

4 x $\frac{3}{8}$ -inch, per 100, 15c; per 1,000.....1.10

5 x $\frac{3}{8}$ -inch, per 100, 20c; per 1,000.....1.35

6 x $\frac{3}{8}$ -inch, per 100, 25c; per 1,000.....1.75

8 x $\frac{3}{8}$ -inch, per 100, 35c; per 1,000.....2.75

10 x $\frac{3}{8}$ -inch, per 100, 50c; per 1,000.....4.50

12 x $1\frac{1}{2}$ -inch, per 100, 90c; per 1,000.....8.00

LABELS. Tree, notched, copper wired:

Per 100, 25c; per 1,000.....1.75

LABELS. Tree, copper, No. 1, per 100.....1.50

" " " No. 2, per 100.....2.00

LAMP, DEFIANCE FUMIGATING. (For use in greenhouses.) It burns kerosene. It is made of heavy tin throughout. The oil fount is drawn in one piece so it cannot leak. The cup that holds the Nico-Fume (or similar preparation) is also drawn in one piece and cannot leak. No glass about the lamp to be broken. Used by prominent Market Gardeners all over the country. Each, 50c; per dozen.....\$5.00

Edging Knife

HORTICULTURAL TOOLS AND SUNDRIES—Continued

LAWN ROLLERS, LAWN MOWERS, ETC.

See pages 131-132.

Mastica Machine

MASTICA. For glazing green-houses. The use of Mastica avoids the necessity of repeatedly reglazing the house, saving much time and expense. With Mastica, can be in, or use outside, with a machine. Broken glass can be easily removed and replaced by new, without the breakage of other glass, which usually occurs with hard putty. One gallon will cover about 300 running feet (one side).

Half-gallon.....\$1.00
One gallon..... 1.90

MASTICA GLAZING MACHINE (see cut).....\$1.90

MATCH PLANT STICKS, painted green. 12 inch, per 100, 25c; per 1,000, \$2.00. 18 inch, per 100, 30c; per 1,000, \$2.50.

MATS, HOTBED—Strong Burlap. Indestructible, cheap

and warm. These are made of strong Burlap, warmly lined with waste wool and cotton, which is quilted to hold in position. Warmer than straw, and more easily handled. Do not retain moisture, freeze, rot, mildew, or harbor vermin, as straw does. 76 x 76 in. Price.....\$2.50

MATS, WATERPROOF DUCK
76 x 76 inches. Price, each, \$3.00.

MATTOCK, LONG CUTTER.
With handle.....\$1.50

MATTOCK, CRONK'S GARDEN.....80c

MOLE-TRAP, RITTENHOUSE. The best trap on the market. No mole can pass under this trap and live.. 75c

OIL, LAWN MOWER. This is a handy can filled with fine oil, manufactured expressly for lawn mowers, bicycles, etc. Per can.....20c

POTATO HOOKS. 4-tine..85c

PLANT BED CLOTH. A cheap substitute for glass, answering many uses equally well. Light and easily shipped. The medium and heavy are made of stout, tanned muslin that sheds water, protects against weather, etc.

PLANT BED CLOTH. Light grade, per yard.....10c
Medium grade, per yard.....17c
Heavy grade, per yard.....25c
Write for special prices on large lots.

WOOD PLANT STAKES, painted green. $\frac{3}{4}$ x $\frac{1}{2}$ inches, 6 feet long. Each 10c; per dozen \$1.00; per 100, \$7.50.

PRUNING KNIVES, TREE—Kansas Improved. The work that the Improved Kansas Pruning Knife will do is wonderful. Five or six trees can be trimmed with it while one is being done with other knives. It will cut any green limb from the very smallest to one that is one and one-quarter inches in diameter. Any length handle can be used, giving the great advantage of standing on the ground to do the work.

Price.....\$3.00

PRUNING KNIVES, TREE—Happy Thought. The Happy Thought Knife will cut a limb three-quarters of an inch in diameter. This knife with its pump gun action, straddle fork head, makes it complete for setting back, budding, shaping and trimming out the too thick growth.

Price, 6 ft., \$1.50; 8 ft., \$1.75; 10 ft., \$2.00.

PRUNING KNIVES, TREE—Detroit. The Detroit Knife will cut a limb one inch in diameter, doing the work easily because of the great leverage and the drawing cut. Price, 6 ft., \$1.50;.....8 ft. \$1.75

PRUNERS, LITTLE GIANT TREE. To use on a pole. Price.....\$1.00

WATERS' TREE, with Pole.....8 ft. 80c

PRUNING SHEARS, RED CLIPPER. This shear has a slot in blade whereby we get a sliding cut, and the shank of the blade is so constructed as to have a hinge movement, enabling the operator to get a powerful leverage.....No. 1, \$3.00; No. 2, \$2.75

PRUNING SHEARS, TIP-TOP.....75c

PRUNING SHEARS, ORCHARD KING. Two-hand Pruning Shears made with compound levers and so constructed that it will do its work with one-third, or even better, one-fourth the effort or power required on the ordinary shear. Price.....\$3.00

PRUNING SHEARS, HAND

PRUNING SHEARS, HAND.

California Pattern. 9 inch.....\$.75
French, 8 inch..... 1.25
Wiss heavy, extra fine quality, 9 inch..... 2.50
Ladies' Hand..... 1.25

HORTICULTURAL TOOLS AND SUNDRIES—Continued

PUTTY, TWEMLOW'S LIQUID, GLAZING. For bedding glass in sash or for filling cracks or seams in roof joints or frames of greenhouses or hotbeds. It makes a solid bed, impervious to moisture and holds glass in its place and will stop any crevice or fault. It is applied with machine, bulb or brush. One gallon will cover about 600 running feet (one side.)
Gallon.....\$2.25

PUTTY BULB. A useful tool for applying liquid putty and glazing greenhouses.....\$1.00

RAFFIA, NATURAL. The best tying material for plants, also used for making hats, baskets, etc. Per lb., 40c; 4 lbs., \$1.50

RAFFIA, COLORED. For making baskets and fancy work in following colors: Black, Blue, Brown, Green, Orange, Pink, Red and Yellow. 1 oz., 10c; 1 lb., \$1.00

REEDS, RATTAN. For basket making, etc.
Oz. ¼-Lb. Lb.
No. 1.....15c 55c \$2.00 No. 4.....12c 45c \$1.50
No. 2.....15c 55c 2.00 No. 5.....10c 35c 1.25
No. 3.....15c 50c 1.75 No. 6.....10c 35c 1.25

RAKES. See page 130.

SAWS, PRUNING. 16-inch, 85c; 18-inch.....\$1.00

SAWS, PRUNING. Double edge.....1.00

SASH, HOTBED, UNGLAZED. Made from strictly clear cypress lumber. White lead used on the tendons, and iron dowel pins at the corners.

No. 1. 3x6 ft., three rows, 10-inch glass. Each, \$2.00; dozen, \$22
No. 2. 4x6 ft., five rows, 8-inch glass. Each, \$2.25; dozen, \$25

SCYTHES, AMERICAN...\$1.00

SCYTHES, AMERICAN. Weed or brush.....\$1.00

SCYTHES, ENGLISH LAWN. 30 to 36 inches...\$1.75 to \$2.00

SCYTHE SNATHE, PEERLESS each.....\$1.00

SCYTHE STONES, TALACRE. English round.....50c

SCYTHE STONES, TALACRE. American round.....25c

SEED SOWER —CAHOON.

The difficulty in sowing is entirely overcome by the use of the Cahoon Broadcast Seed Sower, which can be handled with ease by an entirely inexperienced person, and will sow much more evenly than can be sown by

hand. Weight when packed for shipment, 8 lbs.....\$3.00

SEED SOWER, LITTLE GIANT. For sowing wheat, oats, rye, flax, grass seed, clover seed, etc.; in fact any kind of seed, broadcast. They will save their cost almost daily in saving of seed, to say nothing about saving of time and more even distribution, which will have a great effect on the crop. It weighs but three pounds.....\$1.25

SHOVELS, STEEL. Square point.....1.25

SHOVELS, STEEL. Round point.....1.25

SHOVELS, STEEL. Long handle, square point.....1.25

SHOVELS, STEEL. Long handle, round point.....1.25

SPADES. Steel polished.....1.25

SPADES. Ames Steel.....1.50

SPADES, NURSERY. Steel, extra heavy strapped. 2.00

SPRINKLER, RUB-BEE, SCOLLAY'S.

Indispensable for floral work and window gardening. Large size.....\$1.00

THISTLE OR DOCK CUTTERS.

Narrow blade, with handle for removing thistles or weeds from lawns, with foot rest.....75c

THERMOMETERS, JAPANNED.

Common Grade
8-inch, 20c; 10-inch, 25c

Special Grade.....8-inch, 35c; 10-inch, 50c

Medium Grade.....8-inch, 60c; 10-inch, 75c

Standard Grade. Made with seasoned tubes mounted by clasps on heavy metal; very accurate. 8-inch, 75c; 10-inch, \$1.00; 12-inch.....\$1.25

Hotbed or Mushroom.....\$2.25

Dairy. 10-inch glasses.....25c

Dairy Standard Grade. Hand graduated and very accurate. The tube is magnifying and the entire thermometer is exposed to view as it floats in the cream at the middle bulb.....50c

TROWELS, AMERICAN. All steel, one piece.....25c
Solid shank, forged steel.....50c

Steel, 6-inch.....30c

Ordinary, 6-inch.....15c

TROWEL, BULB. 6-inch.....60c

TROWEL, TRANSPLANTING. 6-inch, 20c; 7-inch, 25c

VASES FOR CUT FLOWERS—Fibrotta

They are not easily broken and do not rust out like metal vases. Rich mahogany color. Measurements are made inside. Order by number.

No.	Diam. Inches	Depth, Inches	Each	Dozen
0	8	13	\$1.00	\$11.00
1	5 ½	10	.90	10.00
2	4 ½	9	.75	8.00
3	4	6	.65	7.00
4	3	4 ½	.60	6.00
00	9	22	3.25	36.00
01	7	20	1.75	19.00
11	5 ½	18	1.15	12.00
22	4 ½	15	.90	10.00
33	4	12	.70	8.00
44	3	9	.65	7.00

WATERING POTS, GALVANIZED.

Long Spout.
Made from

best quality of iron,

and heavily galvanized.

Two roses with each

pot for fine and coarse

watering.....6-quart, \$2.50;

8-quart, \$2.75; 10-quart, \$3.00;

12-quart, \$3.25. Ladies size,

4-quart, \$2.00.

WAX, GRAFTING. ¼-lb., 10c; ½-lb., 15c; 1 lb., 25c.

WATERING POTS, GALVANIZED. Short Spout.
4-quart, 60c; 6-quart, 75c;
8-quart, 85c; 10 quart, 90c;
12-quart, \$1.00; 16-quart, \$1.25.

WEEDERS—

Cleveland Lawn. Removes the weeds without disturbing the sod or disfiguring the lawn.....75c

Eureka. The best hand weeder, thin forged steel fingers.....30c

Eureka. With 2-foot wood handle.....35c

Magic. 3-prong, single handle.....20c

Excelsior. For weeding seed beds, stirring the ground, etc.....10c

Lang's. Allows use of hands in working.....25c

Christy Garden Weeder.....15c

HORTICULTURAL TOOLS AND SUNDRIES—Continued

Wire Folding Plant Stands

The most compact, strong, durable Plant Stands. They pack closer than any other plant stand for shipment. The ends are made of flat steel and have porcelain castors. Can be opened or folded in a few seconds time by simply spreading the stand apart at the bottom, and dropping the cross bars into their places.

The construction of the shelves or trays are such that there is more room for the pots and foliage than any other plant stand that takes the same amount of room on the floor.

3 Tray Wire Stand—Trays 7 1/2 inches wide x 30 inches long,\$3.50
2 " " " " " 7 1/2 " " x 30 " " 2.75
1 " " " " " 10 " " x 33 " " 1.75

Clipper Mill

WIRE WINDOW SHELF FOR PLANTS.

Strong, compact, with adjustable steel brackets; can be applied to any window moulding on flat part of same. Brackets are constructed so as to allow for curtains between window and plants.

36-inch Shelf, by 7 1/2 inches wide, with Brackets complete,\$1.25
42-inch Shelf, by 7 1/2 inches wide, with Brackets complete,\$1.50

Clipper Seed & Grain Mills

These mills are especially adapted for cleaning Grain, Clover and Timothy Seed. Descriptive circulars and prices for Hand and Power Mills sent on application.

Wire Flower Stand

Self-Watering Flower Boxes

Never
leak
a drop

Many home owners object to wooden window boxes because they leak and damage the property. Our Self-Watering Window Boxes do not leak. They are easily and securely fastened on any window-sill by means of a wire or chain.

No.	Height	Width	Length	Water Capacity	Price
520	6 in.	6 in.	16 in.	1 qt.	\$1.00
522	8 in.	9 1/2 in.	25 in.	3 qts.	1.90
524	8 in.	9 1/2 in.	29 in.	4 qts.	2.10
526	8 in.	9 1/2 in.	33 in.	5 qts.	2.30
528	8 in.	9 1/2 in.	37 in.	6 qts.	2.50
530	8 in.	9 1/2 in.	41 in.	7 qts.	2.75

Window Flower Boxes

Made from 7/8 in. white pine lumber, smoothly finished and painted green inside and out. A white pine box will grow finer flowers, last longer and look better than boxes made from any other kind of materials.

No.	Length	Width	Height	Price Each
No. 246	24 in.	8 in.	6 in.	\$.60
No. 306	30 in.	8 1/2 in.	6 in.	.65
No. 366	36 in.	8 1/2 in.	6 in.	.75
No. 426	42 in.	8 1/2 in.	6 in.	.85
No. 1408	14 in.	14 in.	8 in.	.85
No. 486	48 in.	8 1/2 in.	6 in.	1.00

LAWN REQUISITES

Lawn Cleaner, Pennsylvania

This machine will clean your lawn more thoroughly and quicker than three or four men can do it with hand rakes and greatly benefit the turf—it leaves the grass standing up straight and straightens up

crab grass and other running weeds so they will be cut close by the lawn mower and sooner destroyed. In the autumn it takes up the heaviest fall of leaves. It is made of metal, wood and canvas, and is put together in the most durable and thorough manner. It combines strength and durability with light construction. Price.....\$19.00

We can now supply a brush attachment for the purpose of sweeping worm casts on Putting Greens. This attachment can be readily attached to the cleaner in place of the rakes now supplied, at an additional cost of \$5.00.

The Butler Steel Cart

Of unlimited usefulness about the lawn, garden, orchard, stable, etc. Built low down; it is easily loaded and unloaded with barrel, cans, baskets, stones, etc.

The detachable box is for vegetables, leaves, fruit, litter, etc. The cart turns clear over for dumping load, if desired. Wheels 36 inches high; from out to out of hubs, 42 in. Platform 28 x 32 in. Boxboards 15 in. high. Capacity 6 cubic feet. Flaring Hopper, 12 in. above box makes capacity eleven bushels for leaves, litter, etc.

No. 4, plain (without box) steel wheel, 2 in. tires...\$10.00
No. 5, plain (without box), 3 in. tires..... 12.00
Cart box for either No. 4 or 5..... 4.00
Flaring Hopper for box..... 5.00

Lawn, Hay and Garden Rakes

Automatic. Self-cleaning, best hickory, 26 teeth...\$.75
Lawn Queen. Wire: is reversible, and can be used for grass or leaves, 24 teeth..... .65
Ole Olsen. Made of best hickory..... .65
Lawn King. Wooden, 22 teeth..... .40
Wooden, Hay..... .40
Gem Dandelion Rake. For clipping off daisy and dandelion heads..... 1.75
Rakes, Steel Garden. 10 teeth, 50c; 12 teeth, .60
14 teeth, 65c; 16 teeth..... .75

LAWN REQUISITES—Continued

California Lawn Sprinkler

FOUR Arm Lawn Sprinkler which can be operated with a moderate pressure, covers a wide area and distributes the water evenly. The revolving arm throws the water in a fine spray into the air and the motion produces a fine mist. Height about 1 ft. \$1.50

Rainfall Lawn Sprinkler

Each.....25c

Market Gardener's Sprinkler

Every Market Gardener, Florist and others, who use a hose for watering hot beds, cold frames, gardens and lawns, should have one of these sprinklers. Simply attach to hose in place of nozzle.
Galvanized Head, each.....\$1.00
Copper Head, each.....1.25

Ring Lawn Sprinkler, Allen's

The simplest lawn Sprinkler made. No revolving parts to wear and get out of order or leak. Easily moved about the lawn. Made of polished brass. Light, durable and economical. Each.....75c

Crescent Sprinkler

Each.....75c

Square Fountain Lawn Sprinkler

Made of heavy sheet brass and polished. Will sprinkle along the side of your house and into the corners without throwing into the house; or along the front walk and reach the edges without throwing water over the walk.
Each.....60c

Unit Sprayer

For spraying insecticide or soap solutions. The sprayer screws to the hose in place of the nozzle, and the nozzle is attached to the other end of the coupling.
Each.....\$3.50

GARDEN HOSE AND APPLIANCES

Hose, Rubber, "Long Run," best hose on the market, finest quality of rubber, being used in its manufacture. Will not kink and will last for years. We can supply in any length.
 $\frac{1}{2}$ in., per ft., 18c; $\frac{3}{4}$ in., per ft., 20c.

Hose, For Paragon Spray Pumps, per ft.....14c

Hose Reel, Iron.....\$2.50 to \$3.50

Hose Menders, "Hudson," Box containing pliers, six hose menders and twenty bands, per box.....75c

Hose Menders, "Hudson," Brass, $\frac{1}{2}$ and $\frac{3}{4}$ in. sizes, per dozen.....75c

Hose Menders, Brass Bands for $\frac{1}{2}$ and $\frac{3}{4}$ in. sizes, per dozen.....25c

Hose Menders, Pliers, "Hudson," each.....25c

Hose Menders, Perfect clinching, Each, 10c; per dozen.....\$1.00

Hose Menders, Wooden, $\frac{1}{2}$ in. and $\frac{3}{4}$ in., dozen.....15c

Hose Coupling Bands, Each, 10c; per dozen.....\$1.00

Hose Coupling Bands, For Paragon Pump, each.....10c

Hose Washers, Rubber, $\frac{3}{4}$ in. per dozen.....15c

The Snap Hose Coupler

Best hose coupler, being simple, durable and always water tight; for $\frac{3}{4}$ in. hose.

No. 1. Screws on the hydrant or the old threaded coupling and stays there. Each, 20c; per dozen.....\$2.00

No. 2. Screws into the old threaded coupling or into the nozzle and sprinkler and stays there. Each, 10c; per dozen.....\$1.00

No. 4. Used on nozzle end of hose and can be connected with any nozzle by using No. 2 as an intermediate. Used with No. 5 for connecting two lengths of hose. Each, 10c; per dozen, \$1.00

No. 5. Goes on end of hose that attaches to either faucet or ground pipe. It is used with No. 4 for connecting two lengths of hose. Each, 20c; per dozen.....\$2.00

Hoze Nozzle

Graduating. Each.....60c

DUNHAM WATER WEIGHT LAWN ROLLERS

Dunham Water Weight Rollers are electric welded—no rivets used—the drum cannot possibly leak.

IF YOU wish a fine lawn, you must use a Lawn Roller. In no other manner can a smooth compact surface be maintained. It packs the soil, thus retaining the moisture throughout the season, enabling young and tender grass to secure the necessary nourishment.

The Dunham Water-Weight Roller can be made as heavy or as light as desired by simply putting in the right amount of water. For storing away or for moving it can be emptied entirely and is light and easy to handle.

The Dunham Two Section "Water Weight" Roller with counterbalancing handle weights

W. B. Style. Is equipped with a "No-Tip" lock which holds the handle upright when not in use.

W. B. No. 5. 1 section, 24 inches long and 18 inches in diameter. Weight, empty, 85 lbs.; Weight filled with water, 300 lbs.; Weight, filled with sand, 450 lbs. Price....\$11.00

W. B. No. 7. 1 Section, 24 inches long and 24 inches in diameter. Weight, empty, 110 lbs.; Weight, filled with water, 500 lbs.; Weight, filled with sand, 750 lbs. Price....\$13.00

W. B. No. 11. 2 Sections, 24 inches long and 18 inches in diameter. Weight, empty, 110 lbs. Weight, filled with water, 300 lbs. Weight, filled with sand, 450 lbs.....Price, 14.00

H-W Style is equipped with handle weights which counterbalance the handle.

No. HW-10. 2 Section, 24 inches long and 18 inches in diameter. Weight, empty, 160 lbs. Weight, filled with water, 360 lbs. Weight, filled with sand, 560 lbs.....Price, \$16.00

No. HW-12. 2 Section, 32 inches long and 24 inches in diameter. Weight, empty, 230 lbs. Weight, filled with water, 710 lbs. Weight, filled with sand, 1060 lbs.....Price, \$20.00

Dunham Roller Bearing Lawn Rollers

The rollers are smooth on the face, and finished in aluminum. The outer edges are rounded to avoid cutting the lawn.

No. 401—2 Section. Length 16 in. Diam. 15 in. Weight 150 lbs. Price \$11.00

No. 404—2 Section. 20 in. 20 in. 250 lbs. 15.00

Dunham "Water Weight" One Horse Roller. 2 Sections, 48 inches long and 24 inches in diameter. Weight, empty, 400 lbs. Weight, filled with water, 1000 lbs. Price, equipped with shafts and single-tree.....\$45.00

Lawn Mowers

Horse and
Hand Power

Coldwell's Improved Horse Mower

Coldwell's Improved Horse Lawn Mower

THIS well known standard Mower has side draft attachments, to enable the horse to walk on the cut grass only, and caster rollers, which will not mark the lawn. Evenness of cut is assured by an adjustment which raises or lowers the two sides at the same time by means of a simple lever movement; the same lever serves the purpose of raising the knives from the ground when driving over gravel walks or roads. The mowers are fitted up with steel shafting and composition split bushings, and great care is taken to have the workmanship perfect.

These Mowers are made regularly with four blades in the revolving cutter, but when exceptionally fine cutting is desired, such as on golf links and very fine lawns, we can furnish them with six blades.

We positively guarantee these Mowers to give entire satisfaction.
30-inch, complete with shaft and seat (4 blades).....\$80.00
35-inch, complete with shaft and seat (4 blades).....100.00

Coldwell's "Rajah" Ball Bearing Lawn Mower

IS STRICTLY high grade ball bearing, and made of first-grade material throughout. It has large drive wheels (10 1/4 inches high), thus insuring lightness of draft. The large diameter five-blade revolving cutter makes it an exceptionally good high-class lawn mower, with a very fine cut. It is provided with flat sliding pawl ratchets. The adjustment of the bearings is accomplished with one screw conveniently located at the end of the revolving cutter, by means of which all wear can be taken up, and a locking screw holds them securely in place. This mower is furnished with our patent terrace mowing arrangement, reversible channel-shaped bottom knife. It is fully guaranteed in every respect.

14-inch, \$11.50; 16-inch, \$12.75; 18-inch, \$14.00; 20-inch, \$15.25.

Coldwell's Rajah

Coldwell's Imperial High Wheel

THE workmanship upon it is superior to that of any other make. The joints are closely fitted, insuring a noiseless, light-working and durable machine. It is nicely balanced, enabling the operator to handle it with ease. Furnished with five blades in revolving cutter.

14-inch.....\$11.00 18-inch.....\$13.50
16-inch.....12.50 20-inch.....14.50

Cadet Lawn Mower

IS a good Lawn Mower to sell at a medium low price and give the purchaser full value for his money.

14-inch.....\$4.50 16-inch.....\$4.75

Coldwell's Lawn Edger

IT IS equipped with fine cut gears, sliding-pawl ratchet, the best tool steel bottom knife and is made to meet the demands of a really first-class lawn trimmer.

Price \$7.00

Nox All Grass Catchers

No. 500. Made to fit mower, 12 to 16 inches.....\$1.00
No. 510. Made to fit mower, 16 to 22 inches.....1.25

Geared Roller or Golf Mower

Geared Roller or Golf Mower

THIS Mower is made to meet the demand for a machine that will more perfectly cut borders, edges, etc., and yet retain all the other features necessary in a mower for general work. Coldwell's Roller Mower has brass bushings and triple pawl ratchets. The roller tends to make a smooth and even soil, and rolls down upheavals caused by dampness and worms. Furnished with 6 blades in revolving cutter.
16-inch, including grass box....\$20.00
18-inch, including grass box....22.00

Suburban Ball Bearing Mower

IS MADE to meet the demand for a good ball bearing machine, which can be purchased at a price within the reach of all. It is made throughout of best grade material. The driving wheels are 8 inches in diameter. The revolving cutter has four blades, which insures fineness and evenness of cut. It has sliding pawl ratchets, and the adjustment of both bearings and bottom knife is the simplest and most effective ever made. One screw only is required to adjust the bearings, by means of which all looseness in the revolving cutter bearings can be taken up.

14-inch.....\$6.00
16-inch.....6.50

Suburban Ball Bearing Mower

Flower Pots and Saucers

Our Flower Pots and Saucers are standard make, of extra fine finish, and bear shipping well. No Charge for Packing.

Flower Pots

Size	Ea.	Doz.	Per 100
2 inch	\$0.02	\$0.20	\$1.00
2 1/2 "	.02	.20	1.00
3 "	.03	.25	1.50
3 1/2 "	.03	.30	1.75
4 "	.05	.35	2.50
4 1/2 "	.06	.60	4.50
5 "	.08	.80	6.00
6 "	.12	1.25	9.00
7 "	.18	1.75	12.00
8 "	.20	2.25	18.00
9 "	.30	3.00	...
10 "	.40	4.00	...
12 "	.60	6.00	...
14 "	1.25	12.00	...
16 "	2.00	20.00	...

Flower Pot Saucers

Size	Ea.	Doz.	Per 100
4 inch	\$0.03	\$0.30	\$2.00
5 "	.04	.35	2.50
6 "	.05	.50	3.50
7 "	.06	.60	4.00
8 "	.07	.70	5.50
9 "	.10	.90	7.00
10 "	.12	1.00	...
12 "	.15	1.50	...

Azalea Flower Pots

These are the same style as our standard Flower Pots, but not so deep. Suitable for Azaleas, Bulbs, Ferns, Spireas, etc.

Size	Ea.	Doz.
5 inch	\$0.06	\$0.60
6 "	.08	.80
7 "	.12	1.25
8 "	.18	1.75
10 "	.30	3.00
12 "	.60	6.00

Round Seed Pans

These are the same style as our standard Pots, but not so deep, and are suitable for Cacti, Begonias, Tulips, etc.

Size	Ea.	Doz.
5 inch	\$0.06	\$0.60
6 "	.08	.80
7 "	.12	1.25
8 "	.18	1.75
10 "	.30	3.00
12 "	.50	5.00

Fern Pans

These Pans are especially adapted for linings to porcelain and Silver Fern Pans.

Size	Ea.	Doz.
5 1/2 inch	\$0.06	\$0.70
6 1/2 "	.07	.80
7 "	.10	1.00
7 1/2 "	.15	1.50

Fibrotta Flower Pot Saucers

Light and not readily broken, easy to clean and with a surface that will not scratch woodwork, as earthenware does, and they do not sweat through and mould.

Size	Ea.	Doz.
5 inch	\$0.20	\$2.00
6 "	.21	2.10
7 "	.24	2.40
8 "	.25	2.50
10 "	.28	2.75
12 "	.30	3.40
14 "	.40	4.50
16 "	.75	8.00
18 "	.90	10.00

Fibrotta Rolling Stands

The device consists of two steel pieces securely riveted and equipped with casters; a strong and compact support for plants, and can be readily rolled about from place to place without injuring the floor or carpet.

Inches	Castors	Each
12	4	\$0.80
14	4	.90
16	4	1.25
18	4	1.40
20	4	1.60
22	4	2.00

Maytree Moisture Proof Flower Pot Saucers

Maytree flower-pot saucers are superior in every way to all kinds of flower-pot saucers—are practically non-destructible and should last forever. Are a rich, reddish-brown color with a smooth wax finish that will not wear off and will not mar or scratch the finest surface. Are guaranteed to always remain absolutely moisture proof.

Size	Ea.	Doz.
5 inch	\$0.15	\$1.50
6 "	.20	2.00
7 "	.25	2.50
8 "	.30	3.00
9 "	.35	3.50
10 "	.50	5.00
11 "	.55	5.50
12 "	.60	6.25

American Plant Tub

An excellent tub, neat and durable. Made from 3/4 inch Cypress, with iron handles and feet, 3 iron hoops and 2 coats of green paint.

No. 1—11 1/2 inches diameter, 11 1/2 inches high	\$1.25
No. 2—13 1/2 " " " "	1.40
No. 3—14 3/4 " " " "	1.75
No. 4—16 " " " "	2.00
No. 5—19 " " " "	3.00
No. 7—25 " " " "	5.00
No. 8—26 " " " "	6.00

Cedar Plant Tub

Made of seasoned selected Virginia White Cedar, bound with steel hoops. Painted green, inside and out, and top edge finished with round bevel. No feet.

No. 2—Pail Size, 10 3/4 inches diameter, 8 3/4 inches high	\$0.45
No. 5—10 inches diameter, 9 inches high	.65
No. 7—12 " " " "	.90
No. 9—14 " " " "	1.25
No. 11—16 " " " "	1.40
No. 12—17 " " " "	1.75
No. 14—19 " " " "	2.40

American Plant Tub

"Planet Jr." Farm and Garden Tools

PLANET Jr. means on a farm or garden tool, the world over, that it is the latest improved, lightest, strongest, most useful and economical tool of its kind. With Planet Jrs. come less work, bigger crops, more money. The Planet Jr. Catalogue is an instructive handbook of short cuts to best results for farmers and gardeners. It illustrates fifty-five latest improved Planet Jr. tools, showing many in use. Seventy-two helpful pages. Write for it at once!

The Planet Jr. Seed Drills

No. 4. Planet Jr. Hill and Drill Seeder, Single Wheel Hoe, Cultivator and Plow Combined. Price, \$16.50.

PLANTS all garden seeds accurately in hills, 4, 6, 8, 12 or 24 inches or in drills any thickness. Hoes, cultivates and plows quickly and thoroughly. Popular with farmers and gardeners everywhere.

No. 4 D. Planet Jr. as a Hill and Drill Seeder only. \$13.00

No. 25. Planet Jr. Combined Hill and Drill Seeder, Double Wheel Hoe, Cultivator and Plow. Price, \$19.50. Steel Frame

THIS combined machine is intended for gardeners who have a large enough acreage in crops for a Double Wheel Hoe to be used to good advantage, and yet prefer not to buy seeders and wheel hoes separately.

No. 31. Planet Jr. New Combined Drill and Single Wheel Hoe. Price, \$11.00.

No. 31 D. As a Drill Only. Price, \$8.75.

THIS is a new combined tool of great value to thousands of gardeners who have never felt able to own either a seed drill or a wheel hoe. It is thoroughly well made and offered at a price that makes it pay the smallest gardener.

The Planet Jr. Double Wheel Hoes

ARE the greatest cultivating tools for the onion, and for every grower of garden crops from drilled seed. They do more and do it better and easier than can possibly be done in any other way. Works both sides of plants thoroughly and rapidly at one passage until crops are 20 inches high. Indestructible steel frame and steel leaf lifters.

No. 11. Double Wheel Hoe. Has one pair of 6-inch hoes, one pair 4½-inch hoes, two pairs hollow steel cultivator teeth, one pair plows, two 3-tooth rakes, two 5-tooth rakes and two leaf lifters. Price...\$13.50

No. 12. Planet Jr. Double Wheel Hoe, Cultivator and Plow. \$10.50.

Equipment: One pair of 6-inch hoes; four steel cultivator teeth; one pair of plows; two leaf lifters.

No. 14. Planet Jr. Double Wheel Disc Hoe, Cultivator and Plow. \$12.00.

A NEW TOOL, especially pleasing to all who work peat lands. There are three adjustable discs on each side, oil tempered, which may all be used at once or one or two on a side, as preferred.

The set of Prong Cultivator Teeth will be found invaluable in general cultivation. The tooth next to the row is narrow and is arranged to run shallow, the middle tooth is wider and runs one-half inch deeper, while the outside tooth is still wider and runs another half-inch deeper, so that the work is finer and shallower next to the row, to avoid injury to the plants, and deeper in the center. The teeth are also set out of line from front to back, which makes them work with greater freedom.

No. 13½. Planet Jr. Double Wheel Disc Hoe. Same as No. 14, but has one set of discs and one pair of leaf lifters only.....\$9.00

The disc and cultivator teeth attachments will fit the other single and double wheel hoes (except No. 19), and are sold separately.

Discs, per pair.....	\$3.00
Cultivator teeth, per pair.....	1.75
Double Mouldboard Plow for Double Wheel Hoe each.....	2.00
Plows for Double Wheel Hoes, per pair.....	1.50
Wheel Hoe Sweep, per set of four, with two standards for Double Wheel Hoe, per set.....	2.75

PLANET JR. SINGLE WHEEL HOES AND ATTACHMENTS

WE offer these Single Wheel Hoes as the highest type of their class. They have a great variety of tools which adapt the implements to a large variety of work, and there is scarcely any garden culture of which they are not capable.

No. 17 Planet Jr.
Single Wheel Hoe.
Price, \$7.00

You can do more and better hoeing with it in one day than you can do in three days with a hand hoe.

No. 16. Planet Jr.
Single Wheel Hoe,
Cultivator,
Rake and Plow.
Price, \$8.50.

It is light, handy and adapted to almost every garden use. Has leaf guard for close work and lasting steel frame.

No. 33. Planet Jr.
Single Wheel Hoe,
Cultivator and Plow.
Price, \$5.00.

No. 33 is the Single Wheel Hoe portion of No. 31 Combined Seeder and Wheel Hoe. This tool has one large garden plow, one 5-inch sweep, one 10-inch sweep, one 2-inch cultivator tooth, one 5-tooth prong hoe.

No. 38. Single Wheel Disc Hoe, Cultivator and Plow. One set discs, one pair 3-prong cultivator teeth, one plow, one leaf lifter.....\$9.50

No. 19. Single Wheel Hoe..... 5.00
Planet Jr. Grass Edger..... 8.00

ATTACHMENTS

Double Mouldboard Plow for Single Wheel Hoe...\$2.00
Steel Cultivator Teeth and Bolt......40
Hoes, complete, 4 1/2-inch, per pair..... 1.20
Hoes, complete, 6-inch, per pair..... 1.30
Plow for Single Wheel Hoe, each..... 1.50
Rakes, 3-teeth, 50c; 5-teeth, 65c; 7-teeth......75
Wheel Hoe Sweep, per set of three with standard for Single Wheel Hoe, per set..... 2.00
Onion Set Harvester, 8-inch size, for onions and onion sets..... 1.20

THE PLANET JR. ONE-HORSE TOOLS

No. 8. Planet Jr.
Horse Hoe and
Cultivator,
Price with New Steel
Wheel, \$17.00.

It does more kinds of work better, quicker and easier than any other cultivator. Indispensable on the up-to-date farm.

No. 7. Planet Jr. Horse Hoe and Cultivator. Same as No. 8, without the depth regulator. With new steel wheel.....\$16.00

No. 9. Planet Jr. Horse Hoe and Cultivator. This tool has a plain wheel instead of the lever wheel. With steel wheel.....\$14.50
Without wheel..... 12.50

No. 10 B. Planet Jr.
Horse Hoe Cultivator
and Furrower.
Price with New Steel
Wheel, \$17.50.
Price with Cultivator
Teeth, Sweep and
Wheel only \$16.00.

This is a favorite. Finishes, at one passage, rows up to 3 1/2 feet apart even if they vary in width. Capital level cultivator, hiller, plow, furrower. Can be fitted with vine-turner attachment and plow.

No. 4. Planet Jr. Plain Cultivator is equipped with four 3 x 8 in. cultivator steels and one 4 x 8 in. cultivator steel. Has extra high frame, round throated, hollow steel standards with patent beveled steel teeth, and patent expanders, which make an extra stiff tool, yet allow of quick adjustment for width, and one side may be closed while the other is left open. Price with new steel wheel.....\$10.25

No. 81. Planet Jr.
Horse Hoe Cultivator
and Hiller Combined.
Price, with New Steel
Wheel, \$17.00.

This is our latest, best tool of the kind. Thorough work in rows up to four feet apart. Strong, fully guaranteed.

No. 90. Planet Jr. 12 Tooth
Harrow, Cultivator and
Pulverizer.
Price, complete, \$17.00.
No. 90 B. Without Pulverizer,
\$14.00.
No. 90 D. Without Pulverizer or Wheel, \$10.75.

New
Steel
Wheel

Planet Jr. 12 Tooth Harrow, Cultivator and Pulverizer is invaluable in strawberry and truck patches and the market garden. Its twelve chisel-shaped teeth and pulverizer leave the ground in finest condition without throwing dirt on plants.

No. 91. Planet Jr. 12-Tooth Harrow, with Steel Wheel.....\$12.50

A strawberry runner attachment consisting of a 10-inch flat steel disc mounted on an outrigger. Extra..\$3.00

STUCCO BIRD HOUSES

THE birds which nest and harbor in cavities and hollows are in most instances the most valuable of our native birds, which love the vicinity of man, seemingly not only to delight him with chirp and song, but are the most diligent to keep plant life free from parasites and devouring insects.

Our model hutlets and cabins which we provide for these charming entertainers are appreciated by all bird lovers.

Titmouse Hut

PRICE LIST HUTS AND CABINS

Wren Hutlet, each...	\$1.25	Bluebird Hut, each...	\$1.50
Titmouse, each.....	1.50	Bark Hut, each.....	2.00
Chickadee Hutlet, each.....	1.25		
Woodpecker and Flicker Hut, each.....	1.50		
Martin Houses.....	\$ 5.00 to \$50.00		
Feederies, Large.....	15.00 to 35.00		
Feederies, Small.....	1.25 to 2.00		
Carved and Hewn Hut.....	5.00 to 25.00		
Squirrel Cabins, each.....	4.00 to 10.00		

SUET BASKETS

WINTER and Summer, you'll find a happy family of wild birds around you, provided you feed them. It's got a metal back, curved to fit a tree trunk or post that protects the tree from injury.

The stuffing of the basket portion is the work of an instant. Suet or beef trimmings is the best packing. In spring you can fill a part with hair, twine, feathers and cotton (nesting materials). Place the basket on the shady side in Summer, and the sunny side in Winter. Weight, 2 lbs. Price, each, 75c; postage extra.

Chicago Bird Houses

MADE FROM $\frac{3}{8}$ -INCH
WHITE PINE
LUMBER.

STAINED WITH GREEN
CREOSOTE SHINGLE
STAIN.

Wren Houses

- No. 44. Size $5\frac{1}{4}$ inches wide, 6 inches deep, $5\frac{1}{4}$ inches high, with 1-inch entrance. Price, each.....25c
- No. 68. For Bluebirds, Violet-green Swallows and Tree Swallows. Size $5\frac{1}{4}$ inches wide, $5\frac{1}{4}$ inches deep, $8\frac{1}{2}$ in. high, with $1\frac{1}{2}$ in. entrance. Price, each.....50c
- No. 49. For Chickadees, Tufted Titmice, White-breasted Nuthatches and Downy Woodpeckers. Front, back and bottom $\frac{3}{8}$ inch, sides and roof, $\frac{3}{8}$ inch thick. Can easily be cleaned by unscrewing roof. Size $4\frac{1}{2}$ inches wide, $5\frac{1}{4}$ inches deep, $10\frac{1}{4}$ inches high, with $1\frac{1}{4}$ inch entrance. Price, each.....50c
- No. 59. For Redheaded Woodpeckers, Golden-fronted Woodpeckers and Flickers. Front, back and bottom $\frac{3}{8}$ inch thick. Can easily be cleaned by unscrewing roof. Size $6\frac{1}{2}$ inches wide, $7\frac{1}{2}$ inches deep, $15\frac{1}{2}$ inches high, with $2\frac{1}{2}$ inch entrance. Price, each.....75c

Martin Houses

Made from clear White Pine lumber. Painted two coats white, with green roof and brick red chimney.

- No. 6. Has six apartments. Size 20 inches wide, 22 inches deep, $15\frac{1}{2}$ inches high, with $2\frac{1}{2}$ inch entrance. Price, each.....\$5.00
- No. 10. Has ten apartments. Size 20 inches wide, 22 inches deep, $22\frac{1}{2}$ inches high, with $2\frac{1}{2}$ inch entrance. Price, each.....\$7.00
- No. 16. Has sixteen apartments. Size 24 inches wide, 30 inches deep, 21 inches high, with $2\frac{1}{2}$ inch entrance. Price, each.....\$12.50
- No. 20. Has twenty apartments. Size 24 inches wide, 30 inches deep, 25 inches high, with $2\frac{1}{2}$ inch entrance. Price, each.....\$15.00

The Dodson Improved Sparrow Trap

The Dodson Sparrow Trap is made of tinned wire, electrically welded, strong and durable—will last for years. It has sharp, adjustable needle points projecting from the mouth of each of the two funnels, which effectively prevent any sparrows from getting out of either the front or second enclosure. Size $36 \times 18 \times 12$ inches.

Price, complete with receiving box.....\$6.00

Poultry Appliances and Supplies

PRAIRIE STATE SAND TRAY INCUBATORS

If you are in search of the best Incubator manufactured, the one that will hatch the largest number of strong, vigorous chicks, the Prairie State is the machine to buy.

THE Prairie State Incubators are built in four sizes, ranging from 100 to 390 eggs. All Prairie States are equipped with Sand Trays, Egg Trays, Nursery Mats, Thermometers, Egg Testers, Lamps and everything complete ready to operate

Price List of Prairie State Sand Tray Diffusion Incubators.	
Standard Series, No. 0, 100 hen eggs; 135 lbs. crated, price.....	\$27.00
Standard Series, No. 1, 150 hen eggs, 160 lbs. crated, price.....	35.00
Standard Series, No. 2, 240 hen eggs; 240 lbs. crated, price.....	50.00
Standard Series, No. 3, 390 hen eggs; 325 lbs. crated, price.....	65.00

Prairie State "Keystone" Sand Tray Incubators

THE Keystone Series embody in their construction the three principles characteristic of Prairie State Incubators—top-radiant heat, down draft ventilation, and applied moisture.

No. 0—60 hen eggs; 55 lbs., crated, price.....	\$15.00	No. 1—100 hen eggs; 80 lbs., crated, price.....	\$18.50
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Prairie State Stove Brooders

THESE Stove Brooders are alike in all cast iron construction, solid base, without legs to make a hot place underneath which chicks might reach. Substantial, cannot be knocked over. Serviceable, safe and portable. Adaptable to any system of brooding or type of brooder house. Hover canopies of galvanized steel, exclusive Prairie State flat design for most uniform temperature and ventilation distribution, hinged in center to provide free access to all parts for fuel charging and cleaning. Fire bowls of ample capacity to carry fire 12 to 24 hours, making magazine feed unnecessary. "Senior" and "Junior" stoves care for flocks of 200 up to 1000 or more. "No. 0 Junior" up to 700. All canopies fitted with adjustable curtain. "Senior" and "Junior" fitted with triple control wafer thermostatic regulators, 52 inch canopies, and shaker grates. "No. 0 Junior" has double control regulator, 46 inch canopy, and dump grate. "Senior" stove 27 inches high, 11 inches diameter, 10 inch grate. "Junior" 23 1/2 inches high, 9 inches diameter, 9 inch grate. "No. 0 Junior" 21 inches high, 11 inches diameter, 9 inch grate.

Prairie State "Senior" Stove Brooder—Weight 250 lbs.....	\$40.00
Prairie State "Junior" Stove Brooder—Weight 115 lbs.....	25.00
Prairie State "No. 0 Junior" Stove Brooder—Weight, 80 lbs.....	18.00

Prairie State Portable Hovers

No. 1. Capacity, 65 to 100 chicks, weight, crated, 50 lbs. \$18.00
 Prairie State Junior Portable Hover. Capacity, 50 to 75 chicks, weight, crated, 37 lbs... \$11.00

Prairie State Universal Hovers

Universal Hover. With lamp case, smoke conductors, lamp, thermometer, and heat regulator..... \$10.00
 Universal Hover. With lamp case, smoke conductors, lamp and thermometer..... \$9.00
 Universal Hover. With lamp, smoke pipes and thermometer (without lamp case)..... \$8.00
 When used indoors alone, lamp case is not required,

Prairie State Incubator and Brooder Thermometers

Incubator Thermometer Incline, with holder. Each, postpaid \$1.00
 Brooder Thermometer for Prairie State Brooders. Each, postpaid, 65c

Prairie State Combination Outdoor Colony Brooders

No. 1. 3 feet wide, 6 feet long, two compartments. Weight, crated, 300 lbs..... \$30.00
 No. 2. 2 1/2 feet wide, 5 feet long, two compartments. Weight, crated, 208 lbs..... \$27.00
 No. 3. 27 inches wide, 48 inches long. Weight, crated, 150 lbs..... \$22.00
 Heat regulator attached to any of the above brooders, extra..... \$1.25

SEND FOR DESCRIPTIVE CATALOGUE OF PRAIRIE STATE APPLIANCES.
 Prices on all Poultry Feeds and Appliances Subject to Change Without Notice.

THE NEWTOWN COAL BURNING COLONY BROODER

WITH the certainty that the highest prices ever known will prevail next season for poultry and eggs, no poultryman can afford to run another month without a modern

NEWTOWN COLONY BROODER

This is true whether you have no Brooder or an inferior make of machine, because no one ever made money by using a non-dependable, half worn out, "cheap" Brooder.

The Newtown "raises the most chicks and the best chicks with the least labor and at lowest cost." Burns Coal; the cheapest fuel—is self-feeding, self-regulating, free from fire danger—broods any number of chicks up to 1200 in one flock according to the size of the stove and size of the building—reduces labor. It was the first brooder of this type ever put on the market—has been longer in use than any other and is endorsed by the most successful poultrymen in every state of the Union and nine foreign countries—almost in every nook of the world where poultry is raised the Newtown is used.

There can surely be no good reason to delay the purchase of a Newtown another week. See them on display at our store and we know you will buy a Newtown. Ask for our Brooder Catalogue. It's free.

No. 7. Capacity, 250 chicks or less.....	\$22.50	No. 11. Capacity, 500 chicks or less.....	\$30.00
No. 10. Capacity, 300 chicks or less.....	26.25	No. 12. Capacity, 1200 chicks or less.....	38.50

CALL ON US FOR DETAILED PARTICULARS, OR SEND FOR COMPLETE CATALOGUE OF NEWTOWN GIANT BROODER STOVES, INCUBATORS, PORTABLE COLONY HOUSES, ETC.

MANN'S GREEN BONE CUTTER

THE poultry raiser wants eggs, and wants them when eggs are worth the most. Green Bone and raw meat produce them. The hen will do her part if you give her a chance. The Mann's Bone Cutter gives you a better chance than does any other Bone Cutter.

No. 5-C. For flocks of 25 to 50 hens. Weight, 35 lbs. Price.....	\$ 7.50
No. 5-B. For flocks of 25 to 50 hens. Weight, 60 lbs. Price.....	10.00
No. 5-B. M. For flocks of 25 to 50 hens. Weight, 85 lbs. Price.....	13.00
The No. 5-C, No. 5B, and No. 5B M, do not have the split hinged cylinder.	
No. 7. For flocks of 75 to 150 hens. Weight, 107 lbs. Price.....	15.00
No. 7 1/2. Capacity, 50 to 100 lbs. per hour. Weight, 150 lbs. Price.....	20.00
No. 9. For flocks of 200 to 300 hens. Weight, 170 lbs. Price.....	22.50
No. 11. Capacity, 100 lbs. and upwards per hour. Weight, 215 lbs. Price.	32.50
No. 12. Capacity, 150 lbs. per hour. Weight, 260 lbs. Price.....	37.50

Every Hand-Power Mann Bone Cutter is warranted by us against breakage for one year, and we hereby agree to replace, free of charge, any breakage which occurs while cutting bone within one year from date of purchase, provided purchaser pays express charges on broken part. This insures the purchaser a first-class article.

Send for Free Descriptive Catalogue.

No. 7 Mann's Bone Cutter, \$15.00.

DOUBLE QUICK GRAIN SPROUTER

THE Perpetual Poultry Silo that grows Green Feed while you wait. Sprouts in 20 to 30 hours and forces growths of an inch to two a day. Makes 2 to 6 bushels of green feed from one of dry grain. Many thousands of the Double Quick now in every part of the United States and Canada, and is in use in almost every civilized country in the world.

PRICES, CAPACITY, WEIGHT, SIZE

No. 1. 1/4 bushel, 2 trays, 25 to 37 hens, 18 x 14 x 23 inches, 25 pounds.....	\$ 8.00
No. 2. 1/2 bushel, 4 trays, 50 to 75 hens, 18 x 14 x 30 inches, 35 pounds.....	9.75
No. 3. 1 bushel, 5 trays, 100 to 150 hens, 21 x 17 x 40 inches, 55 pounds.....	15.00
No. 4. 2 bushels, 6 trays, 200 to 300 hens, 25 x 20 x 44 inches, 75 pounds....	19.75
No. 5. 4 bushels, 12 trays, 400 to 600 hens, 39 x 25 x 45 inches, 125 pounds..	29.00
No. 6. 8 bushels, 16 trays, 800 to 1,200 hens, 52 x 27 x 60 inches, 200 pounds..	44.00

NOTE 1:—Capacities are given in dry grain.

NOTE 2:—Furnished with lamp, thermometer, directions, etc.

NOTE 3:—Largest sizes will pass through ordinary doors.

Prices on all Poultry Feeds and Appliances Subject to Change Without Notice.

Moe's NEVER FAIL Grain Sprouter

MANUFACTURED entirely of metal with a double wall. Contains 4 trays. Will prout green food for 75 to 100 fowls. Manufactured in one size only.

No. 69. Complete.....\$7.00

Moe's SECTIONAL Oat Sprouter

A RELIABLE double walled sprouter adapted to any size flock. As the birds increase in number, add another section. Manufactured of heavy galvanized iron. No wood to warp or fall apart.

No. 59. Base with lamp and two trays.....\$7.00
No. 60. Additional sections with two trays..... 3.50

No. 10 Red Chief Mill

"RED CHIEF" Rapid Grinding Feed and Grist Mills

No. 1—Just the mill for small poultry raisers. Clamps or bolts to box as desired. Has hooks on which to hang a bucket. Capacity $\frac{3}{4}$ to 1 bushel per hour. Price.....\$3.25

No. 2—This is the best \$4.00 Mill made for grinding all kinds of grain. The feed can be regulated for very fine grinding. Clamps or bolts to box as desired. Has hooks on which to hang a bucket. Capacity 1 to 1 $\frac{1}{2}$ bushels per hour. Price.....\$4.00

No. 5—This Mill also clamps or bolts to box and has hooks on which to hang a bucket. It is also equipped with fly wheel instead of crank which makes it run steady with least possible power. Capacity 2 to 4 bushels per hour. Price.....\$5.00

No. 10—Mounted on stand (See cut). This will grind Coffee, Spices, Chicken Feed, Cracks Peas, etc. Capacity 2 to 4 bushel per hour. Price.....\$6.50

No. 15—For engine three-quarters horse-power or over. It has bronze boxes, steel axles, in fact all of the good features of the No. 20, except that it has no loose pulley and the capacity is not so great. It can be run with a crank when engine is not running. Capacity 5 to 8 bushels per hour. Price.....\$12.00

No. 20—For grinding Corn Meal, Graham Flour, Stock Feed, etc., with a speed of 300 to 450 revolutions per minute, will grind 10 to 20 bushels of feed per hour. Power required $\frac{1}{2}$ to 2 horse-power engine. Patent tension for regulating size of ground material, making change of burrs unnecessary. Tight and loose pulley, 10 inches in diameter, 2 $\frac{1}{4}$ inch face. Reversible belt shift. Feed Regulator. All bearings, bronze bearing metal. Weight crated, 100 lbs. Price.....\$16.00. Stand, extra, \$2.50; Separator, extra, \$6.00

Is guaranteed to do as good, if not better work than any other Sheller on the market. Has patent oval-shaped teeth, helling the corn, without cracking the grains. Only sheller safe to use for shelling seed corn. Shells clean, taking off less chaff than any other sheller. Throws the cobs outside every time.

Clamps on barrel or tub as well as on box. Malleable Iron Crank screws on. Requires no wrench. Tension directly on cob, not on hopper, which makes sheller run easy, no force being required to expand the hopper. Price.....\$2.00

Pop Corn Attachment, for shelling Pop Corn, 40c extra.

"RED CHIEF" Hand Corn Sheller

NEW MODEL Clover Cutter FOR POULTRY

Removable Steel Knives—Adjustable Cutter Bar—Runs Easy—Cuts Fine—Is Durable

THE "New Model" Clover Cutter cuts either green or dry, such growths as clover, alfalfa, vegetable tops, etc., into $\frac{1}{2}$ inch lengths. These growths are the cheapest and most productive egg-forming poultry foods for cold weather. They return big profits when reduced to a fine, easily digested mass.

The "New Model" is made only of iron and steel, from entirely new patterns. It is a strong feeder, has large capacity, runs unusually easy and will do perfect work indefinitely. Length over all 28 $\frac{1}{2}$ inches.

The machine is intended to be mounted on a box or bench at any height to suit the operator.

Weight, crated, 75 pounds. Price.....\$14.00

Sefton's Live Chick Boxes

25-chick size.....each, 20c; per dozen, \$2.00
50-chick size.....each, 25c; per dozen, 2.50
100-chick size.....each, 40c; per dozen, 4.00

For Express Use Only.

Prices on all Poultry Feeds and Appliances Subject to Change Without Notice

UNION LOCK Poultry Fencing

As all of the cables are the same length, and run the whole length of the fabric, every part can be stretched perfectly. Because of its strength and construction this fence requires no top or bottom rail and no more posts than the ordinary woven stock fence, or about one-half the number needed in ordinary poultry netting.

12-inch, bale of 10 rods \$1.70
18-inch, bale of 10 rods 2.25
24-inch, bale of 10 rods 2.75
36-inch, bale of 10 rods \$3.35
48-inch, bale of 10 rods 4.00
60-inch, bale of 10 rods 4.55
72-inch, bale of 10 rods. \$5.10

The McCullough BROODER COOP

WE offer this as the most successful Coop on the market. Has ventilated top and end, is sanitary and safe. Size about 18 inches high, 18 inches wide and 24 inches long. Price.....each \$2.25

MOE'S NEVER FAIL TRAP NEST, No. 33.....each \$1.40
No. 34.....each 1.75
MOE'S TRAP NEST FRONTS, No. 63.....each .40
X-RAY EGG TESTER.....each .35
BANNER ROOT CUTTER, No. 7.....each 5.00

Lawn Park Coop

Size, closed, 18x24 inches; with park extended, 18x48 inches.
Height, 24 inches. Price.....\$3.75

Egg Boxes

Parcel Post. 1 dozen size, each, 10c; 2 dozen size, each, 15c; 3 dozen size, each, 20c; 4 dozen size, each, 25c; 5 dozen size, each, 30c; 6 dozen size, each, 35c; 10 dozen size, each, 50c.
Eyrle. 15 egg size, each, 20c; 30 egg size, each, 30c.
Paper Carton. 1 dozen size, per dozen, 15c; per 100, \$1.00.
Continental Safety Carton. 1 dozen size, per dozen, 20c; per 100, \$1.25.

Egg Carriers

Humpty Dumpty. 6 dozen size, each, 30c; 9 dozen size, each, 40c; 12 dozen size, each, 45c; 30 dozen size, each, 70c.
Moe's Regal. No. 14—15 eggs, each, 20c; No. 15—30 eggs, each, 30c; No. 16—50 eggs, each, 60c; No. 17—100 eggs, each, \$1.00.

Egg Cabinets

Wood's Revolving. 150 egg size, \$3.50; 288 egg size, \$5.50.
Wood's Pony Cabinet. 72 egg size, each, \$1.00.

Incubator and Brooder Lamps, Burners and Wicks

Incubator Lamps. No. 1 for No. 0 Incubator, 60c.
Incubator Lamps. No. 2 for No. 1 Incubator and all sizes of Colony Brooders and Universal Hover, 75c.
Incubator Lamps. No. 3 for No. 2 and No. 3 Incubators, 85c.
Lamp Burners. Sun Hinge Burner, No. 1, using 1/2-in. wick, 50c; No. 2, using 1-in. wick, 60c; No. 3, using 1 1/2-in. wick, 75c.
Lamp Wicks. No. 1 and No. 2 Wicks, dozen 20c; No. 3 Wicks, dozen 30c.

Leg Bands

Moe's Key Ring. (Celluloid.) For American and Mediterranean Breeds. 10 colors—black, white, dark blue, pink, light blue, red, garnet, green, yellow, purple. Per dozen, 15c; 25 for 30c; 50 for 50c; 100 for 75c.
Pigeon and Baby Chick Sizes. (Celluloid.) Per dozen, 10c; 25 for 20c; 50 for 35c; 100 for 50c.
Smith Double Clinch. (Aluminum.) Per dozen, 15c; 25 for 30c; 50 for 50c; 100 for 75c.
Leader Adjustable. (Aluminum.) No. 1—For Bantams and Leghorns. No. 2—For all larger breeds and Turkeys. Per dozen, 15c; 25 for 30c; 50 for 50c; 100 for 75c.
Moe's Self Locking. (Metal.) Per dozen, 15c; 25 for 30c; 50 for 50c; 100 for 75c.
Double Clinch. (Aluminum.) For Pigeons. Per doz., 15c; 25 for 30c; 50 for 50c; 100 for 75c.

Nest Eggs

Lice Expelling. Each, 5c; per dozen, 50c.
Porcelain. 2 for 5c; per dozen, 25c.
Lime. 3 for 10c; per dozen, 30c.

Nests, Poultry and Pigeon

Wire, Hen. Each, 15c; per dozen, \$1.50.
Clay, Pigeon. 8-inch, each, 10c; per dozen, \$1.00.
Indurated Fibre, Pigeon. Each, 50c; per dozen, \$3.00.

Roofing Papers

Rex Flintkote Roofing. 3/4 ply, \$2.25; 1 ply, \$2.50; 2 ply \$3.50; 3ply, \$4.50; all per square of 108 square feet.
Tin Roofing Caps. Per lb., 10c.
Roofing Nails. Per lb., 8c.
Rex Roof Paint. Per gallon, \$1.00.
Flintkote Plastic. 1 qt., 40c; 1 gallon, \$1.25.

Lightning Lice Killing Machine

No. 1 Machine, suitable for young chicks or pigeons. \$3.00

No. 2 Machine, suitable for either young chicks or pigeons, or to clean 8 Leg-horns or 4 fowls the size of Plymouth Rocks at a time.....\$4.00

No. 3 Machine, suitable for chickens of the Mediterranean class and birds, such as Turkeys, Cochins and Brahmas. This size is not suitable for young chicks or pigeons.....\$5.00

FREE

With each machine one-half pound of special Lice Powder for use in the machine is given free.

Feeding Devices For Poultry

Wall Chick Feeders. 10-inch, each, 75c; 20-inch, each, \$1.25.
Moe's Round Baby Chick Feeders. Small size, each, 20c; large size, each, 35c.
Poultry Feeder. 1-2-3 adjustable, each, \$1.25.
Atsatt's Feeders. Chick size, each, 35c; Poultry size, each, 75c.
1-2-3 Shell, Grit and Charcoal Feeder. Adjustable, each, 90c.
Felker's Wall Feeders. 12 inch, each, 50c; 24 inch, each, 80c.
Felker's Junior Chick Feeder. Each, 35c.
Prairie State Grit and Shell Box. 3 compartments, each, \$1.00.
Prairie State Meat Scrap Hopper. Each, 90c.
Prairie State Dry Mash Hopper. Capacity, 25 lbs., each, \$2.00.
Wall Feed Pan. 24 inches long, each, 25c.
Favorite Dry Mash Hoppers. 12 quart, each, \$1.25; 18 quart, each, \$1.75; 24 quart, each, \$2.50.
McCullough's Sanitary Glass Chick Feeder. Each, 20c; 6 for \$1.00.
Chick Servers. For water or food, each, 25c.
Moe's Never Clog and Waste Proof Hoppers. 12 quart, each, \$1.25; 18 quart, each, \$1.75; 36 quart, each, \$2.50.
Moe's Round Feed Saving Hopper. No. 8, 1/2 bushel, each, \$1.50; No. 7, 1 bushel, each, \$2.00.
Hub Chicken Feeders. 9 inch, each, 50c; 15 inch, each, 75c.
Moe's Feeder and Exerciser. No. 51, 4 quart, each, \$1.35; No. 52, 8 quart, each, \$1.65; No. 53, 1/2 bushel, each, \$2.25; No. 54, 1 bushel, each, \$2.75.

Drinking Fountains for Poultry and Pigeons

McCullough's Sanitary Glass Chick Fountain. Each, 20c; 6 for \$1.00.
McCullough's Galvanized Fountains. Cone top, one pint size, each, 20c; 1 quart size, each, 30c; 2 quart size, each, 40c; 4 quart size, each, 60c.
McCullough's Wall Fountain. Brooder size, each, 25c; 2 gallon size, each, \$1.00.
N. W. Automatic Feeder and Fountain. 5 inch pan, each, 15c; 6 inch pan, each, 20c.
Moe's Sanitary Top-Fill Fountains. 1 gallon, each, \$1.50; 2 gallon, each, \$2.00; 4 gallon, each, \$2.75.
Moe's Wall Fountain. Style A, about 1 gallon, each, 70c.
Sanitary Stoneware Fountains. 1 quart, each, 25c; 2 quart, each, 30c; 4 quart, each, 40c; 8 quart, each, 50c.
Drop-Bottom Fountains. 1/2 gallon, each, 75c; 1 gallon, each, 90c; 2 gallon, each, \$1.20.
Felker's Duplex Fountains. 4 quart size, each, 90c; 8 quart size, each, \$1.25.
Moe's Star Jar Fountain and Feeder. Each, 25c.
Moe's Fountain and Feeder, to fit Mason jars, each, 10c; 2 for 15c; 4 for 25c.
W. R. Pigeon Fountain. 1/2 gallon, each, 35c; 1 gallon, each, 50c.
Peerless Drinking Fountains. Brooder size, each, 50c; 5 quart size, each, 90c; 10 quart size, each, \$1.25.
Peerless Heater. For 5 quart Peerless Fountain, each, \$1.50.

PRATT'S POULTRY AND STOCK REMEDIES

Pratt's Baby Chick Food.
3-lb. pkg., 30c; 6½-lb. pkg., 60c; 14-lb. bag, \$1.20.
Pratt's Poultry Regulator.
26-oz. pkg., 25c; 4-lb. pkg., 50c; 12-lb. pkg., \$1.25; 25-lb. pails, \$2.50.

Pratt's Roup Remedy..... per pkg., 25c, 50c and \$1.00.
Pratt's Roup Tablets..... per pkg., 25c, 50c and \$1.00.
Pratt's Sore Head Chicken Pox Remedy... per pkg., 25c.
Pratt's Condition Tablets for Poultry, per pkg., 25c; 50c.
Pratt's Bronchitis Remedy..... per pkg., 25c.
Pratt's Scaly Leg Remedy..... boxes, 25c.
Pratt's Head Lice Ointment... per pkg., 10c and 25c.
Pratt's Gape Remedy..... per pkg., 25c and 50c.
Pratt's White Diarrhoea Remedy, per pkg., 25c and 50c.
Pratt's Lice Killer (powdered form.)
Trial size, 10c; 1-lb. pkg., 25c; 2½-lb. pkg., 50c.
Pratt's Liquid Lice Killer.
1-qt. can, 35c; 2-qt. can, 60c; 1-gallon can, \$1.00.
Pratt's Poultry Disinfectant.
1-qt. can, 50c; 2-qt. can, 90c; 1-gallon can, \$1.50.
Pratt's Chicken Cholera Remedy, per pkg., 25c and 50c.
Pratt's Animal Regulator.
24-oz. pkg., 25c; 50-oz. pkg., 50c; 12-lb. pail, \$1.75; 25-lb. pail, \$3.00.

Pratt's Heave, Cough and Cold Remedy, 1-lb. pkg., 50c.
Pratt's Veterinary Colic Remedy..... per bottle, 60c.
Pratt's Spavin Paste..... per box, 50c.
Pratt's Liquid Spavin Remedy..... per bottle, 50c.
Pratt's Distemper and Pink Eye Remedy, per bottle, 60c.
Pratt's Dip and Disinfectant.
1-qt. can, 50c; 2-qt. can, 90c; 1-gallon can, \$1.50.
Pratt's Liniment..... per bottle, 25c.
Pratt's Bag Ointment..... per box, 25c.
Pratt's Peerless Hoof Ointment..... per box, 25c.
Pratt's Healing Ointment, (for man or beast.)
per box, 30c and 60c.

Pratt's Healing Powder..... 4-oz. sifting top can, 30c.
Pratt's Hog Worm Powder..... per box, 50c.
Pratt's Cow Tonic..... per pkg., 50c.
Pratt's Calf Tonic..... per pkg., 50c.
Pratt's Hog Cholera Specific..... per pkg., 50c.
Pratt's Germ-a-thol..... per bottle, 25c and 50c.
Pratt's Fly Chaser... ½-gal. can, 70c; 1-gal. can, \$1.25.

McCullough's LICE POWDER

Guarantee—To See It Kill

Spread a newspaper on the floor or ground, and hold the fowl to be treated over it while dusting. Five minutes after you have completed the application, if you think there are not as many dead lice on the paper as there were live ones on the fowl, send us the empty package, state the facts, and we will return you the purchase price.

15-oz. pkg., 25c; 3-lb. pkg., 50c.

LAMBERT'S Death To Lice Remedies

Death to Lice Powder.
5-oz. size, 10c; 15-oz. size, 25c; 48-oz. size, 50c; 100 oz. size, \$1.00.
Death to Lice Ointment..... 10c and 25c.

CONKEY'S REMEDIES

Have a Conkey Corner In Your Poultry House

There is nothing like being ready with a good Remedy when disease develops in your flock.

Conkey's Remedies and Tonics

are good, and if you have them at your elbow you can laugh at disease. We guarantee Conkey Goods to satisfy you or we will refund your money. Ask for Conkey's Poultry Book.

Conkey's Buttermilk Starting Food for Chicks.
3-lb. pkg., 30c; 6½-lb. pkg., 60c; 14-lb. bag, \$1.20.
Conkey's Poultry Tonic.
1½-lb. pkg., 30c; 3½-lb. pkg., 60c; 7-lb. pkg., \$1.20; 12-lb. pail, \$1.40; 25-lb. pail, \$2.75.
Conkey's Roup Remedy, per pkg., 30c, 60c and \$1.20.
Conkey's Roup Pills..... per pkg., 30c; 60c and \$1.20.
Conkey's Canker Special..... per pkg., 60c.
Conkey's Bronchitis Remedy..... per pkg., 60c.
Conkey's Cholera Remedy..... per pkg., 30c and 60c.
Conkey's Chicken Pox Remedy..... per pkg., 60c.
Conkey's Limber Neck Remedy..... per pkg., 60c.
Conkey's Scaly Leg Remedy..... per pkg., 30c and 60c.
Conkey's Gape Remedy..... per pkg., 30c and 60c.
Conkey's White Diarrhoea Remedy, per pkg., 30c and 60c.
Conkey's Poultry Conditioner... per pkg., 30c and 60c.
Conkey's Blackhead Remedy..... per pkg., 60c.
Conkey's Rheumatic Remedy..... per pkg., 60c.
Conkey's Poultry Worm Remedy, per pkg., 30c and 60c.
Conkey's Poultry Laxative..... per pkg., 30c.
Conkey's Healing Salve..... per pkg., 30c.
Conkey's Head Lice Ointment.
1-oz. tube, 15c; 3-oz. tube, 30c.

Conkey's Lice Powder.
5-oz. pkg., 15c; 15-oz. pkg., 30c; 48-oz. pkg., 60c; 100-oz. pkg., \$1.20.
Conkey's Lice Fix..... per pkg., 60c;
Conkey's Lice Liquid, 1-qt., 50c; 2-qts., 75c; 1-gal., \$1.25.
Conkey's Poultry Conditioner... per pkg., 30c and 60c.
Conkey's Noxicide. Small size, 40c; 1-qt., 70c; ½-gal., \$1.00; 1-gal., \$1.75.
Conkey's Sulphur Fumigating Candles.
Each, 10c; 3 for 25c; 1-dozen, \$1.00.
Conkey's Fly Knocker. 1-qt., 40c; ½-gal., 75c; 1-gal., \$1.25; 5-gal. can (jacketed) \$4.50.

LEE'S REMEDIES

Lee's Germozone.
4 oz. bottle, 25c; 12 oz. bottle, 50c; 32 oz. bottle, \$1.00.
Lee's Insect Powder..... 1½-lb. box, 25c.
Lee's Liquid Lice Killer.
1-qt. can, 35c; ½-gal. can, 60c; 1-gallon can, \$1.00.
Lee's Egg Maker.
2-lb. pkg., 25c; 5-lb. pkg., 50c; 25-lb. pail, \$2.50.

RUST'S POULTRY REMEDIES

Rust's Egg Producer	Rust's Havens Roup Pills
1 lb. box.....\$0.25	Box of 50 pills.....\$0.25
2 ½ lb. box......50	Box of 112 pills......50
6 lb. box.....1.00	Box of 250 pills.....1.00
10 lb. box.....1.50	
25 lb. box.....3.50	

Rust's Havens Climax Powder
13 oz. box.....\$0.25 5 lb. box.....\$1.00
32 oz. box......50 8 lb. box.....1.50

Rust's Soluble Roup Powder
4 oz. size..\$.25 9 oz. size..\$.50 20 oz. size..\$1.00

Rust's Lice Killing Powder
5 oz. box.....\$0.10 16 oz. box.....\$0.25
48 oz. box......50 112 oz. box.....1.00

Rust's Liquid Lice Killer
Quart can.....\$0.35 ½ gal. can.....\$0.60
1 gal. can.....\$1.00

MISCELLANEOUS SUPPLIES

McCullough's Roup Cure. Small size package, 50c; large size package, \$1.00.
Cypher's Lice Paint.
1-qt. can, 30c; ½-gal. can, 50c; 1-gal. can, 75c.

Prices on all Poultry Feeds and Appliances subject to change without Notice.

POULTRY FEEDS AND SUPPLIES

SPECIAL NOTICE

Prices quoted represent market values at time of going to press only.

Market fluctuations prevent us quoting firm prices on Feeds in our Catalogues, but we are always prepared to quote firm prices upon receipt of an estimate of your wants. None of our Feeds contain grit.

"GLOBE" CHICK FEED. 3 lbs., 25c; 25 lbs., \$1.55; 50 lbs., \$2.65; per bag of 100 lbs., \$5.00.

"GLOBE" DEVELOPING FEED. 3 lbs., 25c; 25 lbs., \$1.55; 50 lbs., \$2.70; per bag of 100 lbs., \$4.95.

"GLOBE" SCRATCH FEED. 3 lbs., 25c; 25 lbs., \$1.55; 50 lbs., \$2.65; per bag of 100 lbs., \$4.95.

"GLOBE" EGG MASH. 4 lbs., 25c; 25 lbs., \$1.40; 50 lbs., \$2.35; per bag of 100 lbs., \$4.25.

"QUEEN" POULTRY MASH. 4 lbs., 25c; 25 lbs., \$1.35; 50 lbs., \$2.25; per bag of 100 lbs., \$4.10.

PURINA CHICKEN CHOWDER. 3 lbs., 25c; 25 lbs., \$1.40; 50 lbs., \$2.40; per bag of 100 lbs., \$4.35.

SPRATT'S CHICK MEAL. 2 lbs., 25c; 25 lbs., \$2.50; 50 lbs., \$4.60; per bag of 100 lbs., \$8.75.

SPRATT'S POULTRY MEAL. 2 lbs., 25c; 25 lbs., \$2.50; 50 lbs., \$4.60; per bag of 100 lbs., \$8.75.

SPRATT'S TURKEY MEAL, GAME MEAL AND PHEASANT MEAL. 2 lbs., 25c; 25 lbs., \$2.50; 50 lbs., \$4.60; per bag of 100 lbs., \$8.75.

CONKEY'S BUTTERMILK STARTING FOOD FOR CHICKS. 3-lb. pkg., 30c; 6 ½-lb. pkg., 60c; 14-lb. bag, \$1.20.

PRATT'S BABY CHICK FOOD. 3-lb. pkg., 30c; 6 ½-lb. pkg., 60c; 14-lb. bag, \$1.20.

PINHEAD OATS. 3 lbs., 30c; 25 lbs., \$2.05; 50 lbs., \$3.65; per bag of 100 lbs., \$6.90.

HULLED OATS. 3 lbs., 30c; 25 lbs., \$2.05; 50 lbs., \$3.65; per bag of 100 lbs., \$6.90.

DIAMOND GLUTEN MEAL. 4 lbs., 25c; 25 lbs., \$1.35; 50 lbs., \$2.30; per bag of 100 lbs., \$4.15.

SUNFLOWER SEED. 3 lbs., 30c; 25 lbs., \$1.90; 50 lbs., \$3.35; per bag of 100 lbs., \$6.25.

ALFALFA MEAL. 5 lbs., 25c; 25 lbs., \$1.00; 50 lbs., \$1.55; per bag of 100 lbs., \$2.65.

MEAT SCRAPS. 55% Protein. 3 lbs., 25c; 25 lbs., \$1.75; 50 lbs., \$3.10; per bag of 100 lbs., \$5.80.

DIGESTER TANKAGE. 60% Protein. 3 lbs., 25c; 25 lbs., \$1.75; 50 lbs., \$3.05; per bag of 100 lbs., \$5.70.

BLOOD MEAL. 80% Protein. 3 lbs., 30c; 25 lbs., \$2.20; 50 lbs., \$3.95; per bag of 100 lbs., \$7.50.

GRANULATED BONE. Furnished in three sizes; fine, medium and coarse. 3 lbs., 25c; 25 lbs., \$1.60; 50 lbs., \$2.80; per bag of 100 lbs., \$5.20.

HEN-E-TA BONE GRIT. Furnished in three sizes; fine, medium and coarse. 5 lbs., 25c; 25 lbs., 90c; 50 lbs., \$1.35; per bag of 100 lbs., \$2.25.

CHARCOAL. Furnished in three sizes; fine, medium and coarse. 3 lbs., 15c; 25 lbs., \$1.25; per bag of 50 lbs., \$2.10.

CRUSHED OYSTER SHELLS. Furnished in two sizes; fine and coarse. 4 lbs., 10c; 25 lbs., 55c; 50 lbs., 70c; per bag of 100 lbs., \$1.00.

MICA CRYSTAL GRIT. Furnished in three sizes; fine, medium and coarse. 4 lbs., 10c; 25 lbs., 55c; 50 lbs., 70c; per bag of 100 lbs., \$1.00.

In 100 lb. lots of the above Feeds, bags are free. In 25 and 50 lb. lots, remit 25c extra for bags.

On the following list of Feeds kindly include price of bags for 25, 50, and 100 lb. lots. Seamless bags, 50c each. Burlap bags, 25c each, extra. Style of bag required is indicated.

BARLEY, for feed. (Seamless bags.) 4 lbs., 25c; 25 lbs., \$1.30; 50 lbs., \$2.15; 100 lbs., \$3.90.

BRAN. (Burlap bags.) 5 lbs., 25c; 25 lbs., 95c; 50 lbs., \$1.45; 100 lbs., \$2.45.

BUCKWHEAT, for feed. (Seamless bags.) 4 lbs., 25c; 25 lbs., \$1.35; 50 lbs., \$2.30; 100 lbs., \$4.15.

CHICKEN MILLET. (Burlap bags.) 4 lbs., 25c; 25 lbs., \$1.35; 50 lbs., \$2.25; 100 lbs., \$4.10.

CORN MEAL. (Burlap bags.) 4 lbs., 25c; 25 lbs., \$1.45; 50 lbs., \$2.45; 100 lbs., \$4.50.

CRACKED CORN. (Burlap bags.) 4 lbs., 25c; 25 lbs., \$1.45; 50 lbs., \$2.45; 100 lbs., \$4.50.

CORN, SHELLED. (Burlap bags.) 4 lbs., 25c; 25 lbs., \$1.40; 50 lbs., \$2.35; 100 lbs., \$4.25.

KAFIR-CORN, White. (Burlap bags.) 4 lbs., 25c; 25 lbs., \$1.40; 50 lbs., \$2.40; 100 lbs., \$4.40.

MIDDINGS. (Burlap bags.) 5 lbs., 25c; 25 lbs., \$1.05; 50 lbs., \$1.70; 100 lbs., \$3.00.

MILO MAIZE. (Burlap bags.) 4 lbs., 25c; 25 lbs., \$1.40; 50 lbs., \$2.40; 100 lbs., \$4.40.

Pigeon Feeds

On the following list of Feeds kindly include price of bags for 25, 50, and 100 lb. lots. Seamless bags, 50c each. Burlap bags, 25c each, extra. Style of bag required is indicated; otherwise bags are free.

"KING" PIGEON FEED. 3 lbs., 25c; 25 lbs., \$1.70; 50 lbs., \$2.95; per bag of 100 lbs., \$5.45. Bags free.

CANADA PIGEON PEAS, No. 1. 3 lbs., 30c; 25 lbs., \$2.30; 50 lbs., \$4.15; 100 lbs., \$7.90.

HEMP SEED. (Burlap bags.) 3 lbs., 30c; 25 lbs., \$2.20; 50 lbs., \$3.95; 100 lbs., \$7.50.

BARLEY FOR PIGEONS. (Seamless bags.) 3 lbs., 25c; 25 lbs., \$1.50; 50 lbs., \$2.60; 100 lbs., \$4.75.

PIGEON MILLET. (Burlap bags.) 4 lbs., 25c; 25 lbs., \$1.40; 50 lbs., \$2.40; 100 lbs., \$4.35.

VETCHES. 3 lbs., 30c; 25 lbs., \$2.10; 50 lbs., \$3.75; 100 lbs., \$7.10; Bags free.

MCCULLOUGH'S HEALTH GRIT. 8 lbs., 25c; 25 lbs., 70c; 50 lbs., 95c; 100 lbs., \$1.50. Bags free.

FOUST'S HEALTH GRIT. 6 lbs., 25c; 25 lbs., 80c; 50 lbs., \$1.20; 100 lbs., \$2.00. Bags free.

MICA PIGEON GRIT. 4 lbs., 10c; 25 lbs., 55c; 50 lbs., 70c; 100 lbs., \$1.00. Bags free.

OYSTER SHELLS, for Pigeons. 4 lbs., 10c; 25 lbs., 55c; 50 lbs., 70c; 100 lbs., \$1.00. Bags free.

ROCK SALT. (Burlap bags.) 5 lbs., 10c; per 100 lbs., 75c.

TOBACCO STEMS. Per bale about 100 lbs., \$1.75.

Pure Seeds for Birds

Canary Seed, re-cleaned.....20c per lb.; 2 lbs., 30c
 Rape Seed, re-cleaned.....20c per lb.; 2 lbs., 30c
 Hemp Seed, re-cleaned.....10c per lb.; 3 lbs., 30c
 Sunflower Seed, re-cleaned.....10c per lb.; 3 lbs., 30c
 Millet Seed, re-cleaned.....10c per lb.; 3 lbs., 25c
 Lettuce Seed, re-cleaned.....20c per lb.; 3 lbs., 50c
 Cuttle Bone.....5c per oz.; per lb., 50c
 Bird Gravel.....3-lb. package, 15c

Mustard for Poultry

FRENCH'S POULTRY MUSTARD. 1 ½ lbs., 40c; 3 lbs., 75c; 5 lbs., \$1.25; 10 lbs., \$2.40; 25 lbs., \$6.00; 50 lbs., \$11.75; 100 lbs., \$23.00

Blatchford's Calf Meal

BLATCHFORD'S CALF MEAL. 25 lbs., \$1.75; 50 lbs., \$2.95; 100 lbs., \$5.45.

Darling's Meat Crisps

DARLING'S MEAT CRISPS. 3 lbs., 35c; 6 ½ lbs., 70c.

Essex Model Nutrine Chick Salts

ESSEX MODEL NUTRINE CHICK SALTS. 2-lb. pkg., 50c; 5-lb. pkg., \$1.00; by parcel post or express at customer's expense.

Milkoline

This is a pure condensed Buttermilk Feed for Poultry and Hogs, and being modified will keep an indefinite length of time in any climate, will not mould, sour, or lose its acidity.

Used at the rate of one gallon of Milkoline to 50 gallons of water for Poultry and fed with usual grain feeds and mashes, doubles the egg yield; keeps fowls on full feed and free from disease.

When fed to Hogs in the above proportion, makes greater weight per bushel of grain, keeps hogs healthy, their appetites keen, bowels in good condition and expels worms.

50c worth of Milkoline mixture saves 100 lbs. of grain. Prices.—Per gal., \$2.00; 5 gals., \$7.50; 10 gals., \$12.50. No charge for kegs. Send for descriptive booklet.

"United States Food Administration
 License Number G-10837."

Prices on all Poultry Feeds and Supplies Subject to Change Without Notice.

Write for Special Firm Prices on Lots of 5 Bags or Over.

MALTOID MILK-BONE

DOGS cannot and do not properly digest the same foods as human beings. **Maltoid Milk-Bone** is scientifically compounded and a perfectly balanced ration, composed of all the good things which a dog enjoys and can be fed exclusively, making happy and contented dogs and puppies.

Put up in sanitary and economical packages, insuring freshness.

Made in sizes for dogs and puppies.

15cpkg., mailing weight, 1lb.; 30cpkg., mailing weight, 3 lbs.; postage extra, see postal rates—2nd page of cover.

SPRATT'S PATENT DOG AND PUPPY CAKES

REQUIRE no preparation, no trouble, no cooking, and are adapted for all breeds of dogs. They are invaluable as a change of food during the warm weather, and are used by the leading kennel owners and breeders throughout the world. Kennel owners look upon these cakes as a necessity, especially during the summer months.

SPRATT'S PATENT DOG CAKES. Per lb., 15c; 2 lbs., 25c; 10 lbs., \$1.20; 50 lbs., \$5.00; 100 lbs., \$9.50

SPRATT'S PATENT PUPPY CAKES. Per lb., 15c; 2 lbs., 30c; 10 lbs., \$1.25; 50 lbs., \$5.20; 100 lbs., \$10.00

THEY FIGHT FOR SPRATT'S

VALUABLE TABLE OF QUANTITIES OF SEEDS PER ACRE AND WEIGHTS PER BUSHEL

FOR the convenience of our customers we have compiled the following table showing the usual quantities required per acre, also weights and measures of SEEDS and SEED GRAIN as required by the present custom of the trade.

CLOVERS

Quantity per Acre.	Pounds per Bushel.
20 to 25 lbs.	Alfalfa or Lucerne..... 60 lbs.
6 " 8 "	Alsike or Swedish..... 60 "
10 " 12 "	Common Red or Medium..... 60 "
12 " 15 "	Crimson or Scarlet..... 60 "
10 " 12 "	Mammoth or Sapling..... 60 "
6 " 8 "	White Dutch..... 60 "
10 " 12 "	Giant Sainfoin Esparett with Hull on 25
15 " 25 "	Sweet or Bokhara, Hulled..... 60 "
20 " 30 "	Sweet or Bokhara, Unhulled..... 30 "
15 " 20 "	Japan Clover..... 25 "

GRASSES

25 to 30 lbs.	Awnless Brome Grass..... about 12 lbs.
10 " 15 "	Bermuda Grass..... " 36 "
30 " 40 "	Blue Grass, Kentucky..... " 14 "
30 " 40 "	Blue Grass, Canadian..... " 14 "
30 " 35 "	Crested Dogtail..... about 30 "
30 " 40 "	Creeping Bent..... " 14 "
30 " 35 "	Hard Fescue..... " 14 "
45 " 50 "	Italian Rye..... " 24 "
20 " 25 "	Johnson Grass..... 25 "
60 " 75 "	Lawn Grass Seed..... 16 "
30 " 40 "	Meadow Fescue or Domestic English Blue Grass..... 24 "
20 " 25 "	Meadow Foxtail..... 9 "
25 " 35 "	Orchard Grass..... 14 "
50 " 60 "	Perennial Rye or Imported English Blue Grass..... 24 "
40 " 50 "	Red Top Chaff..... 14 "
10 " 12 "	Red Top, Fancy Solid Seed..... about 30 "
25 " 40 "	Rhode Island Bent..... " 14 "
30 " 35 "	Sheep Fescue..... " 14 "
15 " 20 "	Sudan-Broadcast..... " 40 "
5 " 6 "	Sudan-In Drills..... " 40 "
3 " 5 "	Sweet Vernal with other Grasses..... " 11 "
25 " 30 "	Tall Meadow Oat Grass..... " 11 "
15 " 20 "	Timothy..... 45 "
20 " 25 "	Wood Meadow..... 14 "

MISCELLANEOUS

Quantity per Acre.	Pounds per Bushel.
100 to 125 lbs.	Barley..... 48 lbs.
60 " 120 "	Beans..... 60 "
30 " 35 "	Broom Corn..... 46 "
12 " 15 "	Broom Corn, for Seed..... 46 "
50 lbs.	Buckwheat..... 50 "
60 " "	Canary..... 60 "
50 " "	Castor Beans..... 48 "
10 to 12 lbs.	Corn, Sweet, Shelled..... Measured Bushel
75 " 100 "	Corn, Sweet, in Drills, for Fodder..... Measured Bushel
15 lbs.	Corn, Field, Shelled..... 56 lbs.
84 to 112 lbs.	Corn for Silage..... 56 "
100 " 140 lbs.	Corn, Field, Ear..... 68 to 70 "
15 lbs.	Corn, Kafir, Broadcast..... 50 "
5 " "	Corn, Kafir, in Drills..... 50 "
10 " "	Corn, Pop Corn..... about 50 "
40 to 56 lbs.	Flax Seed..... 56 "
33 " 44 "	Hemp Seed..... 44 "
50 lbs.	Hungarian for Hay..... 50 "
25 " "	Hungarian for Seed..... 50 "
50 " "	Millet for Hay..... 50 "
25 " "	Millet for Seed..... 50 "
15 " "	Millet, Japanese..... about 35 "
80 to 100 lbs.	Oats..... 32 "
30 " 40 "	Onion Seed for Sets..... 54 "
225 " 280 "	Onion Sets, Top..... about 28 "
250 " 320 "	Onion Sets, Bottom..... 32 "
400 lbs.	Onion Sets, Potato..... 40 "
90 to 105 lbs.	Peas, Cow or Field..... 60 "
120 " 180 "	Peas, Canada Field, Broadcast..... 60 "
90 lbs.	Peas, Canada Field, with Oats..... 60 "
480 to 600 lbs.	Potatoes, Irish..... 60 "
	Potatoes, Sweet..... about 50 "
6 " 8 "	Rape, Dwarf Essex..... 50 "
84 " 112 "	Rye..... 56 "
75 " 100 "	Sorghum or Cane, Broadcast..... 50 "
5 " 8 "	" " for Seed or Syrup 50 "
60 " 90 "	Soja Beans Broadcast..... 60 "
30 " 45 "	Soja Beans in Drills..... 60 "
50 " 60 "	Speltz..... 40 "
10 " 12 "	Sunflower..... 28 "
1 " 1 1/2 "	Turnip..... 58 "
90 " 112 "	Vetches..... 60 "
90 " 112 "	Wheat..... 60 "

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