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Established 1838

WHEN ordering Beans, Corn or Peas to be forwarded by mail, be sure to add 6 c per pound for POSTAGE in first and second zones. For third zone add 7 c 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 naking satisfactory corrections.

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

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All parcels of seeds, bulbs and plants, up to and including 8 oz . at the rate of 1 c 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.
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When larger quantities are wanted we can pack in two or more parcels if necessary, provided money is remitted to cover postage.

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

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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

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ITH this issue of our Annual Catalog and Amateurs' Guide, we enter upon the 82nd year since the founding of our business by the late Mr. J. M. McCullough.
We believe that a perusal of this catalog will convince you that in keeping abreast of the times we have introduced several distinctive features and in a consarvative manner have confined ourselves strictly to well established facts in connection with every article described, carefully eliminating all extravagant phrases that might tend to mislead.

Our President, Mr. H. B. McCullough, devotes his entire time and energies to the general management of our business, ably assisted by a competent force of expert department managers whose experiences and knowledge of the business have been developed and matured during the past forty years, thus presenting to the purchasing public a combination embracing every safeguard, such as is rarely encountered in a business of any character.


$\mathrm{O}^{2}$UR 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 :hree quarters of a century.

POSTAGEWhen ordering BEANS, CORN OR PEAS to be forwarded by mail be sure to add $6 c$ per pound for POSTAGE in first and second zones. For third zone add 7 c 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

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 each hill. Large Green Globe.


## ASPARAGUS SEED

## One ounce will produce about 400 plants.

ANY good loamy, not too weedy, garden land is good for growing the plantz. Sow in rows 12 to 15 inches apart, as early in Spring as the ground is in At condition and give good caltivation; 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, oi 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; 1/4 lb., 30c. Columbian Mammoth White. Large, white stalks.

Pkt., 5c; oz., 10c; $1 / 4 \mathrm{lb} ., 30 \mathrm{c}$. Conover's Colossal. Large and productive. ...Pkt., 5c; oz., 10c; 1/4 lb., 30 c. Argenteuil. This variety is largely grown in France for the Paris market. The stalks grow to a mammoth size. Pkt., 5c; oz., 10c; $1 / 4$ lb., 30c. Barr's Mammoth. A fine large-stemmed green variety. . . . . . . . . . . . . . . . . . . . . . . . Pkt., 5c; oz., 10 c ; $1 / 4 \mathrm{lb} ., 30 \mathrm{c}$.

## B E A N S Dwarf or Bush

One pound will plant 50 feet of drill- 60 to 120 pounds per acre. HILE 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 $S$ inches apart.

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

All varieties of Beans, pkt., 5c. All packets and half pounds of Beans are sent postpaid; for larger quantitios by mail, see "Postage" page 1.



Green-Podded Varieties


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, straisht, round, deeply saddle-backed, brittle, tender and of real good flavor. Has a much larger pod than the Valentine.

Pkt.,5c; $1 / 2 \mathrm{lb}$.,20c; $1 \mathrm{lb} ., 30 \mathrm{c} ; 5 \mathrm{lbs} ., \$ 1.40 ; 15 \mathrm{lbs} ., \$ 3.75$.


Our stock of this is
McCullough's Improved ${ }^{\text {nen }}$ in 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 unequaled in uniformity of ripening, which latter fact, combined with its earliness, makes it one of the most profitable sorts for the gardener.

Pkt.,5c;1/2 lb.,20c; 1 lb.,30c; 5 lbs., $\$ 1.40 ; 15$ lbs.,\$3.75.
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.,5c; 1/2 lb.,20c; 1 lb.,30c; 5 lbs.,\$1.40; 15 lbs.,\$3.75.

## B E A N S



## Dwarf or Bush

## Green Podded Varieties-Continued

All varieties of Beans, pkt., 5c. All packets and half pounds of Beans are sent postpaid, for larger quantities by mail, see "Postage," page 1.
Bountiful. An improved Long Yellow Six Weeks. Being earlier, hardier and producing better and larger pods and more of them. Pods grow to large size, are broad and fleshy; abso-- lutely stríngless, tender, of finest flavor and good appearance. -Pkt., $5 \mathrm{c} ; 1 / 2 \mathrm{lb} ., 20 \mathrm{c}$; $1 \mathrm{lb} ., 30 \mathrm{c} ; 5 \mathrm{lbs} ., \$ 1.40$; $15 \mathrm{lbs} ., \$ 3.75$.
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., 5 c ; $1 / 2 \mathrm{lb} ., 20 \mathrm{c}$; $1 \mathrm{lb} ., 30 \mathrm{c} ; 5 \mathrm{lbs} ., \$ 1.40$; $15 \mathrm{lbs} ., \$ 3.75$.
Full Measure. Highly recommended as one of the most popular varieties for the Market Gardener. Very early and prolific. The pods are long, straight and handsome; meaty, stringless and of good quality; thick, flat or almost semi-round. Pkt., 5c; $1 / 2 \mathrm{lb} ., 20 \mathrm{c}$; $1 \mathrm{lb} ., 30 \mathrm{c}$; $5 \mathrm{lbs} ., \$ 1.40$; $15 \mathrm{lbs} .$, § 3.75.
Improved Pefugee, or Thousand to One. Medium or late variety: grown for pickling.
Pkt., दे c; $1 / 2 \mathrm{lb} ., 20 \mathrm{c} ; 1 \mathrm{lb} ., 30 \mathrm{c} ; 5 \mathrm{lbs} ., \$ 1.40 ; 15 \mathrm{lbs} ., \$ 3.75$.
Tennessae 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.,5c; $1 / 2 \mathrm{lb} ., 20 \mathrm{c} ; 1 \mathrm{lb} ., 30 \mathrm{c} ; 5 \mathrm{lbs} ., \$ 1.40 ; 15 \mathrm{lbs} ., \$ 4.00$.

## DWARF SHELL BEANS

Horticultural Dwarf. Excellent quality as a shell bean either. green or dry Pkt.,5c; $1 / 2 \mathrm{lb} ., 20 \mathrm{c} ; 1 \mathrm{lb} ., 30 \mathrm{c} ; 5 \mathrm{lbs} ., \$ 1.40 ; 15 \mathrm{lbs} ., \$ 4.00$.
White Kidney, or Royal Dwarf. A superior kind for baking, and is also excellent when shelled green. Pkt.,5c; $1 / 2 \mathrm{lb} ., 15 \mathrm{c} ; 1 \mathrm{lb} ., 25 \mathrm{c} ; 5 \mathrm{lbs} ., \$ 1.15 ; 15 \mathrm{lbs} ., \$ 3.25$.
Red Kidney. Similar to White Kidney except in color. Pkt.,5c; $1 / 2 \mathrm{lb} ., 15 \mathrm{c} ; 1 \mathrm{lb} ., 20 \mathrm{c} ; 5 \mathrm{lbs} ., 90 \mathrm{c} ; 15 \mathrm{lbs} ., \$ 2.50$
White Marrowfat. Grown for sale as a dry bean for winter use; excellent shelled, either green or dry. Pkt.,5c; $1 / 2 \mathrm{lb} ., 15 \mathrm{c} ; 1 \mathrm{lb} ., 25 \mathrm{c} ; 5 \mathrm{lbs} ., \$ 1.15 ; 15 \mathrm{lbs}, \$ 3.25$.
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.,5c; $1 / 2 \mathrm{lb} ., 15 \mathrm{c} ; 1 \mathrm{lb} ., 20 \mathrm{c} ; 5 \mathrm{lbs} ., 90 \mathrm{c} ; 15 \mathrm{lbs} ., \$ 2.50$.
Navy. The old standard sort for winter use. Pkt.,5c; $1 / 2 \mathrm{lb} ., 15 \mathrm{c} ; 1 \mathrm{lb} ., 20 \mathrm{c} ; 5 \mathrm{lbs} ., 90 \mathrm{c} ; 15 \mathrm{lbs} ., \$ 2.50$.


Burpee's Stringless Green Pod

## BEANS

## Dwarf or Bush

Wax or Yellow-Podded Varieties
All varieties of Beans, pkt., 5c. All packets and half pounds of Beans are sent postpaid, for larger quantities by mail see "Postage" page 1.
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., 5c ; $1 / 2 \mathrm{lb} ., 20 \mathrm{c} ; 1 \mathrm{lb} ., 35 \mathrm{c} ; 5 \mathrm{lbs} ., \$ 1.65$.
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., 5c; 1/2 lb., 20c; 1 lb., 35c; 5 lbs., \$1.65.
Golden Wax, Improved. One of the best strains of Golden Wax. Prolific, of best quality; pods long, straight, thick and vines very erect.
Pkt.,5c; $1 / 2 \mathrm{lb} ., 20 \mathrm{c} ; 1 \mathrm{lb} ., 30 \mathrm{c} ; 5 \mathrm{lbs} ., \$ 1.40 ; 15 \mathrm{lbs} ., \$ 4.00$.
Davis' White Kidney Wax. Very productive, white-seeded, rustless string or snap variety; long, flat pods, which are very tender while young.
Pkt., 5 c ; 1/2 lb., 20c; 1 lb., 30c; 5 lbs., \$1.40; 15 lbs., \$4.00.
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., 5c; 1/2 lb., 20c; 1.lb., 35c; 5 lbs., \$1.65.
Curries Rustproof Wax. This variety has proven to be practically rust-proof, in addition to which it is unusually prolific, bearing large crops of long, flat, light yellow pods.
Pkt., 5c; 1/2 lb., 20c; 1 lb., 30c; 5 lbs., $\$ 1.40$; 15 lbs., $\$ 4.00$.
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., $5 \mathrm{c} ; 1 / 2 \mathrm{lb} ., 20 \mathrm{c} ; 1 \mathrm{lb} ., 30 \mathrm{c} ; 5 \mathrm{lbs} ., \$ 1.40$; 15 lbs., \$4.00.
Black Wax Pencil Pod. Plants grow about fifteen inches high and are extremely productive. Magnificent straight pods six to seven incheslong, light golden yellow in color, beautifully rounded, meaty and deeply saddle-backed; flesh brittle, solid and entirely stringless, of fine mild flavor. Pkt., 5 c ; $1 / 2 \mathrm{lb} ., 20 \mathrm{c}$; $1 \mathrm{lb} ., 30 \mathrm{c}$; $5 \mathrm{lbs} ., \$ 1.40$; 15 lbs., $\$ 4.00$.

Valentine Wax. We consider this variety the earliest Wax Bean in cultivation. Plants are strong and vigorous, pods are round and very meaty.......................Pkt., $5 \mathrm{c} ; 1 / 2 \mathrm{lb} ., 20 \mathrm{c} ; 1 \mathrm{lb} ., 30 \mathrm{c} ; 5 \mathrm{lbs} ., \$ 1.40$; $15 \mathrm{lbs} ., \$ 4.00$.

Prices subject to change without notice.

## B E A N S-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., 5c.
All packets and half pounds of Beans are sent postpaid; for larger quantities by mail see "Postage" page 1.
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., 5c; $1 / 2 \mathrm{lb} ., 20 \mathrm{c} ; 1 \mathrm{lb} ., 35 \mathrm{c} ; 5 \mathrm{lbs} ., \$ 1.60$; 15 lbs., \$4.50.
Fordhook Bush Lima. This is one of the best Bush Lima Beans in cultivation. It has a distinct uprioht 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., 5c; $1 / 2 \mathrm{lb} ., 20 c ; 1 \mathrm{lb} ., 35 \mathrm{c} ; 5 \mathrm{lbs} ., \$ 1.60$; 15 lbs., \$4.50.


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.,5c; 1/2 lb.,20c; 1 lb.,35c;
 5 lbs., \$1.60; 15 lbs., \$4.50.

Burpec'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 $21 / 2$ 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.,5c; 1/2 lb.,20c; 1 lb.,30c; 5 lbs., $\$ 1.40$; 15 lbs., $\$ 4.00$.

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.,5c; 1/2 lb.,20c; 1 lb.,30c; 5 lbs., $\$ 1.40$; 15 lbs., $\$ 3.75$.

## BEANS-Continued

## Pole or Running Varieties

All varieties of Eeans, pkt., 5c.
All packets and half pounds of Beans are sent postpaid; for larger quantities by mail, see "Postage" page 1.

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.,5c; $1 / 2 \mathrm{lb} ., 20 \mathrm{c} ; 1 \mathrm{lb} ., 30 \mathrm{c} ; 5 \mathrm{lbs} ., \$ 1.40 ; 15 \mathrm{lbs} ., \$ 3.75$.
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., 5c; $1 / 2 \mathrm{lb}$., 20c; $1 \mathrm{lb} ., 30 \mathrm{c} ; 5 \mathrm{lbs} ., \$ 1.40$; 15 lbs., $\$ 3.75$.
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.,5c; $1 / 2 \mathrm{lb} ., 20 \mathrm{c} ; 1 \mathrm{lb} ., 30 \mathrm{c} ; 5 \mathrm{lbs} ., \$ 1.40 ; 15 \mathrm{lbs} ., \$ 3.75$.

Horticultural.
 (Wren's Egg, or Speckled Cranberry). This old favorite is an excellent Corn Bean, productive and tender
tender.
Pkt., 5c; $1 / 2$ lb., 20c; 1 lb., 30c; 5 lbs.,\$1.40;15 lbs., \$3.75.

Lazy Wife. An excellent, late, green podded pole bean. Pods of medium dark green color, thick, very fleshy and entirely stringless. The pods reless. The pods re-
main green and tender until nearly


Ohio Wax Pole ripe. Beans are white, and excel-
lent as shell beans for winter use
Pkt., 5c; $1 / 2 \mathrm{lb} ., 20 \mathrm{c} ; 1 \mathrm{lb} ., 35 \mathrm{c} ; 5 \mathrm{lbs} ., \$ 1.40 ; 15 \mathrm{lbs}$, , $\$ 4.00$.
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.,5c; 1/2 lb.,20c; 1 lb.,30c; 5 lbs.,\$1.40; 15 lbs.,\$3.75.
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.,5c; $1 / 2 \mathrm{lb} ., 20 \mathrm{c} ; 1 \mathrm{lb} ., 30 \mathrm{c} ; 5 \mathrm{lbs} ., \$ 1.40 ; 15 \mathrm{lbs} ., \$ 3.75$.
Scarlet Runner. An ornamental climber. Bright scarlet flowers; pods are edible when picked young.

Pkt., 5c; 1/2 lb., 25c; 1 lb., 40c.
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., 5c; $1 / 2 \mathrm{lb} ., 20 \mathrm{c}$; $1 \mathrm{lb} ., 30 \mathrm{c}$; 5 lbs., $\$ 1.40$.

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., 5c; $1 / 2$ lb., 20c; 1 lb., 35c; 5 lbs., $\$ 1.60$.

Golden Cluster Wax. The pods are from 6 to 8 inches long, stringless, very tender and of delicate flavor Pkt., 5 c ; $1 / 2 \mathrm{lb} ., 20 \mathrm{c} ; 1 \mathrm{lb} ., 35 \mathrm{c} ; 5 \mathrm{lbs} ., \$ 1.60$.

# BEANS-Continued <br> <br> POLE LIMA 

 <br> <br> POLE LIMA}

All varietics of Beans, pkt., 5c.

## All packets and half pounds of Beans are sent postpaid; for larger quantities by mail, see "Postage" page 1.

 F 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 bettor than any other variety, the beans cooking rich and mealy.
Pkt., 5c; $1 / 2 \mathrm{lb} ., 20 \mathrm{c} ; 1 \mathrm{lb} ., \mathbf{3 0 c} ; 5 \mathrm{lbs} ., \$ 1.40 ; 15 \mathrm{lbs} ., \$ 4.00$.
Early Leviathan Lima. The earliest variety of Pole Lima; produces pods in clusters. A good variety where the season is short.

Pkt., 5c; $1 / 2 \mathrm{lb} ., 20 \mathrm{c} ; 1 \mathrm{lb} ., \mathbf{3 0 c} ; 5 \mathrm{lbs} ., \$ 1.40 ; 15 \mathrm{lbs} ., \$ 4.00$. King of the Garden Lima. A vigorous grower, bearing profusely. The beans are large and of rich flavor.

Pkt., 5 c ; $1 / 2 \mathrm{lb} ., 20 \mathrm{c} ; 1 \mathrm{lb} ., 30 \mathrm{c} ; 5 \mathrm{lbs} ., \$ 1.40 ; 15 \mathrm{lbs} . ; \$ 4.00$.


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., 5c; $1 / 2 \mathrm{lb} ., 20 \mathrm{c}$; 1 lb., 30c; 5 lbs., $\$ 1.40$; 15 lbs., \$4.00.

## BROCCOLI

Sow in beds middle of spring, transplant and cultivate the same as Cabbage.
Early Large White...........Pkt., 10c; oz., 50c. Early Purple Cape............Pkt., 10c; oz., 50c.

## BRUSSELS SPROUTS

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 $11 / 2$ to 2 feet apart in the row. Cultivate same as Cabbages.
Dwarf Improved.

## BEET

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 in spring will quickly produce plants from which cuttings can be made all summer.

Pkt., 5c; oz., 15c; $1 / 4 \mathrm{lb} ., 50 \mathrm{c}$; lb.,\$1.75. Giant Lucullus. This is a decided improvement over the common variety.

The plants grow from 2 to $21 / 2$ 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; $1 / 4 \mathrm{lb} ., 60 \mathrm{c}$; lb., $\$ 2.00$.


Brussels Sprouts

## BEETS

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.
 A superb early maincrop Beet, both for market and
the home garden. The roots the home garden. The roots 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., 15c; $1 / 4 \mathrm{lb} ., 50 \mathrm{c}$; per lb., $\$ 1.50$.

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

Bassano:- (The Table Sugar Beet.) A very early flat variety, tender, juicy; flesh white and rose-colored, very sweet. Pkt., 5c; oz., $10 c$; $1 / 4 \mathrm{lb} ., 35 \mathrm{c}$; per lb., $\$ 1.25$.
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:,-15c; $1 / 4 \mathrm{lb} ., 50 \mathrm{c}$; per lb., $\$ 1.50$.
Crimson Globe. A faindsome 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., 15c; $1 / 4 \mathrm{lb} ., 50 \mathrm{c}$; per lb., $\$ 1.50$.
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., 10c; $1 / 4 \mathrm{lb} ., 35 \mathrm{c}$; per lb., $\$ 1.25$.

Detroit. Color of skin dark blood-red; flesh bright-red, zoned with a lighter shade, very crisp, tender and sweet. Pkt., 5c; oz., 15 c ; $1 / 4 \mathrm{lb} ., 50 \mathrm{c}$; per lb., $\$ 1.50$.

Early Blood. Flesh dark red, a standard round variety with small top.

Pkt., 5 c ; oz., 10c; $1 / 4 \mathrm{lb} ., 35 \mathrm{c}$; per lb., $\$ 1.25$.
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., 10c; $1 / 4 \mathrm{lb} ., 35 \mathrm{c}$; per lb., $\$ 1.25$.

Edmand's Early. Uniform small top, bronzy red; exiceedingly tender and sweet; skin blood-red; flesh dark red. Pkt., 5c; Oz., 10 c ; $1 / 4 \mathrm{lb} ., 35 \mathrm{c}$; per lb., $\$ 1.25$.

Egyptian Extra Early. One of the earliest, of good quality and medium size; a fine forcer; small top.

Pkt., 5c; oz., 10c; $1 / 4 \mathrm{lb} ., 35 \mathrm{c}$; per lb., $\$ 1.25$.


McCullough's "Norwood"
Fireball. This is a new and distinct extra early Turniprooted 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., 15c; $1 / 4 \mathrm{lb} ., 50 \mathrm{c}$; per lb., $\$ 1.50$.
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., 10c; $1 / 4 \mathrm{lb} ., 35 \mathrm{c}$; per lb., $\$ 1.25$.
Long Dark Blood. A good late variety for fall and winter use; sweet and tender.

Pkt., 5c; oz., 10c; $1 / 4 \mathrm{lb} ., 35 \mathrm{c}$; per lb., \$1.25.
Swiss Chard or Spinach Beet, See page 6.

## 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; $1 / 4 \mathrm{lb} ., 25 \mathrm{c}$; per lb., 85c.
Lane's Imperial. One of the best for field culture; early, large and productive.

Pkt., 5c; oz., 10c; 1/4 lb., 25c; per lb., 85c.
Giant Half-Sugar Green Top. Longish ovoid; red skin; white flesh; crisp and fine.

Pkt., 5c; oz., 10c; 1/4 lb., 25c; per lb., 85c.

## 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 $21 / 2$ feet apart as soon as the ground can be thoroughly worked. Cover seed about $11 / 2$ 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; 1/4 lb., 25c; per lb., 60c. Yellow Globe. Of large size and globular form; very productive

Pkt., 5c; oz., 10c; 1/ lb., 25c; per lb., 60c. Golden Tankard. Bright yellow, large, handsome, heary cropper, splendid quality

Plit., 5c; Oz., 10c; 1/4 lb., 25c; per lb., 60c.

## C A B B A G E

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 $\mathbf{2 , 5 0 0}$ plants; five ounces for one acre.


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; $1 / 4 \mathrm{lb} ., \$ 1.50$.



McCullough's Early Market


McCullough's Early Louisville Drumhead
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 earlizr and insizefully 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; 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; $1 / 4 \mathrm{lb} ., \$ 1.50$.


Early Jersey Wakefield

## CABBAGE-Continued

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; 1/4lb., \$1.75.

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; 1/4 lb., \$1.50.

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; $1 / 4 \mathrm{lb} ., \$ 1.25$.

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; 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; $1 / 4$ 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 globeshaped, 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; 1/4 lb., \$1.50.


Glory of Enkhuizen
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; $1 / 1 \mathrm{lb}$., $\$ 1.25$.

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; 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; $1 / 4 \mathrm{lb} ., \$ 1.25$.

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; $1 / 4 \mathrm{lb} ., \$ 1.25$.


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. Out stock lias been carefully selected for several years. No better strain on the mariet.

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

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

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; $1 / 4 \mathrm{lb} ., \$ 1.50$.
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; $1 / 4 \mathrm{lb} ., \$ 1.50$.

## RED CABBAGE

Early Red. Extremely early and valuable for pickling. Pkt., 5c; oz., 40c; 1/4 lb., $\$ 1.50$.
Late Giant Red. A large heading, late variety, fine for pickling...........Pkt., 5c; oz., 40c; $1 / 4 \mathrm{lb} ., \$ 1.50$.
Mammoth Rock Red. The largest and most solid of the red varieties; a sure heading sort and tender.

Pkt., 5c; oz., 40c; 1/4 lb., \$1.50.

## CABBAGE-Continued

## SAVOY CACBAGE

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; $1 / 4 \mathrm{lb} ., \$ 1.50$.


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

PE-TSAI, CHINESE OR CELERY CABBAGE

THE Seed we offer is the true variety which has been growninChina 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 "he put as a vegetable" is bound tomake 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., 5c; oz., 35c; 1/4 lb., \$1.25.


## C A ULIFLOWER

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, $21 / 2$ 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 question the poses. It heads where others Year after year this has become more popular, until leading market gardeners now grow it entirely, having discarded all the older va,ieties, 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; $1 / 4 \mathrm{oz}$., $\$ 1.25$.
Early Snowball. (True.) An extremely early dwarf variety, producing magnificent white heads, of fine quality. Well adapted to hot-bed culture.
Pkt., 20c; $1 / 4$ 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; 1/4 oz.,90c.
Early Paris. Heads large, white, compact and solid; tender and delicious.
Pkt., 10 c ; $1 / 4 \mathrm{oz},. 30 \mathrm{c}$; oz., $\$ 1.00$.
Lenormand's. A large, late, short-
stemmed variety, with well-formed white heads.
Pkt., 10c; $1 / 4 \mathrm{oz}$., 30c; oz., $\$ 1.00$.
Veitch's Autumn Giant. One of the finest late varieties, of robust habit, heads large, compact and thoroughly protected by leaves......................................... 10 c ; $1 / 4$ oz., 30 c ; oz., $\$ 1.00$.

# CARROTS 

Alight sandy loam, well-tilled and manured the previous year, best suits he 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.

Early Market, Stump-rooted. A very choice strain, tender, fine-grained flesh. An


Chantenay 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.

Early and good flavor.............Pkt., 5c; oz., 15c; $1 / 4 \mathrm{lb} ., 50 \mathrm{c}$.


McCullough's Intermediate

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 $\qquad$ .Pkt., 5c; oz., 15c; 1/4lb., 50c.
Danvers. A cylindrical-shaped Carrot of good size and stumprooted, rich, dark orange color, grows to a large size, smooth and the flesh very close in texture with little core.

Pkt., 5c; oz., 15c; 1/4 lb., 50c.
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., 15c; 1/4 lb., 50c.
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., 15c; 1/4 lb., 50c.
Nantes Half-Long Scarlet. A stump-rooted variety, having little or no core. Flesh red and of fine flavor. Pkt., 5c; oz., 15c; $1 / 4 \mathrm{lb}$., 50 c .


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 $\qquad$ Pkt., 5c; oz., 15c; 1/4 lb., 50c.
Improved Long Orange. A standard late variety; deep orange color. It is of excellent table quality and is highly nutritious for stock......Pkt., 5 c ; oz., $10 \mathrm{c} ; 1 / 4 \mathrm{lb} ., \mathbf{3 5 c}$. 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., 10c; $1 / 4 \mathrm{lb} ., \mathbf{3 5 c}$.
Large White Belgian. The lower part of the root is white; that growing and exposed above ground, green. It is exclusively grown for stock. .Pkt., 5c; oz., 10c; $1 / 4 \mathrm{lb} ., \mathbf{3 5 c}$.


Danvers

## CELERY

Tgrow early Celery, sow the seed late in March in a hotbed or box; and for later crops, as soon as the weather becomes warm, sow in the open ground, cover lightly, or better still, roll or press it in. Shade the yound 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 plants must be freely watered in dry weather, butit 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 intinded 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.



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., \$1.00.
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; 1/4 lb., \$1.25.
White Plume. Is unsurpassed for fall and early winter use, requiring very little earthing up to blanch it.

Pkt., 5c; oz., 30c; $1 / 4$ lb., $\$ 1.00$.


Easy Blanching. Stalks thick, brittle and excellent flavor. Adapted to early use as well as storing for winte:. 'TiLse who have not been successful with other sorts, should give this a trial............. Pkt., 5c.; oz., 40c; $1 / 4 \mathrm{lb} ., \$ 1.50$.
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. $\qquad$ .Pkt., 5c; oz., 25c; $1 / 4 \mathrm{lb} ., 75 \mathrm{c}$. 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.


Celeriac

Colden-Hearted Dwarf. A popular variety. Handsome color, medium size, fine flavor. . ....Pkt., 5c; oz., 25c; $1 / 4 \mathrm{lb} ., 75 \mathrm{c}$.
Enow 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., 30c; 1/4 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; 1/4 lb., 75 c.

## 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; 1/4 lb., 75c.

## COLLARDS

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

Pkt., 5c; oz., 15c; 1/4 lb., 40c.

## C O R N , Sweet or Sugar

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 to 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 acrs. 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 1 .


The illustration represents a matured ear of our Cincinnati Market or Club Zig-Zag Evergreen Corn. Our patrons can readily infer now juicy this Corn is when the kornels are filled with milk.
 duced by us, has become the best seller on the Cincinnati market. 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.,5c; 1/4 lb.,15c; 1 lb.,25c; 5 lijs., $\$ 1.00 ; 15 \mathrm{lbs} ., \$ 2.75$.
Premo. The best extra early variety. It can be planted early, as the young plants will withstand slight frosts. 'I he 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, wrll filled to each end of the ear. and of a fine sweet flavor.
Pkt.,5c; $1 / 4 \mathrm{lb} ., 15 \mathrm{c} ; 1 \mathrm{ln.,25c} ; 5$ lbs.,\$1.10; 15 lbs.,\$3.00. 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.,5c; 1/4 lb.,15c; 1 lb.,25c; 5 lbs.,\$1.15; 15 lbs.,\$3.00.
Kendal's Early Giant. Very early, fit for use 60 days from planting. Ears larse, 8 to 10 inches in length, twelve rows to a cob. Kernels pure white, sweet and tender.
Pkt.,5c; $1 / 4 \mathrm{lb} ., 15 \mathrm{c} ; 1 \mathrm{lb} ., 25 \mathrm{c} ; 5 \mathrm{lbs} ., \$ 1.15 ; 15 \mathrm{lbs} ., \$ 3.00$.
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 tlavor. It may be planted with perfect safety ten days earlier than other Sweet Corn. One of the best sorts for successive plantings. Pkt.,5c; $1 / 4$ lb.,15c; 1 lo.,25c; 5 los., $\$ 1.15 ; 15$ los., $\$ 3.00$.

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.,5c; 1/4 lb.,15c; 1 lb.,25c; 5 lb.,\$1.15; 15 lbs.,\$3.00.
Early Minnesota. Very early, ears of fair size and good quality.
Pkt.,5c; 1/4 lb.,15c; 1 lb.,25c; 5 lbs.,\$1.15; 15 lbs.,\$3.00. Crosby's Early. A great favorite; productive and of excellent quality.
Pkt.,5c; $1 / 4 \mathrm{lb} ., 15 \mathrm{c} ; 1 \mathrm{lb} ., 25 \mathrm{c} ; 5 \mathrm{lbs} ., \$ 1.15 ; 15 \mathrm{lbs} ., \$ 3.00$.
Early Mammoth. A second early variety. The ears are of large size, kernels large and very sweet. Plkt.,5c; $1 / 4 \mathrm{lb.,15c} ; 1 \mathrm{lb} ., 25 \mathrm{c} ; 5 \mathrm{lbs} ., \$ 1.15 ; 15 \mathrm{lbs} ., \$ 3.00$.
Bantam Evergreen. A cross between Golden Bantam and Stowell's Evergreen. An excellent sort of fine quality. Ears 8 inches long, 12 rowed, giain rather broad and dcep, of a rich golden-yellow color.
Pkt.,5c; 1/4 lb.,15c; 1 lb.,25c; 5 lbs., \$1.15; 15 lbs.. $\$ 3.00$.
Early Evergreen. An early strain of Evergreen of great value. This variety resembles the Sto well'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.,5c; 1/4 lb.,15c; 1 lb.,25c; 5 lbs., \$1.00; 15 lbs.,\$2. 75.
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.,5c; 1/4 lb.,15c; 1 lb.,25c; 5 lbs.,\$1.15; 15 lbs.,\$3.00.
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..5c; $1 / 4 \mathrm{lb} ., 15 \mathrm{c} ; 1 \mathrm{lb} ., 25 \mathrm{c} ; 5$ lbs.,\$1.15; $15 \mathrm{lbs} ., \$ 3.00$.


## CORN ,

## Sweet or Sugar-Continued



Zigzag Evergreen

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., 5c; 1/2 lb., 15c; 1 lb., 25c; 5_lbs., \$1.00; 15 lbs., \$2.5J.
Narrow Grain Evergreen. Similar in all respects to Stowell's Evergreen, but has very narrow grains. Pkt., 5 c ; $1 / 2$ lb., 15c; $1 \mathrm{lb} ., 25 \mathrm{c}$; 5 lbs., $\$ 1.00$; 15 lbs., $\$ 2.50$.
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., 5c; $1 / 2 \mathrm{lb} ., 15 \mathrm{c}$; 1 lb., 25c; 5 lbs., $\$ 1.00 ; 15$ lbs., $\$ 2.50$.
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 zigzag upon the cob, which is always an indication of great sweetness. Pkt., $5 \mathrm{c} ; 1 / 21 \mathrm{~b} ., 15 \mathrm{c} ; 1 \mathrm{lb} ., 25 \mathrm{c}$; 5 lbs., $\$ 1.00 ; 15$ lbs., $\$ 2.50$.
Mammoth Sugar A late variety, producing ears of very large size and fine flavor. Pkt., 5c; $1 / 2$ lb., 15c; 1 lb., 25c; 5 lbs., $\$ 1.00 ; 15$ lbs., $\$ 2.50$.
Black Mexican. Black-grained variety; sweet, tender; must be picked young to avoid a black appearance when cooked.
Pkt., 5c; $1 / 2 \mathrm{lb}$., 15c; 1 lb., 25c; 5 lbs., $\$ 1.15 ; 15$ lbs., $\$ 3.00$.

## GARDEN CORN

Adams' Extra Early. The hardiest and earliest variety for table use, but not a Sugar Corn; can be planted earlier than any other corn. Pkt., 5c; $1 / 2$ lb., 10c; 1 lb., 15c; 5 lbs., 70c; 15 lbs., $\$ 1.85$.
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., 5c; $1 / 2$ lb., 10c; 1 lb., 15c; 5 lbs., 70c; 15 lbs., \$1.85.


Golden Giant Sugar Corn. It excels all the other early varieties of corn in size, productiveness and quality; and all the late varieties in quality and early maturity while equaling them in size. Be sure to read descriptive circular inclosed in this Catalog. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 ozs., 3 jc ; $1 / 4 \mathrm{lb}$, , 50c; $1 / 2 \mathrm{lb} ., 85 \mathrm{c}$; per lb., $\$ 1.50$.

## CORNSALAD, or Fetticus

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; $1 / 4 \mathrm{lb} ., 40 \mathrm{c}$.


Corn Salad

## 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 pro-


## C U C U M B ERS

$\mathbf{F}^{0}$OR 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 handglasses. 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.

An excellent $\mathrm{Cu}-$ cumber for both forcing and outdoor ase. The fruit grows 11 to 15 inches long, slim, slightly
pointed, a dark glossy green color, which 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 ; uz., 15c; 1/4lb., 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 groving. It is hardy and an excellent shipper. It is extensively grown in the South for shipping North, early in the season. Fruit grows 7 to 10 inches long, of a deep green color, and full at both ends.
Ply Cluster. A much esteemed early $40 \mathrm{c} ;$ per lb., $\$ 1.2 \overline{3}$. clusters; is extremely productive

Plit., 5 c ; oz., $10 \mathrm{c} ; 1 / \frac{1}{4}$ lb., 30c; per lb.. $\$ 1.00$. Improved White Spine. The favorite market varietr, 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; Earlp ${ }^{1 / 4 . .35 c} ; 1 \mathrm{lb} ., \$ 1.00$. variety for pickling and table. Medium size. Pkt..5c;oz..10c; $1 / 4 \mathrm{lb} . .30 \mathrm{c} ; \mathrm{lb} ., \$ 1.00$. Green Prolific. One of the best pickling rarieties; dark green, very productire. Good for table use.

Pkt., 5c; oz., 10c; $1 / 4 \mathrm{lb} ., 30 \mathrm{c}$; per lb., $\$ 1.03$. 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; $1 / 4 \mathrm{lb} ., 30 \mathrm{c}$; 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;1/4 lb.,30c; lb.,\$1.00.
Long Green Improved. A standard late sort, fruits 12 to 14 inches long, slender, more or less warted, tapering towards the stem end; color dark green, flesh white and firm. Excellent for table and makes a hard, brittle pickle. Extra selected stock.

Plit., 5c; oz., 20c; $1 / 4 \mathrm{lb} ., 50 \mathrm{c}$; per lb.. $\$ 2.00$.


Ohio White Spine

Davis Perfect. Splendidly adapted for growing either ander glass or in the garden. In color. a dark. ylossy green; shape, sim and symmetrical. with an arerabe denzt of 10 to 12 inches. They are as early as the earliest strain of Thite Spine.

Pkt., 5c; oz.. 15c; 1/1 lb.. 40c: per lb.. $\$ 1.25$.
Early Fortune. The finest type of White Sinine. Early and very productive; fruit grows 9 inches long. slightly tapering, flesh white, firm and crisp with very few seeds; color dark green. Quality is excellent, either for the table, or pickling.

Pkt., 5c; oz., 15c; 1íl lb.. 40c; per lb.. \$1.25. Long Green. A standard late sort. crisp and tender, very prolific, excellent for the table and makesahard, brittle pichle. Pkt. 5 c ; OZ. 15c; 1b., 40c; per lb., $\$ 1.2 \overline{05}$.

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 Loing Green. perlib. $\$ 1.00$
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., 5 c ; oz., $15 \mathrm{c} ; 1 / 41 \mathrm{lb} .50 \mathrm{c}$. Gherkin. A very small prickly variety, used exclusively for pickling, for which purpose they should be gathered while young and tender Pkt.,5c; oz.,15c; 1/4 lb.,50c.

## 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 Edinburg. Very large and long, dull green, quite smooth; packet of 10 seeds.

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

25 c .


## 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., 25c.
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., 30c.

## CRESS, Water and Garden

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; $1 / 4 \mathrm{lb} ., 30 \mathrm{c}$.
Erfurt Water Cress. A most desirable and appetizing salad, thriving best in shallow water, on the edges of streams. $\qquad$ Pkt., 10c; oz., 35c.

## EGG PLANT



S EED is of slow germination and requires a 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 Leauty. 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, whichit retains even after becoming ripe............... Pkt., 10c; oz., 50c; $1 / 4 \mathrm{lb} ., \$ 1.75$.

New York Improved. A leading market variety.
Pkt., 10c; oz., 50c; 1/4 lb., \$1.75.


Witloof Chicory

## ENDIVE

$0^{N}$NE 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; 1/4 lb., 50c. Green Curled. Very hardy, crisp and tender.

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

Moss Curled. It is excellent for winter use.
Pkt., 5c; oz., 15c; $1 / 4 \mathrm{lb} ., 50 \mathrm{c}$.
White Curled. Coarser than Green Curled, but the mid-rib is yellow and the leaves frequently almost white...............Pkt., 5c; oz., 15c; $1 / 4 \mathrm{lb} ., 50 \mathrm{c}$.
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, $1 / 4 \mathrm{lb}$., 15 c ; per lb ., 40 c .


## 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.



Kale or Borecole

## KALE OR BORECOLE

TTHE Kales are more hardy than Cabbage, 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
I pecial
crimped variety of strong vigorous habit, perfectly hardy, bright green color and very attractive in appearance.
Pkt., 5c; oz., 10c; $1 / 4 \mathrm{lb} ., 30 \mathrm{c}$; per lb., $\$ 1.00$.
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; $1 / 4 \mathrm{lb} ., 60 \mathrm{c}$; per lb., $\$ 2.00$.
Dwarf Curled Siberian. Leaves yellowish-green, finely curled. Sow in September for the early winter and spring use.

Pkt., 5c ; oz., 10c; 1/4 lb., 25c; per lb., 75 c .
Tall Scotch. Leaves green, beautifully curled and wrinkled -grows about 2 feet in heioht; hardy, being improved by frost. .Pkt., 5 c ; oz., 20c; $1 / 4 \mathrm{lb} ., 60 \mathrm{c}$; per lb., $\$ 2.00$.


Kohl-rabi

KOHL-RABI $\begin{gathered}\text { Tuunip Rooted } \\ \text { Cababe }\end{gathered}$
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., 30c; $1 / 41 b$., 75 c . Early Purpie Vienna. Differs from the above in color..........Pkt., 5c; oz., 25c; 1/4 lb., 70 c.

## LEEK

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; $1 / 4 \mathrm{lb} ., 75 \mathrm{c}$. London Flag. An old and popular sort; one of the hardiest; best for winter use.

Pkt., 5c; oz., 20c; 1/1 lb., 75c. Large Musselburgh. Of enormous size; leaves large and broad; very mild; pleasant flavor.

Pkt., 5c; oz., 20c; $1 / 4 \mathrm{lb} ., 75 \mathrm{c}$.


## LETTUCE

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 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 fall.

One ounce will produce about 3,000 plants.

## Head Varieties


The finest home garden and market variety. Its beautiful yellowishgreen 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 family use. It withstands the heat of summer and retains its sweetness for a long time...... Pkt., 5c; oz., 15c; $1 / 4 \mathrm{lb}$;, 50c. All Seasons. A large, medium late sort; heart well bleached; leaves broad, smooth and thick; color light grayish-green, never spotted or brownish; quality excellent.

Pkt., 5c; oz., 15c; 1/4 lb., 50c.
Iceberg. A large, late, crisp Cabbage-heading variety; heads firm and hard, leaves broad and light green in color, with faint brown tracing on the borders. Quality good.

Pkt., 5c; oz., 15c; 1/4 lb., 50c.
Big Boston. Heads solid with broad leaves; the best for outdoor or for forcing. Color light green. We have made

## Big Boston



Wayahead


## Curled Varieties

Grand Rapids. This is probably the best of the looseleaved 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. We strongly urge those who cannot succeed in getting lettuce to head to grow Grand Rapids.

Pkt., 5c; oz., 15c; 1/4 lb., 50c.
White Star. A crisp, loose-heading variety, leaves broad, crumpled and twisted. Color very light green.

Pkt., 5c; oz., 15c; $1 / 4 \mathrm{lb} ., 50 \mathrm{c}$.
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 weli as for early outdoor planting.

Pkt., 5c; oz., 10c; 1/4 lb., 40c.
Early Curled Simpson. Does not head, but forms a close, compact mass of leaves; very early, excellent for forcing...............Pkt., 5c; oz., 10c; $1 / 4 \mathrm{lb} ., 40 \mathrm{c}$.
Early Curled Silesian. Early, loose heads, curled, tender and fine flavor. . .....Pkt., 5c; oz., 10c; $1 / 4 \mathrm{lb} ., 40 \mathrm{c}$.
Prize Head. Produces large, loose heads, finely crimped and fringed leaves, outer portions shaded brown; crisp, sweet and tender....Pkt., 5c; oz., 10c; 1/4 lb., 40c.


Oak Leaved. Very distinct, excellent for summer use and for the South
Pkt., 5c; oz., 15c; 1/4 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; $1 / 4 \mathrm{lb} ., 50 \mathrm{c}$. Trianan Self-Folding. A self-blanching Cos Lettuce, very crisp and tender, and of excellent flavor.

## MUSKMELONS

$\mathbf{I}^{\mathrm{N}}$N 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; $1 / 4 \mathrm{lb} ., \$ 1.00$.

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., 15c; 1/4 lb., 40c.
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; 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; $1 / 4 \mathrm{lb} ., 60 \mathrm{c}$.



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., 15c; $1 / 4 \mathrm{lb} ., 40 \mathrm{c}$.
Hackensack. Melons grow to large size and attractive appearance. Flesh green, very sweet and sugary. Outer skin is heavily netted.

Pkt., 5c; oz., 15c; 1/4 lb., 40c.
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., 15c; $1 / 4 \mathrm{lb} ., 40 \mathrm{c}$.
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; $1 / 4 \mathrm{lb} ., 40 \mathrm{c}$.
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; $1 / 4 \mathrm{lb} ., 40 \mathrm{c}$.
Defender. Medium size, salmon flesh, and delicious flavor; oval shape, slightly ribbed and covered with a slight netting..............Pkt., 5c; oz., 15c; $1 / 4 \mathrm{lb} ., 40 \mathrm{c}$.

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., 15c; 1/4 lb., 40c.
Emerald Gem. Ripens early; medium size; nearly round; flesh a delicate 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., 5 c ; oz., 15 c ; $1 / 4 \mathrm{lb} ., 40 \mathrm{c}$.
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., 15c; 1/4 lb., 40c.
Improved Green Nutmeg. A large melon, nearly round, deeply ribbed, flesh thick, light green, delicious flavor.

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

# WATERMELONS 

One ounce for 30 hills-4 to 5 pounds for an acre. HILE 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 Watci nnelons 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. Fruit oblong in shape, dark green color with tracings of light green. Flesh deep red, crisp and tende:. Weight, 35 to 60 pounds.
Pkt.,5c; oz.,10c; 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; 1/4 lb.,30c; per lb.,\$1.00.
Kleckley's S weet. 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; 1/4 lb., 30c; per lb., \$1.00.
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; $1 / 4 \mathrm{lb} ., 30 \mathrm{c}$; 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 darir 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; $1 / 4 \mathrm{lb} ., 30 c$; 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; $1 / 4 \mathrm{lb} ., 30 \mathrm{c}$; 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; $1 / 4 \mathrm{lb} ., 25 \mathrm{c}$; per lb., 75 c .
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; $1 / 4 \mathrm{lb} ., 30 \mathrm{c}$; 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; 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; $1 / 4$ lb., 30c; per lb., \$1.00.

Halbert Honeg. A very sweet, long, dark green variecy. 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; $1 / 4$ lb., 30c; per lb., $\$ 1.00$.
Duke Jones. The color of the skin is solid green, flesh bright red, sweet, juicy and melting.

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

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

Long Light Icing. The skin a mottled gray color, shape long, flesh bright crimson and sweet.

Pkt., 5c; oz., 10c; 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; $1 / 4$ lb., 30c; per lb., \$1.00.
Pride of Georgia. Dark green color, almost oval.
Pkt., 5c; oz., 10c; $1 / 4$ lb., 30c; per lb., \$1.00.
Rattlesnake, or Gypsy. Fruit large, oblong, striped; flesh red.

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\text { Pkt., 5c; oz., 10c; } 1 / 4 \mathrm{lb} ., 30 \mathrm{c} ; \text { per lb., } \$ 100 .
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Colorado Preserving Citron. Flesh white and firm.
Pkt., 5c; oz., 10c; 1/4 lb., 30c.

## MUSHROOMSPAWN

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 outhouses. 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 situationsa 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 wainuts 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 $2 \times 6$ 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 sidewise in the beds 10 to 12 inches apart each way. Prices, by express-customer to pay charges. Per brick, 25c; per lb., 20c; 10 lbs., $\$ 1.25$; 100 lbs., $\$ 12.00$. By mail, 30c 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 claim it is a surer crop. Amateurs have much the pay charges-per brick, 30c; 5 bricks, $\$ 1.25$; 100 bricks, $\$ 20.00$. By mail, 35' per brick; 5 bricks, \$1.50, 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 (Gemschorn, 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.

## M USTARD (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; 1/4 lb., $25 c$.
Chinese, or Giant Southern Curled. The large leaves, which often measure 14 inches, are ready for use in whout six weeks after sowing. Leaves are eaten boiled, about six weeks after sowing.
like Spinach...........Pkt., 5 c ; oz., $10 \mathrm{c} ; 1 / 4 \mathrm{lb} ., 25 \mathrm{c}$.

## 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. Tne habit of growth of plant is dwarf, and it is very productive.

Pkt., 5c; oz., 10c; 1/4 ib., 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; 1/4 lb., 25 c .
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; $1 / 4 \mathrm{lb} ., 25 \mathrm{c}$.
Long Green. Taller than the preceding, bearing long, ridged pods. Highly esteemed in the South.

Pkt., 5 c ; oz., 10c; 1/1 lb. 25c

## ONION SEED

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 onequarter 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 especially and carefully selected as t, shape. It is the best paying onion that is grown for general crop, and has been the leading variety for years.

Pkt., 5c; oz., 20c; 1/4 lb., 70c.
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 globeshape, 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.

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\text { Pkt., 5c; oz., 25c; 1/4 lb., } 75 \mathrm{c} \text {. }
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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

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., 15c; $1 / 4 \mathrm{lb}$., 50c.
Yellow Dutch, or Strasburg. A good keeper and well flavored; bright straw colored skin and somewhat

flattened shine. 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., 5 c ; oz., $15 \mathrm{c} ; 1 / 4 \mathrm{lb} ., 50 \mathrm{c}$.
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 flosh of a purplishwhite color, rather strong-flavored; an excellent keeper.

Pkt., 5c; oz., 20c; 1/1/ lb., 60c.
Southport Red Globe. Beautiful globe-shape; of medium size, a good keeper and of superior quality. Tais variety is very popular in some sections.

Pkt., $5 \mathrm{c} ;$ oz., 30 c ; $1 / 4 \mathrm{lb}$., $\$ 1.00$.
White Portugal, or Silver Skin. This variety is one of the leading white sorts. The bulbs are flat in shape an 1 mature early. Largely used for growing sets.

Pkt., 5c; oz., 25c; $1 / 4 \mathrm{ib} ., 75 \mathrm{c}$.
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., 25c; $1 / 4 \mathrm{lb} ., 75 \mathrm{c}$.
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., 35c; 1/4 lb., $\$ 1.25$.
White Queen. A rapid-growing variety of mild flavor, pure white, and splendid for pickling.

Pkt., 5c; oz., 35c; $1 / 4 \mathrm{lb} ., \$ 1.25$.
White Barletta. An extra early small white Onion; similar to White Queen.........Pkt., 5c; oz., 40c ; $1 / 4 \mathrm{lb} ., \$ 1.50$.
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., 35c; $1 / 4 \mathrm{lb} ., \$ 1.25$.
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., 35c; $1 / 4 \mathrm{lb} ., \$ 1.25$.

## ONION SETS

$I^{\mathrm{N}}$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 tne row. We handle sets of the standard varieties.

Prices subject to market changes.
Lowest merket price will be given upon aplication.

## PARSNIP

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 tho ground until spring, to be dug as required.

## One ounce for 200 feet of drill. <br> 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 flaror This strain was made by careful selection of roots growing to an ideal shape and having the distinct hollow crown. Pkt., 5c; oz., 10c; $1 / 4 \mathrm{lb} ., 30 \mathrm{c}$ Student, or Guernsey. A good half-long variety, smooth sweet and of delicate flavor...Pkt.,5c; oz.,10c; $1 / 4 \mathrm{lb} ., 30 \mathrm{c}$.


Norwood


Long Sugar, or Eollow Crown

## PARSLEY

SW thickly early in April, in rows one foot apart and one-half incl 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; $1 / 41 \mathrm{lb} ., 40 \mathrm{c}$. Extra Double Curled. Beautifully crimped and curled.

Pkt., 5 c ; uL., 10c; $1 / 4 \mathrm{lb} ., 35 \mathrm{c}$.
Moss Curled. Fine for garnishing...Pkt.,5c; oz.,10c; 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 and stews, as well as for drying.

Pkt., 5c; oz., 10c; $1 / 4 \mathrm{lb}, 30 \mathrm{c}$.
Hamburg Turnip Rooted. The fleshr root resembles a parsnip and is used for flavoring soup and stews, etc.

P'it., 5c; oz., 10c; 任 lb., 35c.

## PEPPER

SOW early in the spring in hotbeds, if possible, and transplant to the open ground when the weather is farorable. 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 as Large Bell, but of more delicate flavor; color yellow.........Pkt., 10 c ; oz., 40 c ; $1 / 4 \mathrm{lb} ., \$ 1.50$.
Celestial. Fruit conical in shape, one to two inches long; green from the blossom, turning alternately to lemon, golden and scarlet

Pkt., 10 c ; oz., 40c; $1 / 4 \mathrm{lb} ., \$ 1.50$.
Chinese Giant. Flesh is thick, mild and very sweet. Largest Pepper grown................................Pkt., 10c; oz., 50c; $1 / 41 b ., \$ 1.75$.
Ruby King. Large size, ruby red pods; flesh exceedingly thick, swent and mild. . . . . . . . . . . . . . . . . . . . . . Pkt., 10 c ; oz., 40 c ; $1 / 4 \mathrm{lb} ., \$ 1.50$.
Spanish Monstrous. Early and productive; flesh very sweet and mild. . . . . . . . . . . . . . . . . . . . . . . . . . . . Pkt., 10 c ; oz., 50c; $1 / 41 \mathrm{lb} ., \$ 1.75$.
Sweet Mountain. Similar in shape to the Bell, but grows larger; rind thick, tender and fleshy...........Pkt., 10c; oz., 40c; $1 / 4 \mathrm{lb} ., \$ 1.50$.
Large Bell, or Bull Nose. Large and early, rind very thick; color glossy red; flavor mild and pleasant. . .Pkt.,10c; oz..40c ; $1141 \mathrm{lb} ., \$ 1.50$.
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 voung, becoming deep red as they mature.......... Pkt., 10 c ; oz., 40 c ; $1 ; 1 \mathrm{lb} ., \$ 1.50$
Long Red Cayenne. From 3 to 4 inches long, bright-red color. very productive and hot................Pkt., 10c; oz., 40 c ; $1 / 4 \mathrm{lb} ., \$ 1.50$
Small Cayenne, or Red Chili. Pods $11 / 2$ to 2 inches long, very hot; used for making pepper sauce....Pkt., 10c; oz., 40c; 1́ lb., \$1.50.


## PEANUTS

Shell the nuts and plant in April or May in drills 2 to $21 / 2$ feet apart, dropping 2 seeds 12 to 15 incics apart in the drills. If to be sent by mail, see "Postage," page 1.
Spanish. The earliest variety grown; pods are small, but remarkably solid and well filled... Pkt.,5c; 1, 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; 1/2 lb., 15c; per lb., 25 c .

## GARDEN PEAS

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

PEAS 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 musi 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 Poas are sent postpaid; for larger guantities by mail, see "Postage" page 1.

## 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 unequaled 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;1/2lb.,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 wellfilled, 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; $1 / 2 \mathrm{lb} ., 25 \mathrm{c} ; 1 \mathrm{lb} ., 40 \mathrm{c} ; 5 \mathrm{lbs} ., \$ 1.75 ; 15 \mathrm{lbs} . \$ 4.50$.
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; 1/2 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; $1 / 2 \mathrm{lb} ., 30 \mathrm{c} ; 1 \mathrm{lb} ., 50 \mathrm{c} ; 5 \mathrm{lbs} ., \$ 2.25 ; 15 \mathrm{lbs} ., \$ 6.00$.


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 fect. Pkt.,10c; $1 / 2 \mathrm{lb} ., 25 \mathrm{c} ; 1 \mathrm{lb} ., 40 \mathrm{c} ; 5 \mathrm{lbs} ., \$ 1.75 ; 15 \mathrm{lbs} ., \$ 4.50$.
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; $1 / 2 \mathrm{lb} ., \mathbf{3 0 c} ; 1 \mathrm{lb} ., 50 \mathrm{c} ; 5 \mathrm{lbs} ., \$ 2.25 ; 15 \mathrm{lbs} ., \$ 6.00$.
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 hardier in constitution; height, three feet.
Pkt.,10c; 1/2lb.,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; $1 / 2 \mathrm{lb} ., 20 c ; 1 \mathrm{lb} ., \mathbf{3 0 c} ; 5 \mathrm{lbs} ., \$ 1.25 ; 15 \mathrm{lbs} ., \$ 3.50$.
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;1/2lb.,25c; 1 lb.,40c; 5 lbs.,\$1.75; 15 lbs.,\$4.50.
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.
Fkt.,10c;1/2lb.,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.

## 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; $1 / 2 \mathrm{lb} ., 25 \mathrm{c} ; 1 \mathrm{lb} ., 40 \mathrm{c} ; 5 \mathrm{lbs} ., \$ 1.75 ; 15 \mathrm{lbs} ., \$ 4.50$.

## Second Early and Main Crop

Boston Unrivalled. An improred Telephone. Tines grow nearly five feet high and are covered with fine large pods. The pods ste about 5 inches in length by three-quarters of an inch broad, each containing seven or eight large peas of finest flavor.
Pkt., 10c; $1 / 2 \mathrm{lb} ., 25 \mathrm{c} ; 1 \mathrm{lb} ., 40 \mathrm{c} ; 5 \mathrm{lbs} ., \$ 1.75 ; 15 \mathrm{lbs} ., \$ 4.50$.
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 dars from time of planting. Pkt., 10c; 1 2lb., $25 \mathrm{c} ; 1 \mathrm{lb} ., 40 \mathrm{c} ; 5 \mathrm{lbs} ., \$ 1.75$; $15 \mathrm{lbs} ., \$ 4.50$


## (1)



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 remakable 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; $1 / 2 \mathrm{lb} ., 20 \mathrm{c} ; 1 \mathrm{lb} ., \mathbf{3 5 c} ; 5 \mathrm{lbs} ., \$ 1.50 ; 15 \mathrm{lbs} ; \$ 4.00$.
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; $1 / 2 \mathrm{lb} ., 20 \mathrm{c}$; $1 \mathrm{lb} ., 40 \mathrm{c}$; 5 lbs., $\$ 1.50$; $15 \mathrm{lbs} ., \$ 4.00$.
Admiral Dewey. The largest podded Pea yet introduced. Height. $31 / 2$ feet; pods a rich, dark-green color, frequently 6 inches long, beautifully shaped. Peas large, tender and of fine flavor.

Pkt., 10c; $1 / 2$ 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 heary 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; $1 / 2 \mathrm{lb} ., 25 \mathrm{c} ; 1 \mathrm{lb} ., 40 \mathrm{c} ; 5 \mathrm{lb} ., \$ 1.75$; $15 \mathrm{lbs} ., \$ 4.50$.
Telephone. The farorite late variety: extra large pods. This Pea has proven to be a most valuable introduction. Vine large, coarse leares, 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 ; $1 / 2 \mathrm{lb} ., 25 \mathrm{c} ; 1 \mathrm{lb} ., 40 \mathrm{c}$; $5 \mathrm{lbs} . . \$ 1.75 ; 15 \mathrm{lbs} ., \$ 4.50$.
Improved Stratagem. A favorite with market gardeners and for the kitchen garden. Strong vines, immense pods, large peas, heary 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 $21 / 2$ feet.

Pkt., 10c ; $1 / 2 \mathrm{lb} ., 25 \mathrm{c} ; 1 \mathrm{lb} ., 40 \mathrm{c}$; $5 \mathrm{lbs} ., \$ 1.76 ; 15 \mathrm{lbs} ., \$ 4.50$.

## 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 1.

## 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 tilled with fine large peas. For a pea which should be staked there is none quite so good as Alderman. It is one of the fineat of the large-podded summer varieties. The haulm grows fire 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., $10 \mathrm{c} ; 1 / 2 \mathrm{lb} ., 25 \mathrm{c} ; 1 \mathrm{lb} ., 40 \mathrm{c} ; 5 \mathrm{lbs} ., \$ 1.75$; $15 \mathrm{lbs} ., \$ 4.50$.
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; 1/2 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 ; $1 / 2 \mathrm{lb} ., 25 \mathrm{c}$; $1 \mathrm{lb} ., 35 \mathrm{c}$; 5 lbs., $\$ 1.50$; $15 \mathrm{lbs} ., \$ 4.00$.
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; $1 / 2 \mathrm{lb} ., 25 c ; 1 \mathrm{lb} ., 40 \mathrm{c} ; 5 \mathrm{lbs} ., \$ 1.75$; 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; $1 / 2 \mathrm{lb} ., 25 \mathrm{c}$; $1 \mathrm{lb} ., 45 \mathrm{c} ; 5 \mathrm{lbs} ., \$ 1.75 ; 15 \mathrm{lbs} ., \$ 4.50$.
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., 10 c ; $1 / 2 \mathrm{lb} ., 20 \mathrm{c} ; 1 \mathrm{lb} ., 30 \mathrm{c} ; 5 \mathrm{lbs} ., \$ 1.25 ; 15 \mathrm{lbs} ., \$ 3.50$.
Large White Marrowfat. A favorite variety; large, well-filled pods. Five feet.

Pkt., 10c; $1 / 2 \mathrm{lb} ., 20 \mathrm{c}$; $1 \mathrm{lb} ., \mathbf{3 0 c} ; 5 \mathrm{lbs} ., \$ 1.25 ; 15$ lbs., $\$ 3.50$.
Dwarf Sugar. Edible pods. Can be used in a green state like string beans. Height, five feet.

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

Prices subject to market changes.


## P U M P K I N

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 be injured by 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., 15c; $1 / 4 \mathrm{lb} ., 40 \mathrm{c}$; per lb., $\$ 1.25$.
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; $1 / 4 \mathrm{lb} ., 30 \mathrm{c}$; 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; $1 / 4 \mathrm{lb} ., 40 \mathrm{c}$; per lb., $\$ 1.50$.
Golden Cashaw. Beautiful golden-orange color; an improvement on the old Cashaw.

Pkt., 5c; oz., 15c; $1 / 4 \mathrm{lb} ., 40 \mathrm{c}$; per lb., $\$ 1.50$.
Tennessee $S$ weet Potato. Medium size, pear-shaped, a little ribbed, color creamy white, sometimes lightly striped with green.

Pkt., 5c; oz., 15c; $1 / 4 \mathrm{lb} ., 40 \mathrm{c}$; per lb., $\$ 1.25$.
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., 15c; $1 / 4 \mathrm{lb.}$,40 c ; per lb., $\$ 1.25$.
Large Cheese. An excellent keeper, color bright orange.
Pkt., 5c; oz., 10c; $1 / 4$ lb., 25c; per lb., 75c.
Mammoth Tours. A productive French variety, which grows to an immense size.

Pkt., 5c; oz., 15c; $1 / 4 \mathrm{lb} ., 40 \mathrm{c}$; per lb., $\$ 1.25$.
Kentucky Field. Good for cooking purposes and for feeding stock..Pkt.,5c; oz.,10c; $1 / 4 \mathrm{lb} ., 20 \mathrm{c}$; per lb.,50c.
Connecticut Field. A large, yellow variety.
Pkt., 5c; oz., 10c; $1 / 4 \mathrm{lb} ., 25 c$; per lb., $70 c$.

## R A D I S H

$\mathbf{S}^{\mathbf{x}}$OW early and often. In good, warm, tibrous roam; 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.


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., 10c; 1/4 lb., 30c; per lb., $\$ 1.00$.
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., 10c; 1/4 lb., 30c; per lb., \$1.00.


Cincinnati Market

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., 10c; $1 / 4 \mathrm{lb} ., 30 \mathrm{c}$; per lb., $\$ 1.00$.


Early Scarlet Globe

Rosy Gem. We have a very clean and beautiful strain of this popular sort. It is extremely early, maturin ${ }^{\circ}$ 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., 10c; $1 / 4 \mathrm{lb} ., \mathbf{3 0 c}$; per lb., $\$ 1.00$.
Earliest White Globe Forcing. The earliest white oliveshaped Radish in existence, beautiful transparent ivorywhite, 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; $1 / 4 \mathrm{lb} ., 40 \mathrm{c}$; per lb., $\$ 1.25$.
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., 10c; $1 / 4 \mathrm{lb} ., 30 \mathrm{c}$; per lb., $\$ 1.00$.
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., 10c; $1 / 4 \mathrm{lb} ., \mathbf{3 0 c}$; per lb., $\$ 1.00$.
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., 10c; 1/4b., 30c; per lb., $\$ 1.00$.
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., 10c; $1 / 4 \mathrm{lb} ., \mathbf{3 0 c}$; per lb., $\$ 1.00$.
Early White Turnip. An early, crisp, turnip-shaped Radish of pure white color.

Pkt., 5c; oz., 10c; $1 / 4 \mathrm{lb} ., \mathbf{3 0 c}$; per lb., $\$ 1.00$.
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., 10c; $1 / 4 \mathrm{lb} ., \mathbf{3 0 c}$; per lb., $\$ 1.00$.


White Icicle

## RADISH—Continued

Fine long white Radish, with beautiful shape; skin and flesh pure white.

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

Long Scarlet, Short Top. Long, of a deep scarlet color; flesh white, crisp and of good flavor.

Pkt., 5c; oz., 10c; $1 / 4 \mathrm{lb} ., 30 c$; per lb., $\$ 1.00$.
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., 10c; $1 / 4 \mathrm{lb} ., 30 \mathrm{c}$; per lb., $\$ 1.00$.
Giant White Stuttgart. Quick growing and therefore early, of the largest size, and both flesh and skin are pure white. Pkt., 5c; oz., 10c; $1 / 4 \mathrm{lb} ., 30 c$; per lb., $\$ 1.00$.

White Summer Turnip. A very desirable Summer Radish. Grows a round, smooth root, crisp and firm. A favorite family radish...Pkt.,5c; oz., 10c; $1 / 4 \mathrm{lb} ., \mathbf{3 0 c}$; per lb., $\$ 1.00$.

White Strasburg. Oblong, tapering shape, skin aṇd flesh pure white, firm and brittle, fine for winter use.

Pkt., 5c; oz., 10c; $1 / 4 \mathrm{lb} ., 30 \mathrm{c}$; per lb., $\$ 1.00$.
Chartier. Half-long, of quick growth; color deep pink above and gradually blending into a pure waxy white to root.

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

## 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., 10c; $1 / 4 \mathrm{lb} ., \mathbf{3 0 c}$; per lb., $\$ 1.00$.

Black Spanish Long. Differs from the above only in shape....Pkt., 5c ; oz., 10c; $1 / 4 \mathrm{lb} ., \mathbf{3 0 c}$; per lb., $\$ 1.00$.
Celestial. An all-season white Radish.
Pkt., 5c; oz., 10c; $1 / 4 \mathrm{lb} ., 30 \mathrm{c}$; per lb., $\$ 1.00$.
Chinese Scarlet. Half-long, fine winter sort, keeps well. Pkt., 5c; oz., 10c; $1 / 4 \mathrm{lb} ., 30 \mathrm{c}$; per lb., $\$ 1.00$.

Mammoth White Winter. A giant white-fleshed fall Radish...Pkt., 5c; Oz., 10c; $1 / 4 \mathrm{lb} ., 30 \mathrm{c}$; per lb., $\$ 1.00$.

## R H U B A R B



$G$OOD 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
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; $1 / 4 \mathrm{lb} ., 60 \mathrm{c}$.
Victoria. Very large; later than Linnaeus.
Pkt., 5c; oz., 20c; 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., 50; (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).

## S A L S I F Y or vegetable oyster

$\mathbf{C}^{c}$
OMMONLY 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; 1/4 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 mar-


## SPINACH

 be rolled or trampled in for if shrivels the seed, so that it will not germinate.One ounce for 100 feet of drill
10 to 12 pounds for an acre.
HOR 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 alway;


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.

Pht., 5c; oz., 10c; 1/4 lb., 25c; per lb., 60c.


Bloomsdale Savoy. The hardiest large Savoy leaved, curled and crimpled; with thick, fleshy leaves; good for family and market purposes.

Pkt., 5c; oz., 10c; $1 / 4 \mathrm{lb} ., 20 c$; per 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., 10c; 1/4 lb., 20c; per lb., 59c.

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., 10c; 1/4 lb., 20c; per lb., 50c.
Prickly Weeded, or Fall. The hardiest variety, having smaller leaves; is not so productive as the above.

Pkt., 5c; oz., 10c; 1/4 lb., 25c.

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; $1 / 4 \mathrm{lb} ., 50 \mathrm{c}$

## S Q U A S H

$\mathbf{I}^{\mathrm{T}}$T IS useless to sow until the weather has become settled and warm. Light soils are best suited for its growth. Prepara 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


## Fall and 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., 15c; $1 / 4 \mathrm{lb} ., 40 \mathrm{c}$; per lb., $\$ 1.25$.
TVarted Hubbard. This strain without doubt, grows the finest Hubbard in existence. The wartiness iadicates a very hard shell, which is one of the features in a long-keeping Squash; it also denotos 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., 15c; $1 / 4 \mathrm{lb} ., 40 \mathrm{c}$; per lb., $\$ 1.25$.
Marblehead. Resembling the Hubbard, but of a lizhter color, and is remarkable for its sweetness, dryness and delicious flavor, as well as its keeping qualities.

Pkt., 5c; oz., 15c; $1 / 4 \mathrm{lb} ., 40 \mathrm{c}$; 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; 1/4 lb., 40c; per lb., \$1.25.
Boston Marrow. A popular winter variety; quality unexcelled.

Pkt., 5c; oz., 10c; $1 / 4 \mathrm{lb} ., 30 \mathrm{c} ;$ per lb., $\$ 1.00$.
Essex Hybrid. Very prolific, fine grained, orange-red flesh.

Pkt., 5c; oz., 10c; $1 / 4 \mathrm{lb} ., \mathbf{3 0 c}$; per lb., $\$ 1.00$.

Delicious. Resembles the old Huboard, having a dark olive-green hard shell, weizh from 5 to 10 lbs . Fur table use it can not be excelled, the flesh being remarkably thick, fine-grained, sweet and of rich flavor.

Pkt., 5c; oz., 15c; $1 / 4 \mathrm{lb} ., 45 c$; per lb., $\$ 1.50$.
Fordhook. A winter Squash cf great merit. Of handsome bright yellow color outside and straw-yellow within. The flesh is dry and sweet.

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


## TOMATO

 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 fincr quality.


## One ounce of Seed Will Prociuce about 2,000 Plants; $1 / 1$ Pound to the Acre

Acme. Fery early and productire; fruit medium sized, and of a dark, rich red, slightly tinged with purple; very solid and smooth..Pkt., 5c; oz., 30c; $1 / 4 \mathrm{lb} ., 85 \mathrm{c}$.
John Baer. An early tomat? 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 pipens 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 Amaterir or NIarket Gardener..................Pkt., $5 \cup$; Oz., 40 c ; $1 / 4 \mathrm{lb} ., \$ 1.3 \mathrm{~J}$.
Earliana. The earlisst smooth tomato, of good size an : flavor. 'Tomatoes are deep scarlet and grow closel $y$ together in clusters of five to eight, all of medium size averaging $21 / 2$ inches in diameter; they are smooth and solid, quite thic. through and free from rough ribs or cracks. The flesh is deep red, with soid center and small seed cells, slizhtly acil flavor.

Pkt., 5c; oz., 30c; 1/4 lb., 85c.

Detroit. Eoth the Amateur and the Market Gardener will be intereste 1 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 fruit 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., 5 c ; oz., 30 c ; $1 / 4 \mathrm{lb}$., 85 c .
Bonny Best. Fruit of good size. bright rer color, smooth, solid and uniform. A secon 1 earlv and very productive

Ykt., 5c; oz., 40c; $1 / 4 \mathrm{lb} ., \$ 1.00$.
June Pink. This variety closely resembles the Earliana in habit of growth and shape of fruit, but the color is pink. The fruit grows in clusters and begins to mature very early; measures 3 inches in diameter and is of excellent quality. As a rule it continues bearing until vines are killed by frost. . .Pkt., 5 c ; oz., $3 \mathrm{Jc} ; 1 / 4 \mathrm{lb} ., 85 \mathrm{c}$


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.


Trucker's Favorite. Onc 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;
$1 / 4 \mathrm{lb} ., 85 \mathrm{c}$.
Dwarf Champion. Of dwarf, stiff, distinct, upright growth, scarcely needing support; early and prolific; smooth medium-sized fruit of pinkish purple color. Pkt., 5c; oz., 30c;
$1 / 4 \mathrm{lb} ., 85 \mathrm{c}$.
Dwarf Stone. Foliage heary and a rich dark green. The fruit is produced in clusters of 3 to 5 , arcraging 4 inches in diameter, and $21 / 2$ inches in depth, bright scarlet color, smooth and regular.
Pkt., 5c; oz., 30c;
$1 / 4 \mathrm{lb} ., 85 \mathrm{c}$.
$\qquad$
Tomatoes-Continued
to next page.

## TOMATO-Continued

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 purplecrimson, and the depth of color is maintained throughout the entire season.

Pkt., 5c; oz., 40c; 1/4 lb., \$1.25.
Cincinnati Purple. A valuable variety, especially adapted for canning and shipping. It is very large; color a dark purplish red.

Pkt., 5c; oz., 30c; 1/4 lb., 85c.
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., 30c; $1 / 4 \mathrm{lb}_{\boldsymbol{r}} 85 \mathrm{c}$.
Favorite. A large, handsome and uniform-shaped tomato; solid, smooth and bright scarlet; ripens early.................Pkt., 5c; oz., 30c; $1 / 4 \mathrm{lb} ., 85 \mathrm{c}$.
Perfection. Fruit almost round, smooth, tough skin of brilliant scarlet; ripens thoroughly; solid and of rich flavor.....Pkt., 5c; oz., 30c; $1 / 4 \mathrm{lb} ., 85 \mathrm{c}$.

Globe. A beautiful globe-shaped variety. Large size. smooth, frm fleshod, fow seeds. Ripens evenly; color, a beautiful glossy rose, tinged purple.

Pkt., 5c; oz., 40c; $1 / 4 \mathrm{lb} ., \$ 1.25$.
The Stone. Fruit very large and deep; bright scarlet; smooth; ripening evenly to the stem without a crack; exceedingly solid and firm-fleshed; of finest quality.

Pkt., 5c; Oz., 25c; $1 / 4 \mathrm{lb} ., 75 \mathrm{c}$.
Matchless. A standard main crop, bright red variety, producing enormous crops of finest scarlet fruit.

Pkt., 5c; oz., 25c; 1/4 lb., 75c.
Buckeye State. The large tomatoes are borne in immense clusters of four to eight. Color rich, glossy crimson, with a slight purple tince.

Pkt., 5c; oz., 30c; 1/4 lb., \$1.00.
Ponderosa. One of the largest fruited tomatoes. The fruit is of a purplish pink color, very solid and ripens 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; $1 / 4 \mathrm{lb} ., \$ 1.35$.
Comet Forcing. Superior red variety for forcing under glass. Rich scarlet-red; fruit is solid, round, smooth; strong grower; exceedingly heavy cropper; medium sized fruits; flavor excellent.

Pkt., 5c; oz., 40c; 1/4 lb., \$1.35.


Cincinnati Purple
Golden Queen. Large, smooth fruit, of a beautiful golden color; quality excellent; attractive for slicing, and mixing with sliced red sorts.

Pkt., 5c; oz., 30c; 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 fruit $1 / 2$-inch in diameter, surrounded by a husk; for preserving.

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

Special Prices given to Market Gardeners and Truckers
TOMATO PIANTS are a specialty of ours. See Vegetable Plants


## TURNIP

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 $11 / 2$ 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., 10c; $1 / 4 \mathrm{lb}$., 30c; lb., $\$ 1.00$.

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., 10c; 1/4 lb., 30c; per lb., \$1.00.
Early White Flat Dutch. An early white-fleshed variety, of quick growth, mild flavor and excellent quality. Pkt., 5c; oz., 10c; $1 / 4$ lb., 30c; per lb., $\$ 1.00$.
Large White Globe, Strap-Leaf. Flesh white, firm and crisp; a very desirable early variety.

Pkt., 5c; oz., 10c; $1 / 4$ lb., 30c; per lb., $\$ 1.00$.
Snowball. Extra early. A variety of sterling merit, perfectly round, early, pure white, very solid, sweet short top...Fkt.,5c; oz., 10c; $1 / 4 \mathrm{lb} ., 30 \mathrm{c}$; per lb.,\$1.00.

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., 15c; $1 / 4 \mathrm{lb} ., 50 \mathrm{c}$; per lb., $\$ 1.50$.
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., 10c; $1 / 4 \mathrm{lb} ., 30 \mathrm{c}$; per lb., $\$ 1.00$.


Purple Top White Globe

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., 10c; 1/4 lb., 30c; per lb., \$1.00.
White Egg. An egg-shaped variety for spring or fall sowing: flesh white. firm, fine grained, mild and sweet. Pkt.. 5c ; ez., 10c; 1/4 lb.. 30c; per lb., \$1.00.

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., 10c; 1/4 lb., 30c; per lb., \$1.00.

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., 10; ${ }_{4}^{\prime}$ lb., 30c ; per lb., \$1.00.

Purple Top Yello 7 Aberdeen. A large, globe-shaped Turnip, with yellow fiesh of fine quality, a good keeper, popular for table or stock. Pkt., 5c; oz., 10c ; 1/4 lb., 30c ; lb.. $\$ 1.00$.

## 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 usc. Pkt., 5c ; oz., 10c; $1 / 4 \mathrm{lb} ., 30 \mathrm{c}$; per lb., $\$ 1.00$.

Skirving's Purple Top. An important variety of large size and strong growth, a heary cropper and one of the best for field culture.

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

Budlong's Improved. White, very sweet, much milder flavor than any of the other sorts, globe-shaped, skin a cream yellow.

Pkt., 5c; oz., 10c; $1 / 4 \mathrm{lb} ., 30 c ;$ per lb., $\$ 1.00$.
Long Island Improved Purple Top. A uniform large rooted, quick growing, yellow fleshed sort.

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

## TOBACCO

 HE 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 of̂ 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 Durle: 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.


## 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, $\mathbf{5 c}$ per dozen; 25 c 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

D
EEP, 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 varietiesArgenteuil, Barr's Mammoth, Columbian Mammoth White, Conover's Colossal, Palmetto.
All the above varieties, per doz., 25 c ; per $100, \$ 1.50$. If wanted by mail, add 5 c per doz., 15 c per 100 for postage.
 easily shipped.

## EGG PLANTS

(Ready about May 15th.)
Black Beauty. Per doz., 50c.

## HORSERADISH SETS

(Ready April 1st.)
Per doz., 15c; per 100 75c. (By mailper 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., 30 c .

## CELERY PLANTS

(Ready June and July.)
McCullough's Paris Golden Yellow, Golden SelfBlanching, Golden-Hearted Dwarf, Giant Pascal, Triumph.
All the above, per 100, 60c.

## CABBAGE PLANTS <br> (Ready about April 1st.) <br> ...................

Early Jersey Wakefield
Paris Golden Yellow, Golden Self-
Golden-Hearted Dwarf, Giant Pascal,

. . Per 100, 60c. Premium Late Flat Dutch. Per 100, 60c.

## CAULIFLOWER PLANTS

(Ready Ápílil 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.

Per

## SWEET POTATO PLANTS

(Ready about June 1st.)
Jersey Yellow
. Per 100, 50 c . Red Bermuda

## TOMATO PLANTS

(Ready about May 1st.)
Transplanted plants offer many advantages over seedlings; they produce fruit much earlier and are more

## 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.)

# Macullousb's Selected flower Seeds 

Every gear 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. Our stock of seeds is of the bighest possible quality.

Y "perennial," "biennial," etc. These descriptions, when classified as "annual," "hardy annual." "tender annual." "perennial," "biennial," etc. These descriptions, when properly understood, will tell much about planting.
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.

## 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. . . 10 c pkt.

## ACHILLEA (Milfoil, or Yarrow)

2-Ptarmica "The Pearl." Grows about two feet high, and from Spring till frost is covered with heads of purest white double flowers. Easily grown from seed, flowering the first season if sown early. Hardy Perennial. . . . . . ..................................... . . . 10 c pkt.

## ACONITUM (Monk's Hood, or Wolfsbane)

3-Napellus. Grows in any good garden soil, producing long spikes of curiously-shaped blue and white flowers, adapted for planting among shrubbery or in shady corners of the garden; 3 to 5 feet. Hardy Perennial.

5 c pkt.

## AGROCLINIUM

4-Double Mixed. An "Everlasting," growing about 15 inches high, bearing white or rosy-pink flowers, which, when cut in the bud state, can be dried and used in winter bouquets. Half-hardy Annual.

1/4 oz., 15c; 5c pkt.

## ADLUMIA <br> (Mountain Fringe, Allegheng Vine, or Climking Fumitory)

5-Cirrhosa. A graceful climber, but, as it resows itself year after year, it might be considered perennial. The feathery foliage closely resembles that of the Maidenhair 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.

## AGERATUM (Floss Flower)

NE 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.
6-Blue Perfection. This is the darkest-colored of all large flowering Ageratums. Color, deep amethyst-blue; compact growth; fine bedder. (See cut.)........ $1 / 4$ oz., 50c; 5c pkt.
7-Little Blue Star. Of 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 phts., 25c; 10c pkt.
8-Little Dorrit. Azure blue, 9 inches. ..... $1 / 4 \mathrm{oz} ., 40 \mathrm{c} ; 5 \mathrm{c}$ pkt.
9-Album. White, profuse bloomer, 18 inches. ......... 5c pkt.

## AGROSTEMMA

## (Rose of Heaven, Mullein Pink)

$\mathbf{A}^{\mathrm{N}}$N 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. 10-Mixed Varieties. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 5 . 5 pkt. AFRICAN GOLDEN DAISY. (See Dimorphotheca Aurantiaca.) ALLEGHENY VINE. (See Adlumia.)

## ALYSSUM (Mad-wort)

PRETTY little plants for beds, vases, baskets, edgings or rockwork, blooming profusely all Summer; usefu also for Winter-flowering. Hardy Annual.

11-Little Gem, or Carpet of Snow. We know of no other flower which is so particularly well adapted for borders, ribbons, etc. The plants commence to bloom when quite small, and will flower all Summer 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.)
$1 / 4 \mathrm{Oz} ., 15 \mathrm{c}$; oz., 50c; 5c pkt.
12-Lilac Queen. Is of dwarf, compact habit and the deep, lavender-like flowers are borne in profusion.

10c pkt.
13-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. . $1 / 4 \mathrm{oz} ., 10 \mathrm{c}$; 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; 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 tbeir full beauty. Hard" Annual.
14-Caudatus. (Love Lies Bleeding.) Bloodred; drooping racemes. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 5 c pkt.
15-Tricolor Splendens-Joseph's Coat. $21 / 2$ 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. 5 c pkt.


## ANTIRRHINUM (Snapdragon)

ANTIRRHINUMS or Snapdragons are one of the best cut flowers which can readily be grown from seed. 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 Perennial. (See cut.)

## AMPELOPSIS

16-Veitchi. (Boston or Japanese Ivy). A Hardy Perennial climber from Japan. The best and most popular climber for covering brick or stone walls.
$1 / 4$ 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. 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: blooms early in July and continues until hard frost. It delights in a sunny situation. 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.


## TALL, GIANT FLOWERING

Flowers nearly double the size of the older sorts
21-Queen Victoria. Very beautiful, bearing immense flowers, white shaded cream, with lemon-colored lip. The best white. . . . 10c pkt.
22-Silver Pink. Delicate rosy pink, seemingly covered with a silver sheen. . . . . . . . . . . . . . . . 10c pkt.
23-Brilliant. Scarlet, gold and white. . . . . . . . . . . . . . . 10c pkt. 24-Fire King. Scarlet with orange. 10c pkt.
25-Venus. Light rose, white throat. 10c pkt.
26-Golden King. Golden yellow flowers. . . . . . . . . . . . . . . 10c pkt.
27-Special Collection. One packet each of the above 6 varieties . . 50c.
28-Tall Giant Mixed. A splendid mixture, containing all the colors; magnificent large individual flowers. $1 / 4 \mathrm{oz} ., 30 \mathrm{c} ; \mathrm{oz} ., \$ 1.00$; 5c pkt.

## SEMI-DWARF GIANT FLOWERING

Are particularly good for bedding, as they require no staking. The flowers are most wonderful, in many new shades and tints.
29-Queen of the North. Grows 1 foot in height, densely covered with large white flowers. Also valuable for pot culture. .10c pkt. 30-Daphne. Soft blush pink.

10c pkt.
31-Golden Queen. Pure yellow,
very fine. .............. . 10c pkt.
32-Firebrand. Rich deep rer. 10c pkt.
33-Ruby. Brilliant red. . .10c pkt.
34-Half-Dwarf Mixed. Large va-
riety of colors; best for bedding.

## 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 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 Biennial.

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, longspurred flowers, shading from light pink to dark rose with white center and yellow anthers.

3 pkts., 25c; 10c pkt.

4n-McCullough's
 ing shades and combinations of blue white, yellow, orange, scarlet and bright rose pink in large flowers with long spurs; the finest to be had

3 pkts., 25c; 10c pkt 38-Double, all colors, mixed.
39-Single, all colors, mixed.
$1 / 4 \mathrm{oz} ., 20 \mathrm{c}$; 5c pkt.

## ASTERS

ASTERS are one of the most important summer and autumn flowers, and receive special care at our hands. Our list fiden only such sorts as can be planted with perfect price or from what source.

The early sorts begin blooming in July, followed by the midseason kinds, which flower during August; then the lateflowering 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 Annual.


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 in. . $1 / 8 \mathrm{oz} ., 40 \mathrm{c} ; 1 / 4 \mathrm{oz} ., 75 \mathrm{c} ; 10 \mathrm{c} \mathrm{pkt}$.


## 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 $21 / 2$ 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. . . . . . . . . . . . . 10 c pkt.
42-Lavender................ 10 c pkt.
43-Deep Purple. . . . . . . . . 10 c pkt.
45-Rhell Pink................... 10 c pkt. 45-Shell Pink..................10c pke pkt. 47-Collection. One pkt. each of the above 6 varieties. . . . . . . . . . . 50 c . 48-Finest Mixed. Containing many more colors than mentioned above. $1 / 8 \mathrm{oz} ., 25 \mathrm{c} ; 1 / 4 \mathrm{oz} ., 40 \mathrm{c}$; 10c pkt.

## Improved Giant Comet Asters <br> The finest type of the Giant Com-

 et, or Ostrich Feather Asters. Much larger than the Giant Comet, the petals longer, more curled and twisted. and produced in greater abundance. Borne produced in gr49-Crimson.
50-Rose.
51-Light Biue.
52-Dark Blue.
53-Pink...
10c pkt
..........10c pkt
$5-$ Collection. One pkt. each of the
56-Finest Mixed. Ail colors.

## Royal Asters

(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.


## 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.
64-Crimson... . . . . . ..... . 10c pkt.
65-Rose............................. . . 10 c pkt.
66-Violet. . . . . . . . . . . . . . . . . 10c pkt.

67-Lavender. . . . . . . . . . . . . 10c pkt.
68-Pink............................. 10 c pkt.
69—White................................ 10 c pkt.
70 - Collection. One pkt. each of the
above 6 varieties............ 50 c . 71 -Finest Mixed........... i0c 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 stens, making them exceedingly valuable for cutting; one foot.
72-Rose...................... . 5 c pkt.
73-Rose............................5c . . 5 crimst.
74-Light Blue
75-Dark Blue........... 5 c pkt
6-Pink Blue.............. 5 c pkt.
77-White.......................... 5 c pkt.
78-Collection. One pkt. each of the above 6 varieties $\quad 25 \mathrm{c}$
79-Finest Mixed, all colors

## $1 / 4$ oz., 35c; 5c pkt.

## Express Extra Early Aster

Early flowering Asters of great merit not only for garden purposes but of even more value for early cut flowers; come into bloom in the open ground with us by the middle of July. They are the largest early Asters of which we know, flower $31 / 2$ to 4 inches across, of double Comet type; splendid substance and long stems; plants healthy and sturdy, branching habit; 18 inches high: free bloomers.
80-Dark Blue............. 10 c pkt.
81-Light Blue. . . . . . . . . . . 10c pkt.
82-Rose..................... . . 10c pkt.
83-White.......................... 10c pkt.
84 -Collection. One pkt. each of the Collection. One pkt. each of the 85-Finest Mixed, all colors.
$1 / 8 \mathrm{oz} ., 30 \mathrm{c}$; 10 c pkt.


## ASTERS-Continued <br> MISCELLANEOUS ASTERS.

86-Daybreak. Of symmetrical growth; attains a height of 18 inches, globe-shaped flowers, of a delicate pink tint. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 10c pkt.
87-Purity. Identical in every way to Daybreak, but of pure glistening white. . . . . . . . . . . . . . . . . . . . . . 10c pkt.
88-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.
89-Pink Enchantress. The color -s a very delicate pink. It is a mid-season variety. . . . . . . . . . . 10c pkt.
90-China Asters, Mixed. A general mixture of fine sorts and colors. ................ $1 / 4$ oz., 25c; 5c pkt.


## BALLOON VINE

## (Love-in-a-Puff) (Cardiospermum)

91-A rapid growing annual climber; succeeds best in a light soil and warm situation; flowers white; seed vessels look like miniature balloons and are of great interest to children. Half-hardy Annual............ 5c pkt.


## 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 Annual; two feet.

Unrivaled for variety of color and size of flower; includes all the most desirable shades. (See cut.)

1/4 OZ., 30c; 10c pkt.
93-Salmon Pink. Brilliant salmon rose flowers; very double, of finest camellia flowered type. . . . . $10 c$ pkt.
94-White Perfection. The finest pure white grown; flowers unusually large, solid and double. ....10c pkt.
95-Scarlet. Brilliant fiery scarlet. . . . . . . . . . . . 5 c pkt.
96-Double Camellia Flowered, Mixed. Of perfect form, beautiful colors. ............. . $1 / 4$ oz., 20c; 10c pkt.
97-Choice Double Mixed. . . $1 / 4 \mathrm{oz} ., 15 \mathrm{c}$; oz., 50c; 5c pkt.
BACHELOR'S BUTTON, BLUE-BOTTLE OR RAGGED SAILOR. (See Cyanus.)
BLACK-EYED SUSAN. (See Thunbergia.)

## 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 Annual.
98-Balsam Pear. (Momordica Charantia.) Pear-shaped fruit; the fruit is long and used medicinally.

Oz., 40c; 5c pkt.
99-Balsam Apple. (Momordica Balsamina.) Round apple-shaped fruit. ................. Oz., 40c; 5c pkt.

## BEGONIAS

## Everblooming Bedding Varieties

T${ }^{\top}$ HE following are varieties of Begonia Semperflorens, doing equally well in full sunlight, or in positions partially or wholly in shade. They grow about one foot high and form dense bushes, which, from May until frost are completely hidden with flowers. As pot plants for winter flowering they are superb. Easily raised from seed, which should be started indoors or in a hotbed. Tender Perennials.
100-Gracilis Luminosa. This differs from Begonia Gracilis in the lustrous reddish-brown color of the foliage, while the flowers measuring 1 to $11 / 2$ 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.). . . . . . . . . . . . . . . . . . . . . . . . . . 10 c pkt. 101-Vernon. Bright orange carmine flowers, deep red foliage.

10 c pkt.
102-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....................................................
103-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.)

## BEL工IS (English Daisy)

AFAVORITE perennial plant, which will stand the winter if given the protection of a few leaves or litter; in bloom rom 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 Perennial.
104-Longfellow. Large, double, dark pink flowers; with long, stiff stems. . . . . . . . . . . . . . . . . . . . . . . . . . 10 c pkt.
105-Snowball. A beautiful white variety with long stems, and very double flowers; fine for cutting. . . . . .10c pkt.
106-Giant Double. Beautifully and densely imbricated flowers, $11 / 2$ inches in diameter. Finest mixed. 10 c pkt.

## BRACHEGOME (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.
107-Mixed. Light blue and white. $\qquad$

## BROWALLIA (Amethyst)

108-Free-Flowering plants, covered with bright blue flowers, during summer and autumn. Sow during April and May in good, light, rich soil. Half-hardy Annual. Mixed Colors........................ . . 5c pkt.

## BRYONOPSIS

109-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.


Begonia Gracilis Luminosa

## GALCEOLARIA

110-Hybrida Grandiflora. Unsurpassed for pot culture in the greenhouse or conservatory, producing their brilliant flowers in great profusion and variety. Greenhouse Perennial. Mixed varieties. . . . ........................25c pkt.

## CALENDULA (Pot Marigold)

SHOWY free-flowering hardy annuals, growing in any good garden soil, producing a fine effect in beds or mixed borders, continuing in bloom from early summer until killed by frost; valuable also for pot culture, one foot. Hardy Annual. (See cut.)
111-Orange King. The outer petals are slightly imbricated, while those of the center are curved like those of the paeony. Color rich, dark orange. ...........1/2 oz., 15c; 5c pkt.
112-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 appear ance. .............................. $1 / 2$ oz., 15c; 5c pkt. 113-Lemon King. A grand variety, with double, extra large yellow flowers. . . . . . . . . . . . . . . . . . . $1 / 2$ oz., 15c; 5c pkt
114-Fine Double Mixed. Contains the choicest sorts.
1/2 oz., 10c; oz., 15c; 5c pkt.
(See also Marigold)

## 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 Annual. (See cut.)
115-Golden W a $\boldsymbol{\nabla}$ e Bright, golden-yellow flowers, with small, dark centers, blooming profusely
1/2 oz., 20c; 5c pkt.
116-Finest Mixed. $1 / 2$ oz., 20c; 5c pkt.

## GOREOPSIS

117-Lanceolata Grandiflora. Large showy, bright yellow flowers, produced in the greatest abundance from June till frost. Easily grown from seed, flowering the first year if sown early. Hardy Perennial. ....... $1 / 4 \mathrm{oz}$., 25 c ; 10c pkt

## GAMPANULA <br> (Canterbury Bells)

THIS old-fashioned flower is a favorite with all. Stately and showy, and of the easiest culture. The seeds should be sown about April, in finely prepared, rich soil. Hardy Biennial.
Calycanthema. (Cup and Saucer Canterbury Bells.). 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.
118-Pink. Delicate rosy-pink. ......10c pkt.
119-Elue. A fine, clear shade. .. 10c pkt.
120-White. Pure white. 10c pkt.
121-Finest Mixed. All colors of the Cup and Saucer type......... $1 / 4$ oz., 50c; 5c pkt.
Medium. (Single Canterbury Bells.) The oldfashioned sort, with beautiful, large bellshaped blossoms. (See cut.)
122-Blue. $\qquad$ .10c pkt.
. .10c pkt
125-Single Mixed . . . Ail col........... . . 10c pkt.
125-Single Mixed. All colors.
$1 / 4$ oz., 25c; 5c pkt.
126-Double Mixed. All the double-flowering Medium varieties. . . $1 / 4 \mathrm{oz} ., 40 \mathrm{c}$; 5 c pkt


## GANARY-BIRD VINE <br> (Tropaeolum Canariense)

127-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. Oz., 25c; 5c pkt.

## GANDYTUFT

T TNIVERSALLY known and cultivated, and considered indispensable for cutting; one foot. Hardy Annual.
128-Giant Hyacinth Flowered. The finest of all the white varieties, being a complete mass of pure white flowers, in a pyramid of bloom.

1/2 oz., 25c; oz., 40c; 5c pkt.
129-Little Prince. Very large heads of pure white flowers; fine for borders and pots; 6 inches. ........... . 5c pkt.
130-Rose Cardinal. Bright carmine rose......5c pkt. 131-White Rocket. Pure white. .Oz., 25c; 5c pkt. 132-Dwarf Hybrids Mixed.......................5c Pkt. 133-Mixed Colors....... $1 / 2$ oz., 15c; Oz., 25c; 5c pkt. PERENNIAL CANDYTUFT. (See Iberis.)


## GANNA

(Indian Shot)

$\mathbf{S}^{0}$OAK 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.
134-Mixed. Crozy's finest sorts.

Oz., 20c; 5c pkt.

## GARDINAL CLIMBER

(Ipomoea Quamoclit Hybrida)
135-The most brilliant, beautiful and distinct annual climber introduced for many years. Rapid grower with branching habit; flowers all summer; cardin-al-red clusters, 15 to 25 feet. Tender Annual........ 10c pkt.
Cardinal Climber Plants. Each 20c; by mail, each 25 c.

## CARNATION

C

ARNATIONS 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 best for Summer flowering. Half-hardy Perennial.
136-Earliest French Mixed......... $1 / 4$ oz., 50c; 10c pkt. 137-Malmaison or Giant Mixed.... $1 / 4 \mathrm{oz}$., 50c; 10c pkt.

## Marguerite Carnation

138-These are deservedly the most popular Carnations with the amateur, as they begin flowering in a few weeks from time of sowing, producing on long, strong stems an abundance of large, double, beautifully fringed, highly scented flowers. Half-hardy Perennial. Mixed. All colors. $1 / 4$ Oz., 50c; 5c pkt.

## CELOSIA, or Cockscomb

$G^{R}$RACEFUL 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 Annual.
139-Glasgow Prize. Enormous rich, deep crimson combs. 140-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.
141-Thompsoni Magnifica Crimson. Of pyramidal growth, attaining a height of 3 feet and producing graceful, feathery plumes of the most brilliant crimson. . . . . . . . . . . . 10c pkt. 142-Thompsoni Magnifica Yellow. . 143-Plumosa, Mixed.

10c pkt. CHILDSI. (See Chinese Woolflower.)

## GENTAUREAS

UNDER this name is included such popular annuals as the Cornflowers, Sweet Sultans, etc. They are perfectly hardy, will grow almost anywhere, and are in demand as cut flowers.

## Cornflowers (Centaurea Cyanus)

These are also known as Bachelor's Button, Blue Bottle, luagged Sailor, Bluet. Attractive flowers of easiest culture. Sow early in Spring in the beds where they are to bloom. Hardy Annual. (See cut.) 144-Dwarf Blue. Single blue.
45-Single Mixed Blue $1 / 2$ oz., 15c; oz., 25c; 5c pkt. 145-Single Mixed. Blue, white, rose, etc.
$1 / 2$ oz., 15c; oz., 25c; 5c pkt.
146-Double Blue. Flowers semi-double. 5c pkt. 147-Double Pink. .. ........................... 5c pkt.


## Royal Sweet Sultans (Centaurea Imperialis)

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 Annual.
 150 -Lavender...10c pkt. 152 -White. . . . . . . . 10c pkt. 153-Yellow.
 $10 c$
$10 c$
pkt. 155-Finest Mixed Colors.
$1 / 4$ oz., 20c; 5c pkt


White-Leaved Centaureas (Dusty Millers)
Fine for bedding, vases, hanging-baskets and pots; also extensively used for borders. Sow the seed early indoors and transplant in May. Tender Perennial.
156 -Candidissima. Silvery white; leaves broadly cut.
157-Gymnocarpa. Fine-cut silvery foliage; the kind used most for borders; 1 foot. ....... $1 / 4 \mathrm{oz} ., 20 c ; 10 c$ pkt.

## CENTROSEMA (The Butterlly Pea)

158-Grandiflora. 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 $11 / 2$ to $21 / 2$ inches in diameter, ranging in color fiom a rosy violet to a reddish purple. Hardy Perennial.. ................... 10 c pkt.

## CHINESE WOOLFLOWER

## (Celosia Childsi)

159-This new Celosia grows 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 plants remain too long in pots or seed beds, they will to the garden as soon as danger of frost is passed. Half-hardy Annual.. ............. 2 pkts., 25c; 15c pkt.

## CHRYSANTHEMUMS

## Hardy Annual Varieties

The hardy annuals are summer-flowering border plants and quite distinct from the hardy perennial varieties. 160-Bridal Robe. (Double.) The plants grow about 12 inches high, and are covered the entire summer with their beautiful snow-white double flowers.

5c pkt.

$5 c$
$5 c$
pkt. 161-The Sultan. (Single.) $\underset{\text { (Single.) }}{\text { Flown maroon. . . . . . . . . . . . . . 5c pkt. }}$ -Evening Star. (Single.) Flowers 3 inches across; of pure golden-
yellow 163-Northern star. . Large, white fowers, with black center. 5c pk pkt. 164-Annual Double Mixed. Yellow, white, etc. .................5c pkt. 165-Annual Single Mixed. (Painted Daisies.)....................5c pkt.

## SHASTA DAISY

## (Chrysanthemum Leucanthemum)

166-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.

## GINERARIA

AWELL-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.
167-Hybrida Grandiflora. This strain of Cineraria can not be surpassed, either for size of flowers or beauty of color. Many of the blooms measure $21 / 2$ inches in diameter. We have received very flattering reports from florists and private gardeners of their success with our Cineraria seed.

## CLEOME (Giant spider Flower)

168-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. Halfhardy Annual. .................................. . 5 c pkt.

## COLEUS

169-Large Leaved Varieties. 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. Sow indoors in March or April and transplant to open ground in May. Tender Perennial.

2 pkts., 25c; 15c pkt.

## Columbine (See Aquilegia)

## COSMOS

BEAUTIFUL autumn-blooming plants. They produce thousands of beautiful flowers in pure white, pink and crimson shades, furnishing an aburder 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 Cosmos

One of the best novelties of recent years. These varieties produce full, round, double flowers on sturdy, bushy plants, blooming in late summer and autumn.
170-Double Crimson........3 pkts. 25c; 10c pkt. $701 / 2-$ Double Pink. white. 3 pkts., 25 c ; 10 c pkt 171-Snowball, pure white.. 3 pkts., 25c; 10c pkt. $1711 / 2$-Finest Mixed......... 3 pkts., 25c; 10c pkt.

## c. Double Crested

These, which are commonly called double, are not fully double, but are double crested, having double centers and a row of petals around the base of the flower, which makes them very effective. They come into flower about the same time as the late flowering mammoth
$172-$ Double Pink Beauty... 3 pkts., 25c ; 10c pkt. $1721 / 2-$ Double White Queen. 3 pkts., 25 c ; 10c pkt. $173-$ Double Mixed H ybrids. 3 pkts., 25c; 10c pkt.

## Extra Early Mammoth Flowering

Seeds sown in the open ground produced plants that were covered with bloom two months before the late-flowering kinds.

176-Mixed, Early Cosmos
oz., 25c; 5c pkt.
oz., 25c; 5c pkt.
4 Oz., 20c; 5c pkt.

## Mammoth Perfection

A magnificent selection. bearing flowers of mammoth size and perfect form.
177-Mammoth Crimson. . . . . . . . . . 1/4 oz., 20c; 5c pkt. 178-Pink "Lady Lenox." Bears gigantic flowers, on very long stems, color a beautiful deep rosy-pink. The plant is of strong, vigorous growth. 6 to 7 feet high................................ $1 / 4 \mathrm{oz}$., 25 c ; Ec pkt.
179-White "Lady Lenox." Flowers measure four to five inches in diameter. Habit of plant strong and vigorous, bushes growing to a height of seven feet
180-Mammoth Perfection, Mixed. $1 / 4 \mathrm{oz} ., 20 \mathrm{c} ; \mathrm{m}^{2} \mathrm{c}$ pkt.
CYPRESS VINE (Ipomoea Quamoclit)

DELICATE, fern-like foliage, and masses of beautiful, mall star-shaped flowers. Sow in May, first soaking the seeds in warm water for a few hours. 15 feet. Half-hardy Annual.
181-Scarlet $\qquad$ Oz., 40c; 5c pkt. 182-White. . . . . . . . . . . . . . . . . . . . . . . . . . . Ozz, 40c; 5c pkt. 183-Mixed. White and Scarlet. . . . . . . . . . Oz., 40c; 5c pkt.
(See Cardinal Climber.)
CONVOLVULUS
(See Morning Glory.)

QUAMOCLIT HYBRIDA

## GOBAEA SGANDENS

(Cathedral Bells)
184-Purple Lilac. 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. . . . ............... 10c pkt.
Cobaea Scandens Plants. Each 25c; per doz., $\$ 2.50$; (by mail, each, 30c.)

## CORN (Ornamental)

185-Zea Japonica Quadricolor Perfecta. This grass forms an object of great beauty in mixed beds and borders or isolated in groups on lawns. in sub-tropi ial gardens, etc.; it thrives in rich, light, warm soils. The leaves are striped in yellow, green, rose and dark red four feet. Tender Annual..... $1 / 4 \mathrm{oz} . .15 \mathrm{c}$; 5c pkt.


## CYCLAMEN

186-Giant-Flowered. (Persicum Giganteum.) A popilar pot-plant for Winter and Spring-flowering. Seedlings bloom in eight to ten months. Greenhouse Perennial. Best strains, mixed.

## D AHLIA

DAHLIAS are easily grown from seed and bloom the first season. The carlier they are started the better. which can be done nicely in a box in a sunny window or the greenhouse. Protert the roots during winter in a dry cellar in sand. Halj-hardy Perennial.

## Double Flowering

187-Cactus Varieties. Most popular at the present time; distinct and elegant; petals pointed.........10c pkt. 188-Double Large-Flowering. This mixture is composed of the finest large flowering double varieties. . . 10c pkt.

## Single Flowering

189-Collerette. 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.
190-Single Giant Perfection. This strain produces flowers of immense size, averaging 6 inches across, in a great variety of coloring....... 1

## DELPHINIUM (Hardy Perennial Larkspur)

ONE of the must exquisite blue-tinted flowers that we have. Very effective planted in beds, masses or borders. Plant $11 / 2$ 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 Perennial.
191-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 beautiful, ranging from pure white through all shades of lavender and blue. (See cut.)....................10c pkt.
192-Belladonna. (Everblooming Hardy Larkspur.) Free 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.
193-Elatum. (Giant Bee Larkspur.) Clear, blue flowers, 3 feet. . 5 c pkt.
194-Formosum. Elegant spikes of the richest dark-blue flowers, with a white center; especially fine for cutting; 4 feet. . . . . . . . . . . . . . 5c pkt. 195-Formosum Coelestinum. Light, sky-blue flowers, with darker centers; a very fine variety; 4 feet.


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 Annual.

## Double Annual Pinks

199-China Pinks. (Chinensis fl. pl.) Large, double, fragrant flowers. Mixed colors.

## (African Golden Daisy) Half-hardy Annual.

197-Aurantiaca. The bushy plants grow 12 to 15 inches high. The flowers, which are $21 / 2$ inches and over across, are a unique, rich, glossy, orange-gold, with dark disc and halo............................ $10 c$ pkt.
198-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

196-Mixed Chinese $\nabla$ arieties. This mixture contains a great variety of shades, from pure white to gentian-blue.......................... . 5 pkt.
ANNUAL DELPHINIUMS. (See Larkspur.)

## DIMORPHOTHECA



202-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.
203-Snowball. Large double white, splendid for cutting or as a border. . .......................................... pkt.
204-Fireball. Rich blood-red flowers. Makes a striking contrast to the pure white variety; Snowball.......5c pkt.

## Single Annual Pinks

205-Salmon Queen. The well-formed, nicely-fringed flowers are a brilliant salmon color, changing into a crimson rose.

206-Vesuvius. Brilliant geranium-red, makes a very effective bed or border. . . . . . . . . . . . . . . . . . . . . . . . . . . . . 5 c pkt.

## Hardy Garden Pinks

This splendid class of Pinks should be in all gardens. They have the delightful clove fragrance. Half-hardy Perennial.
207-Double Large-Flowering Grass, or Spice Pinks. (Plumarius Semperflorens, 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.
DIANTHUS BARBATUS. (See Sweet William.)

## DIGITALIS (Foxglove)

208-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 Biennial. Finest Mixed.. . ................................ . . $10 c$ pkt.

## DOLICHOS (Hyacinth Bean)

209-A rapid-growing, annual climber, flowering freel in erect racemes, followed by ornamental seedpods for covering arbors, trellises, etc. Tender Annuals. Finest mixed, purple and white. Oz., 15c; 5c pkt

## ESCHSCHOLTZIA

A

## (California Poppy, Gold Cups)

 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 Annual. (See cut.)210-Californica. Bright yellow, with orange center Oz., 25c; 5c pkt 211-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.
212-Golden West. The flowers measure from 3 to $\kappa$ 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 the whole flower.

Oz., 30c; 5c pkt.
213-Hybrida Grandifiora. New large flowering. erect type containing a large percentage of new shades and includes soft pink, scarlet, chrome-copper red. claret and royal purple. . . 3 pkts., 25 c ; 10 c pkt.
214-Mixed. Single cup-shaped flowers in shades of bright yellow, deep orange, pink and silvery white.
BUSH ESCHSCHOLTZIA. (See Hunnemannia.)

## EUPHORBIA

$\mathbf{S}$TRONG-GROWING annuals, suitable for beds of tallgrowing plants or mixed borders; the flowers are inconspicuous; but the foliage is exceedingly ornamental. Hardy Annual.
215- Variegata. (Snow on the Mountain.) Attractive foliage, veined and margined with white; 2 feet. 5c pkt.
216-Heterophylla. Annual Poinsettia, Mexican Fire Plant, Painted Leaf. 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

EVERLASTING, ETERNAL, or STRAW FLOWERS. (See Acroclinium, Ammobium, Gomphrena, Helichry-
sum, 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.)

## GOMPHRENA (Globe Amaranth)

217-A desirable everlasting, valuable for its handsome globular heads of flowers. Half-hardy Annual. Mixed.


## GAILLARDIA (Blanket Flower) ANNUAL VARIETIES

Splendid, showy annuals; in bloom from early Summer till November; excellent for beds, borders or for cutting. Half-hardy Annual.
218-Picta Lorenziana. Double-flowering mixed. 5c pkt.
219-Picta Mixed. Single sorts: fine colors......5c pkt.

## HARDY PERENNIAL VARIETY

Thrives in almost any position or soil and requires little or no protection. If sown early, begins flowering in July, continuing a mass of bloom until frost, fine for cutting, Hardy Perennial. (See Cut.)
220-Grandiflora. A compact variety, forming bushy plants 12 to 15 inches high. and bearing its long-stemmed flowers well above the foliage.

## 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 Perennial.
221-Zonale, Mixed. A superb strain of the largest and finest varieties. ................................. $10 c$ pkt.
222-Apple-scented. This fragrant. favorite variety can only be grown from seed to form fine plants... 10c pkt.

## GODETIA



223-The plants bioom 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. Finest Mixed. Oz., 30c; 5c pkt.

## GOURDS (ornamental)

B
EING of rapid growth, they are fine to cover old fences, trellises, stumps. etc. Do not plant the seed till all danger of frost is orer, and select rich, mellow ground. Tender Annual climbers, 10 to 20 feet.
224-Calabash, or Dipper. Long. slim
 225-Dish Cloth. Clusters of large yellow flowers. The fruit, when dried, is used as a dish cloth. ..5c pkt. 226-Giant Bottle. Large and orna-227-Hercules Club. A curious sort Club-shaped. . . . . . . . . . . . . . 5c pkt 228-Japanese Nest Egg. White; facsimile of an egg; not injured by heat or cold. . ..................... 5 c pkt. 229-Orange. The well-known mock 230-Pear-shaped. Green and white striped...................... . 5 c pkt. 231-Sugar Trough. Used for buckets 232-African Pipe. The stem end of the fruits are much used in making pipes. 233-Mixed Varieties. Oz., 25c; 5c pkt.


Gourds

## GRASSES (Ornamental)

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.
234-Bromus Brizaeformis. A graceful variety, with drooping panicles. Hardy Perennial, flowering the first season; 1 foot. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 5c pkt.
235-Coix Lachryma. (Job's Tears.) Broad, corn-like leaves, and hard, shining, pearly seeds, resembling tears; 2 feet; Hardy Annual............... Oz., 10c; 5c pkt.
236-Erianthus Ravennae. A Hardy Perennial noble grass, with exquisite white plumes; flowers the first season if sown very early; 10 feet. . . . . . . . . . . . . . . . . . . . . . . . . . 5c pkt.
237-Eulalia Japonica. One of the most beautiful of the tall-growing grasses. Hardy Perennial; 5 feet. . . . 5c pkt.
238-Gynerium Argenteum. (Pampas Grass.) The finest ornamental grass in cultivation. Half-hardy Perennial; 10 feet. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 5 c pkt. 239-Pennisetum Ruppelianum. Beautiful and graceful spikes of purple; this is one of the best. Hardy Annual; $21 / 2$ feet.
240-Finest Mixed. Used for making Winter bouquets.

## GYPSOPHILA (Baby's Breath)

PRETTY free-flowering plants, succeeding in any garden soil. Their misty white panicles of bloom are largely used for mixing with other cut flowers.
241-Elegans Grandiflora Alba. This is an improved large flowering, pure white form of the annual Baby's Breath. Half-hardy Annual......Oz., 25c; 5c pkt. 242-Paniculata. White flowers, fine for bouquets; blooms first year if sown early. Hardy Perennial; 2 feet.

## HELICHRYSUM (Straw Flower)

243-Monstrosum. Everlasting flowers, large and full. Colors, white, yellow and red. Cut before the flowers fully expand. Hardy Annuai. Mixed.......5c pkt.

. 5 c pkt. 5c pkt.

5c pkt.


## HELIOTROPE (Cherry Pie)

AHALF-HARD Y 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.
244-Choicest Mixed; from new varieties. ..
.5c pkt.

## HIBISCUS (Marshmallow)

CHOWY ornamental perennial plants, for mixed beds or shrubbery borders; blooms first year if sown early.
245-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. They come up year after year and are absolutely hardy. Hardy Perennial. (See cut.)

10c 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 Perennial.
246-Chater's Double Pink. $\qquad$ 10c pkt.
247-Chater's Double Scarlet. $\qquad$ 248-Chater's Double White.................................................. 10c pkt.
249-Chater's Double Yellow. 10c pkt.
10c pkt. richness and delicacy of coloring, with magnificent spikes of very double flowers. (See cut.).............................. 3 pkts., $25 c$; 10c pkt. 251-Choice Double Mixed.
. . . . . . . . . . . . . 5 c pkt.
252-Mammoth Fringed Allegheny. Mammoth flowers of loosely arranged fringed petals. The colors vary from the palest shrimp pink to deep red. The plants are of strong growth, sending up spikes 6 to ${ }^{\prime} 7$ feet high.
253-Single. Many prefer the single flowering. They are usually f growth and present a handsome appearance when covered with their artistic blossoms. Finest mixed; all colors.

## HONESTY (Moonwort, Satin Flower)

254-Greatly admired for its silvery seed pouches, which are used for house ornaments; two feet. Hardy Biennial.

## HUNNEMANNIA

## (Giant Yellow Tulip Poppy, or Bush Eschscholtzia)

255-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 ${ }^{\text {Hop }}$ )

256-Japonicus. A very ornamental and fast-growing climbing plant. The foliage resembles that of the common Hop, is very dense, and in color a lively green. Hardy Annual.

1/4 oz., 20c; 5c pkt. 257-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.
 HYACINTH BEAN. (See Dolichos)
IBERIS (Hardy Candytuft)
258-Sempervirens. A profuse white-blooming plant, coming in flower early in the Spring; much used for cemeteries, rockeries, etc.; 1 foot. Hardy Perennial.

## ICE PLANT

259-Mesembryanthemum Crystallinum. 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.......5c pkt. IPOMEA. (See Cypress Vine, Moonflower and Morning-Giory) "JACK AND THE BEAN STALK"'. (See Kudzu Vine Seed.) IMPATIENS (Sultan's or Zanzibar Balsam)
C HARMING plants producing bright, waxy-looking flowers pro$C_{1}$ fusely and almost continuously. Tender Perennial.
260-Holstii. It forms elegant bushes $11 / 2$ feet in height. The flowers measure $11 / 2$ inches across, are of a brilliant vermilion color and
 261-Sultana Hybrida. Beautiful hybrids. Varying shades of color. from delicate pink to the deepest red.................... 10c pkt.

## KENILWORTH IVY

262-Linaria Cymbalaria. A trailing plant suitable for vases, etc. Little lavender and purple flowers and an exquisite foliage. Hardy Perennial. .......... 10c pkt.

## KOCHIA

 (Summer Cypress, Belvedere or Burning Bush)FORMS regular pyramids about 3 feet high, having a cypress-like appearance. The leaves are light green until September, when they change to carmine and blood red. Sow indoors in April and plant out in May, or sow in open ground about May 1. Hardy Annual. (See cut.) 263-Kochia Tricophylla. . . 5c pkt. 264-Kochia Childsii. This new variety produces plants that grow three to four feet high, dense, strong and symmetrical. The foliage is green all summer, but at touch of frost it changes to dark claret-red and does not die until Christmas or later. A splendid plant to divide the vegetables from the flower garden or for forming a hedge for the summer for any purpose. Also desirable as a pot plant.
.3 pkts., 25 c ; 10c pkt.


## KUDZU VINE

265-Pueraria Thunbergiana. 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. Unequaled for porches. arbors, trellises, etc. Hardy Perennial. . . . . 10c pkt.

## LANTANA

266-Verbena-like heads of orange, white, rose and other colored flowers; constantly in bloom; 2 to 3 feet. Halfhardy Perennial. Mixed colors. . . . . . . . . . . . . 5 c pkt.

## LAVENDER (Lavandula vera)

267-Well known, sweet-scented Hardy Perennial; should be extensively grown in the mixed border; 2 feet. 5 c pkt.


## ANNUAL LARKSPURS

THIS is one of the best known of garden flowers. 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. Hardy Annual.
268-Double Stock-Flowered. The finest variety with splendid spikes of beautiful double flowers; $21 / 2$ to 3 feet. Finest mixed. 1/4 Oz., 15c; oz., 50c; 5c pkt.
269-Dwarf Rocket. The flowers are large, double and of various beautiful colors, shadings and markings; long spikes of bloom. 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 Perennial.
270-Latifolius "White Pearl." The finest white variety. 10c pkt. 271-Pink Beauty. Rosy pink. . . . . . . . . . . . . . . . . . . . . . . . . 10c pkt. 272-Mixed. All colors.......... $1 / 4$ oz., 15c; oz., 40c; 5c pkt.

## LINUM (flax)

273-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., $25 \mathrm{C} ; ~ 5 \mathrm{c}$ 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 Annual. Cardinalis is one of the finest native Hardy Perennials.
274-Crystal Palace Compacta. Rich blue; finest for bed-275-Speciosa. Dark blue; trailing; fine for vases. . . . . . . . . . . . . . . . . pkt. 276-Cardinalis Hybrida. Splendid hybrids, mixed; highly recommended. Hardy Perennial; 2 feet. ....... . 10c pkt.

## LUPINUS (Lupine)

277-Annual Mixed. Free-flowering, easily grown annuals, with long, graceful spikes of rich and various colored peashaped flowers; 2 feet. Hardy Annual. Oz., 25c; 5c pkt.
278-Polyphyllus Roseus. A fine variety of the perennial Lupine, with showy spikes of rose-colored flowers. Hardy Perennial.
279-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 free-flowering annuals of easy culture; the former have uniformly large, yellow or orange colored flowers. (See cut.) The latter are dwarfer in growth, with beautifully striped flowers. They succeed best in a light soil, with full exposure to the sun. Half-hardy Annual.

## African Varieties

280-Orange Prince. Densely double flowers of a rich, deep golden orange color. $1 / 4$ oz., 20c; 5c pkt. 281-Lemon Queen. Soft, lemon-yellow flowers, and forming a fine contrast to the preceding.... $1 / 4 \mathrm{oz}$., 20c; 5c pkt. 282-Finest Mixed African.......... $1 / 4$ oz., 15c; 5c pkt.

## French Varieties

283-Legion of Honor. Single Dwarf Marigold, forming compact bushes. Flowers golden yellow and brown; blossoms in great profusion.... $1 / 40 \mathrm{oz}$., 25 c ; 5 sc pkt. 284-French Gold Striped. Very double; 1 foot.
$1 / 4 \mathrm{oz} ., 15 \mathrm{c} ; 5 \mathrm{c}$ pkt.

## MARVEL OF PERU,

 or Four O'Clocks (Mirabilis Jalapa)285-A well-known free-flowering garden favorite; does well everywhere; give each plant 12 to 18 inches of room. Half-hardy Perennial. Finest Mixed. Oz., 25c; 5c pkt.

## MATRICARIA

286-Capensis Alba Plena. (Double White Feverfew.) Free-flowering plants, producing all season fine, double, white flowers. A fine bedding or pot plant. Halfhardy Perennial. .



Beautiful, rapid, slender growing climbers, blooming profusely until late in the autumn; also fine for the conservatory or greenhouse. A Half-hardy Perennial, flowering the first season if sown early.
297-Barclayana. Deep violet; fine $\qquad$ .10c pkt.
288-Finest Mixed. All colors. 10c pkt.

## MIGNONETTE (Reseda)

A well-known favorite. No garden is complete without a bed of Mignonette. Half-hardy Annual. (See cut.)
289-Defiance. One of the finest sorts; excellent for
forcing. . . . . . . . . . . . . . . . . . . . . $1 / 4 \mathrm{oz}$., 20 c ; 10 c pkt.
290-Machet. Dwarf pyramidal growth, with very large,
thick spikes, fragrant. .......... 1/4 oz., 20c; 10c pkt.
291-Sweet-scented. The old variety; but very sweetly
scented.
MIMOSA (Sensitive, or Humble Plant)
292-Pudica. Curious and interesting annuals, with pinkish-white flowers; the leaves close and droop when touched or shaken. Half-hardy Annual.

5c pkt.

## MIMULUS

Fine for shady situations; blooming the first year from seed if sown early; 1 foot. Half-hardy Perennial. 293-Tigrinus. (Monkey Flower.) Fine mixed spotted varieties.
294-Moschatus. (Musk Plant.) Fine for hanging baskets, etcs; small yellow flowers, fragrant foliage. 5c pkt.

## MOON FLOWER (Ipomoea Noctiflora)

Climbers of rapid growth, with beautiful and varied flowers; for covering walls, trellises, arbors or stumps of trees.
295-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 Percnnial. . . . . 1/4 oz., 20c; oz., 75c; 5c pkt.
296-Giant Pink Hybrids. Similar to the above in habit of growth and bloom with pink flowers.
Moon Flower Plants $1 / 4$ oz., 20c; oz., 75c; 5c pkt. Each, 20c; per doz., $\$ 2.00$; by mail, each $25 c$. All 10c Packets are 3 Packets for 25 c .

## MORNING GLORIES or Convolvulus

THE Morning Glory is too well known to need a description. Succeeds under almost all circumstances. Hardy Annual 297-Morning Glories. (Convolvulus Major.) Climbing varieties, mixed.........Oz., 10c; $1 / 4 \mathrm{lb} ., 25 \mathrm{c}$; 5 c pkt. 298-Double Mixed Climbing. The flowers are double and semi-double and some are fringed. . ............. 5 c pkt.
299-Imperial Japanese or Emperor Morning Glories. The flowers are of gigantic size and their colors range from snow-white to black-purple, with all the possible intermediate shades. . . . . . .... $1 / 2 \mathrm{oz} ., 15 \mathrm{c}$; oz., 25c; 5c pkt. 300-Ipomoea Setosa. (Brazilian Morning Glory.) Branches in all directions and presents a remarkable appearance. Rosy pink flowers.

## MYOSOTIS (Forget-Me-Not)

The Forget-Me-Nots succeed best in shady, moist situations; Half-hardy Perennial. 301-Alpestris Victoria. Early flowering, of bushy habit. 302 bearing large, bright, azure-blue flowers. ........ 10 c pkt. 02 early 303-Palustris. The true Forget-Ne-Not; beautiful blue flowers; 6 inches. 304-Palustris Semperflorens. A dwarf Forget-Me-Not
continuing in bloom from early Spring until autumn; blue continuing in bloom from early Spring until autumn; blue
flowers. . . . . . . . . . . . . . . . . . . . . . . . . . . . . 10c pkt.

## NASTURTIUMS

F
OR ease of culture, duration of bloom, brilliance of coloring and general excellence, nothing excels Nasturtiums. All they need is a moderately good soil in a well-drained sunny position. The varieties offered below were selected from a very large number of sorts as being the best and most distinct Half-hardy Annual.

## 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.
305-Chameleon. Different richly-colored flowers on the same plant.
$306-C r i m s o n . ~ R i c h ~ a n d ~ v e l v e t y ~$
307-Fulgens. Dazzling crimson flowers, dark foliage.
308-Gold Garnet. Orange yellow, garnet blotches.
309-King Theodore. Deep crimson maroon. dark foliage. 310 - Yellow. Clear yellow white with few red reins. 311- Orange. Pure orange; no markings.
312-Pearl, or Moonlight. Creamy white.
313-Rose. Salmon rose; an exquisite shade.
314-Ruby. Deep scarlet flowers.
315-Schulzii. Rosy scarlet flowers, dark foliage.
316-Rich Yellow. Spotted garnet.
Price-Any of the above Tall sorts.
Oz., 20c; $1 / 4 \mathrm{lb} ., 60 \mathrm{c}$; 5c pkt.
317-Collection. 6 rarieties......................... $25 c$.
318-Collection. 12 varieties.
40 c .


Contains all the new Giant Flowering kinds together with many other grand new hybrids, embracing 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

Oz., 20c; 1/4 lb., 60c; lb., \$2.00; 5c pkt. 320-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; 1/4 lb., 40c; lb., \$1.25; 5c pkt.

## Lobb's Nasturtiums

T
HERE is little difference between these and the tall asturtiums. They are rich in the red shades.

## Miscellaneous Varieties

322-Hybrids of Madame Gunter. For richness and variety of colors these have no equal among Nasturtiums. The foliage is mostly dark. Oz., 20c; 5c pkt. 323-Tall Ivy Leaved. Thick, green, lobed leaves, resembling those of the English Ivy. The flowers are of a delicate fringed formation........Oz., 20c; 5c pkt. 324-Tall Variegated Leaved. The foliage is variegated. rendering the plants very ornamental even when not


TROPAEOLUM CANARIENSE.
(See Canary Bird Flower.)


## 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.
325-Beauty. Yellow-striped red.
326-Chameleon. This interesting variety produces flowers of different colors on the same plant.
327-Crystal Palace Gem. Sulphur, spotted maroon.
328-Empress of India. Crimson flowers, dark foliage.
329-Golden King. Brilliant yellow.
330 - King of Tom Thumbs. Intense deep scarlet flowers, dark foliage.
331-King Theodore. Dark Maroon, bluish-green foliage, 332-Pearl, or Moonlight. Creamy white.
333-Prince Henry. Golden yellow, marbled and spotted with brilliant scarlet.
334-Regialianum. Deep purplish crimson
335-Rose. Salmon rose.
336-Vesuvius. Brilliant salmon pink.
337-Variegated Leaved Mixed. All colors.
Price-Any of the above Drrarf sorts.
Oz., 20c; 1/t lb., 60c; 5c pkt.
338-Collection. 6 varieties............................ 25 c .
339-Collection. 12 varieties. . . . . . . . . . . . . . . . . . . . . 40 c.


Will give a larger variety of colors in even proportions than any other Nas-
turtium 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; $1 / \pm$ lb., 60c; 1b.. $\$ 2.00$; 5c pkt.
341-Dwarf Nasturtiums Mixed. We handle such large quantities of Drrarf 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; 1⁄ lb., 40c; lb., \$1.25; 5c pkt.

## NEMESIA

342-Strumosa Grandiflora. Flowers range in color from crimson to golden yellow and are large and brilliant. Half-hardy Annual............. 3 pkts., 25c; 10c pkt.
343-Blue Gem Compacta. The flowers are a soft azure blue. Fine for borders. edgings or small beds; 6 to 8 inches. Half-hardy Annual. . 3 pkts., 25c; 10c pkt.

## 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 Annual.
344 -Affinis. Large, pure white flowers of delicious fragrance. If taken up in the Fall, cut back and potted, they will bloom all winter...... 5 c pkt.
345-Sanderae Hybrids. A showy and profuso flowering, half-hardy annual, giving a continuous display of brilliant fowers 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 $11 / 2$ to 2 inches across and remain open all day. Many colors, mixed.

## NiGELLA

(Love in a Mist, or Devil in the Bush)
346-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. Height, 18 inches. Hardy Annual. . . . . . . . . . 10c pkt.
347-Finest Mixed.
10c pkt.

## PANSY

PANSY seed has always been a leading specialty with us. Seed germinates best while soil is still cool and moist. 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 Perennial.

## Mastodon Pansies

## A new strain of American Grown Mammoth

 Flowering Varieties.348-Adonis. Light blue flowers, marked with a yellowishwhite face and large dark blotches.

2 pkts., 25c; 15c pkt. 349-Blue Perfection. The best dark blue flowers of immense size.................. 2 pkts., 25c; 15c pkt. 350-Candidissima. The finest and largest pure white flowers. . . . . . . . . . . . . . . . . . . . 2 pkts., 25c; 15c pkt.
351 -King of the Blacks. Flowers of immense size, nearly all jet black and velvety in substance.

2 pkts., 25c; 15c pkt. 352-Madame Perrett. Colors are dark wine, pink and red, with edges of petals frilled and bordered white

2 pkts., 25c; 15c pkt.
353-Meteor. Flowers a beautiful shade of wine red, very free bloomer................... 2 pkts., 25c; 15 pkt. 354-Panama Pacific. Flowers of immense size, deep yellow......................... 2 pkts., 25c; 15c pkt. 355-Parisian Yellow. Flowers of pure yellow, of grand form and size. . . . . . . . . . . . . . . . 2 pkts., 25 c ; 15 c pkt. 356-Vulcano. Flowers a rich, velvety burgundy-red, of immense size; finest red pansy grown.

2 pkts., 25c; 15c pkt.
 The cream of American and European Specialists. In this magnificent mixture of mammothflowering 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......1/8 oz., $\$ 1.00$; $1 / 4$ oz., $\$ 1.75$; 25c pkt.

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Great diversity of colors. free flowering, blossoms are slightly smaller than the Giant sorts. $1 / 8$ oz., 15c; $1 / 4$ oz., 25c; 5c pkt.

## Violas, or Tufted Pansies

(Also known as Pansy Violets, Johnny-Jump-Ups, etc.)

0UR 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.


## 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 Annual.

## Double Large-Flowering

$I^{T}$T 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.

$\left.\right|^{\text {361-McCullough's Splendid }}$ Double Fringed very large full and beautifully formed, having the edges of the petals elegantly fringed. . c pkt. 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, 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. 364-Ruffled Giants. Very large fowered; ruffled, fluted and fringed, striped and mottled, blotched and solid self-colors. . . . . . . . . . . . . . . . . . . . . . . . . . 15c pkt
365-Large Flowering Single, Finest Mixed. Superb strain from show flowers; very large and of great substance.

## PETUNIA-Continued

## Single Bedding Petunias

366-Howard's Star. A beautiful free-flowering strain, crimson maroon with a clearly-defined five-pointed star of blush white. . . . . . . . . . . . . . . . . . . 3 pkts., 25c; 10c pkt. 367--Rosy Morn. Carmine pink with white throat. . .10c pkt. 368-Brilliant. Carmine pink. . . . . . . . . . . . . . . . . . . 10c pkt. 369-Dwarf Inimitable. Compact growing variety; flowers cherry-red with a white center................... 10c pkt 370 -Pure White. For cemetery beds. $\qquad$ 5c pkt. 371-Striped and Blotched. Fine for massing.

/\& OZ., 3Cc; 5c pkt. Superb strain. $1 / 4$ oz., 50c; 10c pkt. 1/4 oz., 25c; 5c pkt.

## McCULLOUGH'S anNUAL PHLOX

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. 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. (See cut.)

## McCullough's Giant Phlox

Is a special mixture of Phlox; Giant flowering flowers large, perfectly round trusses of flowers which will surpass every other variety in extreme richness of color and duration of bloom. It grows very compact. To prolong blooming, the seed pods should be remored as soon as they form. A bed of McCullough's Giant Phlox makes a grand display all Summer. . . . $1 / 8 \mathrm{oz} .30 \mathrm{c}$; $1 / 1 / \mathrm{oz} ., 50 \mathrm{c}$; 10 c pkt. 375-Phlox Drummondi, Mixed Colcrs. Flowers not so large as the Grandiflora type offered, but are very free-flowering and effective.

$$
1 / \pm \mathrm{oz} ., 30 \mathrm{c} ; \mathrm{oz} ., \$ 1.00 ; 5 \mathrm{c} \text { pkt. }
$$

## Large-Flowering Dwarf

A type combining the size of the individual flower and head of the Grandifloras, but of dwarf, compact growth. 376 -Finest Mixed Colors (Dwarf Varieties).... 10 c pkt.


## Star Phlox

377-Phlox Cuspidata. (Star of Quedlinburg.) Of dwarf habit wi.h very pretty star-shaped flowers. A novel variety; mixed colors 10c pkt.

## Hardy Perennial Ph1ox (P. Decussata)

Hardy Herbaceous Perennial and quite distinct from the varieties of Phlox Drummondi. 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.
378-Mixed. All varieties.......1/4 oz., 60c; 10c pkt.

## POPPIES

## Double Annual Poppies

THEY make a gorgeous show during their flowering period, and are largely used for beds and borders. Should be sown as early in the spring as possible where they are in. as they do not stand transplanting. Sow rery thinly. Hardy Annual.
379-American Flag. Beautiful variety; flowers very large and double, snow white, bordered with scarlet.

Oz., 30c; 5c pkt.
382-White Swan. Immense double flowers, beautifully fringed and of purest white.

Oz., 25c; 5c pkt.
383-Carnation Flowered. Splendid double fringed flowers, mixed colors.

384-Paeony Flow-
ered. Large, showy, double globular flowers. resembling a double Paeony; 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.

1/2 oz.,15c ; oz..25c ;
5c pkt.
Poppies continued to next page.


## POPPIES-Continued

## Single Annual Poppies

$\mathbf{A}^{1}$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 Annual.
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.)

1/4 oz., 15c; oz., 40c; 5c pkt.
387-Admiral. A single paeony-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., 40c; 5c pkt.
388-Danebrog, or Danish Cross. Very showy variety, producing large flowers of brilliant scarlet, with a silverywhite spot on each petal, forming a white cross.

Oz., 40c; 5c pkt.
389-Fire Dragon. Very showy flowers of brilliant deep scarlet, with black spots, margined white; 2 to $21 / 2$ feet.
$1 / 4 \mathrm{oz} ., 25 \mathrm{c} ; 5 \mathrm{c}$ pkt.
390-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. . . . . . . . . . . . . $1 / 4$ oz., 20c; oz., 60c; 5c pkt. 391-The Bride. A beautiful variety with very large, pure white, perfectly-formed flowers. .......Oz., 25c; 5c pkt
 Poppies and many other kinds not listed. It is really extra choice $1 / 2$ oz., 15c; oz., 25c; 5c pkt.
(For Double Flowering Poppies, see preceding page.)

## Hardy Perennial Poppies

0RIENTAL 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.
393-Bracteatum. Immense orange-scarlet flowers, similar to the Oriental Poppy ...... $1 / 4$ oz., 25c; 5c pkt.



394-Orientale. (The large Oriental Poppy.) A charming summer-fiowering hardy plant, producing numerous leafy stems about $21 / 2$ feet high, with large, deep crimson flowers, having a conspicuous black blotch on each petal; exceedingly showy........ $1 / 4 \mathrm{Oz} ., 25 c$; 5c pkt.


Contains the preceding 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. . . . . ........... $1 / 4$ oz., $50 \mathrm{c} ; \mathrm{m}^{10 \mathrm{c} \text { pkt. }}$

## 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.
396-Finest Mixed. All colors. .... $1 / 4 \mathrm{oz} ., 25 c ; 5 c$ pkt.

## PORTULACA (Sun Plant or Rose Moss)

0
NE 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 rockwork; 6 inches. (See cut.)
397-Single Mixed Colors..........Oz., 60c; 5c pkt. 398-Double Mixed. A large percentage of the flowers will come perfectly double. ......... . $1 / 4$ oz., 75c; 10c 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.

## PRIMULA

THE beautiful Chinese Fringed Primroses and Obconica and Forbesi varieties are in dispensable 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 Perennial.
399-Alba Magnifica. The finest pure white with bright yellow eye, beautifully fringed. . . . . . . . . . . . . . . . . . . . 20e pkt. 400-Chiswick Red. Large brilliant scarlet, finely fringed................... 20 c pkt 401-Coerulea. Fine blue; excellent. 20 c pkt. 402-Delicata. Deli ate rose; finely fringed. 20 c pkt.

(See cut.) $\qquad$

## 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 Perennial.
404-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.
405-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

406-Forbesi. (Baby Primrose.) This is the freestflowering primula we know of. The little plants throw up tiny rosy-lilac flowers when only a few weeks old.

10c pkt
407-Malacoides. A fine house plant, somewhat like $P$. Forbesi, but larger in all its parts; flowers delicate lilac.

## Hardy Primroses

These are among the best of the early spring-blooming plants. Half-hardy Perennial.
408-Auricula. Finest mixed. Extra choice; saved from
 10c pkt.
410-Vulgaris. True English Primrose; canary yellow, fragrant flowers. . . . . . . . . . . . . . . . . . . . . . . . 10c pkt.

## PYRETHRUM

oNE of the most valuable of our summer flowers. They flower in May and June, and frequently in August and September the second time. Hardy Perennial.
411-Hybridum Grandiflorum. This 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. One of the most graceful and long-lasting cut flowers.

1/4 Oz., 50c; 10c pkt.
412-Hybridum Fl. Pl. Large semi-double flowers, resembling a China Aster, only more refined; extra choice selected seed; mixed colors................25c pkt
413-Pyrethrum Aureum. It is the well-known Golden Feather used for edging, carpet-bedding, etc...5c pkt.

## RHODANTHE (Swan River Everlasting)

FF wanted for bouquets the flowers should be gathered before they fully expand. If allowed to gruw too long they open too much, and lose their beautiful bell form. Flowers everlasting. Half-hardy Annual.
414-Maculata. Mixed, all colors. $\qquad$ .5c pkt.

## RICINUS (Castor Bean)

K NOWN 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. Sow as soon as the ground is warm. Half-hardy Annual.
415-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., 30c; 5c pkt.
416-Sanguineus. Blood-red stalks and clusters of red fruit; 8 feet. . . . . . . . . . . . . . . . . . . .Oz., 30c; 5c pkt.
417-Zanzibariensis. A distant 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., 30 c ; 5 c pkt.
418-Mixed. All sorts.
Oz., 25c; 5c pkt.

## RUDBEGKIA (Cone Flower)

419-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.
420-Newmani. 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.
421-Purpurea (Giant Purple Cone-Flower.) esting urea. (Giant Purple Cone-Flower.) An intershong 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. .. ................................. . $10 c$ pkt.


## SALPIGLOSSIS (Painted Trumpet)

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.)

422-McCullough's Special Mixture

This mixture is put up by ourselves of separate varieties and is without doubt the best mixture obtainable. $1 / 4 \mathrm{oz} ., 50 \mathrm{c} ; 10 \mathrm{c}$ pkt. 23-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. 4-Finest Mixed. All colors. .... $1 / 4 \mathrm{oz} ., 30 \mathrm{~B} ; \mathrm{r}^{10 \mathrm{c}}$ pkt.

## SALVIA (Flowering 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 Perennial.
425-"Bonfire," or "Clara Bedman." Grows 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. (See cut.)............. 1/4 oz., 75c; 10c pkt. 426-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."
7-Splendens. (Scarlet Sage.) On oz., $\$ 1.00$; 10c pkt and Fall plants with magnificent brilliant scarlet flowers; 2 feet. .. . . . . . . . . . . . . $1 / 4 \mathrm{oz.}, \mathrm{60c;} \mathrm{10c} \mathrm{pkt}$.

## SCABIOSA

(Mourning Bride, Sweet Scabious, Pincushion 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 Annual.
428-Azure Fairy.
Lavender-blue.
431-King of the Blacks.
432-Rose.
429-Crimson.
433-White.
430-Flesh Pink.
Any of the above colors. ............1/4 oz., 20c; 5c pkt. 434 -Collecticn. One packet each of the above 6 varieties, 435-Mixed. All colors of the Improved Large-flowering. $1 / 4$ oz., 15c; oz., 50c; 5c pkt.

## Hardy Perennial Scabiosa

436-Caucasica. (Blue Bonnet.) Especially valuable for cutting, the blooms lasting a long time in water; lilacblue; 3 feet. Hardy Perennial. . . . . . . . . . . . 10c pkt.
437-Japonica. A Hardy Perennial variety from Japan, forming bushy plants $21 / 2$ feet in height, and bearing on long wiry stems beautiful, lavender-blue flowers. A fine cut flower.


Salvia-"bonnre


## SGARLET RUNNER BEANS

438-A great favorite in Europe, not only as an ornamental climber, but for the delicious, edible pods which succeed the bright scarlet, pea-shaped blossoms. Tender Annual....Large pkt., 10c; small pkt., $\mathbf{5 c}$.

## SENSITIVE PLANT. (See Mimosa.)

SHASTA DAISY. (See Hardy Chrysanthemum.)

## 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 Annual.
439-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.
440-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.

## SMILAX (Myrsiphyllum Asparagoides)

441-Smilax is the most useful climber which adorns the greenhouse or conservatory. Tender Perennial. $1 / 4$ oz., 25c; 10c pkt.

## SOLANUM

442-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. . . 10 c pkt.

## STOCKS (Gillifower)

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.


A fine perpetual blooming stock, producing one long, sturdy spike, closely set with enormous double flowers. A grand variety.

0c pkt.
444-Princess Alice. (Cut and Come Again.) If sown early it commences blooming in June and continues until frost. It throws out numerous side branches bearin! clusters of very double, pure white, fragrant blossoms, and is excellent for cutting.

## STOCKS-Continued

## Giant Perfection Ten Week Stock

This magnificent strain is without a rival for open-ground planting attaining a height of $21 / 2$ feet. The spikes of bloom are long and the individual flowers are enormous in size and very double. Halfhardy Annual. (See cut.)



## 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. 452 -Almond Blossom. White shaded carmine, superb. 10 c pkt 453 - Beauty of Nice. Delicate flesh pink. . . . . . . . . . . . 10c pkt. 454-Lilac. Deep lilac, beautiful color and large spikes. . 10c pkt 455-Mont Blanc. Purest white.
456-Queen Alexandra. Soft rosy-lilac.
457-Beauty Stocks, Mixed.

## STOKESTA (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 Perennial.

SUNFLOWER (Helianthus)

REMARKABLE for the stately growth, size and brilliancy of their flowers, making a very good effect among shrubbery and for screens. Hardy Annual.

## Double Annual Sunflowers

460-Chrysanthemum-Flowered. The plants grow 6 to 7 feet and produce a great number of double flowers Oz., 30c; 5c pkt. 461-Globosus Fistulosus. (Dahlia Sunflower.) Flowers large, double, of a rich saffiron color, 6 feet.
462-Mammoth Russian. Extra large., 30c; 5c pkt. 462-Mammoth Russian. Extra large flowers, with an 463-Double varieties, Mixed...... Oz., 25c; 5c pkt.

## Hardy Perennial Sunflowers

464-Mixed. Contains the finest single-flowering Hardy Perennial sorts. Seeds sown early will produce fowering plants the first year; as subjects for the hardy border as well as for cutting they are of great value.
$1 / 4 \mathrm{oz}$., 65c; 10c pkt.


Single Annual Sunflowers

## (Dwarf-Branching "Cut-and-Comə-Again")

465-Stella. (Improved Miniature Sunflower.) Flowers of the purest golden yellow, with black disc. Th: plants form bushes 2 to 3 feet high, bearing a continuous succession of flowers from June until frost. They are easily grown, commencing to flower in a few weeks from seed. Hardy Annual.... ...... $1 / 4$ oz., 15c; 5c pkt.
466-The "Red Sunflower." The plants vary in height from five to eight feet. The flowers are of good form, usually having large, long rays and small discs. The color varies greatly-some plants produce flowers of a rich chestnut-red, others red flowers tipped with yellow, others washed with red. . . . . . . . . 3 pkts., 25c; 10c pkt
467-Rainbow Hybrid Sunflowers. Our wonderful Rainbow Hybrids are the results of bringing together three distinct types of Hybrids and combining the good points of all. The cond bronzes, and some solid red plants; grow 5 to 8 feet high; flowers 5 to 8 inches in diameter. . . . $1 / 40 \mathrm{oz} ., 40 \mathrm{c} ; 10 \mathrm{c}$ 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 weli 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 Perennial. Height, $11 / 2$ to 2 feet.
468-Pink Beauty. An exceedingly pretty variety with beautiful salmon pink flowers.. $81 / 2$-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, Will the range of color, all showing a clear, white eye, is superb. 5 c pkt.
 469-McCullough's
Selected Single Mixed single-flowering varieties

1/4 oz., 20c; 5c pkt.
$4691 / 2$-Double Red. Very effective, rich deep red variety........5c pkt.
470-Double White. Excellent for cut flowers . . . . . . . . . . . . . . . . . 5 c pkt.
$4701 / 2$-Double Mixed. This mixture you will find of very superior quality; containing all colors and shades.

## 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 varicties 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 varietics.
471-Early Meadow Lark. Flowers are cream colored, duplexed, well waved and borne in fours and threes very floriferously on strong vines. .. . $1 / 2$ oz., 60c; oz., $\$ 1.00$; 10c pkt.
472-Early Warbler. The flowers are a rich mauve purple color: large and beautiful in form..... $1 / 2 \mathrm{oz} ., 60 \mathrm{c}$; oz., $\$ 1.00$; 10c pkt.
473-Early Liberty. A rich, deep, sunproof crimson. The flowers are large, well waved and borne in fours and threes. The vines are vigorous. $1 / 2 \mathrm{oz} ., 60 \mathrm{c}$; oz., $\$ 1.00$; 10 c pkt.
474-Early Songster. The vines are floriferous and the Lavender colored flowers very large and nicely waved.

1/2 oz., 60c; oz., \$1.00; 10c pkt.
475-Early Blanche Ferry. The standard is bright rose, the wings being pinkish or blushwhite. Vines are strong and vigorous, bearing large, well waved flowers in threes and fours. $1 / 2 \mathrm{Oz} ., 40 \mathrm{c}$; oz., 75c; 10c pkt.
476 - Heather Bell. 'The color is a rich, but pleasing mauve, but after standing in water the color becomes a beautiful mauve lavender.
477-Morning Star. The color is a deep orange scarlet or flame color in standard with rich orange-pink wings.
-S 1/2 Oz., 40c; oz., 75c; 10c pkt. Flake. This is the best Early Flowering White Seeded Spencer. The blossoms are very large and of the best waved Spencer form. . . $1 / 2 \mathrm{oz}, 40 \mathrm{c}$; oz., 75c; 10c pkt.
479-Song Bird. Standard richly flushed with a beautiful distinct shade of pink on a white ground, wings soft light pink.
480-Yarrawa ${ }^{1 / 2}$ Oz., 40c; oz., 75c; 10c pkt. color on opening is rose pink standard, tinted buff, blush wings. $1 / 2$ oz., 40c; oz., 75c; 10c pkt.

## New Spencers

481-Blue Picotee. Large, bold white flowers, with blue edge, nicely waved, and borne in threes and fours on long stems.

1/2 oz., 20c; oz., 35c; 10c pkt.
482-Dobbies Cream. Deep cream or primrose colored, nicely waved, with an abundance of four-bloom Sprays.
$1 / 2$ oz., 20c; oz., 35c; 10c pkt.
483-Dobbies Sunproof Crimson. This beautiful crimson flowering variety does not scorch or burn under intense sunshine. Flowers are freely borne on long stems in threes and fours. . . $1 / 2 \mathrm{oz} ., 20 \mathrm{c}$; oz., 35 c ; 10c pkt.
484-Fiery Cross. Color a scorching fire-red, or scarlet. It does not scorch or burn and the beautifully waved and fluted flowers are borne freely in threes and fours, on long stems.

1/2 Oz., 40c; oz., 75c; 10c pkt.
485-Hercules. A magnificent soft rose-pink. The broad and beautifully waved standards frequently measure two and one-half inches in diameter.
$1 / 2$ Oz., 20c; Oz., 35c; 10c pkt.
486-Hilary Christie. Flowers salmon orange, edged with fiery orange scarlet, wings rosy salmon.
$1 / 2$ Oz., 40c; oz., 75c; 10c pkt.
487-Jean Ireland. Flowers creamy buff, standards margined carmine rose. $1 / 2$ oz., 40 c ; oz., 75c; 10c pkt.

488-King Edward Spencer. The large flowers are waved and crinkled; standard and wings deep rich carmine scarlet. 489-King White. The grandest of all White Sweet Peas and of the most up-to-date Spencer form. It is 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.
$1 / 2$ oz., 20c; oz., 35c; 10c pkt.
490-Margaret Atlee. The flowers are a rich glowing pink on cream ground, suffused with salmon in the standard, while the wings are pinkish-rose and salmon. The flowers are exquisitely waved, and freely produced in "fours" on long stout stems.
$1 / 2$ oz., 20c; oz., 35c; 10c pkt.
(Sweet Peas continued on next page.)

## McGULLOUGH'S SELEGT SWEET PEAS

## NEW SPENCERS-Continued

491-Margaret Madison. The flowers are azure blue, slightly tinted with maure, of good size, both standard and wings being delightfully waved and frilled. $1 / 2$ oz., 20c; oz., 35c; 10c pkt. 492-Miriam Beaver. Light apricot and buff. $1 / 2$ oz., 20c ; oz., 35c; 10c pkt. 493-Mrs. Cuthbertson. The standard is a clear, rosepink in color, wings white, slightly flushed light rose. $1 / 2$ oz., 20c; oz., 35c; 10c pkt. 494-R. F. Felton. The color is a soft, pleasing shade of lavender suffused rose; wings French gray. Flowers large and waved.... $1 / 2 \mathrm{oz} ., 20 \mathrm{c}$; oz., 35 c ; 10 c pkt. 495-Rosabelle. A fine large rose-colored flower, and a strong grower. . . . . $1 / 2$ oz., 20c; oz., 35c; 10c pkt. 496-Royal Purple. A rich royal purple, a distinct color $1 / 2$ Oz., 20c; oz., 35c; 10c pkt. 497-The President. Flowers are scarlet. of largest size, carried on strong, stiff stems, usually in fours, always beautifully waved.
$1 / 2$ oz., 20c; oz., 35c; 10c pkt. This mixture 498-McCullough's Special Mix- ${ }_{\text {ture of Spencer Varieties }}^{\text {turn }}$ is made up by ourselves from the cream of this class in all possible color variations. and we are in this not only the above sorts. but many others which are new and striking in this class.
$1 / 2 \mathrm{oz} ., 15 \mathrm{c}$; oz., 30c; 1/4 lb., $\$ 1.00$; 10c pkt.

## McCULLOUGH'S SPECIAL COLLECTION OF "SPENCER" SWEET PEAS

One (regular size) packet of each of the Seventeen Spencer Varieties for $\$ 1.10$ Postpaid,
or 6 packets for 45 c ; 12 packets for 80 c Customer's Selection, Postpaid.


## McCullough's "PREMIER" Mixed Sweet Peas

## THE FINEST AND MOST COMPLETE MIXTURE

 EDER OFFERED512-This mixture contains all the best-named large-flowering varieties and novelties and is undoubtedly a trul. superb mixture blended by us with extraordinary care from named yarieties of the most approved largeflowering type including recent American and European varieties. as well as a great many Spencer and Lnwin sorts and other hybrids insuring a gorgeous color effect. 313 Oz., 10c; 1/4 lb., 35c; per lb., \$1.25; 5c pkt. -Fine Mixed. A very good mixture of over 30 large flowering varieties.

Oz., 10c; $\underset{\sim}{\text { l }} \mathrm{lb} ., 25 c$; per lb., 80c; 5c pkt. (See also McCullough's "Premier" Mixture.)

## 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; $1 / 4 \mathrm{lb} ., 40 \mathrm{c}$; 5c pkt.
499-Black Knight. Pure maroon, self-colored. Large 45 size.
500-Blanche Ferry. Rose pink standard, white wings. 501-Dorothy Eckford. The finest pure white. The plant is short-jointed, and grows an enormous mass of bloom.
502-Earliest of All. Rose pink standard, with white wings.
503-Flora Norton. Pure bright self-blue; quite distinct. 504-Gladys Unwin. Bright light pink, a little deeper at the edges.
505-King Edward VII. A lovely, intense, bright crimson, giant flowering variety with strong stems and growth; does not burn in the sun.
506-Lady Grisel Hamilton. Beautiful pale lavender; in form it is one of the most advanced giant flowering type.
507-Lord Nelson. Standard, dark navy blue; wings shaded purple.
508-Miss Wilmott. Standard, orange pink; wings rose, tinted orange.
509-Mrs. Geo. Higginson, Jr. A clear, delicate light blue.
510-Nora Unwin. Giant white flowering variety.
511-Prima Donna. Bright blush pink; large size and fine form.

## McCULLOUGH'S SPECIAL COLLECTIONS

Thir veen Best Grandifiora or Large Flowering Varieties for only 50c-Postpaid.
(One regular Size packet of each variety listed above)
or 6 packets for $25 c$; customer's selection, postpaid.

## THUNBERGIA (Black-Eyed Susan)

514-Beautiful, rapid-growing annual climbers. preferring a warm, sunny situation; used extensively in hanging baskets. rases, low fences, etc.: very pretty flowers in buff, white, orange, etc.: with dark eyes; mixed colors. Half-hardy Annual. 4 feet. ..... $1 / 4$

## TORENIA

515-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.

10 c 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.
516-Finest Mixed.
10c pkt.
VIOLAS, or TUFTED PANSIES. (See Pansies.)

## VINCA (Madagascar Periminkle, 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 Annual. (See cut.)
517-Rosea. Rose, dark eye.
10c pkt.
518-Alba Rosea. White. crimson eve.......... 10c pkt.
519-Alba Pura. Pure white.................... 10c pkt.
520-Mixed. . . . . . . . . . . . . . . . . . . . . . $1 / 1 / 4$ oz., 25 c; 5c pkt.
VERBENAS. (See next page,)

## VERBENAS

To have the best results, seeds should be started early in the house and the young plants bedded out by the first of June, and they will make a lavish and showy display of flowers until frost. Half-hardy Annual. 521 -Mammoth Defiance. Brilliant scarlet, fine for bedding. 522-Mammoth Candidissima. Large trusses of pure white flowers. . . . . . ....................... 10c pkt. 523-Mammoth Bive. Bright biue, in various shades. 524-Mammoth Pink. Bright shades of pink; fine pkt. 525-Gigantea Lucifer. Flowers intense brilli 10c pkt
with no eye. .. .. . . . . . . . . . . . . . . . . . . . . . . . 10 c pkt.


Our mixture contains every desirable color and shade. They bloom most profusely and for enormous flowers of rich and superb colors are unsurpassed........... $1 / 8$ oz., 25c; 1/4 oz., 40c; 10c pkt. 527-Fine Mixed. A very satisfactory assortment, containing many fine colors and shades.
$1 / 8 \mathrm{oz} ., 15 \mathrm{c}$; $1 / 4 \mathrm{oz} ., 25 \mathrm{c} ; 5 \mathrm{c}$ pkt.

## Various Verbenas

528-Lemon Verbena. (Aloysia Citriodora.) Every garden should have a few plants of this fragrant favorite den 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.

## WALLFLOWER (Goldack)

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. 529-Extra Early Market. A mixture of beautiful single annual varieties which flower through the Summer from seeds sown in Spring. Half-hardy Annual.
$1 / 4$ oz., 25c; 5c pkt. 530-Single Mixed. Half-hardy Perennial., All colors. 531-Double Finest Mixed. Half-hardy Perennial. 10c pkt.

## WILD CUCUMBER

## (Echinocystis Lobata)

$T$HIS 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. 532. . . . . . . . . . . . . . . . . . . 1/2 oz., 10c; oz., 15c; 5c pkt.


## "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.
533-Dwarf Sorts. Growing from 12 to 18 inches high.
Oz., 25c; 5c pkt.
534-Climbing and Trailing Sorts. Fine for hiding
fences, brush and rubbish heaps....Oz., 25c; 5c pkt.

## XERANTHEMUM

## (Everlasting, or Immortelle)

535-Double Mixed. Bright and pretty "Everlasting", with silvery foliage and silky flowers in pink, white and purple. Half-hardy Annual. ..... .1/4 oz., 15c; 5c pkt.

## PTAN (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 Annual.

## Double Giant Picotee

536-A new and distinct class originated from flesh color with each petal distinctly tipped with dark chocolate colors and producing the following colors, all tipped with various shades of dark, giving the flowers a very. attractive and pleasing appearance, resembling Picotee Carnations, Orange, Flesh, Lemon, Pink and Cerise.

10c pkt.

## 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.
537-Mammoth White. 540-Mammoth Crimson.
538-Mammoth Yellow. 541-Mammoth Scarlet.
539-Mammoth Flesh Color. 542-Mammoth Violet.
Each of the above
3 pkts., 25c ; 10c pkt. 543-Collection. One packet of each of the above 6 varieties.

Contains all the
 Mammoth Mixed colors listed above together with many new shades. Be sure and try this wonderful strain of this grand old favorite flower.
$1 / 4 \mathrm{oz} ., 30 \mathrm{c} ; 10 \mathrm{c}$ pkt.
545-Elegans Double, Finest Mixed. Semi-dwarf varieties. Many colors. . . $1 / 4$ oz., 15c; oz., 50c; 5c pkt.
546-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.
$1 / 4$ oz., 30c; 10c pkt.
547-Jacquerninot. 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. . . . . . . . . . . . . . . . . . . . . . $1 / 4 \mathrm{oz}$., 30c ; 10 c pkt.
548-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.
$1 / 4 \mathrm{oz} ., 30 \mathrm{c} ; 10 \mathrm{c}$ pkt.
549-Red Riding Hood. Of compact form and covered the entire season with little button-like, intense scarlet flowers not over an inch across; as a border plant it is highly effective. . . . . . . . . . . $1 / 4 \mathrm{oz}$., 30c; 10c pkt.

## JMeCullough's

# "Suburran" Zawn Grass Sced 



## WILL MAKE A BETTER LAWN THAN TURF OR SOD



$I^{s}$S a misture of the finest Dwarf Evergreen Grasses that grow and flourish during different months of the year so that a rich, deep green, relvety lawn is constantly maintained. Our mixture is the result of several years experimenting, and, as we now offer it, is unequaled. 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 15 x 20 , 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 unfailing 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:-1/2 lb., 25c; 1 lb., 40c; 5 lbs., $\$ 1.75$; $1 / 2$ bu., (8) lbs., $\$ 2.65$; per bu. of 16 lbs., $\$ 5.00$.
Postage Must Be Added if Wanted by Mail. See Postal Rates, Second Page of Cover.
Pulverized Sheep Manure and Pure Bone Meal are the Best Fertilizers for Lawns. See Fertilizers.

## Mectullough's "Shadr- 耳lace" Lawn $\mathfrak{G r a s s}$ Seed



View of Lawn and Trees-Shady Places-"The Pines'


$\mathrm{O}^{2}$N 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:-1/2 lb., 30c; 1 lb., 50c; 5 lbs., $\$ 2.25$; 8 lbs., $\$ 3.25$; per bushel of $16 \mathrm{lbs} ., \$ 6.00$.
Postage must be added if wanted by mail. See Postal Rates, second page of cover.

## McCullough's Eden Park Lawn Grass Seed



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, $1 / 2$ lb., 20c; 1 lb., 35c; 5 lbs., $\$ 1.50$; 8 lbs., $\$ 2.15$; per bushel of 16 lbs ., $\$ 4.00$.

## TERRACE MIXTURE

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

Prices, $1 / 2 \mathrm{lb} ., 25 \mathrm{c}$; $1 \mathrm{lb} ., 40 \mathrm{c}$; 5 lbs., $\$ 1.75$; 8 lbs., \$2.65; per bushel of $16 \mathrm{lbs} ., \$ 5.00$.

## Macullough's

## Special Mixtures for Golf Links and Plutting Greens



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

## PUTTING GREEN MIXTURE

AVING 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. $1 / 2 \mathrm{lb}$., $30 \mathrm{c} ; 1 \mathrm{lb} ., 50 \mathrm{c} ; 5 \mathrm{lbs} ., \$ 2.25 ; 8 \mathrm{lbs}$., $\$ 3.25$; per bushel of 16 lbs., $\$ 6.00$.

## GOLF LINKS MIXTURE

$\mathbf{W}^{\text {B }}$E 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., 35c; 5 lbs., $\$ 1.50$; 8 lbs., $\$ 2.15$; per bushel of 16 lbs., $\$ 4.00$.

Quantity of Seed to Sow. One pound of these mixtures will sow $15 \times 20$ 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.


Illustration indicates style of packets. For complete description of this famous Lawn Grass Seed, see page 57 .

## PRICES.



Postage Must be Added if Wanted by Mail.

See Postal Rates, Second Page of Cover.

# JMeCullough's Grass Seeds 



We specialize in Grass Seed of all kinds and for every purpose

FGOR 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.

Seamless bags for Clover, Timothy, Fancy Red Top and other heavy Seeds and Seed Grain are 60c each. extra.

The number of pounds to the bushel, in brackets, is the old way
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.

## KENTUGKY BLUE GRASS

## (Poa Pratensis)

$\mathbf{A}^{1}$LSO 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., 35 c ; 7 lbs ., $\$ 2.40$; per'bushel of 14 Ibs ., $\$ 4.50$. Write for special prices on large quantities and other grades.

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 annualıy; the words "McCullough", and "Kentucky Blue Grass" being very familiar to the principal Seed dealers of the world.

## ORGHARD GRASS <br> (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.) Market Price.

## RED TOP GRASS

## (Agrostis Palustris or Alba)

$\mathbf{H}^{\prime}$ERD'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 $21 / 2$ 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., 30c; 10 lbs., $\$ 2.85$; per 100 lbs., $\$ 25.00$. Choice Red Top Seed in Chaff. Per lb., 20c; 7 lbs., $\$ 1.25$; per bu. of 14 lbs., $\$ 2.25$.

## 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., 25c; 12 lbs., $\$ 2.25$; per bushel of 24 lbs., $\$ 4.00$.

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., 30c; 12 lbs., $\$ 2.50$; per bu. of $24 \mathrm{lbs} ., \$ 4.50$.

## Meadow Fescue (Festuca Pratensis)

(Erroneously called English Blue Grass)

HGHLY vauabaif for pormanent grass land Does not. however, attain its full productive power till the second or tnird 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.) Tms is the true Evergreen Grass of the South. Price on Application.

## Awnless Brome Grass (Bromus Inermis)

AHARDY 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. Market Price.

## Bermuda Grass (Cynodon Dactylon)

AVALUABLE grass for the South and for tropical climates; will not endure frost. Sow 10 to 15 lbs. per acre. Write for prices.

## 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., 25 c ; $10 \mathrm{lbs} ., \$ 2.25$.

## Creeping Bent (Agrostis Canina)

VALUABLE in mixture with other grasses for lawns, etc. Suitable also for moist localities. ( 12 lbs. per bushel.) Sow 30 to 40 lbs . per acre. Market Price.
Crested Dogstail (Cynosurus Crystatus)

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. Perennial. Height, 1 to $11 / 2$ feet. . Per lb., 40c; 10 lbs., \$3.75.

## Fine-Leaved Sheep Fescue <br> (Festuca Ovina Tenufolia)

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.

## GRASS SEEDS-Continued

## 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 bu.)

Per 1b., 45 c ; 10 lbs., $\$ 4.00$.

## Italian Rye Grass (Lolium Italicum)

 nial, it is not adapted for permanent pastures, but for one or two years hay it is unsurpassed.to 50 lbs. per acre. ( 18 lbs. per bushel.) lbs., $\$ 17.00$

## Red Fescue (Festuca Rubra)

ACREEPING-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 golfcourses. 40 lbs. to the acre. ( 24 lbs. per bushel.)

Per lb., 45 c ; 10 lbs., $\$ 4.00$.

## Rhode Island Bent (Agrostis Tenuis)

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. Write for prices.

## 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.) Market Price. Annual. (Anthoxanthum Odoratum Puelli.) Much smaller than the perennial. Price on application.


## Sheep Fescue (restuca orina)

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. Write for prices.
Tall Meadow Oat Grass (avena Elatoir)
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.

Market Price.

## Timothy (Phleum Pratense)

Herd's Grass. Cat's-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.

Per lb., 75c; 10 lbs., $\$ 7.00$. We specialize in Grass Seed of all kinds and for every purpose. For larger quantities-write for Special Prices.


## McGULLOUGH'S MIXED GRASSES For Meadows and Pastures

$\mathbf{A}^{\mathrm{F}}$
FTER 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 recleaned seeds, while in our second quality we use the same seeds, but without recleaning, 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., 35c; 8 lbs., $\$ 2.40$; bu. of $16 \mathrm{lbs} ., \$ 4.50$.
For Permanent Pasture
Per lb., 35c; 8 lbs., $\$ 2.40$; bu. of 16 lbs., $\$ 4.50$.
For Pasture and Hay in Orchard
and Other Shady Places
Per lb., 35c; 8 lbs., $\$ 2.40$; bu. of $16 \mathrm{lbs} ., \$ 4.50$.

For Marshy Grounds
Per lb., 35c; 8 lbs., $\$ 2.40$; bu. of $16 \mathrm{lbs} ., \$ 4.50$.
For Sandy and Rocky Grounds
Per lb., $35 \mathrm{c} ; \mathrm{S}$ lbs., $\$ 2.40$; bu. of $16 \mathrm{lbs} ., \$ 4.50$.
Postage must be added if wanted by mail. See Postal
Rates, second page of cover.

# Stecullough's Jtigh-Grade $\mathfrak{C l o v e r}$ 

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, 65c each, extra. Postage must be added


View of a Field of Alfalfa Clover grown in territory contiguous to Cincinnati

## Alfalfa, or Lucerne (medicago Sativa)

$\mathbf{A}^{\mathrm{L}}$LFALFA is one of the most profitable crops the dairyman or stock farmer can raise, due to the high yield of palatable hay which contains a large percentage of protein. Alfalfa as grown in the United States yields more than twice the digestable nutriments that Red Clover does and more than three times the digestable protein to the acre. Alfalfa and corn make a perfectly balanced ration. Many farmers are using it in their rotation to take the place of Red Clover. This practice is satisfactory where the soil contains a large supply of lime and organic matter and the seed has been inoculated, or the land has been in Alfalfa previously.

Alfalfa is best adapted to steep limestone hillsides and gravelly river bottoms, where the water can get away from the roots. Will grow on acid soils providing the water is drained off and sufficient lime is added to correct the acidity.

## Seeding Alfalfa

The ground should be plowed in late fall and worked in spring once or twice to kill the weeds. If the land is acid it should be limed at the rate of three tons ground limestone to the acre. With a Wheat drill sow 20 to 25 lbs. of best grade non-irrigated inoculated Alfalfa seed with one bushel of 60 day Oats as a nurse crop to the acre any time between April 15th and May 10th. Apply 400 lbs . of a good high grade fertilizer, carrying a small per cent of ammonia and high per cent of phosphorus to the acre. If land is to be seeded following early potatoes, work ground up with disc and drag down. Sow seed the same as in spring, omitting the Oats as a nurse crop. Where land is being seeded to Alfalfa for the first time it will pay to inoculate the seed with Edwards' Legume Bacteria for Alfalfa. The bacteria will be present and if there is not enough available nitrogen present they will gather the nitrogen from the air and supply your young plants, thus insuring a good stand.

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.)

Prices on application.

## Montana Alfalfa

A hardy variety from the non-irrigated or dry lands of eastern Montana, where the climate is severe. Under ordinary conditions the seed will serve all purposes where, hardiness is required and we advise giving the "Montana" a trial wherever it has been difficult to grow other varieties. Sow in spring or fall at the rate of 15 to 20 lbs. per acre. Sow in spring or fall at the rate of 15 to 20 lbs. per acre. Per lb., $60 \mathrm{c} ; 10 \mathrm{lbs} ., \$ 5.50 ; 100 \mathrm{lbs} ., \$ 50.00$.

## Grimm Alfalfa

This variety of Alfalfa is being raised all over the United States. It seems to be much hardier than common Alfalfa, which is due to the division of its root system, enabling it to withstand freezing and thawing weather, droughts and other hardships which the common alfalfa will not endure.

We have this season secured a supply of Genuine Seed of this variety, grown by specialists in northern Idaho, where the soil and climatic conditions are most favorable for its development, consequently there can be no comparison between the quality of the seed offered by us and that offered from other sources of supply. When comparing prices kindly bear this fact in mind.

To secure a stand the following requirements are essen-tial-good seed bed, limestone soil, or addition of 3 tons of fine ground limestone per acre, inoculation of seed, and plenty of available plant food. Sow in the spring or fall of year at the rate of 15 to 20 lbs . per acre

Per lib., \$1.00; 10 lbs., $\$ 9.00$

## Crimson, or Scarlet Clover

## (Trifolium Incarnatum)

## Crimson, Scarlet or Carnation Clover

THIS Clover is grown in Italy, France, Great Britain and other European countries Was introduced into this country in 1822 and has proved especially adapted to the light sandy soils of the Eastern and Southern parts of the United Sates. Largely used as a cover crop in orchards.

If seeded in August it makes an early growth in the autumn, passes the winter in a somewhat dormant but green state, makes a very early spring growth and matures its seed and dies before summer. It makes little or no growth in very hot weather.

Crimson Clover should be seeded shallow on a moist, reasonably fertile, well drained, well settled seed bed. Inoculation is essential when seeding the first time.

Crimson Clover makes a good cover crop to be sowed on potato fields after the potatoes are dug. It makes a good growth in the fall and early spring and may be plowed under for potatoes the following spring.

It may be seeded alone following any farm crop which can be removed from the land by early summer, so that seed can be sown in late summer or very early fall. It may also be seeded for hay in mixture with grain, such as Wheat, Rye, Barley or Winter Oats, which are ready to cut for hay at about the same time as the Clover the following spring.

Apply seed at the rate of 12 to 14 lbs. per acre.
Per lb., 25c ; 10 lbs., $\$ 2.25$.

# McGULLOUGH'S HIGH-GRADE GLOVER SEEDS-Continued 

## Bokhara or Sweet Clover

SWEET Clover is a biennial plant, which closely resembles Alfalfa. It requires practically the same soil treatment as Alfalfa, but will grow under a wider variation of soil conditions than Alfalfa.
Three things are essential-lime, inoculation and scarified seed. If the land has raised Alfalfa previously, then the addition of lime may not be necessary. Inoculation with Edwards' Legume Bacteria tends to insure a stand, by securing nitrogen for the young plant at a time when it needs it the most. Scarified seed is seed that has been so treated as to scratch or crack the hard coating and make it easy for moisture to penetrate and hasten germination, thus insuring a stand.

When Sweet Clover is inoculated it gathers nitrogen from the air and stores it up in the soil for the use of future crops.
Yellow Flowered. (Melilotus Officinalis.) Is a beinnial producing seed the second year and will reseed itself if left undisturbed. It is the variety which is best adapted for hay, as it blossoms three weeks earlier than the White Sweet Clover, has a finer stem and does not grow so tall. It makes excellent pasture where 10 to 15 lbs. of seed is mixed with 6 lbs . of Timothy sowed in Wheat or Rye, then pastured in the fall. The following spring the Sweet Clover will be three weeks earlier than any other grass, thus making a fine early pasture.

When sowing unhulled seed in the fall with Wheat for hay, apply 10 to 15 lbs. per acre. Do not sow unhulled seed in the spring and expect results the same year.
Yellow Flowered, Unhulled Seed.........Per lb., 30c; 10 lbs., $\$ 2.75$.
Yellow Flowered, Hulled Seed, Scarified. Per lb., 35c; 10 lbs., $\$ 3.25$.


## White Flowered. (Melilotus Alba.) Is a biennial pro-

 ducing seed the second year and will reseed itself if left undisturbed.The White Sweet Clover is much coarser than the yellow, and is especially well adapted for soiling purposes. Many farmers are taking advantage of this crop in the bottoms where annual flooding prevents the use of Red Clover in a crop rotation, corn being planted year after year with an occasional crop of wheat. Scarified seed which has been inoculated is sown at the rate of 15 lbs . per acre in the corn at the last cultivation. This makes a growth of 10 to 15 inches by the time the corn is husked off of the stalk in the fall, and is plowed under late the following spring for corn.

It is being widely used where farmers wish to shorten their crop rotation and secure a crop of hay. To do this sow scarified seed which has been inoculated with Edwards' Legume Bacteria in the Wheat, from the middle of April to the 1st of May, at the rate of 15 lbs. per acre. The following September as much as one ton of hay per acre may be cut from this land and the next May the second growth may be turned under for corn. The Sweet Clover, being young and tender, rots early and forms a mulch which holds the water, thus making ideal conditions for a good corn crop. Mr. R. E. Simonds, of Miamitown, Ohio, won the Ohio State Championship in the 10 acre corn growing contest in 1917 with a yield of 102 bushels of corn per acre by practising this method. Farmers can increase their yield of corn from one-third to one-half by using Sweet Clover as a green manure crop.
White Flowered, Unhulled Seed. Pcrlb.,30c; 10lbs.,\$2.75. White Flowered, Hulled Seed, Scarified.

Per lb., 45c ; 10 lbs., $\$ 4.00$
Unhulled Seed of both varieties is very slow to germinate. Unhulled Seed ( 30 lbs. per bushel.) Hulled Seed (C0 lbs. per bushel.)

## Alsike or Swedish Clover $\underset{\substack{\text { (Trifolium } \\ \text { Hybridum }}}{\substack{\text { ( }}}$

This variety is perennial and on account of its fibrous root system does not winter-kill. Will grow well on poor soil, and will do better on moist land than any other variety of Clover. It is a valuable acquisition to the forage plants of this country and is highly esteemed as pasturage for bces. Sow 6 to 8 lbs. per acre. Market Price.

## White or Dutch Clover (Trifoiium

T${ }^{-}$HIS variety thrives on nearly all soils; is a low close growing Clover and on account of its earliness and hardiness should be used in mixtures for permanent pastures. Is very hardy, spreads, rapidly, acts as a binder, and when mixed with other grasses for lawn purposes is very desirable. Is also excellent for bee food. Sow 6 to 8 lbs per acre. . . . . . . . . . . . . . . . . . . . Per lb., 80c; 10 lbs., $\$ 7.00$.

## 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.

## 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. 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. Sow 15 to 20 lbs. per acre. (25 lbs. per bushel.)

Per lb., 45c; 10 lbs., $\$ 4.00$.

## 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.


NOTE:-We haveinstalled scarifying machinery and our Hulled Sweet Clover is all carified whichincreases the germination 40 to 50 per cent.


# Farm, Field, Forage and Silo Seeds 

We give special attention to the quality of our FARM SEEDS and can furnish best quality of recleaned 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. |
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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, 65c each, extra.

Postage Must be Added if Wanted by Mail. See Postal Rates, second page of Cover.

## Tennessee, or Southern Golden Millet

FAR superior to Western grown. Will grow in any climate or soil, and make a large yield of most nutritious feed. 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 Southern Golden Millet (cultivated seed), which we know will give the best satisfaction. Sow one bushel per acre, ( 50 lbs . per bushel). Write for Special Quotations.

## Northern or Western Golden Millet

Does not yield so much hay nor so good hay as the Southern Golden Seed. Sow about a bushel to the acre. (50 lbs. per bushel.)

Write for Special Quotations.

## 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.). .. P Per lb., 15c; 10 lbs., 85c; 100 lbs., $\$ 7.00$.

Pearl Millet, or "Pencillaria"
When sown broadcast or drilled in rows, 12 to 18 inches apart, 8 to 10 pounds per acre sboild be used.

Per lb., 40c; 10 lbs., \$3.50.

## 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. ner bushel.)

Per lb., 25c; 10 lbs., $\$ 2.25$; 100 lbs., $\$ 15.00$.

## Kafir-Corn

A Great Fodder Crop. The Finest Grain for Poultry and Pigeons cellent fodder. The seed heads form at the top of each stalk, and as soon as these show the grain well, the joirts 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., 65 c.

## Feterita

An Extra-Early Strain of White Kafir Corn. A New Nonsaccharine Cane.

$\mathrm{I}^{\mathrm{r}}$KIS twenty to thirty days earlier than Kafir Corn and more productive. It is one of the surest croppers and one of the best feeds for poultry and pigeons. (50 lbs. per bushel.). . . . . . . . . Per lb., 10c; 10 lbs.. 80c.

## 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., \$1.25. <br> Barley

BARLEY needs a rich land, more sandy and lighter than that adapted to Wheat, 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 $11 / 2$ to 2 bushels if drilled; 2 to $21 / 2$ bushels broadcast. ( 48 lbs . per bushel.)
Spring Barley. Market price.
Beardless Barley.

## Buckwheat

$\mathrm{T}^{N}$N this locality it is sown anywhere from June 1st to July 15th; one bushel of 50 lbs., broadcast, to the acre. It makes a very fine quality of flour; is largely used for poultry food and frequently yields as much as 80 bushels to the acre. ( 50 lbs. per bushel.) Japanese. This superior variety is earlier, 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., $\$ 2.75$.

## Sorghum or Sugar Cane

Plant in drills $3 / 4$ to 1 bushel; broadcast, 1 to $11 / 2$ 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., $15 \mathrm{c} ; 10 \mathrm{lbs} ., \$ 1.00$. 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., $\$ 1.00$.

## Sudan Grass (Andropogon Sorghum)

ASWEET 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, $41 / 2$ to $61 / 4$ tons per acre of dry, sweet hay that cattle prefer to Cow Pea hay. Ripe for hay cutting in 70 days, and cut every 30 days following. Plant from March to July in 18 to 30 inch rows, 5 pounds to acre, or broadcast 10 pounds. Each seed stools wonderfully-20 to 40 stools per seed.

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.

Per lb., 25c; 10 lbs., \$2.00.
Sunflower (Mammoth Russian)

$I^{N}$MMENSE 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., 25c; 10 lbs., \$2.25.

## 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., $70 \mathrm{c} ; 5 \mathrm{lbs.}, \mathbf{\$ 3 . 2 5 .}$

## Prices Subject to Market Changes.

In Ordering Farm Seeds Always Allow 65 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 $11 / 2$ 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 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 a crop of Beans 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

Ito 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$1 / 4$ to $3 / 8$ 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 $1 \frac{1}{2}$ inches long. Color of seeds, bright green. The branches are usually far enough above the ground to permit easy harvesting.

## VETCHES OR TARES

THIS has been used in Europe for many years as a stock food and green manuring or cover crop. 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 ive 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 $11 / 2$ 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.)

Market Price.
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.)


## 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 or productiveaper means of improving 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 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 $11 / 4$ to $13 / 4$ 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.

## CANADA FIELD PEAS

THESE are sown with oats about April 1st at the rate of $11 / 2$ bushel of Peas and $11 / 2$ 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 furnish excellent pea hay. For plowing under as green manure, they add a vast amount of nitrogen to the soil, and succeeding crops. particularly wheat, are wonderfully benefited. 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., $15 \mathrm{c} ; 10 \mathrm{lbs} ., \$ 1.00 ; 100 \mathrm{lbs} ., \$ 7.50$.

# FARM. FIELD, FORAGE AND SILO SEEDS--Continued 

## SOWING RAPE

AFORAGE 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 sheep and swine, produces 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 crnp 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 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.

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

## SPELTZ OR EMMER

T
THIS 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., $\mathbf{1 0 c}$; 10 lbs., 65 c ; bushel of 40 lbs ., $\$ 2.00$.

## WHITE NAVY BEANS

DLANTED in June or July, these usually make a very profitable crop to grow as shelled white beans for market. rlant 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 $3 / 4$ to 1 bushel per acre. ( 44 lbs. per bushel.)

## FLAX SEED

Northwestern. Sow at rate of $3 / 4$ to 1 bushel per acre. Market price. (56 lbs. per bushel.)

## 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.

## CHOICE SEED OATS

Broadcast, $21 / 2$ 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.
ROSEN RYE (Michigan Grown)
Grain unusually large and yield surpasses the old standard sorts. Price on Application.

## SEEDWHEAT Prices on Application.

## 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 reselection 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 quarts per acre in hills, sow $21 / 2$ to 3 bushels broadcast for fodder.

Never use Feeding Corn for Seeding Purposes.


The most prolific white Corn. Each stalk bears two to five ears, average length of ears $81 / 2$ inches.
Stalks range in height from 9 to 12

The best White D ent Corn. Ears 10 to 12 inches long, well filled at tip and butt; will mature in any corn country and in strong land and good season will make from 100 to 125 bushels per acre.
Boone County White Dent. Ears contain from 18 to 24 rows and are well filled from butt to tip, with deep kernels.
Peerless. (White.) Will mature in 90 days. Produces generally two large ears to the stalk.
Silver Mine. One of the best yielding White Dent Corns. 18 to 20 rows; kernels deep and cobs small.
Hickory King. The ears are rather small but as they are borne 2 to 3 on a stalk it is a fairly good yielder.
Reid's Yellow Dent. Has from 18 to 24 rows; ear medium in size and of a bright yellow color.
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.
Leaming Yellow. Ears of good size, cob red and small, 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 and strong leafy stalks.
Sugar Corn for Ensilage. There is nothing better for green feed or curing for winter than sweet corn.

## SEED POP GORN

Plant Two Quarts to the Acse.
White Rice. A handsome variety, kernels long and pointed, very prolific. . . . . . . . . . . Per lb., 20c; 10 lbs., \$1.50. Queen's Golden. The stalks grow 6 feet high and the large ears are produced in abundance. It pops perfostage Must Be Adided if Wanted by Mail. Postage Must Be Added if Wanted by Mail.

# Snccullough's Selected Seed flotatoes 

## Northern Grown Stock

Selected and Grown Especially for Seed
Purposes, Superior Both in Quality and Productiveness.
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 will produce Potatoes under right 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 or Arsenate of Lead. 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 marface. 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.

## 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.

## 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.

## 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.

## Bull Moose

Large white potatoes with a small number of eyes. smooth and pares with little or no waste. It is used exclusively as a second crop potato. It yields well if planted by the first of July. Yields of 25 to 30 bushels from one bushel of seed are not uncommon.

## 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 34.


## NOTICE.

We handle the very best seed potatoes it is possible to obtain.

All seed potatoes nowadays are more or less infected with fungous diseases. In order to secure the best results we would advise treating the seed potatoes before cutting.

The potatoes should be immersed for $1 \frac{1}{2}$ hours in a solution of $1 / 2 \mathrm{oz}$. Corrosive Sublimate, mixed in $3 \frac{3}{4}$ gallons of water, then spread them out to dry before cutting. This quantity of solution is sufficient to treat five bushels of potatoes.

NOTE:-Corrosive Sublimate should be used in wooden or earthen-ware vessels, since it corrodes metals.

When occasion requires, write us for further information on fungous diseases and insect pests.

# INCREASE YOUR YIELD OF ALFALFA, clovers, Yetch, COW PEAS, SOYBEANS 

## 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 affora to risk a loss by not inoculating.

Another vaiuable result of inoculation is that the roots of a well-inoculated legume crop will con tain 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 EDWARD'S LEGUME BACTERIA. These cultures are manufactured by the method originated and successfully followed for ten years at the Ontario Agricultural


Portion of root of alfalfa plant showing the tubercles or nodules formed by the nitrogen gathering legume bacteria. (Photograph natural size.) 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.

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 three sizes:

> To inoculate $\mathbf{3 0}$ pounds of seed. . . . . . . . . . . . . . . . . . . $\mathbf{\$ 0 . 6 0}$
> To inoculate $\mathbf{6 0}$ pounds of seed. . . . . . . . . . . . . . . . . . $\mathbf{1 . 2 0}$
> To inoculate $\mathbf{3 0 0}$ pounds of seed. . . . . . . . . . . .

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 Sulbs and Koots 

## AMARYLLIS

$\mathbf{P}$LANT in equal parts sandy loam and leaf mould. 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, 15 c ; per dozen, $\$ 1.50$.
Belladonna Major. White, turning to rose. Each, 25c; per dozen, \$2.75.
Formosissima. Crimson
Each, 15 c ; per dozen; $\$ 1.50$.
Johnsonii. Large flower, crimson-scarlet, striped with white.

Each, 35c; per dozen, $\mathbf{\$ 3 . 5 0}$.
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, grow to a height of two to three reet dily-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; per dozen, \$2.50.
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, $\$ 5.00$.

## BEGONIAS TUBEROUS-ROOTED

T
HEY 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 fhen 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

Single. Crimson, orange, pink, rose, scarlet, white and yellow in separate colors.

Each, 25c; per dozen, $\$ 2.50$; per 100, $\$ 20.00$.
Single, Mixed...Each,20c; per doz..\$2.25; per 100, $\$ 17.50$.


O

## BEGONIAS, Hardy

Exceedingly useful plants for the garden; good for shady places. Lustrous bronze green foliage with smal pink flowers. Plants only ...... Each, 25 c ; per doz., $\$ 2.50$. (If sent by mail, each, 30c; per dozen, $\$ 3.00$.)

## GALADIUM ESGULENTUM

## (Elephant's Ear)

 NE 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 of easiest culture It should be planted in a rich compost, where it will obtain plenty of water. Foliage light green. (See cut.)
## Size

1. Small bulbs.
$\begin{array}{cc}\text { Each } & \text { Doz. } \\ . .10 \mathrm{c} & \$ 1.00 \\ . .15 \mathrm{c} & 1.00\end{array}$
2. Extra large buibs. . . . . . . . . . . . . . . . . .
3. Selected extra large .25 c 1.00 15c each .35 c
2.50
3.50
4. Monster bulbs. .50 c
5.00 30c each

## GALLA, SPOTTED

Golden Yellow. (Richardia Elliottiana.) This is the best of the yellow Callas, its flowers being as large as the popular white variety, but of a rich lustrous goldenyellow of velvety texture: the foliage is dark green. with translucent creamy-white spots, which adds much to its beauty

## 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 dozen, $\$ 1.00$; (By mail, per doz., \$1.15). Express. Large, broad. bright scarlet-crimson fowers in immense trusses. The best dwarf red Canna; two and one-half feet
Firebird. The best scarlet, green-leaved variety. The flowers are borne in immense trusses on strong stalks well above the leaves. They are of splendid form, round and shapely. The petals measure and sometimes exceed two and one-half inches across, a clear glistening scarlet without any streaks, spots or blotches; four feet.

## CANNAS-Named Varieties-Continued

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.
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.
Meteor. The best deep red large-flowered Canna, with massive, erect trusses of deep blood-red flowers; 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.
Rosea Gigantea. Large flowers, borne in such abundance that the mass of color is amazing. A deep rich rose, almost a coral carmine; four 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.
Wyoming. Massive orange flowers with purplish-bronze foliage, making a strong contrast; six feet.
Yellow Humbert. Has the same habit of growth as the King Humbert. Has green foliage and produces yellow flowers, dotted with red; four to five 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, 10 c ; per dozen, 75 c ; (per dozen by mail, 85c).

## CANNA PLANTS

CANNA PLANTS of the following varieties. Express, Firebird, King Humbert, Meteor, Rosea Gigantea, Venus, Wyoming, Yellow Humbert.

Small Plants, each 15c; per dozen, \$1.50.
Large plants, each, 20 c ; per dozen, $\$ \mathbf{2 . 0 0}$.
Ready about May 10th. Sent by express only at purchaser's expense.


## GINNAMON 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
Fleshy, heart-shaped leaves of a light green and numerous racemes of feathery flowers of delicious fragrance.

Each, 5c; per dozen, 40c.


Kriemhilde

## DAHLIAS

TTHE 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 25 th 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.

Dahlias continued to page 71.

## DAHLIAS-Continued

## Cactus Dahlias

Named Varieties. Each, 20c; per dozen, \$2.00. If wanted by mail, add 15 c per dozen for postage.
Electric. The color is a rich, clear canary yellow, each petal heavily tipped white; flowers large with incurved petals.
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.
Golden Gate. Large flowers of a rich, deep goldenyellow, suffused and shaded fawn.

## Show Dahlias

Are a perfectly full, rounded, regular form, cupped or quilled petals and solid color, or tipped darker than the ground color. (See cultural directions)
Named Varieties. Each, 20c; per dozen, \$2.00.
If wanted by mail, add 15 c 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.
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.

Juliet. Rosy pink, tintng lighter towards the center.
Kriemhilde. Deep rosy pink with lighter center. A distinct and valuable variety as the flowers keep a long time after cutting.

Marjorie Castleton. Rosy pink, tinted lighter toward center and tips.

Prince of Yellows. Soft, golden yellow. Profuse bloomer.
Queen of Hearts. A beautiful pure white with yellow at the base of petals.
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.


Red Hussar. Richest, dazzling cardina 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.
Yellow Duke. A splendid primroseyellow of good form

## Collarette, Pompon, Fancy, Peony Flowered and Single Dahlias

Named Varieties. Each, 20c; per dozen, \$2.00. If wanted by mail, add 15c per dozen for postage.
Allie Mourey. (Pompon.) Light pink, tipped deep pink.
Crimson Queen. (Pompon.) Deep crimson, shaded purple.

## Decorative Dahlias

$\mathbf{M}^{A}$ANY 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.)
Named Varieties. Each, 20c; per dozen, \$2.00.
If wanted by mail, add 15c per dozen for postage.
Eventide. White with a faint flush of delicate rose on the edge of the flower.
Delice. The best, pure, bright rose pink; entirely distinct.
Henry Patrick. Large snow-white.
Jack Rose. Brilliant crimson red.
Jean Wood. White suffused violet mauve, petals gracefully twisted.
Le Grand Manitou. Immense size, pink, striped rich crimson.
Lyndhurst. The best bright red for cutting.
Minnie McCullough. Very striking. Soft golden yellow, tipped bronzy red; effective.
Mrs. J. Gardner Cassatt. Flowers mauve-pink and of large size; a fine cut flower.
Mrs. Roosevelt. Very large, soft pink.
Nymphaea. A very delicate shrimp pink.
Oregon Beauty. Intense oriental red, carmine suffusion; a magnificent red.
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.
Sylvia. Deep pink, tinting to flesh pink at center; large, perfect form, on long stiff stems.
Wm. Agnew. Very large, dazzling crimson scarlet.

Klien Domitea. (Pompon.) Bright golden terra cotta.
Little Beauty. (Pompon.) Soft, silvery pink, closely quilled petals
Snowclad. (Pompon.) A snowy white, free bloomer.
Penelope. (Fancy.) White flaked, rosy lake, beautiful and chaste.
Harmony. (Collarette.) Primrose-yellow, marked soft purple, collar yellow.
Big Chief. (Peony.) Rich crimson, margined maroon.
Queen Emma. (Peony.) Flowers of a peculiar shade of pink.
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.
Scarlet Century. (Single.) Brilliant scarlet with golden disc.
White Century. (Single.) Pure white with large, heavy, overlapping petals of good texture

McCULLOUGH'S MIXED DAHLIAS.
Our mixtures are made from selected varieties.
Double Mixed, Cactus Mixed, Single Mixed and All Varieties Mixed, our selection.
Each, 15c; per dozen, \$1.50.
If wanted by mail, add 15c per dozen for postage.

## GLOXINIA

MAGNIFICENT for house culture, producing in great profusion, beautiful flowers of rich and beautifu colors. They succeed best in sandy loam and peat and require a moist heat.
Large Flowering Varieties. Finest Mixed.
Each, 35c; per dozen, \$3.50

## 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 5 c per dozen 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, 7c; per dozen, 60c; per 100, $\$ 4.00$.
Augusta. A lovely and useful pure white variety.
Each, 7 c ; per dozen, 60 c ; per $100, \$ 4.00$.
Baron Hulot. Color a rich, royal violet blue, with well expanded flowers, very effective. Each, 8c; per dozen, 80c; per 100, $\$ 6.00$.
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, 8c; per dozen, 70c; 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.


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, $\mathbf{7 c}$; per dozen, 60 c ; per $100, \$ 4.00$.
Mrs. Frank Pendleton. Color a lovely salmony pink, with brilliant deep red blotches in the throat.

Each, 10c; per dozen, 90 c ; per 100, $\$ 7.50$.
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, 10 c ; per dozen, 90 c ; per 100, $\mathbf{\$ 7 . 5 0}$.
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, 90c; per 100, \$7.50.
Peace. Tall, graceful spikes of large, pure white flowers with a touch of carmine in the lower petals.

Each, 8 c ; per dozen, 80 c ; per $100, \$ 6.00$.
Princeps. An especially fine variety with immense, wideopen, 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, 10c; per dozen, 90c; per 100, \$7.50.
Scarsdale. Tall grower, with large, lavender-colored flowers, shaded to dark rose.

Each, 8c; per dozen, 80c; per 100, $\$ 6.00$.

## COLLECTIONS OF CHOICE NAMED GLADIOLUS

1 each of the 12 varieties on this page.
3 each of the 12 varieties on this page.
2.00

6 each of the 12 varieties on this page..
3.75

12 each of the 12 varieties on this page..
7.00

If wanted by mail, add 5 c per dozen for postage.

## Gladiolus in Separate Shades

| Scarlet and Crimson shades mixed | $\begin{array}{r} \mathrm{Ea} . \\ \ldots 5 \mathrm{c} \end{array}$ | $\begin{aligned} & \text { Doz. } \\ & \text { 50c } \end{aligned}$ | $\begin{gathered} 100 \\ \$ 3.50 \end{gathered}$ |
| :---: | :---: | :---: | :---: |
| White and Light shades mixed. |  | 60c | 4.00 |
| Yellow and Orange shades mixed |  | 70c | 5.00 |
| Striped and Variegatd shades mixed |  | 60c | 4.00 |
| Pink and Rose shades mixed. |  | 60c | 4.00 |

## 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, 6c; per dozen, 50 c ; per 100, $\$ 3.50$.

## 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, 40c; per 100, \$3.00.

If Gladioli are wanted by mail, add 5 c 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 vostage in your remittance.

## OXALIS (Summer-Flowering)

$\mathbf{V}^{\text {ALUABLE for edging walks, flower beds, etc. Bulbs }}$ planted three inches apart form rounded rows of delicate foliage, about one foot high, and produce flowers in endless succession.
Dieppi Alba. Pure white, very fine.
Lasandria. Fine, rose pink, beautiful cut foliage.
Shamrock. Clover-like foliage, pink blossoms.
Each variety . . . . . . . Per dozen, 15 c ; per $100, \mathbf{\$ 1 . 0 0}$.

## 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. Mammoth bulbs. Robust stem and long spikes of flowers, which are more double and twice as large as those of the old sort.

Each, 10 c ; per dozen, 75 c ; per 100, $\mathbf{\$ 5 . 0 0}$.
Dwarf Pearl.
Large size.
Each, 6c; per dozen, 60c; per 100, $\$ \mathbf{4 . 0 0}$.

# Everblooming J•tqbrid-Gea Koses 

 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 cover the beds after the ground begins to freeze with any oose material such as strawy manure, evergreen boughs, or corn stalks, and in more severe climates, heavier covering is all that is required.
STRONG 4-INCH POT PLANTS, on own roots, of all the following rarietics, ready about May 10th.
Each, 75 c ; per doz., $\$ 7.50$. If wanted by mail, within the third zone, add 5c each, 50c per dozen for postage.
British Queen. Surpassing in beauty and elegance of form all other white varieties.
Edward Mawley. Is the finest of all dark crimson roses. A true perpetual flowering Hybrid Tea.
Etoile de France. Color a lovely shade of clear, red-crimson relvet; very fragrant and keeps well.
Etoile de Lyon. Bright sulphuryellow; fine form, large size; a fine yellow rose.
Florence Forrester. Clear snowwhite with a lemon tinge; fine rose for bedding.
Gruss An Teplitz. The finest brilliant red, everblooming garden rose.
Helen Good. Color delicate yellow, suffused with pink; chaste and beautiful; large size and form.
Hermosa. Bright pink color, freeflowering and perfectly hardy.
Jonkheer J. L. Mock. Color deep pink, outer petals silvery rose; very fragrant.
Killarney Brilliant. Color varies from pink to crimson. Very free bloomer.
La France. Beautiful, bright silvery-pink, with pale lilac shading. Queen of all the roses.
Madame Caroline Testout. Clear, bright satiny-pink; flowers large and showr.
Maman Cochet. Light pink, shaded with salmon yellow outer petals splashed with brizht rose.
Mrs. Aaron Ward. In bud, a deep Indian yellow; when fully opened it is light yellow throughout.
My Maryland. Color glowing, intense pink which lightens up as the flower expands.
Ophelia. Salmon flesh, shaded with rose; large and of perfect shape.
President Taft. It has a shining, intense, deep pink color possessed by no other rose.
Radiance. Brilliant rosy-carmine, with beautiful, rich and opaline-pink tints in the open flower.
Red Radiance. The color is dazzling crimson-scarlet with large flowers on strong stems.
Rhea Reid. Flower large and double; rich, dark, velvety red.
Richmond. Pure, rich scarlet; very free and continuous flowering.
Sunburst. The color is orange-copper or golden-orange and golden-sellow; cdge of petals lighter.
White Killarney. It is pure white in color, long in bud, of fine form.

White Maman Cochet. Creamy-white flowers, faintly tinged with blush.
William R. Smith. Petals cream with flesh tint tips buffy-yellow base and pink center.
STRONG 4-INCE POT PLANTS, on own roots, of all varieties listed. Ready about May 10th.

Each, 75c; per doz., \$7.50.

## POLYANTHA or Baby Rambler Roses

ACLASS 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. Pruaing is not necessary: simply remove the past season's flower stems.

STRONG 4-INCH POT PLANTS, on own roots, of all the fol lowing varieties. Ready about May 10th.

Each, 75c ; per dozen, \$7.50.
Anna Muller. Flowers are a shiny, brilliant pink.
Catherine Zeimet. Grows about 20 inches high and produces double, pure white flowers.
Clothilde Soupert. Color effect is ivory-white, shading to bright silvery-pink at center.
Erna Teschendorff. Flowers car-mine-red. Blooms from May to end of October.
Mile. Cecile Brunner. Color blush. shaded light salmon-pink.
Orleans. Is a huge bouquet of deep cerise or geranium pink with showy center of pure white.
Tip Top. Color brilliant goldenyellow, tipped with clear, bright cerise.
Rose Plants Travel Best by Express-But if wanted by Parcel Post within third zone, add 5c each; 50 c per dozen, for postage.

## HARDY HYBRID PERPETUAL ROSES

Two rear field grown plants on orn roots. of the following raricties. Ready for delivery from March 15th to April 20th. Each. 75 c ; per dozen, $\$ 7.50$.

If wanted by mail. within the third zone, add 5 c each 50c per dozen for postage.
Boule de Niege or Ball of Snow. Pure white. flushed with rose, very free flowering.
Clio. Flesh color, shaded in center to rosy-peach. Large, fine globular form, free bloomer.
Coquet des Alps. Pure white, delicately tinted blush on first opening.
Druschki. An exquisite flower of the purest white.
Magna Charta. Deep pink, large, sweet scented and of fine form.
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.

THE steadily increasing demand for hardy plants has induced us to give them more attention and to increase our stock considerably. For those 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.

## AGHILLEA (Sneezewort)

Boule De Neige. (Ball of Snow.) An improved variety, bearing pure white flowers of perfect form all summer. Fine for cut . Each 20 c per dozen, \$2.00. upatorium. (Parker's variety.) Produces brilliant yellow heads of flowers all summer, with neat, finely-cut foliage.

Each, 25c ; per dozen, \$2.50.

## AGROSTEMMA (Rose Campion

Erect growing plants with silvery foliage and showy flowers during June and July.
Coronaria. (Mullein Pink.) Bright rosy-crimson flowers; $21 / 2$ to 3 feet. . . . . . . . . . . . . . . . . . . . . . . Each, 20c; per dozen, \$2.00.

## A J UGA (Bugle)

Reptans Rubra. A fine plant for the rockery and for shady situations. Large spikes of purplish-blue flowers in May.

Each, 25c; per dozen, \$2.50.

## ALYSSUM (Madwort)

Saxatile Compactum. (Basket of Gold, Gold Tuft, Rockmadwort.) A fine plant for the rockery or border; grows 1 foot high and produces broad flat heads of yellow flowers in May. Each, 25c; per dozen, \$2.50.

## ANGHUSA ITALIGA

Dropmore Variety. Remarkable for its free and continual flowering all summer and the beautiful gentianblue of its flowers; grows about five feet high.

Each, 25 c ; per dozen, $\$ 2.50$. Myosotidiflora. Grows 10 to 12 inches high, producing during April and May sprays of beautiful Forget-Me-Not-like flowers of rich blue.

Each, 35c; per dozen, \$3.50.

## ANEMONE JAPONICA

## (Japanese Wind-flower)

THHEY grow two to three feet high and are in bloom from August till mid-November, furnishing abundant cut flowers and a brilliant display.
Alice. This new pink variety has silvery-rose, shell-like petals suffused with carmine. Each, 25c; per doz., \$2.50. Queen Charlotte. Very large, semi-double flowers of La France pink. . . . . . . . Each, 25 c ; per dozen, $\$ 2.50$. Whirlwind. Large, semi-double, white flowers.

Each, 25 c ; per dozen, $\$ 2.50$.

## ANTHEMIS TINGTORIA

The hardy Marguerites are among the most satisfactory summer-flowering perennials, growing about 15 inches. Large golden yellow flowers...Each, 20c; per dozen, $\mathbf{\$ 2 . 0 0}$.

## ANTIRRHINUM (Snap Dragon)

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. They thrive well with ordinary garden culture, but do best in partially shaded nooks.
Chrysantha. (Golden Columbine.) Golden yellow flowers with long spurs........ Each, 20c; per dozen. $\$ 2.00$. Chrysantha Alba. A long spurred white variety.

Each, 20c; per dozen, \$2.00. Coerulea. 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, $\$ 2.00$. Long Spurred Hybrids. Beautiful variations from the standard type..........Each, 35c; per dozen, $\$ 3.50$. Canadensis. (American Columbine.) A bright red and yellow variety, very attractive.

Each, 20c; per dozen, \$2.00.


## ARABIS (Rock Cress)

Alpina. A desirable early spring flowering plant, adapted for edging and the rock garden, but does equally well in the border, forming a dense carpet, completely covered with pure white flowers, which last a long time in bloom. .
Alpina Flore Pleno. ...... A distinct double white flowering form of the above. . . . . . Each, 35c; per dozen, \$3.50.

## ASCLEPIAS (Butterfly Weed)

Showy native plants about $21 / 2$ feet high, blooming during July and August.
Incarnata Rosea. (Swamp Milkweed.) Pretty rose-flesh colored flowers. . . . . ..... Each, 20c; per dozen, $\$ 2.00$.
Tuberosa
-colored flowers.
Each, 20c; per dozen, \$2.00.

## ASTERS (Michaelmas Daisies or Starworts)

$\Gamma$HESE 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.
Novi Belgii Climax. The plant is of strong vigorous habit, over 5 feet high, with pyramidical shaped flower stems filled with light lavender-blue flowers, each $11 / 4$ inches or more in diameter. August to October.

Each, 25c; per dozen, \$2.50.
Novi-Belgii, 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. rose-colored Roseu rose-colored flowers.

Similar to the preceding, bearing September.

Each, 20c ; per dozen, \$2.00.
Novae-Angliae. Mrs. F. W. Raynor. Large, deep crimson. September . . . . . . . Each, 20c ; per dozen, $\$ 2.00$. Ptarmicoides. White flowers, produced in great masses; fine for cutting. July and August.
Snowflake. Grows to nearly Each, 25c, per dozen, $\$ 2.50$ September Each 20c: per pure white Trinervis. Plant grows three and one-half feet high and produces deep violet-mauve flowers from September to November . . . . . . . . . . . Each, 25c; per dozen, $\$ 2.50$.

## BAPTISIA (False Indigo)

Australis. Grows about 2 feet high with dark green, deeply-cut foliage and spikes of dark blue flowers in June...................... . . Each, 20c; per dozen, \$2.00.

# HARDY HERBAGEOUS PLANTS-Continued 

## BEGONIAS, HARDY

 XCEEDINGLY useful plants, thri ving best in a partially shaded, moist situation. Lustrous bronze green foliage with small pink flowers. Lustrous bronze grEach, 25 c ; per dozen, $\$ 2.50$.
BELLIS PERENNIS (English Daisy)
Double flowering, white and pink.
Each, 10 c ; per dozen, $\$ 1.00$.

## 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 Septembei.
Asteroides. Pure white; five to six feet.
Latisquama. Pink, tinted lavender, six feet.
CERASTIUM (Snow in Summer)
Tomentosum. Suitable for the rockery or for corering dry, sunny spots. Low growing plant with silvery foliage and white flowers in June.

## 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.
Carpatica. (Carpathian Hare Bell.) Ideal for border or rockery planting, being about eight inches high; flowers from June till frost. Blue and white. each separate................. Each, 20c; per dozen, \$2.00.
Glomerata Dahurica. Large heads of purple flowers, fine for the burder. 2 feet.

Each, 2Cこ; per dozen, \$2.00.
Persicifolia. (Peach Bells.) Blue flowers during June and July; 2 feet. . . ..... Each, 25 c ; per dozen, $\$ 2.50$.
Rotundifolia. (Scotch Hare Bells.) Very graceful, drooping blue bells, rising from compact tuft of foliage; fine for rockery. June to August.

Each, 20c; per dozen, \$2.00.

## CHELONE (Shell Flower)

STATELI 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, 25 c; per dozen, $\$ 2.50$

## CHRYSANTHEMUMS (Hardy Pompon)

THESE are becoming universally popular for bedding, as well as for cut flowers. They bloom profusely at a time mhen so many other flowering plants are destroyed by frost. While they are perfectly hardy they should be planted in a we many drained position and protected with a light mulching in winter. As the demand for these plants always exceeds the well drained position and protected as all orders are filled in rotation. Ready for delivery about Inay 1st.
supply it is advisable to or
Large Flowering
or Aster Varieties
Ashbury. Sulphur white; for cut flowers.
Bradshaw. Silver pink; large, full flowers.
Cumberland. Long stems; large flowers; pure yellow.
Daisy Anderson. Reddish bronze; dwarf.
Elkton. Light pink, full, large flowers.
Excellence. Pure white, tall grower.
Excelsior. Bright orange yellow; long stems.
Fred J. Red orange; for cut flowers.
Gertrude. Pure white; open center.
Ida. Bright golden yellow; early.
Irene. Pure white. shaded pink; early.
Julia Lagravere. Crimson maroon; for cut fowers.
Leila. Bright brick red.
Lillian Doty. The finest pink in the large flowered section.
Miss Emma. Golden bronze; tall.
Miss Julia. Orange red. turning yellow.
Peto. Rich bronze; dwarf.
Queen of White. Fine, creamy white; long stems.
Silver Queen. Light silvery pink.
Sir Michael. Lemon yellow, open center; for cut flowers.
St. Illoria. Silver rose; quilled petals; for cut flowers.
Sylvia. Large flowers, scarlet bronze; tall grower.
Stratagem. Dark red bronze.
The Hub. Fine white; open center; for cut flowers.
Viola. Rich violet rose.
The above rarieties. each, 20 c ; per doz. $\$ 2.00$ By mail.
each, 25c; per dozen, \$2.50.


Small Flowered or Button Varieties
Dawn. Daybreak pink.
Doris. Pure bronze; one of the best.
Golden Pheasant. Deep orange yellow. James Boone. Pure white. Little Pet. Rich violet red; for cut flowers.
Lyndhurst. Deep scarlet bronze.
Meg. Wine red, shading to garnet.
Rhoda. Pink shaded white. Ruby Queen. Dark ruby red.
Rufus. Crimson maroon.
The above varieties. each 20c; per dozen, \$2.00 By mail, each, 25 c ; doz. $\$ 2.50$

## Anemone

## Flowered Varieties

Barnet. Golden bronze.
Earle. Pearl white. silver rose center; dwarf.
Eva. Rose pink.
Furnessia. Silver white.
Lady Olivia. Beautifulwhite.
May Suydam. Bronze.

Meyer's Perfection. Fine, pure white; tall grower.
Oban. Silver pink: fine for cutting.
Palmyra. Silver pink.
Prince Danilo. Pure white.
The above varieties each. 20c; per dozen, \$2.00. By mail. each. 25 c ; per dozen. $\$ 2.50$.

## 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. . . . . . . . . . . . . . . Each. 20c; per dozen, $\$ 2.00$.
Rosea. Small pink flowers. blooming in August and September. Foliage dark green. finely divided. Úseful in border and rockery; 1 foot.

We do not guarantee or replace plants, shrubs or trees at prices quoted.

## HARDY HERBAGEOUS PLANTS-Continued

## 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, 25c; per dozen, \$2.50.
Belladonna Semi-Plena. Clear blue flowers, overlaid with pink. 3 feet. Each, $\mathbf{3 5 c}$; per dozen, $\$ 3.50$.
Formosum. Dark blue, white center, spikes three to four feet tall; vigorous and free blooming. 3 feet. .................Each, 25 c ; per dozen, $\$ 2.50$.
Moerheimi. This white hybrid is of vigorous growth with flowers of purest white. 3 feet....................... Each, 50c; per dozen, $\$ 5.00$.
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, $\$ 2.00$.
Chinensis. A pretty dwarf species, with fine feathery foliage and intense gentian-blue flowers in open panicles.......Each, 25c; per dozen, $\$ 2.50$. Chinensis Alba. A pure white form of the above

Each, 25c; per dozen, \$2.50.

## 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, 25c; per dozen, $\$ 2.50$.
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. Each, 35c; per dozen, \$3.50.

## 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.
Gloxiniaeflora
Finely-spotted varieties.
White, purple, rose or mixed Each, 20c; per dozen, $\$ 2.00$,

## EUPATORIUM

Ageratoides. (Thorough Wort.) A border plant of strong, free growth. 3 to $31 / 2$ feet high, with small white flowers in dense heads; splendid for cutting. August and September. . . . . . . . Each, 25c; per dozen, $\$ 2.50$. Coelestinum. Light blue flowers, similar to the Ageratum, blooms from August until frost.

Each, 25 c ; per dozen, $\$ 2.50$.


## EUPHORBIA (Milk Wort)

Corollata. (Flowering Spurge.) Grows about 18 inches high, bearing from June to August umbels of pure white flowers with a small green eye; desirable for cutting.

Each, 25 c ; per dozen, $\$ 2.50$. Cyparissias. Grows 10 to 12 inches high with Cypresslike foliage and bears showy trusses of bright yellow flower-like bracts during May; very effective even when out of bloom............. Each, 25c; per dozen, \$2.50.

## 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.
Coerulea. (Blue Day Lily.) Blue flowers and broad green leaves. . ................Each, 20c; per dozen, $\$ 2.00$. Glauca. Purplish-white flowers with immense foliage. Each, 25c; per dozen, \$2.50. Subcordata Grandiflora Alba. (White Day Lily, August Lily.) Pure white, lily-shaped, fragrant flowers.
Thomas Hogg. Leaves are Each, 25c; per dozen, $\$ 2.50$. and variegated around edges, with lavender flowers.

Each, 25c; per dozen, \$2.50. Undulata Variegata. Foliage green, striped with white. Each, 25c; per dozen, $\$ 2.50$.

## GAILLARDIA (Blanket Flower)

Grandiflora. Beginning to flower in June, they continue one mass of bloom the entire summer. Flowers three inches in diameter; center dark reddish-brown; petals orange to crimson........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. Repens. An elegant trailing plant for the rockery, with clouds of small white flowers in July and August.
GRASSES, Ornamental. (See page 80)

## HELIANTHUS (Hardy Sunflower)

TE perennial sunflower is very effective either in borders, among shrubbery, or as clumps on the lawn, etc
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. arsifolious. 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.

## HELENIUM (Sneezewort)

THESE are desirable border plants, succeeding in any soil in a sunny location; useful for cutting.
Autumnale Superbum. Flowers are deeper yellow, separate and distinct from Riverton Beauty.

Each, 25c ; per dozen, \$2.50.
Riverton Beauty. Lemon-yellow, with large purplishblack cone.............. Each, 25c; per dozen, \$2.50. Riverton Gem. Old gold changing to wall-flower red. Each, 25c; per dozen, \$2.50.

## HARDY HERBAGEOUS PLANTS-Continued

## 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, 35c; per dozen, $\mathbf{\$ 3 . 5 0}$. Flava. The best known variety, very fragrant, deep lemon-yellow flowers in June and July..............Each 25c; per dozen $\$ 2.50$. Luteola. Blooms during July and August; flowers a pleasing shade of lemon-yellow.....................Each, 25c; per dozen, $\$ 2.50$. Sovereign. Cup-shaped fiowers; inside of petals light yellow, outside brown; blooms during July and August.

Each, 25 c ; per dozen, $\$ 2.50$. Thunbergii. Bears rich, buttercup-yellow, funnel-shaped flowers in July and August...................Each, 25c; per dozen, $\$ 2.50$.

## HEUCHERA (Alum Root)

F OLIAGE remains close to the ground. During July and August the graceful, thin flower spikes, 2 feet high, appear in profusion. Sanguinea. Bright scarlet. . . . . . . . . . Each, 25c; per dozen, $\$ 2.56$

## HIBISCUS (Mallow)

THESE are a mass of bloom during the entire summer, when they produce large flowers in gorgeous colors.
Mallow Marvels, Giant-flowering. Flowers of enormous size. frequently 10 to 12 inches in diameter. Plants grow from 5 to 8 feet high, and bloom from early in July until late in autumn. We offer these distinct colors-red, pink and white-strong roots. One each of the 3 colors for $\$ 1.00$... Each. 35 c ; 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 in 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 Y Sllow , Single Mixed Each, 20c; per dozen, $\$ 2.00$.

## IBERIS (Hardy Candytuft)

Sempervirens. Low growing, with evergreen foliage. In spring and early summer, is completely covered with dense heads of pure white flowers. Each,25c ; doz. $\$ 2.50$.

## LIBERTY IRIS (Flag Iris) <br> The "Fleur-de-Lis" of France

THE Liberty Iris is one of the most desirable May flowering plants. The flowers are of large size and of exquisite colors. For the best results plant in a welldrained sunny 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
King of Yellows. Yellow.
I'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, 20 c ; per dozen, $\$ 2.00$. If by mail, add 5 c each, 50 c per dozen.
We can furnish large clumps of most of the above varieties from 50c to $\$ 1.00$ each.

## IRIS PALLIDA DALMATICA

This variety is 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 Liberty 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, 20 c ; per dozen..... $\$ 2.00$
....... Each, 20c; per dozen..... $\$ 2.0$

## JAPANESE IRIS (Iris Kaempferi)

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 vein, 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-Kamone, 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. to dark pink at center and hearily veined, shading purple, marbled with white.
Above named varieties, each. 30c; per dozen, $\$ 3.00$ By mail, each, 35 c ; per dozen. $\$ 3.50$ Finest Mix ed (Our selection) Each, 20c; per dozen, $\$ 2.00$. By mail, each 25 c ; 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.
Pycnostacha. 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, $\$ 2.00$.

## LINUM (Flas)

Perenne. A fine plant for the border or rockery; grows 2 feet high. with light, graceful foliage and large blue flowers all summer...... Each, 25 c ; per dozen, $\$ 2.50$.
We do not guarantee or replace plants, shrubs or trees at prices quoted.

## HARDY HERBACEOUS PLANTS-Continued

## LUPINUS POLYPHYLLUS (Lupine)

EFFECTIVE plants, producing large spikes of flowers. thrive in any good garden soil; they 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, 25 c ; per dozen, $\$ 2.50$.

## LYCHNIS

Arkwrighti. Produces large circular flowers varying in color through crimson, scarlet, orānge, salmon and intermediate shades; blooms all summer and grows about $21 / 2$ feet high.

Each, 50c ; per dozen, $\$ \mathbf{5 . 0 0}$. Chalcedonica. A desirable plant, growing 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, 25c; per dozen, \$2.50.

## 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)

CHOWY 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 (Forget-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)

$\mathbf{E}^{\text {I }}$LEGANT subjects for growing in an exposed, sunny position, either in the border, or on the rockery, blooming all summer.
Pilgrimi. Large clusters of bright yellow flowers.
Each, 25c ; per dozen, \$2.50.

## PENTSTEMON (Beard Tongùe)

Barbatus Torreyi. Spikes of brilliant scarlet flowers from June to August. Grows 3 to 4 feet high.

Each, 25c; per dozen, \$2.50.

## PLATYGODON <br> Balloon Flower or <br> CHE Platycodons are closely allied to the Campanulas

 and form neat, branched bushes of upright habit. Grandifiorum. Deep blue, cupped, star-shaped flowers one and one 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.

## POLEMONIUM (Jacob's Ladder)

Reptans. Useful border plant, grows about 12 inches high, succeeds best in a partially shaded position; deep green, finely-cut foliage and spikes of showy blue flowers in May and June. . . . . . . Each, 25c; per dozen, \$2.50.

## PHLOX DIVARIGATA GANADENSIS

This variety is worthy of extensive planting, as it commences to bloom early in April and continues through May, with large, fragrant lavender flowers, on stems 10 inches high. . . . . . . . . . . . . . . . . Each, 20c; per dozen, $\$ 2.00$.

## PHLOX SUFFRUTICOSA

Miss Lingard.
This early flowering variety grows about 2 feet high and blooms from May to October. Flowers white with pale pink eye, long, graceful panicles.

Each, 25 c ; doz., \$2.50.

## 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.)

We ofler the following collection of twelve new
and extra choice varieties. Each, 25c; per dozen, $\$ 2.50$
Africa. Brilliant carmine-red with deeper eye.
Baron Von Dedem. Blood-red, scarlet, with salmon shadings, immense trusses.
Elizabeth Campbell. Bright, light salmon-pink, with lighter shading and dark red eye.
Europa. A white variety with decided crimson-carmine eye. The individual flowers and trusses are very large; plant of sturdy, erect habit.
Frau Anton Buchner. The finest white yet introduced, having the largest truss and largest individual flower.
Mad. Bezanson. A tall growing variety with bright crimson flowers in large trusses.
Mme. Pape Carpentier. This is a dwarf variety, bearing enormous trusses of pure white flowers.
Mme. Paul Dutrie. Delicate lilac-rose, in shade like a soft pink Orchid; flowers very large, borne in immense panicles.
Rosenberg. Bright, reddish-violet flowers with bloodred eye: individual flowers very large.
Sir E. Landseer. Large, bright crimson flowers, borne in immense trusses.
Thor. Deep salmon-pink with aniline-red eye, suffused and overlaid with a scarlet glow.
W. C. Egan. Flowers are of a delicate lilac, illuminated by a large, blight solferino eye, producing a pleasing shade of soft pink. Flowers produced in immense panicles.
Any of the above varieties, Each, 25c; per dozen, \$2.50. If wanted by mail, add 5 c each, 50 c per dozen, for postage.
General Collection of Hardy Phlox.
Each, 20c; per dozen, \$2.00.
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.
Eclaireur. 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.
Independence. An early, pure white.
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.
Selma. Large trusses of very large pink flowers, with cherry-red eye; choice.
Thebaide. Salmon, with carmine eye; dwarf. Any of the above varieties, each, 20c; per dozen, $\$ 2.00$. If wanted by mail, add 5c each, 50c per dozen, for
postage.

# HARDY HERBACEOUS PLANTS-Continued 

## PHLOX SUBULATA

(Moss, or Mountain Pink)
An early spring-flowering type, with pretty mosslike 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, 20 c ; per dozen, $\mathbf{\$ 2 . 0 0}$.

## 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, soft pink. Each,20c; per dozen,\$2.00 Virginica Alba. Pure white. 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 re-appearing 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 varieties. . . Each, 25c; per dozen, \$2.50. 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, 25c; per dozen, \$2.50.
White Reserve. A pure white variety, possessing a spicy fragrance. Ever-blooming.
Mixed Hardy Garden Pinks Each. 25c; per dozen, \$2.50. very select strain, which should produce a good percentage of double flowers. . Each, 20 c ; per dozen, $\$ 2.00$.

## 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, 35 c ; per dozen, $\$ 3.50$. Hybridum, Single Flowering. In choicest mixture.
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, 20 c ; per dozen, $\mathbf{\$ 2 . 0 0}$.

## PEONIA OFFIGINALIS

THIS type is the real old-fashioned "Peony," 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, 25 c ; per dozen, $\$ 2.50$.

## Peonies-Japanese Single

THE single Peonies 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 Peony.
Mixed Colors.
.Each. 35c; per dozen, \$3.50.


## DOUBLE HERBACEOUS PEONIES

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. cut.)
Dorchester. A most beautiful, soft pink of fine form dwarf grower. Each, 40 c
Duc de Wellington. Large bomb, white guards, sulphur center; fragrant. . . . . . . . . . . . . . . . . . . . . . . . Each, 50 c
Edulis Superba. Bright, mauve pink color mixed with Felix Cragrant. . . . doubie, ball-shaped blom, $35 c$ brilliant red. . . . . . . . . . . . . . . . . . . . . . . . . . Each, 60c
Festiva Maxima. White, with carmine tipped flakes to a

Floral Treasure. Large, full, clear pink, with lighter cen-
Ha mlet. "Color very dark red. . . . . . . . . . . . . . . . . . . . . Each, 35 E
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....................................... 40 c . Mme. Calot. Large, pale hydrangea-pink, with darker shadings in the center. . . . . . . . . . . . . . . . . . Each, 50 c .
Madame Boulanger. Color glossy, tender rose, shading to heliotrope, bordered with silvery flesh... Each, 50c. 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, 60c. Marie Lemoine. Large, sulphur white, shaded with pink;
 Meissionier. Broad outer petals, brilliant purple amaranth, inner petals crimson, free bloomer....Each, 50c.
Purpur Each, 40c
Queen Victoria. Large, full, compact bloom, opening flesh, changing to white, center petals tipped with carmine. Each, 40c. Rosa Magna. Beautiful, large, rose colored Peony Thorbeckii. Deep red pink, of fine form, lighter in center

Tricolor Rosea. Dark violet rose; large globular flower. Each, 50c.
MCCULLOUGH'S PEONY COLLECTION-one each of the above twenty named varieties for $\$ 9.00$ purchaser paying express charges.

We can supply large clumps of many varieties of Peonies from $\$ 1.00$ to $\$ 1.50$ each.

If to be sent by mail, add 5 c each, 50 c per dozen.

## Peonies in Mixture

$\Gamma$
HEY 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, $\$ 2.50$.

## HARDY HERBACEOUS PLANTS

## (Continued)

## RUDBECKIA (Cone Flower)

AVARIETY 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 flowers, 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,
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 one-half feet high....

## 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.

## SGABIOSA

Caucasia. (Blue Bonnet.) Blooms from June to September. Flowers a soft shade of lavender borne on stems 18 to 24 inches high. . ..............Each, 25 c ; per dozen, $\$ 2.50$.
Japonica. They last a long time when picked and placed in water. Bears lavender-blue flowers on long stems from July to September. . . . . . . . . . Each, 25c; per dozen, $\$ 2.50$.

## SEDUM (Stone Crop)

Acre. (Golden Moss.) Much used for covering graves; foliage green, flowers bright yellow.
Album. Green foliage, white flowers. Sexangulare. Dark green foliage, yellow flowers.

Erect growing . heigh 20c; per dozen, $\$ 2.00$ light-green foliage and immense heads of handsome showy, rose colored flowers. . Each 20c; per doz., \$2.00. Spectabilis Brilliant. Similar in growth to the above wivh bright, amaranth-red flowers. Each, 20c; per doz., \$2.0J. Spurium. Grows 6 inches high with attractive pink flowers.

Each, 20c; per dozen, \$2.0J.

## SHASTA DAISY

TARGE, snowy-white flowers, in bloom continuously L throughout the summer and fall.
Alaska. A decided improvement on the original, very free-flowering, with blooms $41 / 2$ to 5 inches across, of pure, glistening white....Each, 25c; per dozen, \$2.50. King Edward. Very large flowers; plant of vigorous growth. . . . . . . . . . . . . . . . Each, 25c; per dozen, \$2.50.

SPIREA (Goat's Beard, Meadow Sweet)
Filipendula, fl. pl. (Double Flowered Drop-wort.) Pretty fern-like foliage, with double white flowers on stems 15 inches high during June and July.

Palmata Flegans Pure white pink anthers during June and July; 3 feet

Each, 25 c ; per dozen, $\$ 2.50$.

## 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, 25c; per dozen, \$2.50.

## 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.
Alba. White flowers and green foliage. per dozen, $\$ 2.50$.
SWEET WILLIAM (Dianthus Barbatus) Well known hardy plant. We offer a superb strain of mixed single and double-flowering sorts.
Newport Pink. Salmon or watermelon-pin dozen, $\mathbf{\$ 2 . 0 J}$

## VALERIANA

Coccinea. Showy heads of reddish flowers, blooming from June to October. Height, 2 feet.

Each, 25c; per dozen, \$2.50.
Officinalis. (Hardy Garden Heliotrope.) Produces showy heads of rose-tinted white flowers during June and July, with strong heliotrope odor; 3 to 4 feet.

Each, 20c; per dozen, \$2.00.


## VINGA 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.

## VERONICA (Speadwell)

Amethystina. Grows 2 feet high; bears amethyst-blue flowers in June and July . Each, 20c ; per dozen, $\$ 2.00$. Incana. Bright silvery foliage, with spikes of amethystblue flowers 1 foot high during July and August.

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, 35c; per dozen, \$3.50.
Spicata. An elegant border plant, growing about $11 / 2$ feet high, producing long spikes of bright blue flowers.

Each, 20c ; per dozen, $\$ 2.00$.
Virginica. Long spikes of white flowers in July and August;

## VIOLAS, or TUFTED PANSIES <br> (Viola Cornuta)

They flower continuously for nearly eight months in the year and while their flowers are not so large as those of the Pansy, their bright colors make them welcome additions to any garden.
Admiration. Soft purple, with dark blotch.
Lutea Splendens. Rich golden yellow.
Papilio. Violet, with dark eye; the most effective for massing.
White Perfection. A fine white.
Each of the above, 15 c ; per dozen, $\$ 1.50$.

## YUCGA FILAMENTOSA

## (Adams's Needle)

A hardy ornamental foliage and evergreen plant with long, narrow leaves that are bright green the whole year round. The flowers are white, produced on long spikes.

Each, 25c ; per dozen, \$2.50.

## ORNAMENTAL GRASSES

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; by mail, 35c 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 bune 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, 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.

Stocks of ORNAMENTAL FLOWERING SHRUBS have become greatly depleted in the last two years, consequently it is no longer possible to offer two or more sizes, except in a few instances. Our prices contemplate furnishing the largest sizes now available.

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 or 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.

Each, 50c; per dozen, $\$ \mathbf{5 . 0 0}$.
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, 60c; per doz. $\$ 6.00$.
Grandiflora Superba. Double blush white, shaded carmine...............Each, 60c; per dozen, $\$ 6.00$.
Jeanne D'Arc. Double white.
Each, 60c; per dozen, $\$ \mathbf{6 . 0 0}$.
Meehani. Beautiful variegated foliage with satiny, lavender colored, single flowers, open and free blooming. ............Each, 60 c ; per dozen, $\$ 6.00$.
Purpurea. Single purple. Each, 60c; per dozen, $\mathbf{\$ 6 . 0 0}$.
Rosea. Single white, red center.
Each, 60 c ; per dozen, $\mathbf{\$ 6 . 0 0}$.
Totus Albus. Single, pure white.
Each, 60 c ; per dozen, $\$ 6.00$.
Single Rose, White and Purple.
Each, 50 c ; per dozen, $\$ 5.00$.
Double Rose, White and Purple Each, 50 c ; per dozen, $\$ 5.00$.
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.

12 to 18 inches. per dozen, $\$ 2.25$; per 100, $\$ \mathbf{1 6 . 0 0}$. 18 to 24 inclies, per dozen, $2.75 ;$ per 100, 20.00 . 24 to 36 inches, per dozen, $\mathbf{3 . 6 0}$; per 100, 24.00 .
BUDDLEYA. (Butterfly Shrub or Summer Lilac.) Variabilis Magnifica. Flowers continuously all season. The flower racemes are composed of many little blossoms in the shape and color of lilacs.

Each, 25 c ; per dozen, $\$ 2.50$; clumps, each, 50 c.


Clethra Alnifolia
CALYCANTHUS FLORIDUS. (Sreet-Scented Shrub.) Flowers fragrant, double and of a chocolate color. Each, 50 c ; per dozen, $\$ 3.00$.
CARYOPTERIS MASTACANTHUS. (Blue Spirea.) Autumn blooming shrubby plant, producing clusters of fragrant blue flowers from Seprember until frost. Dies to the ground in winter.

Each, 50 c ; per dozen, $\$ 5.00$.
Cercis Canadensis. (Judas Tree or Red Bud.) Tery 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.

Each, $\$ 1.00$; per dozen, $\$ 10.00$.
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. Each, $\mathbf{7 5} \mathrm{c}$; per dozen, $\$ 7.50$.

CHERRY. Double Rose Flowering. A very ornamental tree for the lawn. Five to six feet.

Each, $\$ 2.00$; per dozen, $\$ 20.00$.
CHESTNUT. Dwarf Horse Chestnut. Grows in bush form, with deep green foliage and spikes of white flowers in midsummer. Each, $\$ 2.50$; per dozen, $\$ \mathbf{2 5 . 0 0}$.
Clethra alnifolia. (Sweet Pepper Bush.) Dark green foliage and upright spikes of creamy white, fragrant flowers in August. (See cut.)

Each, 50 c ; per dozen, $\$ 5.00$.
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.

Each, 50 c ; per dozen, $\$ 5.00$.
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.

Each, 50 c ; per dozen, $\$ \mathbf{5 . 0 0}$.
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, 50c; per dozen, $\$ \mathbf{5 . 0 0}$.

We do not guarantee or replace plants, shrubs or trees, at prices quoted.

## 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.).............Each, $\$ 1.25$; per dozen, $\$ 12.50$.

CORN US FLORIDA RUBRA. (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.

Each, 50c; per dozen, $\mathbf{\$ 1 5 . 0 0}$.
CORNUS MASCULA. (Cornelian Cherry.) A small treelike shrub, producing early in spring, before the leaves appear, clusters of bright yellow flowers, which are followed by red berries...Each, 50c; per dozen, $\$ 5.00$.

CORNUS SANGUINEA. (Red Twigged Dogwood.) A strong growing bush, with crimson-colored branches, especially attractive in winter....Each, 50c; doz., \$5.00.

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. Each, $\$ 1.50$; per dozen, $\$ 15.00$.

DESMODIUM PENDULIFIORUM. 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.....Each, 50c; per dozen, \$5.00.

DEUTZIA CRENATA FLORA P\&ENA. Flowers double white, tinged with pink. . F F.ch, 50c; per dozen, $\$ 5.00$.

DEUTZIA GRACILIS. A dr/orf bush, covered with spikes of pure white flowers in farly summer.

Each, 50c; per dozen, $\mathbf{\$ 5 . 0 0}$.
DEUTZIA LEMOINEII. Habit dwarf, flowers white. One and one-half to two feet.

Each, 50c; per dozen, $\$ \mathbf{5 . 0 0}$.
DEUTZIA PRIDE OF ROCHESTER. Large double white flowers, slightly tinted with rose. Each, 50c ; per dozen, \$5.00.
ELDER, GOLDEN. (Sambucas.) Golden yellow foliage. Each, 50c; per dozen, $\$ 5.00$.
ELEAGNUS LONGIPES. Nearly evergreen; foliage silvered on the under surface. The orange-scarlet berries are attractive during summer. Hach, 50c; per dozen, \$5.00.


EUONYMUS EUROPAEUS. (Burning Bush.) Conspicuous in autumn and winter, when loaded with scarlet seed pods, from which orange-colored berries hang on slender threads. . Each, 50c ; per dozen, \$5.00.

EXOCHORDA GRANDIFLORA. (Pearl Bush.) Bears white flowers in racemes in early spring. Each, 50 c ; per dozen, $\mathbf{\$ 5 . 0 0}$.

FORSYTHIA FORTUNEI. (Golden Bell.) Upright growth and bright yellow flowers in April. Each, 50c; per dozen, $\$ \mathbf{5 . 0 0}$.

FORSYTHIA SUSPENSA. (Weeping Golden Bell.) Willowy growth and yellow flowers. Each, 50c; per dozen, \$5.00.

FORSYTHIA VIRIDISSIMA. (Golden Bell.) Erect growth and spreading branches; flowers bright yellow. Each, 50c; per dozen, $\$ 5.00$.

HALESIA TETRAPTERA. (Silver Bell.) White, bell shaped flowers in May. Bears four winged fruit fron one to two inches long. . . .Each, 50c; per dozen, $\$ 5.00$.

HYDRANGEA ARBORESCENS STERILIS. (SnowballHydrangea.) Snowy white blooms: will flower for fully three months. . . . . . Each, 60 c ; per dozen, $\$ 6.00$.


Hydrangea Paniculata Grandiflora

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, 40c; per dozen, \$4.00. Three to four feet, each, 60c; per dozen, $\$ 6.00$.

HYDRANGEA PANICUIIATA GRANDIFLORA. Standard or TreeShaped Plants. These are four and five years old, trained to tree-shape with about three feet of straight stem and nicely shaped heads. Four to five feet, each, $\$ 1.50$; per dozen, $\$ 15.00$.
We do not guarantee or replace plants, shrubs or trees, at prices quoted.

## ORNAMENTAL FLOWERING SHRUBS-Continued

LILACS. (True Syringa.) (See cut.) Purple. (Syringa Vulgaris.) The common purple species, and one of the best.

Each, 50c; per dozen, \$5.00. White. (Syringa Vulgaris Alba.) Flowers pure white, very fragrant. Each, 50 c ; 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 Cpright Honeysuckle.) Handsome upright shrubs. They thrive in almost any soil.
Ledebouri. Very distinct, producing red flowers in May....Each, 50c.
Morrowi. A handsome Japanese variety with white flowers during May, but especially valuable for its bright red fruit during the summer and autumn months............Each, 50c; per dozen, $\$ 5.00$.

Tartarica. (Tartarian Honeysuckle.) A large shrub with numerons upright or spreading branches. Flowers borne in great profusio: in late spring. Fruit red or orange, ripening in summer. Red. whrie and pink...............................Each, 50c; per dozen, \$5.00.
MAHONIA AQUAFOLIA. (Holly-leared Mahonia.) A native species of medium size, with purplish. shining leaves, and showy, brizht yellow flowers succeeded by bluish berries.

1 S to 24 inches, each, 60 c ; per dozen, $\$ 6.00$.


PRIVET. See Hedge Plants.
PHILADELPHUS OR SYRINGA. (Mock Orange or Orange Llossoms.) 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. Each, 50c; per dozen, \$5.00.

Coronarius Aurea. (Golden-leaved Mock Orange.) Fine golden-yellow foliage, contrasting beautifully with the dark leaves of other shrubs.

Each, 50c; per dozen, $\$ 5.00$.
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. $\qquad$ Each, 50c; per dozen, $\$ \mathbf{5 . 0 0}$
RHODOTYPOS. (White Kerria.) Kerrioides. Handsome foliage and large single white flowers in the latter part of May, succeeded by numerous black berries.

Each, 50c; per dozen, $\$ 5.00$.
RHUS COTINUS. (Purple Fringe, or Smoke Tree.) low, shrubby tree, covered in midsummer with large clusters of feathery flowers, giving the appearance of a cloud of smoke or mist. Dach, 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. ....Each, 50 c ; per dozen, $\$ 5.00$.

RIBES AUREUM. (Golden Currant.) Bright green foliage, beautifully tinted in the autumn; fragrant yellow flowers in May, followed by dark brown fruit. Each, 50c ; per dozen, $\$ \mathbf{5 . 0 0}$.

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. Each, 50c; per dozen, $\$ 5.00$.

SAMBUCUS. Aurea. (Golden Elder.) Attractive golden foliage and desirable to mix with other shrubs.

Each, 50c; per dozen, $\$ \mathbf{5 . 0 0}$.

SPIREA. A large group of showr, frec-flowerine, hardy shrubs.

Anthony Waterer. Makes nice, round bushes. three feet high and wide: becrinning to bloom in summer, continuing until fall. Rose red Rowers in large, round clusters all over the bush.

18 to 24 inches, each. 50 c ; per dozen, $\$ 5.00$.
Billardii. Pink flowers: bloom nearly all summer. It is grand for planting in masses. Each, 50 c ; dozen, $\$ 5.00$.

Callosa Alba. A white flowering variety of dwarf, bushy, symmetrical form. Flowers all summer.

18 to 24 inches, each. 50 c ; per dozen. $\$ 5.00$.


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, 40 c ; per dozen, $\$ 4.00$. Three to four feet, each, 60 c ; per dozen, $\$ 6.00$.

Spireas continued on next page.
rubs or trees, at prices quoted.

## ORNAMENTAL FLOWERING SHRUBS-Continued

SPIREA-Continued.

Opulifolia Aurea. (Virginian Guelder Rose.) Goldentinted foliage and large white flowers in June; two to three feet. . ............. . Each, 50c; per dozen, \$5.00.
Prunifolia Fl. Pl. (Old Bridal Wreath.) Blooms in May, with pure white, double flowers.

Each, 50c ; per dozen, \$5.00.
Reevesii Fl. P1. Tall, with dark, bluish green foliage, and large, double, pure white flowers, in May and June. 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. Each, 50c; per dozen, $\$ 5.00$.
SYMPHORICARPUS. Snow berry and Indian Currant.Small native shrubs much used in shaded places and in open masses. Grow in almost any soil; quite hardy.

Racemosus. (Snowberry.) A graceful shrub, three to five feet tall, with slender branches. Flowers white or pinkish, in loose racemes, in summer. Berries white, produced in showy, profuse clusters, the branches bending under their weight.

Each, 30c; per dozen, \$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.


Catalpa Bungei
We do not guarantee or replace plants, shrubs or trees, at prices quoted.

## 

0N account of the large demand for Evergreens we have made arrangements with one of the best Evergreen specialists in the country, whereby we are able to offer the following list of Evergreens. These are largely American stock and the quality will be the best that can now be supplied. We have tried to make prices as reasonable as possible and if you contemplate further plantings, would advise placing your order at once while stocks are still fairly complete.

All of 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.

## KOSTER'S BLUE SPRUCE

(Picea Pungens Glauca Kosteriana)
The finest ornamental Evergreen grown. The foliage is the purest blue. Our stock of this variet, is probably the largest and finest in America 2 to 3 feet, each, $\$ 7.00$; per dozen, $\$ 70.00$; 4 to 5 feet, each, $\$ 15.00$; per dozen, $\$ 150.00$ 6 to 7 feet, each, $\$ 18.00$ : per dozen, $\$ 180.00$

NORWAY SPRUCE (Picea Excelsa)
A vigorous, rapid growing tree, with dark-green foliage. One of the most popular Evergreen trees $11 / 2$ to 2 feet, each, $\$ 1.00$; per dozen, $\$ 10.00$ 2 to 3 feet, each, $\$ 1.50$;' per dozen, $\$ 15.00$ 3 to 4 feet, each, $\$ 2.25$; per dozen, $\$ 22.50$.

WHITE SPRUCE (Picea Alba)
One of the best for cold climates. Compact. upright growing and varies in color from light green to glaucous blue. 3 to 4 feet, each, $\$ 2.75$; per dozen, $\$ 27.50$.
ARBORVITAE AMERICAN (Thuya
Well known screen and hentalis) feet, each, $75 \mathrm{c} ;{ }^{\text {per dozen. } \$ 7.50 ;}{ }_{2}$ to ${ }_{3} \frac{1}{2}$ feet each, $\$ 1.25$; per dozen. $\$ 12.50$; 3 to 4 feet, each, $\$ 2.00$; per dozen. $\$ 20.00$.

## ARBORVITAE PYRAMIDALIS

(Thuya Occidentalis Pyramidalis)
Suitable for tubs and possesses foliage of finer texture and more dense habit than the American Arborvitae. 2 to 3 feet, each, $\$ 2.50$; per dozen, $\$ 25.00$; 3 to 4 feet, each. $\$ 3.50$; per dozen, $\$ 35.00 ; 4$ to 5 feet, each, $\$ 4.50$; per dozen, \$45.00.

## ARBORVITAE GLOBE (Thuya Occidentalis Globosa)

Very dwarf and compact; grows naturally into a rounded. almost ball-like form. 1 to $11 / 2$ feet, each. $\$ 2.50$; per dozen, $\$ 25.00$.

## ARBORVITAE SIBERIAN (Var. Wareana)

Of dwarf habit and conical outline. Rich, dark green foliage. Will withstand colder exposure than other sorts. 1 to $11 / 2$ feet, each, $\$ 2.25$; per dozen, $\$ 22.50$.

## ARBORVITAE BIOTA (Chinese Arborvitae)

Deep green, soft, feathery foliage. Habit of growth pyramidal and upright. $11 / 2$ to 2 feet, each, $\$ 2.00$; per dozen, $\mathbf{\$ 2 0 . 0 0} ; 2$ to 3 feet, each, $\$ 3.00$; per dozen, $\mathbf{\$ 3 0 . 0 0}$.

## ARBORVITAE GOLDEN

Golden-green foliage: highly ornamental. 3 to 4 feet, each, $\$ 4.00$; per dozen, $\$ 40.00 ; 4$ to 5 feet, each, $\$ 5.00$; per dozen, $\$ \mathbf{5 0 . 0 0}$.

ARBORVITAE TOM THUMB
Smaller and more compact than the variety Ericoides. Suitable for low hedges. 1 to $11 / 2 \mathrm{ft}$., each, $\$ 2.00$; doz., $\$ 20.00$.

## ARBORVITAE ERICOIDES

Dwarf and pyramidal, with heath-like leaves of grayish green. 1 to $1 \frac{1}{2}$ ft., each, $\$ 2.00$; per dozen, $\$ 20.00$.

WHITE PINE (Pinus Strobus)
A beautiful ornamental tree, also used for shade and shelter belts. 3 to 4 feet, each, $\$ 3.00$; per dozen, $\$ 30.00$.

AUSTRIAN PINE (Pinus Austriaca)
A tall tree with spreading branches. hearily plumed with long. stiff needles. 3 to 4 feet, each, $\$ 3.00$; per dozen, $\$ 30.00$.

## SCOTCH PINE (Pinus Sylvestris)

A strong grower with spreading branches and short. stiff needles. 2 to 3 feet, each. $\$ 2.50$; per dozen, $\$ 25.00$.

## DWARF MUGHO PINE (Mughus)

Usually broader than its height and sometimes almost prostrate. Forms a dark, dome-shaped bush. 1 to 1 ! feet, each, $\$ 2.50$; per dozen. $\$ 25.00$.


Koster's Blue Spruce
IRISH JUNIPER (Juniperus Hibernica)
Grows erect in a dense column of dark green. 2 to 3 feet. each. \$1.75; per.dozen, \$17.50.

BLUE VIRGINIA CEDAR (Juniperus Glauca)
Leaves are a rich. silvery blue. 2 to 3 feet. each. $\$ 4.00$; per dozen $\$ 40.00 ; 3$ to 4 feet. each, $\$ 5.00$; per dozen, $\$ 50.00^{\text {- }}$

RETINOSPORA PLUMOSA (Plume Cypress)
Light green, feathery foliage. It stands shearing well. $11 / 2$ to 2 feet, each. $\$ 3.00$; per dozen, $\$ 30.00$.

## RETINOSPORA PISIFERA AUREA

Golden evergreen, light airy foliage. 12 to 15 inches. each, $\$ 2.25$; per dozen, $\$ 22.50$; 15 to 18 inches, each, $\$ 4.00$; per dozen, $\$ 40.00$.

## IRISH YEW (Taxus Hibernica)

Of pyramidal growth, with dark, shining leaves and red berries. 2 to 3 feet, each, $\$ 3.75$; per dozen, $\$ 37.50$.

JAPANESE YEW (Taxus Cuspidata)
A dwarf, compact variety, with shorter leaves than the others. 2 to 3 feet, each, $\$ 4.00$; per dozen, $\$ 40.00$.

GOLDEN ENGLISH YEW (Taxus Aurea)
2 to 3 feet, each, $\$ 4.00$; per dozen, $\$ 40.00$.

## IVCedge fllants

CALIFORNIA PRIVET. (Ligustrum Oralifolium.) 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 adrerse conditions. such as under dense shade of trees. The most adrantageous manner of planting is in double rows, the two rows being about $S$ inches apart. The rows, the two rows being about $S$ 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.

18 to 24 inches. 75 c per clozen: $\$ 4.00$ per 100 : $\$ 35.00$ per 1000 .
2.4 to 36 inches $\$ 1.00$ per dozen; $\$ 6.00$ per 100 $\$ 50.00$ per 1000 .

Extra Large Bushy Plants, $\$ 1.50$ per doz; $\$ 10.00$ per 100 .

# Shade and Ornamental Grees 

FOR LAWN, STREET AND FOREST PLANTING

ASH. American White. A handsome, hardy, broad-headed, quick growing shade tree. Valuable for park and street planting. 6 to 8 feet. ......Each, $\$ 1.75$; per dozen, $\$ 17.50$.
ASH. European. Smaller in its habit of growth and more spreading than the American. 6 to 8 feet.

Each, \$1.75; per dozen, \$17.50.
BIRCH. European White. This is a valuable species with white bark. Very effective in landscape work. 8 to 10 feet.

Each, \$2.25; per dozen, \$22.50.
CATALPA SPECIOSA. A handsome, rapid growing tree, with large, bright green foliage. Valuable for lawn and street planting. 8 to 10 feet. ..... Each, $\$ 1.75$; per dozen, $\$ 17.50$.
CATALPA B UN GEI. (Umbrella Catalpa.) See"Ornamental Trees," page 84 , for description. 6 to 7 feet, each, $\$ 2.25$; selected two year old, ea., $\$ 3.00$; specimen three year heads, ea., $\$ 3.50$.
ELM. American. A valuable tree for park, avenue and lawn planting. A hardy, rapid grower; resists drought well and is long lived. 8 to 10 feet. . . . . Each, \$1.75; per dozen, $\$ 17.50$.

LINDEN. American. A rapid growing tree with large leaves and fragrant flowers. Extensively used as a lawn tree, also for park and street planting. 8 to 10 feet.

Each, $\$ 2.75$; per dozen, $\$ 27.50$.
LINDEN. European. This is the broad-leaved linden of European plantations and probably the largest. 6 to 8 feet.

Each, $\$ 1.75$; per dozen, $\$ 17.50$.


Sugar Maple

LIQUIDAMBER. (Sweet Gum.) A very ornamental tree and beautiful at every stage. Splendidly adapted for street and park planting. 5 to 6 feet.

Each, \$2.75; per dozen, \$27.50.
MAPLE. Norway. A large, handsome tree with a compact, rounded lead of spreading branches. One of the best trees for lawn, park, street or cemetery planting. 8 to 10 feet. . . . . . . . . Each, $\$ 2.50$; per dozen, $\mathbf{\$ 2 5 . 0 0}$.
MAPLE. Rock or Sugar. An excellent shade tree of upright, dense growth. Grows to a large size and is long lived. 6 to 8 feet. . Each, $\$ 2.50$; per dozen, $\mathbf{\$ 2 5 . 0 0}$.
MAPLE. Silver or Soft. This is an ornamental tree with wide, slender, spreading branches and thrives almost anywhere. 8 to 10 feet.

Each, $\$ 1.75$; per dozen, $\$ 17.50$.
MAPLE. Japanese. See "Ornamental Trees" page 84.
OAK. Red. A beautiful tree of rapid growth, growing into a large, majestic tree, with broad, round head, the foliage turning dark red in fall. 6 to 8 feet.

Each, $\$ 4.00$; per dozen, $\$ 40.00$.
OAK. Scarlet. A noble tree with gradually spreading branches, which form a rather open head. Leaves turn scarlet in fall. 4 to 5 feet.

Each, $\$ 3.50$; per dozen, $\$ 35.00$.
OAK. Pin. A handsome tree, especially when young. Tree is fibrous rooted, transplants well and grows rapidly. Foliage turns bright red in fall. 6 to 8 feet. . . . . . . . . . . . . . . Each, $\$ 4.00$; per dozen, $\$ 40.00$.
POPLAR. Carolina. Onr of the surest and most rapid growing trees. The leaves are glossy and fresh looking. Valuable for quick effects. 10 to 12 feet.

Each, $\$ 1.25$; per dozen, $\$ 12.50$.
POPLAR. Bolleana. Its habit of growth is broader than the Lombardy. Tall growing with cottony leaves. 8 to 10 feet. . . . . . . . . Each, $\$ 1.25$; per dozen, $\mathbf{\$ 1 2 . 5 0}$.
POPLAR. Lombardy. This is an excellent tree for landscapes because with age it becomes striking and picturesque. 6 to 8 feet.

Each, $\$ 1.00$; per dozen, $\$ 10.00$.

SALISBURIA. (Maiden Hair or Ginkgo.) A tall, sparsely branched, usually slender tree, with leaves similar in shape to the Maiden Hair Fern. Especially valuable for solitary planting to secure picturesque effects. 6 to 8 feet. . . . . . . . . . Each, $\$ 2.75$; per dozen, $\$ 27.50$.
SALIX DISCOLOR. (Pussy Willow.) A shrub or short trunked tree. Foliage smooth, bright green above and white beneath. The catkins of this species are one of the earliest harbingers of spring. 6 to 7 feet.

Each, $\$ 1.00$; per dozen, $\$ 10.00$.
SYCAMORE. Platanus Orientalis. (Oriental Plane.) This is among our largest and tallest growing trees. Very hardy and does well in moist places. Excellent for street, park and lawn planting. Thrives well in smoky cities, making it a good tree for city planting. 6 to 8 feet. $\qquad$ . Each, \$1.50; per dozen, \$15.00.
SYCAMORE. Platanus Occidentalis. (American Sycamore, Buttonwood.) Similar to the Oriental Sycamore in general habit of growth, but more susceptible as to location and sheds its leaves earlier in the fall. 6 to 8 feet. $\qquad$ . Each, $\$ 1.25$; per dozen, $\$ 12.50$.
TULIP TREE (Liriodendron Tulipfera.) A tall, handsome, hardy, ornamental tree of pyramidal habit and rapid growth. Bears numerous tulip-shaped, fragrant flowers of a creamy yellow and orange color in June. 6 to 8 feet. . . . . . . . . . . . . . . . Each, $\$ 2.50$; per dozen, $\mathbf{\$ 2 5 . 0 0}$.

## WEEPING TRBES

EIRCH. (Cut-leaf Weeping.) A tree of wonderful grace and beauty. Tall, slender, drooping branches and delicately cut leaves. It colors brilliantly in the fall. Its bare white trunk and branches make a beautiful winter picture. 6 to 8 feet.

Each, \$2.50; per dozen, \$25.00.
MULBERRY. Teas Weeping. See "Ornamental Trees" page 84 .
WILLOW. Elegantissima. The strongest and most vigorous grower of all the weeping willows. Used for planting in low places or on the banks of streams or ponds; making a beautiful effect. 6 to 8 feet.

Each, \$1.25; per dozen, \$12.50.

# Jardy $\mathfrak{C l i m b i n g}$ plants 

AMPELOPSIS VEITCHII. (Japan Creeper or Boston Ivy.) The best climbing plant for covering brick or stone walls.

Each, 50 c ; per dozen, $\mathbf{\$ 5 . 0 0}$; by mail, each, 55 c .
AMPELOPSIS QUINQUEFOIIA. (Virginia Creeper.) For covering walls, verandas and trunks of trees. Each, 50 c ; per doz., $\$ 5.00$; by mail, each,55c.
ARISTOLOCHIA SIPHO. (Dutchman's Pipe.) Large, heart-shaped leaves.
Each, 50c; per doz., $\$ 5.00$; by mail, each, 60 c . BIGNONIA RADICANS. (Trumpet Vine.) Flowers trumpet-shaped, bright scarlet.
Each, 25c; per doz., $\$ 2.50$; by mail, each, 30 c .

## CLEMATIS (Large Flowering)

Henryii. Creamy white flowers.
Jackmanii. Intense violet purple flowers.
Ville de Lyon. Brilliant crimson flowers.
The above named Clematis, each, 75c; per dozen,
$\$ 7.50$; by mail, each, 80 c ;
We send out strong, healthy roots of Clematis and cannot entertain any claims for non-success with these plants.


## CLEMATIS $\underset{\substack{\text { Flowering })}}{(\text { Smanl }}$

Paniculata. (Japanese Clematis.) Pure white, very fragrant flowers, borne in large clusters.
Each, 50c; per dozen, \$5.00; by mail, each, 55 c .

## HONE YSUCKLES

Each, 35c; per dozen, \$3.50; except where noted; by mail, each, 40c.
Aurea Reticulata. Foliage variegated yellow and green with yellowish white, fragrant flowers.
Monthly Fragrant or Dutch. Blooms all summer.


IV Y, English. Beautiful, evergreen vine. Each, 50c; per doz.,\$5.00; by mail, each, 55c.
KUDZU VINE. (Or Jack-and-the-Bean-Stalk.) A rapid growing vine. Each, 50c; per doz., $\$ 5.00$. By mail, each, 55c.

MATRIMONY VINE. The branches may be trained orer fences or trellises. Each. 50c; per doz.. $\$ 5.00$. By mail, each. 55 c .
WISTARIA, CHINESE. Delicate, violet blue blossoms. Each, 60c; per doz., $\$ 6.00$. By mail, each, 65 c .

WISTARIA, CHINESE WHITE. Pure white flowers. Each, 60c; per doz., $\$ 6.00$. By mail, each, 65 c .


Common Woodbine. A strong, rapid grower; flowers red outside, buff within.
Hallcana. Nearly evergreen; flowers pure white.
Scarlet Trumpet. Scarlet inodorous flowers.

## TENDER CLIMBING PLANTS

CARDINAL CLIMBER. Each, 25c; per dozen, \$2.50. COBAEA SCANDENS. Each, 25c; per dozen, $\$ 2.50$. MOON FLOWER PLANTS. Each, 25c; per dozen, $\mathbf{\$ 2 . 5 0}$. If wanted by mail, add 5 c each, 50 c per doz., for postage. MADEIRA VINE. Strong tubers. Each, 5c; per doz., 40c. By mail. per dozen, 50 c .

## BEDDING PLANTS

These cannot be mailed, as we send out strong plants, which travel best by express.


|  | Each | Per Doz. |  |  | Each | Per Doz. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ageratum. Blue | . 15c | \$1.50 | Lobelias. | Trailing | 10c | \$1.00 |
| Asters. Best varieties, all colors | 10c | 1.00 | Pansies. | Fancy... | 10c | 1.00 |
| Cannas. Large flowering kinds. | 20c | 2.00 | Petunia. | Double sorts | 20 c | 2.00 |
| Centaurca. (Dusty Miller)... | 15 c | 1.50 | Petunia. | Scarlet varieties | 15 c | 1.50 |
| Coleus. Standard sorts.... | 15 c | 1.50 | Verbenas | Scarlet varieties | 20c | 2.00 |
| Geranivaza. Standard sorts | 20c | 2.00 | Vincas. | Bedding sorts | 15 c 15 c | 1.50 1.50 |
| Lantanas. | 15c | 1.50 | Vinca. | Variegated, trail | 20 c | 2.00 |

## Fruit Grees

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.

## APPLES, standard

5 to 7 feet high. Each, $\mathbf{\$ 1 . 0 0}$; per dozen, $\mathbf{\$ 1 0 . 0 0}$. SUMMER VARIETIES
Early Harvest. (Early June, Yellow Harvest). Fruit is medium size to large, the skin tender, very smooth, clear, pale, waxen yellow; flesh is white, rather fine, crisp, tender, juicy, at first briskly sub-acid, but eventually becoming milder and more agreeable for dessert. Ripens in July and August.
Red Astrachan. Fruit of good medium size; yellow, largely covered with red, presenting a striped appearance; flesh white, often strongly tinged with red, crisp, tender, juicy, sub-acid and of good quality. One of the most beautiful early market apples. Ripens in August.
Yellow Transparent. (White Transparent. Grand Sultan). The tree is an upright grower and usually bears fruit the next year after planting. Fruit of medium size, pale, waxen yellow, pleasantly acid, tender and good, splendid for home and market. Ripens in July and August, before Early Harvest.

## APPLES, standard

5 to 7 feet high. Each, $\$ 1.00$; per dozen, $\$ 10.00$.

## AUTUMN VARIETIES

Delicious. This is probably the best of the newer varieties, having been satisfactorily tested in many parts of the country. Fruit is brilliant dard red, shading to yellow at the blossom end. Flesh is crisp, fine grained and quite juicy; flavor slightly acid but very pleasing.
Duchess of Oldenburg or Duchess. A variety of great hardiness, yielding abundantly in all sections. Fruits are large, rounded, yellow, striped red, tender, juicy and of the best quality for cooking.
Fall Rambo. Fruit mottled and striped red and yellow, of medium size and good flavor; widely cultivated and highly esteemed for eating. Tree is a strong grower and heavy bearer.
Maiden's Blush. Fruit of uniformly good size, smooth, round, beautifully fushed with brilliant red on a yellow ground. Good for table use. One of the most beautiful and productive Fall varieties. Ripens in August and September.

## APPLES, standard

5 to 7 feet high. Each, $\$ 1.00$; per dozen, $\mathbf{\$ 1 0 . 0 0}$. WINTER VARIETIES
Baldwin. A great market apple, very productive; fruit large, deep red, crisp, juicy and rich. December to March.
Banana. The fruit is large, clear, pale yellow with pinkishred blush; flesh is tender and aromatic with a suggestion of banana flavor. November to February.


## WINTER VARIETIES-Continued

Ben Davis. (New York Pippin.) A remarkable-keeper and profitable market apple in many sections. Large. handsome, brightly striped with red, variable in flavor. Remarkably vigorous and fruitful. January to April.
Gano. Similar but superior to the Ben Davis, bearing a handsome and better quality of fruit that is large and dark red. Flesh is pale yellow, sub-acid, of good flavor and good keeping qualities. Very productive. December to March.
Grimes Golden. Fruit medium to large of transparent golden yellow and of best quality. Flesh tender. juicy, spicy and rich. November to February.
Jonathan. Fruit is medium sized, pale yellow, heavily flushed with red; the flesh is white, juicy, tender and mild sub-acid. Excellent quality. November to March.
Northern Spy. Fruit large, striped crimson in the sun; juicy, rich and aromatic, retaining these qualities until late Spring or Summer. Valuable as an Aphis-resisting sort. January to June.
Rome Beauty. (Royal Red, Rome, Phoenix). The fruit is large and handsome, yellow with crimson cheek, tender, juicy, with yellow flesh; uniform in size, fine in appearance and of good quality. November to February.
Stayman's Winesap. Fruit medium size, mostly covered with red on a yellow ground; flesh fine, crisp, juicy, very tender and highly flavored. November to April, but will keep until May. A favorite apple for cider.
Winesap. Fruit medium large, skin almost entirely covered with dark red; flesh yellow, crisp, with a rich flavor. December to March.
York Imperial. (Johnson's Fine Winter, Shepp). Fruit medium size, attractive, smooth, clear, waxen yellow, flushed with carmine. The flesh is crisp, firm, sub-acid and retains its flavor to the last. December to February.

## CRAB APPLES

5 to 7 feet. Each, $\mathbf{\$ 1 . 0 0}$; per dozen, $\$ 10.00$.
CRAB Apples do well on almost all soils. Trees are hardy and vigorous; come into bearing early and bear jelly.
Hyslop. Bears large crimson fruit in clusters. October.
Transcendent. Largest and best of the Siberian Crabs. Tree is extremely hardy, good grower and usually very productive. Fruit is bright yellow, striped with red and one and one-half to two inches in diameter. Flesh is crisp, juicy and sub-acid. August and September.
Whitney. Tree is a hardy, thrifty, upright grower; comes into bearing young and is very productive. Fruit is green, spotted with carmine. Flesh yellowish, crisp, juicy, splendid for eating and cider. August and September.
Yellow Siberian. Color of fruit is amber with red blush and of medium size. September.

Apples, standard, 30 to 40 feet. Pears, standard, 18 to 20 feet. Peaches, 16 to 18 feet. Cherries, sweet, 18 to 20 feet. Cherries, sour, 15 to 18 feet. Plums, 16 to 20 feet. Quinces, 10 to 12 feet.

We do not guarantee or replace plants, shrubs or trees at prices quoted.

# FRUIT TREES-Continued <br> <br> CHERRIES <br> <br> CHERRIES <br> \section*{HEART AND BIGARREAU (Sweet)} 

5 to 7 feet, first-class, each $\$ 2.00$; per doz.. $\$ 20.00$.
No home orchard is complete without some cherry trees. They are easily grown wherever the apple succeeds and they bear good crops yearly.
Black Tartarian. A beautiful purplish cherry of large size and superb quality, rich and juicy. Late June and July.
Governor Wood. One of the finest sweet cherries. Fruit is large, light red, juicy and delicious. Tree is healthy is large, light red, Juice.
Napoleon. Fruit of large size, white with red cheeks, firm and juicy. One of the best. Early July.
Rockport Bigarreau. Fruit large, round, light red, flesh firm and of fine flavor. Late June.
Yellow Spanish. A large handsome sweet cherry; yellow with light red cheek. firm and delicious. Late June.

## DUKE AND MORELLO (Sour)

4 to 6 feet, first-class, each, $\$ 1.20$; per doz., $\$ 12.00$
Dyehouse. One of the earliest cherries. Similar to the Early Richmond but ripens about a week earlier and is much sweeter. The fruit is medium sized, soft, red and juicy. Tree is hardy and very productive. June.
Early Rich mond or May. Unsurpassed for cooking. The tree is a free grower and reliable producer. The fruit is medium size, dark red, juicy and has an acid flavor. June.
English Morello. Fruit is large, dark red, nearly black, rich, juicy, with acid flavor. Tree is of dwarf growth. Late July.
Windsor. A large, delicious cherry; reddish-brown or liver colored. Valuable for late market or home use. July.


## PEACHES

4 to 6 feet, each, $\$ 1.00$; per dozen. $\$ 10.00$. F living on a farm, plant a small peach orchard for home use or a larger one for commercial purposes. If living on a city lot plant a peach tree in the back yard.
Champion. One of the finest freestone peaches. Large, creamy-white with slight blush. Flesh white, rich, sweet, juicy and of excellent flavor. August.
Crawford's Early. A very large, rich, yellow freestonc of the finest quality. Late August.
Crawford's Late. This peach is similar to Crawford's Early, but ripens two or three weeks later. Freestone. Late September.
Elberta. The fruit is large with golden-yellow shin covered largely with crimson; flesh is yellow, firm. juicy and of high quality, very prolific. Freestone. September.
Heath Cling. Fruit very large, creamy white with faint blush. Flesh white to the stone, juicy and sweet with a good aroma. October.
Old Mixon Free. The standard late white peach. A large tender freestone with tender, excellent white flesh. September.


## PEARS

## STANDARD AND DWARF

6 to 7 feet. first-class. each. $\$ 1.20$; per doz., $\$ 12.00$.
Pears should be included in all home orchards, as they will adapt themselves to as great a variety of soils as any other fruit.
Bartlett. One of the most popular sorts, both for home and market. It is large, handsome, waxy yellow with red blush. flesh buttery, rich, juicy and highly flavored. August and September
Duchess D'Angouleme. The skin is a dull greenish-yellow; flesh white, melting, juicy and well flavored. Tree is a vigorous grower. October and November:
Flemish Reauty. The fruit is large, the skin pale yellow; the flavor is sweet and melting. September and October.
Kieffer's Hybrid. Large, rich color and good quality. Fine for canning and preserving. October and November.
Seckel. Small. yellowish brown, of rich, delicious flavor, very popular for dessert. August and September.
Sheldon. Of the finest quality, rich and aromatic. Fruit is greenish russet with a red cheek. large size and somewhat flattened shape. September.


## FRUIT TREES—Continued

## PLUMS

## STANDARD ON PLUM STOCKS

5 to 7 feet, each, $\$ 2.00$; per dozen, $\$ 20.00$.
Plum trees require but little room to grow and are prolific bearers. For dessert, cooking and canning the demand is almost unlimited.
Abundance. Large, beautiful yellow, heavily over-spread with purple-carmine. Flesh yellow, juicy, sweet, firm, with tough skin. July.
Bradshaw. Very large, dark violet red; flesh yellow, juicy and good. Tree an erect, vigorous grower. Middle of August.
Burbank. Fruit very large, color cherry red, mottled; flesh yellow, sweet and firm. Hardy and vigorous grower. August.
Lombard. A favorite for canning. Fruit is medium size, oval and violet red. Flesh is yellow, juicy, pleasant and good. Late August.
Red June. An early ripening plum of good quality. Fruit medium to large, purplish-red; flesh yellow, solid, juicy and of good quality. Early August.
Shippers Pride. Large, showy, dark purple fruit. The flesh is sweet and firm. Se ptember.
Yellow Egg. A beautiful yellow, egg-shaped plum of large size; flesh yellow. Excellent for canning. Late August.

## QUINCES

## 4 to 5 feet, each, $\$ 1.00$; per dozen, $\$ 10.00$.

The Quince is a reliable cropper and requires but little care. While they will thrive in almost any soil, they prefer a heavy, moist, clay loam,

Apple or Orange. Large, round, bright golden yellow, cooks quite tender and has an excellent flavor. Valuable for preserving and for market. An abundant bearer.
Champion. The fruit is large, oval, of a rich color and excellent quality. Ripens late and keeps well until January.


## MULBERRIES

5 to 6 feet, each, $\$ 1.00$; per dozen, $\$ 10.00$.
Downing's Everbearing. One of the most prolific varieties, bearing an abundance of large, black, sub-acid fruits; hardy.

A small number of trees, properly planted and tender. will bring better results and bring more satisfaction to the grower, than twice the number half cared for.

## BLAGKBERRIES

Per dozen, $\$ 1.00$; per 100, $\$ 7.50$.
THE Blackberry is one of the most profitable fruits to grow when properly managed as it thrives well in almost any soil, but reaches perfection in a strong loam tending towards clay.
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 shippe".
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.


## DEWBERRY

The Dewberry is a trailing or vine form of the Blackberry. May be trained to run over stone piles, over rough embankments or rocisy hillsides and sometimes produces a very large crop of fruit annually on land where no other crop could be grown. The fruit is very large and always at a premium with the commission men or on the open market.

We are only offering one varicty which is considered the best of all Dewberries now in cultivation.

Lucretia. Fruit of high quality and very large, often one to two inches long and one inch in diameter. Perfectly hardy and a great bearer. Per doz., 75c; per 100, \$4.50.
By Express or Freight at Expense of Purchaser.

# GURRANTS, GOOSEBERRIES AND RASPBERRIES 

# By Express or Freight at Expense of Purchaser. 

Impossible to Accept Orders for Small Fruits Totaling Less Than One Dollar.


## GURRANTS Two-Year-Old Plants

A cool, moist soil is best adapted to the growth of Currants. Strong, moist loams with a considerable mixture of clay, are good. Even, well-drained, stiff clay will give good results.

The pruning is simple but very important. The younger the wood the finer the fruit. It is absolutely necessary, however, that a fair supply of the old wood be left in order to insure productiveness. No wood over three years old should be allowed to remain.
Cherry. Large, bright red berries with a thin skin and fine flavor.
Each, 45 c ; per dozen, $\$ 4.50$.
Champion. This is one of the best black currants; fruit is above medium size, with fine flavor......................................Each, 45c; per dozen, $\$ 4.50$. Perfection. Color of fruit is a beautiful bright red, of large size and a rich, mild, sub-acid flavor. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Each, 45 c ; per dozen, $\$ 4.50$. White Grape. The golden-white berries are borne is large, handsome clusters and have a mild, sub-acid flavor.............................Each, 45c; per dozen, \$4.50.

## GOOSEBERRIES

## Two-Year-Old Plants

One of the hardiest of the bush fruits. The best results are obtained by planting in moist, but not soggy, clay loam. but they will do reasonably well in any well drained soil if they are well fertilized once each year. The Gooseberries bear most freely on two and three year old wood. Therefore, the aim should be to keep a continuous supply of vigorous shoots. Prune freely to encourage upright growth.
Downing. Large, pale green and of splendid quality for both cooking and table use.

Eaclı, 50 c ; per dozen, $\$ 5.00$. Houghton's. Small to medium;
 roundish oval, pale red, sweet, tender.................. Each. 50c; per dozen. \$5.00. Industry. The best English variety yet introduced. Berries large, dark red color
 Smith's Improved. Large, pale greenish yellow, skin thin. of excellent quality. Each, 50 c ; per dozen, $\$ 5.00$.

## RASPBERRIES

Once the Raspberry patch is established, it requires very little cultivation. They will do well in any good soil, but thrive best in deep, moist (not over wet) soil. The lighter loams are preferable for the red varieties, while the heavier loams suit the black varieties best.

Pinch back the black varieties early when the young canes are about three feet high, in order to keep the bushes snug and compact. Mrlching will prove brneficial to both varieties, both in summer and winter. Black c ps should be planted in the siring.


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 $c$.nes in generous quantities until late in August. By that date, berries begin to ripen upon the young canes, which continue to produce berries in increasing numbers until severe frost. The berries are a bright crimson, of large size and surpassing 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 . . . Per dozen, $\$ 1.00$; per $100, \$ 7.50$.

Cardinal. Considered one of the very best purple berries, as they produce a fine quality of dark red or almost purple berries through a long season.

Per dozen, $\$ 1.00$; per 100, $\$ 7.50$. The following varieties are all, per dozen, 75c; per 100, $\$ 5.00$.
Cumberland. The largest black cap.
Cuthbert. Large, firm, deep rich crimson.
Gregg. A large black cap variety, fruit firm.
Kansas. The hardiest black cap; strong, vigorous.

# STRAWBERRIES AND GRAPE VINES 

## By Express or Freight at Expense of Purchaser.

Impossible to Accept Orders for Small Fruits Totaling Less than One Dollar.

## STRAWBERRIES

STRAWBERRIES will do well in any soil that will grow good corn. Soil should be made fine and loose. A generous supply of well rotted manure incorporated in the soil is a great benefit.
Strawberries are naturally shallow-rooted plants and must be encouraged continually to send their roots deep, in crder to be sure of a supply of moisture and to feed in a soil of even temperature.

Plant in spring-always the best time-and see that no soil is allowed to remain in the crown of the plant.

Mulching strawberries is done to keep the soil moist and cool in summer, to protect the berries from mud and dirt when ripe and to protect the plants in winter. The winter protection should not be put on until the ground freezes.

Strawberries for garden culture should be planted in rows three feet apart and one foot apart in rows. For field culture plant in rows four feet apart and eighteen to twenty-four inches apart in row.

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 unusually 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, September 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 blossoms may then 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, \$1.50.
Aroma. One of the finest for long-distance shipping. The large berries are bright red to the center, of conical shape with prominent and attractive yellow seeds.
Gandy. One of the best late varieties. Berries large, of fine form and excellent quality.
Glen Mary. Large to very large, sometimes flattened; sweet and rich.
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.
Wm. Belt. Berries very large, conical, bright red; of good flavor. The plant is strong, healthy and fruitful.


RED GRAPES
*Catawba. Berries large, round; when ripe a dark copper color; sweet, rich........Each, 45c; per dozen, \$4.50. Delaware. Small, light red, thin skin; very juicy, sweet, sprightly................ Each, 60c; per dozen, \$6.00.

Varieties marked with a SELECTED STOCK every year. vated and pruned.

## BLACK OR PURPLE

 GRAPES $\$ 4.00$. per dozen, \$3.50. per dozen, \$4.50.
## GRAPES

ALL TWO-YEAR OLD
This is one of the most satisfactory crops that can be grown, because it can be depended upon practically

Grape vines will grow almost anywhere, but they should be carefully culti-
*Concord. Large, black grape, hardy and productive; juicy and sweet. Each, 40c; per dozen,

Ives' Seedling. Dark purple, sweet. Each, 35c;

Moore's Early. Ripens ten days earlier than Concord; bunch and berry round and large. Each, 45c;


WHITE OR YELLOW GRAPES
Niagara. Bunch and berries large, light greenish white, slightly ambered........Each, 45c; per dozen, \$4.50.
Pocklington. Bunch and berry very large; attractive, golden yellow color......Each, 45c; per dozen, \$4.50. (*) are best for arbors.

## JncCullough's $\mathfrak{J l i g h}$ (Urade JFertilizers

## 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 elments of fertility in commercial fertilizers new. 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 developes 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 $1,000 \mathrm{lbs}$. 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

T
HIS 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, 10 c ; $5 \mathrm{lbs} ., 25 \mathrm{c}$; 10 lbs., 50c; 25 lbs., $\$ 1.00$; 50 lbs., $\$ 1.50 ; 100$ lbs., $\$ 2.50$.


THE GRASS AND GARDEN TONIC

T
HIS lime is especially 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 $2,000 \mathrm{lbs}$. 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 satisf ying 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 unequaled; 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; alter 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 Garden and should be used by all Amateurs, as it has for some time been used by professional Market Gardeners and Planters.

Per bag of 50 lbs., $\$ 1.00 ; 2$ bags ( 100 lbs.), $\$ 1.75$; 5 bags ( 250 lbs ), $\$ 4.25$; $10 \mathrm{bags}(500 \mathrm{lbs}$ ), $\$ 8.00$.

## AGRICULTURAL LIMESTONE DESTROYS SOIL ACIDITY-LOOSENS UP CLAY SOILS-TIGHTENS UP SANDY SOILS

$\mathbf{P}^{\mathrm{L}}$UTS 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.

Contains $87.97 \%$ Calcium Carbonate and $7.65 \%$ Magnesium Carbonate.

Packed in 100 lb . bags.
Per bag of 100 lbs., $\$ 1.25$; 5 bags, $\$ 5.00$; 10 bags (1,000 lbs.), \$8.00.

## 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., 35c; 10 lbs., 60c; 25 lbs., $\$ 1.25$; $50 \mathrm{lbs} ., \$ 2.00$; per bag of $125 \mathrm{lbs} ., \$ 4.00$.

## HALF AND HALF

$\mathrm{I}^{\mathrm{s}}$Should be applied at 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., $30 \mathrm{c} ; 10 \mathrm{lbs} ., 50 \mathrm{c} ; 25 \mathrm{lbs} ., \$ 1.00 ; 50 \mathrm{lbs} ., \$ 1.90^{\circ}$; 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., $30 \mathrm{c} ; 10 \mathrm{lbs.}, \mathrm{50c} ; 25$ lbs., $\$ 1.00$; 50 lbs., $\$ 1.50$; per bag of 125 lbs., $\$ 2.75$.

## MURIATE OF POTASH

$\mathrm{A}^{\mathrm{P}}$
PPLY 100 to 150 lbs. per acre, usually with other fertilizers. This must be used with great care as it is very powerful. Excellent for potatoes, corn, grain,

## HYDRATED LIME

THIS lime is used for sweetening acid or sour soils. 3 lb. package, 10 c ; bag of $50 \mathrm{lbs} ., \$ 1.00 ; 5$ bags ( 250 lbs.), $\$ 4.00$; 10 bags ( 500 lbs.), $\$ 7.50$.

## 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; 25 lbs., $\$ 2.65 ; 50$ lbs., $\$ 5.00 ; 100$ lbs., $\$ 9.50$.

## LAND PLASTER

TF 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, $\$ 2.75$.

## EXCELSIOR PLANT FOOD

## For Ferns and Other House Plants

$\mathrm{A}^{-}$I 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.
(Fertilizers continued to next page.)

## FERTILIZERS-Continued

## NITRATE OF SODA

CARRIES approximately $20 \%$ of ammonia and comes in crystals which vary in size. It is sometimes lumpy and the lumps should be crushed to a powder before the material is applied. Owing to the fact that Nitrate of Soda is a highly concentrated form of plant food, care should be used in applying the material to plants on the leaf surface.

Use a top dressing at the rate of 100 lbs . per acre between the rows when the plants are well established, on the following vegetables. Cabbage, Cauliflower, Egg Plant, Lettuce, Spinach, Beets, Celery, Onions. For Asparagus, a top dressing of 250 lbs . per acre when the young shoots are starting in the spring. For Strawberries apply between the rows at the rate of 100 lbs . per acre at the time of blossoming. For the home garden apply a solution of one ounce to two gallons of water.

Fruit:-The old idea that fruit does not require any fertilizer has been entirely dispelled in the last five years. The most up-to-date fruit growers are now applying 5 lbs. of Nitrate of Soda to apple and pear trees 20 to 25 years old, in a circle on the ground 3 ft . wide underneath the tips of the branches. $1 \mathrm{lb} ., 15 \mathrm{c} ; 2 \mathrm{lbs} ., 25 \mathrm{c} ; 10 \mathrm{lbs} ., \$ 1.15$; 25 lbs., $\$ 2.00$; 50 lbs., $\$ 3.50$; $100 \mathrm{lbs} ., \$ 6.50$.

## SULPHATE OF AMMONIA

CONTAINS approximately $25 \%$ of ammonia and comes U in fine crystals which is very nice to apply broadcast. Owing to its firmness and keeping qualities it is preferred by some gardeners and fruit growers to Nitrate of Soda. Owing to the fact that it carries $5 \%$ more ammonia to the weight than Nitrate of Soda, the user should apply four pounds of Sulphate of Ammonia where he uses 5 lbs. of Nitrate of Soda. 1 lb., 15c ; 2 lbs., 25c; 10 lbs., $\$ 1.15 ; 25$ lbs., $\$ 2.65$; 100 lbs., \$9.00.

## ZENKE'S NEW PLANT LIFE

 (Liquid)It is a Plant Food containing in proper percentage All Elements essential to Plant Growth.

Mix one quart with 50 gallons of water and water plants sufficiently to saturate soil. Use about one quart to one square foot of soil.

It is immediately available to absorption by plants and saves time and labor. 8 oz . can, 25c; gallon, $\$ 3.00$. (One gallon is sufficient to make 200 gallons of solution.)

## Moss, Peat, Etc.

Moss, Green Sheet. For hanging baskets, etc. Per bale, 40 c ; bundle of five bales, $\$ 1.50$.
Moss, Sphagnum. For packing plants and growing orchids, etc. 1 lb., $10 \mathrm{c} ; 3 \mathrm{lbs} ., 25 \mathrm{c} ; 7 \mathrm{lbs} ., 50 \mathrm{c}$.
Peat, Jersey. Per bushel, $\$ 1.25$; per bag of two measured bushels, $\$ 2.00$.
Potting Soil. Peck, 30c; per bushel, \$1.00

## Insecticides and Fungicides <br> Liquid Insecticides and Poisons cannot be sent by mail.

## Proper Use of <br> Insecticides and Fungicides

The annual loss of fruit and vegetables from ravages of insects and fungous diseases is not due to poor material, but is primarily caused by lack of properly indentifying the insect or fungous disease affecting the crop and applying the wrong material, or applying the material after it is too late to control the insect or disease.

To control insects with biting mouth parts which chew the surface or eat part or all of the leaf, like potato bugs, apply some form of Arsenate poison to be taken inwardly.
To control insects with sucking mouth parts, such as aphis and thrip, which are small green or black insects usually found on the underside of the leaves or tender portions of the stems of the plant, apply a contact yoison such as Nicotine Sulphate, using soap as a spreader, with a sprayer which furnishes sufficient pressure to bring the material in contact with the body of the insect.

To control rose, oyster shell, scurfy and San Jose scale, apply a contact spray which destroys the carcass of the insect, such as Lime-Sulphur or Scalecide.

Fungous diseases affecting the leaves, stems and fruit, can be effectively controlled by frequent applications of fungicides, which should be applied before the disease starts and will tend to hold it in check even after the disease has made its appearance.

Fungous or bacterial diseases affecting the roots or underground parts cannot be controlled by application of fungicides. The only control for these diseases is soil sterilization by steam or drench method with Formaldehyde.

In general, the following list of insecticides and fungicides are made for the purpose of controlling certain insects and fungous diseases and if the users will follow directions they will obtain good results.

## Ant Eradicator

Useful against ants in lawns, gardens, etc. 8 oz . can, 25c.

## Arsenate of Lead (Dry Powdered)

## Nu-Rex Form

$I^{T}$T 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 $11 / 2$ 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. $1 / 2 \mathrm{lb}_{.,}$pkg., 35c; $1 \mathrm{lb} .$, pkg., $60 \mathrm{c} ; 5 \mathrm{lb}$. pkg., $\$ 2.50$; $121 / 2 \mathrm{lb}$. pkg., $\$ 5.65$; 25 lb. pkg., $\$ 10.00$.

## 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 o spray liquid. 1 lb. can, $40 \mathrm{c} ; 5$ lbs., $\$ 1.70 ; 10$ lbs., $\$ 2.75$; 20 lbs., $\$ 4.50 ; 50$ lbs., $\$ 11.00 ; 100$ lbs., $\$ 20.00$.

## "Black Leaf 40"

$\mathbf{I}^{\mathrm{T}}$$T$ 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 Aphis indoors use $3 / 4$ pint "BLACK LEAF 40 "' to 100 gallons of water or 1 teaspoonful to 1 gallon of water, with sufficient soap in water to make good suds. 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 ; $1 / 2 \mathrm{lb}$. tin, $\$ 1.00$ $2 \mathrm{lb} . \operatorname{tin}, \$ 3.25 ; 10 \mathrm{lb} . \operatorname{tin}, \$ 13.75$.

## Bordo Lead Mixture (Paste)

AN Insecticide and Fungicide combined in one very of fective 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. $1 \mathrm{lb} . \mathrm{can}, 35 \mathrm{c}$; $5 \mathrm{lbs} ., \$ 1.50$; 10 lbs., $\$ 2.75$; 25 lbs., $\$ 6.25$.

## Bordo Lead Powder

COOMBINED Insecticide and Fungicide. Kills Bugs and prevents Blight, Rot, Mildew and Fungus, in one spraying operation. Can be used for wet spraying or dry dusting. Can be used for fruits, vegetables or flowers.

1 lb. makes about 7 gallons-ready to apply.
$1 / 2 \mathrm{lb} . .35 \mathrm{c} ; 1 \mathrm{lb} ., 65 \mathrm{c} ; 5 \mathrm{lbs} ., \$ 3.00$;
10 lbs., $\$ 5.00$

## INSECTICIDES AND FUNGICIDES-Continued

## Bordo Mixture (Paste)

AFUNGICIDE 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. $1 \mathrm{lb} . .40 \mathrm{c}$; 5 lbs., $\$ 1.75$; 10 lbs., $\$ 2.75$; 20 lbs., $\$ 4.50$; 50 lbs., $\$ 9.00$; 100 lbs., $\$ 16.00$.

## Bordo 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 Bordo 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. $1 / 2 \mathrm{lb}$. pkg., $30 \mathrm{c} ; 1 \mathrm{lb}$. pkg., $50 \mathrm{c} ; 5 \mathrm{lbs} ., \$ 2.25 ; 10 \mathrm{lbs}$. , $\$ 4.00$.

## 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 Tine. $1 \mathrm{lb} ., 20 \mathrm{c}$; 3 lbs ., 45 c ; 5 lbs., 70c; $121 / 2$ lbs., $\$ 1.40$.

## Cutworm Food

T
HE worm seeks the Food in preference to the plant. For plants transplanted from indoors, apply an even teaspoonful around each plani 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 $\overline{7} 5$ to 100 plants. $1 \mathrm{lb} ., \mathbf{3 5 c}$; 5 lbs., $\$ 1.40$.

## 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 remeds. $1 / 2 \mathrm{lb} ., 20 \mathrm{c} ; 1 \mathrm{lb} ., 30 \mathrm{c}$; 5 lbs., $\$ 1.25$; in bulk, 25 lbs., $\$ 5.50$.

## Zenke's Liquid Fungicide

POWERFLL, reliable remedy for Leaf Spot. Leaf Rust, Scab, Mildew, Black and Brown Rot and most other Fungoid troubles. Per gallon, $\$ 3.00$. (Sufficient to make 50 gallons of solution).

## Grape Dust

ANON-POISONOLS 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.
$1 \mathrm{lb} ., 25 \mathrm{c}$; 5 lbs., $\$ 1.00$; 10 lbs., $\$ 1.75$.

## Hellebore Powder

FOR destruction of Slugs. Worms, Caterpillars. etc. Apply with powder bellows and dust evenly orer plants. early in the morning while plants are wet with dew. $1 / 4 \mathrm{lb} ., 20 \mathrm{c}$; $1 / 2 \mathrm{lb} ., 35 \mathrm{c}$; $1 \mathrm{lb} ., 60 \mathrm{c} ; 5 \mathrm{lbs} ., \$ 2.75$.

## Insect Powder

FOR Worms, Flies. Aphis. and almost all kinds of insects. $1 / 4 \mathrm{lb} ., 30 \mathrm{c}$; $1 \mathrm{lb} . . \mathrm{S} .00$.

## Zenke's <br> Compound Plant Insecticide

$I^{s}$S a contact remedy (Liquid). Very effective against Plant Lice. Black and White Fly, Mealy Bugs. Scale Insects, Eggs and Larra.
A very effective wash for Palms and Rubber Plants. S oz. can, 25c: per gallon, \$1.50. (One gallon is sufficient to make 20 to 35 sallons of solution).

## Rex Lime-Sulphur Solution

$\mathrm{F}^{o}$OR fall, winter and early spring spray. Destroys Sa. Jose Scale. Peach Leaf Curl. Bud Moth. Apple Aphis. Blister Mite, any Scale Insects or Bark Lice. 1 gallon will make S gallons spraving liquid. $1 \mathrm{qt.}$.40 c ; 1 gal.. 65 c ; 1 gal., $\$ 1.00$; 5 gal., $\$ 3.50$; $1 / 2 \mathrm{bbl}$. ( 25 gals.), $\$ 8.00$. 1 bbl. . (50 gals.), $\$ 14.00$.

## S. W. Dry Lime-Sulphur

TS a combination of Lime and Sulphur which can be used 1 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.

From 10 to 12 pounds of S. W. Dry Powdered LimeSulphur 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 $11 / 2$ pounds of Dry Powdered 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 stone fruits. 1 lb . can 40c; 5 lb . can $\$ 1.75 ; 10 \mathrm{lb}$. can, $\$ 3.00$; 25 lb . can, $\$ 6.00$.

## Nico-Fume Liquid

HOR destroying Aphis. Thrip and Red Spider.
Contains 40 per cent nicotine.
Use one to two teaspoonsful of Liquid to each gallon of water. This is a contact remedy. $1 / 4 \mathrm{lb} ., 65 \mathrm{c} ; 1 \mathrm{lb} ., \$ 2.00$; 4 lbs., $\$ 7.50$; S lbs.. $\$ 14.50$.

## Nico-Fume Paper

S
TRIPS 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, $\$ 1.25$; 144 sheets. $\mathbf{\$ 5 . 0 0}$; $2 S S$ sheets. $\$ \mathbf{9 . 5 0}$.

## Paris Green

APOISONOCS 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. 1̌1 lb.. 20c; 1lb., 65c; 5 lbs., $\$ 3.00$.

## Scalecide

SCALECIDE is an asphaltum base petroleum oil from which the light inflammable and heary lubricating oils have been removed. but leaving the natural sulphur in the oil. combined with sulphonated regetable oil, and naphthaline, and chemically treated to make it soluble or water-miscible. It mixes instantly with water and stays mixed.

Add one gallon of "Scalecide" to 15 gallons of water. stir, and you are ready to spray any kind of tree when the leaves are ofi, provided it is not too cold to be comfortable.

Use a fine spray nozzle and thoroughly wet the tree from the topmost twig down to the ground and around the base of the tree and you can rest assured that you will have accomplished everything you could with any other dormant spray or combination of sprays. and in addition. some things they cannot do.

If used according to directions, Will hill erery San Jose Scale that comes in contact with it.

1 qt.. 65 c ; 1 gallon. $\$ 1.60$; 5 gallons, $\$ 6.80$; 10 gallons. $\$ 11.70 ; 30$ gallons. $\$ 23.85 ; 50$ gallons. $\$ 43.00$.

Insacticides continued to next page.)

# INSEGTIGIDES AND FUNGIGIDES-Continued 

## 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.,60c; 1 gal.,\$1.40; 5 gal.,\$5.50.


## Slug Shot

ANON-POISONOUS powder and a popular Insecticideit requires no further mixing or preparation-easily applied, and not injurious or dangerous to animals, the person applying it, or fruits and vegetables treated. Very effectual in destroying Caterpillars, Currant, Goose-berry and Cabbage Worms, Potato, Melon, Squash and Cucumber Bugs, Rose Slugs, etc.

When used on Melon, Squash and Cucumber Vines should be put on lightly. 1.lb., carton, 20c; 5 lbs., 60c; 10 lbs., \$1.15.

## Sulphur, Powdered

USED principally to prevent and cure mildew on Roses and Plants in greenhouses. $1 \mathrm{lb} ., 15 \mathrm{c}$; $2 \mathrm{lbs} ., 25 \mathrm{c}$; 5 lbs., 50c; 10 lbs., 90 c.

## Sulpho-Tobacco Soap

DESTROYS Black and Green Aphis, 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, 10 c ; (by mail 15c); 8 oz . cake, 20c; (by mail 25c.)

## Tobacco Dust

ASURE remedy for Green Fly, Aphis, Fleas, Beetles, etc. $1 \mathrm{lb} ., 10 \mathrm{c} ; 4 \mathrm{lbs} ., 25 \mathrm{c} ; 10 \mathrm{lbs} ., 50 \mathrm{c} ; 100 \mathrm{lbs} ., \$ 3.00$, TOBACCO DUST FOR FUMIGATING. $1 \mathrm{lb} ., 10 \mathrm{c}$; 3 lbs., 25c; 10 lbs., 60c; 25 lbs., $\$ 1.25$; 100 lbs., $\$ 4.00$.

## Tobacco Stems

USED for fumigating plants to kill insects, and as a mulch for Roses, Asters, Lettuce, etc. $1 \mathrm{lb} ., 5 \mathrm{sc}$; bale of about 125 lbs., \$2.00.

## Weed Killer, Key Brand

AHIGHLY 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., $\$ 7.00$.

## 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., | $50 \mathrm{c} ;$ | 3 | lbs., |
| :--- | :--- | :--- | :--- | :--- |



## HOW AND WHEN TO SPRAY

## PLANT

Apple

Pear

Peach

Plum

| 1st Spray | 2nd Spray | 3rd Spray | 4th Spray | 5th Spray |
| :---: | :---: | :---: | :---: | :---: |
| (Dormant Spray). | (Preblossom | (Caly x Cup | Fourteen days af- | About July 25th |
| Apply in fall after | Spray). When pink | Spray). Just after | ter petals fall. Apply | apple Bordeaux and |
| leaves fall or in spring | shows in cluster buds, | petals fall, before | Bordeaux and Arsen- | Arsenate of Lead. |
| before buds open. | before buds open. | calyx closes. Apply | ate of Lead. Con- | Controls beetle. rot, |
| Apply Lime Sulphur | Apply Bordeaux with | Lime Sulphur with | trols apple blotch, | apple blotch and cod- |
| or Scalecide. Con- | Arsenate of Lead (add | Arsenate of $L$ e ad | codling moth and | ling moth. |
| trols San Jose scale, | Black Leaf Forty if | (add Black Leaf 40 | canker worm |  |
| scurfy scale, aphis | aphis are present. | if aphis are present) |  |  |
| eggs and mite eggs. | Controls apple scab, curculio, canker worm and aphis. | Controls apple scab, sooty fungus, curculio, codling moth and canker worm |  |  |
| Same as apple. | Same as apple. | Same as apple. |  |  |
| (Dormant Spray). | Ten days after the | Ten days later | Three weeks after | Directions for |
| Apply in fall after | petals fall or when | than No. 2. Apply | No. 3. Apply com- | Making 8-8-50 |
| leaves fall or in spring | the blossom husks | commercial Li mie | mercial Lime-Sulphur | (See next page) |
| before buds open. | are shedding. Apply | Sulphur 1-75 or self | $1-75$ or self boiled |  |
| Apply Lime Sulphur | Arsenate of Lead. | boiled Lime-Sulphur | Lime-Sulphur 8-8-50. |  |
| or Scalecide. Con- | Controls rot and | 8-8-50 and Arsenate | Controls scab and |  |
| trols leaf curl, San | scab. | of Lead. Controls |  |  |
| Jose scale, aphis, and scab. |  | curculio, pustular spot, scab, rot and aphis eggs. |  |  |
| (Dormant Spray). | When buds are | (European vari- | (European vari- |  |
| Apply in fall after | Swelling. Apply | eties). After calyx | eties). Repeat No. 3 |  |
| leaves fall or in spring | Bordeaux with Ar- | drops. Apply Bor- | two weeks later. |  |
| before buds open. | senate of Lead. Con- | deaux with Arsenate | (American and Ja- |  |
| Apply Lime-Sulphur | trols rot and curculio. | of Lead. (American | panese varieties). |  |
| or Scalecide. Con- |  | and Japanese vari- | Apply self boiled |  |
| trols San Jose scale |  | eties). Use self boiled | Lime-Sulphur instead |  |
| and aphis eggs. |  | Lime-Sulphur instead | of Bordeaux. Con- |  |
|  |  | of Bordeaux. | trols rot, curculio and |  |
|  |  |  | aphis eggs. |  |

## HOW AND WHEN TO SPRAY-Continued



## Spraping Tlumps 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

T
HESE 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 ${ }^{\frac{1}{2} 2}$-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, $31 / 2$ gallons. Equipment, 4 feet 6 -ply hose, 3 feet spray pipe, two spray nozzles. Price. ... . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 14.00$
No. 1. Capacity, 6 gallons. Equipment, 5 feet 6 -ply hose, 5 feet spray pipe, two spray nozzles. Price.
18.00

No. 3. Capacity, 12 gallons. Equipment, 10 feet 6 -ply hose, $71 / 2$ 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. $\qquad$ Price. .
25.00

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. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 32.00$ This machine without wheels. Price. .

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..
Nos. 1 and 3 Sprayers can be furnished with solid all cast brass pumps for.
additional $\$ 5.00$
No. 4 Sprayer can be furnished with solid all cast brass pump for additional, $\$ 6.00$


## Bamboo Brass Lined Spray Poles

12-foot lengths. . . . . . . . . . . . . . . . . net price, $\$ 4.50$ 10-foot lengths. . . . . . . . . . . . . . . . . net price, 4.00
8 -foct 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.


## Sean flower Spraping Outfits

T
HE accompanying illustration presents a view of the Bean Power Sprayer. These sprayers are made in several sizes to meet all the requirements of orchardists, whether orchards are large or small. They have proved to be cconomical, labor-saving and more thorough in applying insecticides than any other device on the market.

## "WHY the

## BEAN

is the BEST",
FIRST-The Bean Pressure Regulator maintains a uniform pressure; saves fuel and wear of engine; is safe and dependable; makes possible the removal of any valve in the pump while full pressure is maintained on the air chamber, and while engine is operating


SECOND-The Bean Threadless Ball Valves (Reversible and Interchangeable Seats) may be removed without stopping engine; no threads; saves time; valves easily cleaned.
THIRD-Porcelain lined Cylinders, guaranteed to last the life of the pump.
FOURTH-Underneath suction; tanks easily emptied; engine throws more liquid with less power.
FIFTH-Only pump without stuffing box-This saves labor and trouble.
SIXTH-Bean Eccentrics increase the life of the pump and the durability of the outfit.
SEVENTH-One piece steel bedplate-makes outfit rigid, durable and light.
EIGHTH-The Bean Rocking Bolster; special truck reduces weight of outfit; adjustable on all kinds of ground.
NINTH-Novo Engine; simple to operate; runs under all conditions; may be removed from outfit and used for other purposes.
TENTH-Bean Refiller; saves time and labor; simple to operate; one man can fill the spray tank in 5 minutes. Besides these features the Bean equipment has many other strong points which the fruit growers should consider before purchasing an outfit.

## SPECIFICATIONS

The Bean Giant Triplex Sprayer Outfit No. 626, with giant three cylinder pump, which has $23 / 4$-inch cylinders, porcelain lined, $27 / 8$-inch stroke, 48 R. P. M., $91 / 2$ gallons per minute capacity, 250 lbs . pressure. This outfit complete with one Novo Engine, 4 H. P.; 200 gallon tank; complete rotary agitator; special steel platform; hinged wood covers; special low down steel truck, 4 -inch grooved tires; 50 feet Bean $5 / 8$-inch high pressure spray hose; also one Bean Spray Gun. Everything put together in good working shape and tested out before leaving the plant.

This outfit is made for the big orchard man who wants an outfit that will deliver the goods without any trouble when he starts his spraying. It is simple to operate and will last a lifetime if properly cared for.

The Bean Power Sprayers are made in different sizes to meet the demands of the fruit growers. The same quality of equipment is used in each outfit.

As prices vary according to size and specifications of equipment, write us for firm prices on outfits to meet your requirements, before placing your order.

## SPRAY PUMPS AND SPRAYERS-Continued

## 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......\$5.50. 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. . . . . . . . . . $\$ 4.25$.
Eight-foot Pipe Extension.....75c. Bordeaux Nozzle. . . . . . . . . . . . . $\mathbf{\$ 1 . 0 0}$.
Graduating Vermorel Nozzle. . . . . . . . . . .90c.


## AUTO COMPRESSED AIR SPRAY

$\mathrm{C}^{4}$AN 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, greenhouses, 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 AutoPop Nozzle. . . . . . . . . . . . . . . . . . . . . . . . . . . \$7.50. Brass Extension. Two feet, per length.... . 60 . Elbow. .30.


## BRANDT EASY SPRAYER

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. Each. . $\$ 2.50$.


T
HE pump of Auto Spray No. 5 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 $31 / 2 \mathrm{ft}$. of $3 / 8 \mathrm{in}$. 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. $\qquad$ .$\$ 5.00$
.
.30 c Brass extension, extra. . . . . .60c.

Elbow, extra.

## 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 $3 / 8$ inch discharge hose and "Seneca" nozzle, price..
. $\$ \mathbf{5 . 5 0}$.

## THE ROBERTSON COMPRESSED AIR SPRAYER



T
HIS Sprayer is easy to operate and does 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 tcp of mouldings, window casings, behind steam pipes, and other difficult places inaccessible with the ordinary sprayers. Capacity one quart. Tin pump and reservoir, each, 75 c. Brass pump and reservoir.

## ATOMIZERS, POWDER DUSTERS, Etc.-Continued

## 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 $\frac{3}{16}$ inch brass ball
plying disinfectants. Capacity, one quart. Galvanized. Price, each............................. . . 90c.

ACMECYCLONE ATOM. IZER. Well made of heavy, bright tin plate. Tank 4 x 5 inches, air chamber $141 / 2$ inches long, $13 / 4$ 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. .
 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. Glass Tank Atomizer

## ACME GLASS TANK

ATOMIZER. Tank, standard quart Mason jar. air chamber $13 / 4$ inches in diameter, $18 \frac{1}{2}$ 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.



#### Abstract

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 ally desired quantity. The elbow may be detached, if desired. We also furnish a spreader for distributing the blast. Each............................. . $\$ 1.50$. WOOLASON'S POWDER BELLOWS. Single cone; small, $\$ 2.25$; single cone, large, $\$ 3.25$.


## LEGGETT'S CHAMPION INSECTICIDE DUSTER

The machine that started the growers "Dusting." Weighs about 6 lbs. Without tubes is 27 inches long. Each machine is packed in a case complete, comprising four 16 inch tubes, six nozzles and two straps.

Cased for shipping, weighs 17 lbs . The reservoir holds 4 lbs . of Paris Green (or over a quart of powder).

When all tubes are attached foliage about ten feet high may be reached. Price, $\$ 15.00$.


## little giant

## DRY POWDER DUSTER

For Farm. Garden, Vineyard, Tobacco Fields, etc. Machine weighs about six pounds.

Furnished with three 16 inch tubes, five nozzles and strap. Weight, cased, about 15 lbs . Capacity about one quart.
 For low growing crops only.

Smaller than the Champion, but also a very good machine, especially when Paris Green and like powders are to be applied.

## FEENY'S HAND DUST GUN

The Feeny Dust Gun is ideal for applying all kinds of powdered insecticides and fungicides, to trees, plants. vegetables. etc., for the control of all insects and fungus pests: for use in the flower garden and in green houses. May also be used to control vermin on poultry and in poultry houses and to apply all other powdered materials for various uses, such as to kill flies, roaches. etc. In using the Feeny Dust Gun it is essential that the powder be dry, fine and free from lumps, in order to insure perfect success. For any and


Feeny Dust Gun all of the above uses the Feeny Dust Gun is indispensable. Price. ....... $\$ 2.25$.

## Jlorticultural Gools and Sundries

BASKETS, WIRE HANGING. 8 -inch, 15 c ; 10 -inch, 20c; 12-inch, 25c; 14-inch, 35c; 16-inch, 45c; 18inch, 65c; 20-inch, 80 c .

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..
$\$ 1.50$
BELLOWS, WOODASON'S, Single cone, small.
Single cone, large.
$\$ 2.25$
BLUE GRASS STRIPPER. Each.
\$1.75
CULTIVATOR, NORCROSS. 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. . . . . $\$ 1.25$

FRUIT PICKER. Made of galvanized steel wire; attaches to pole of any length.
Price, without pole.
.50c
GARDEN LINE. About 150 feet. . . . . . . . . . . . . . . . . $\$ 1.25$
GLASS CUTTER, ECLIPSE. The best cheap cutter on the market. For all around usefulness we prefer it to a diamond. Each, 20c; per dozen. . . . . . . $\$ 2.00$

G L A Z IN G PEERLESS, Will stop your glass from sliding. Made of galvanized steel wire. No rights or lefts. Can be used on either side.


No. 1. For small single-thick glass . . . . . . . . . . . . . . . . . 75 Cm No. 2. For large single-thick glass. . . . . . . . . . . . . . . . . . . . 75 . No. $21 / 2$. For double-thick glass. . . . . . . . . . . . . . . . . . . . . 75 .

GLAZING POINTS, ZINC CITY. Are positively the


GRASS HOOKS. American....50c
GRASS HOOKS. English, riveted back.
GRASS SHEARS. American. . . .50c GRASS SHEARS. Imported..... . . . . . $\$ 1.25$ GUNS, INSECT POWDER. CYCLONE... best; last forever; a sure preventive of glass slipping. Effective on large or small glass; easy to drive, easy to extract. Per lb.60c


These tools are designed to save labor, to garden better, and to last longer than the ordinary tools used by most gardeners.
The cultivators can be instantly adjusted by turning thumb screws and moving the swinging arms to any desired angle.

When used with all the teeth in a straight row, this tool not only cultivates but is better than a common rake for preparing the seed bed, because the longer, broader teeth do more thorough work. 9 Tooth Hand Cultivator, each. $\qquad$ .$\$ 1.50$ No. 4 Jr. Hand Cultivator, each.
CANES. Six to nine feet long, for plant stakes. Per 100. . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 1.75$
CANES. Japanese, green dyed, 3 feet long. Per 100. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 1.75$


EDGING KNIFE. For cutting edges of walks and beds.

## 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 Exterm:nator never grow again, the rost 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..
FORKS, DIGGING OR SPADING. . $\$ 1.50$ to $\$ 1.75$ FORKS, HAND-WEEDING.

Small size, 25c; large size, 40c.


Small size, 25c: large size,


HEDGE SHEARS. English, 5 in ,\$2.00; 8 in.,\$3.00; 9 in. $\$ 3.25$.
HOES, ENGLISH SCUFFLE OR PUSH. Imported, six inches, without handle.......... 90 c
HOES, STANDARD SOCKET GARDEN......85c " ONION. One end square; opposite end one prong. . . . . . . . . . . . . ........... . 50 c " ONION. One end square; opposite end two prongs. . . . . . . . . . . . . . . . . . . . 60c " GRUBBING. With handle........... $\$ 1.00$ " SANDUSKY. . . . . . . . . . . . . . . . . . . . . . 1.00
HOSE, RUBBER. (See Lawn Requisites.)
KNIVES, PRUNING. . . . . . . . . . . . . . . $\$ 1.00$ to $\$ 1.50$ " BUDDING. . . . . . . . . . . . . . . $\$ 1.00$ to 2.50 : ASPARAGUS. American. ........... 40c LABELS, WOOD. For pots, painted.
$4 \times 5 / 8$-inch, per $100,25 c$; per $1,000 \ldots \ldots . \$ 1.50$ $5 \mathrm{x} \quad 5 / 8$-inch, per $100,25 \mathrm{c}$; per $1,000 \ldots . .2 .00$ $6 \times 5 / 8$-inch, per $100,30 c$; per $1,000 \ldots . . .2 .50$ $8 \times 7 / 8$-inch, per $100,75 \mathrm{c}$; per $1,000 \ldots \ldots .6 .00$ $10 \times 7 / 8$-inch, per 100, $\$ 1.00$; per $1,000 \ldots 8.00$ $12 \times 11 / 8$-inch, per $100, \$ 1.25$; per $1,000 \ldots 10.00$ LABELS. Tree, notched, copper wired: Per 100, 30c; per 1,000. $\$ 2.50$ LABELS. Tree, copper, No. 1, per 100. ...... \$2.00 No. 2, per 100....... 2.50
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 prominentMarketGardeners all over the country. Each, 65c; per dozen...................... $\$ 6.75$

## HORTICULTURAL TOOLS AND SUNDRIES-Continued

LAWN ROLLERS, LAWN MOWERS, ETC. See pages 106-107.


MASTICA. For glazing greenhouses. The use of Mastica avoids the necessity of repeatedly reglazing the house, sáving much time and expense. With Mastica, can bed 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).
One gallon. . . . . . . . . . . $\$ 2.90$
MASTICA GLAZING MACHINE (see cut)...... $\$ 2.90$
MATCH PLANT STICKS, painted green. 12 inch, per $100,25 \mathrm{c}$; per $1,000, \$ 1.75$. 18 inch, per $100,30 \mathrm{c}$; per $1,000, \$ 2.00$.

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. $76 \times 76$ in.
Price. . . . . . . $\$ 3.50$


MATTOCK, LONG CUTTER. With handle. . . . . . . . . . $\$ 1.75$

MATTOCK, CRONK'S GARDEN.
.90c
MOLE-TRAP, RITTENHOUSE. The best trap on the market. No mole can pass under this trap and live. .90c

OIL, LAWN MOWER. This is a handy can filled with fine oil, manufactured exprcisly for lawn mowers, bicycles, etc. Per can. . . . . . . . . . . . . . . 20c

POST HOLE DIGGER. Hercules. . . . . . . . . . . . . . . . $\$ 2.25$

POTATO HOOKS. 4-tine, $\mathbf{\$ 1 . 2 5}$

PLANT BED CLOTH. A cheap substitute for glass, answering many uses equally well. Light and easily shipped; made of stout, tarred muslin that sheds water, protects against weather, etc.


PLANT BED CLOTH. Medium grade, per yard.......30c Write for special prices on large lots.

WOOD PLANT STAKES, painted green. $7 / 8 \times 7 / 8$ inches, 6 feet long. Each 15 c ; per dozen $\$ 1.25$; per $100, \$ 9.00$.


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...... $6 \mathrm{ft} ., \$ 1.50 ; 8 \mathrm{ft}$. , $\$ 1.75 ; 10 \mathrm{ft}$. ; $\$ 2.00$.
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.
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. $1 . \ldots . . . \$ 3.00$
No. $2 . . . .{ }^{2} .75$


PRUNING SHEARS, HAND

## PRUNING SHEARS, HAND.

California Pattern. 9 inch.
Wiss heayy, extra fine quality, 9 inch.... . . . . . . . 3.00
Ladies' Hand.

## HORTICULTURAL TOOLS AND SUNDRIES-Continued

PUTTY, TWEMLOW'S LIQUID, GLAZIN G. 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...................... $\$ 3.00$
PUTTY, BLACK, PEERLESS GLAZING CEMENT. For glazing greenhouses. Durable and inexpensive. Apply with machine.
Gallon, $\$ 1.75$; 5 gal. kit., $\$ 8.00$
PUTTY BULB. A useful tool fov applying liquid putty and glaz-
 ing greenhouses.

RAFFIA, NATURAL, The best tying material for plants, also used for making hats, baskets, etc. Per lb., 50c; 5 lbs., $\$ 2.25$.

## 128

RAFFIA, COLORED, For making baskets and fancy work in following colors: Black, Blue, Brown, Green, Orange, Pink, Red and Yellow. 1 oz., 15c; 1 lb., \$1.25.
RAKES. See page 105.
SAWS, PRUNING. 16 -inch, 90 c ; 18 -inch.
. $\$ 1.00$
SAWS, PRUNING, DISSTON SWIVEL. Swiveled in steel frame to cut in any position............... $\$ 2.00$
SASH, HOTBED, UNGLAZEDMade from strictly clear cypress lumber. White lead used on the tendons, and iron dowel pins at the corners.
No. 1. $3 \times 6 \mathrm{ft}$., three rows, 10 -inch glass. Each . . . . . . . . . . $\$ 2.75$
No. 2. $4 x 6 \mathrm{ft}$., five rows, 8 -inch glass. Each. .i.... $\$ 3.00$
SCYTHES, AMERICAN . . . $\$ 1.75$
SCYTHES, AMERICAN. Weed SCYTHES, ENGLISH MAWN 30 -inch, $\$ 2.75$; 32 -inch, $\$ 2.85$ 34-inch. . . . . . . . . . . . . . . $\$ 3.00$
SCYTHES SNATHE, PEERLESS Each.
.$\$ 1.50$
SCYTHE STONES, TALACRE.


English round. . . . .40c SCYTHE STONES, TALACRE. American round.... 25 C


SEED SOWER -CAHOON. The difficulty in sowing is entirely overcome by the use of $t h e$ C a h o o n Broadcast Seed Sower, which can be handled with ease by an entirely inexperienced person, and will sow much. more evenly than can be
hand. Weight when packed for shipment, 8 lbs. ..... $\$ 4.75$
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.


SHOVELS, STEEL. Square point..................... $\$ 1.50$
SHOVELS, STEEL. Round point. . . . . . . . . . . . . . . . . 1.50
SHIOVELS, STEEL. Long handle, square point. . . . . 1.50
SHOVEISS, STEEL. Long handle, round point. . . . . 1.50
SPADES. Steel polished.
1.75

SPAD
SPADES, NURSERY. Steel, extra heavy strapped.. 2.75


SPRINKLER, RUB BER, SCOLLAY'S.
Indispensable for floral work and window gardening. Large
size. . . . . . . . . . . \$1.35
THISTLE OR DOCK CUTTERS. Narrow blade, with handle for removing thistles or weeds from lawns, with foot rest. . . . 35c
THERMOMETERS, JAPANNED. Tin case. Ordinary Grade, 8-inch, 25c; 10-inch, 35c


Special Grade. $\qquad$ 8-inch, 35c; 10-inch, 50c Medium Grade. $\qquad$ 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. . . . . . . . . . . . . . . . . . . . . . . . . . . 2.50
TROWELS, AMERICAN. All steel, one piece. .......25c
Solid shank, forged steel.
Steel, 6-inch .40 c
Ordinary, 6-inch .15 c
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.

|  | Diam., | Depth, |  |  |
| :---: | :---: | :---: | ---: | ---: |
| No. | Inches | Inches | Each | Dozen |
| 0 | 8 | 13 | $\$ 1.00$ | $\$ 11.00$ |
| 1 | $51 / 2$ | 10 | .90 | $\mathbf{1 0 . 0 0}$ |
| 2 | $41 / 2$ | 9 | .75 | 8.00 |
| 3 | 4 | 6 | $\mathbf{6 5}$ | $\mathbf{7 . 0 0}$ |
| 4 | 3 | $41 / 2$ | .60 | 6.00 |
| 00 | 9 | 22 | $\mathbf{3 . 2 5}$ | $\mathbf{3 6 . 0 0}$ |
| 01 | 7 | 20 | 1.75 | $\mathbf{1 9 . 0 0}$ |
| 11 | $51 / 2$ | 18 | 1.15 | 12.00 |
| 22 | $411 / 2$ | 15 | .90 | 10.00 |
| 33 | 4 | 12 | .70 | 8.00 |
| 44 | 3 | 9 | .65 | $\mathbf{4 . 0 0}$ |


$1 / 4-\mathrm{lb}$.
15 c
1/2-1b. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 20 c
1 lb .
30c
WEEDERS-
Magic. 3-prong, single handle. . . . . . . . . . . . . . . . 20c
Excelsior. For weeding seed beds, stirring the ground, etc
Lang's. Allows use of hands in working. . . . . 25 c
Christy Garden Weeder
25c

## 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 is 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 $71 / 2$ inches wide x 30 inches long ..........\$3.75 2
2
1


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 $7 \frac{1}{2}$ inches wide, with Brackets complete....... $\$ 1.25$ 42 -inch Shelf, by $71 / 2$ 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 pricesfor Hand and Power Mills sent on application.


## Window Flower Boxes

## Made from

 $7 / 8$ in. white pine lumber, pmeothly finished and painted green inside and out. A white pine box will grow finer flowers, 1 a stonger a n d
look better than boxes made from any other kind of materials.

|  |  | Length | Width | Height |
| :--- | :---: | :--- | :--- | ---: | | Price |
| ---: |
| Each |

No. 486


Self-Watering Flower Boxes


Many home owners object to wooden window boxes because they leak and damage the property. Our SelfWatering 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 <br> Capacity | Price |
| ---: | :--- | :--- | :--- | ---: | ---: |
| 0 | 6 in. | 6 in. | 16 in. | 1 qt. | $\$ 2.00$ |
| 2 | 8 in. | $91 / 2$ in. | 25 in. | 3 qts. | 2.70 |
| 4 | 8 in. | $91 / 2$ in. | 29 in. | 4 qts. | 3.10 |
| 6 | 8 in. | 9112 in. | 33 in. | 5 qts. | 3.50 |
| 8 | 8 in. | 9112 in. | 37 in. | 6 qts. | 4.00 |
| 10 | 8 in. | $91 / 2$ in. | 41 in. | 7 qts. | 4.50 |

## Kequisites

## Lawn Cleaner, Pennsylvania



This machine will clean your lawn more thoroughly and quicker th an 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 $t$ 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.................... $\$ 22.00$

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 $\$ 6.00$.

## Lawn, Hay and Garden Rakes

Automatic. Self-cleaning, best hickory, 26 teeth.... \$1.00 Lawn Queen. Wire: is reversible, and can be used for grass or leaves, 24 tєeth........................ . . . 85
Ole Olsen. Made of best hickory.................... . . . 75
Lawn King. Wooden, 22 teeth........................ . 65
Wooden, Hay.......................................... . . . . . 60
Gem Dandelion Rake. For clipping off daisy and $\quad 2.00$
Rakes, Steel Garden. 10 teeth, 65c; 12 teeth, .75
14 teeth, 85c; 16 teeth........................... 1.00

## Ring Lawn

 Sprinkler, Allen'sThe 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.... $\$ 1.00$


## LAWN REQUISITES—Continued <br> The Dayton Rotary and Oscillating Sprinkler

THE most practical, durable, efficient machine ever devised for sprinkling lawns, parks, or irrigating truck gardens. It must be seen in action to be appreciated. Saves time, labor, hose wear. It is nearest approach to natural rain. All the parts of this irrigating machine are made of brass and aluminum (non-rusting or corroding metals).

A tiny jet of water against an aluminum water-wheel revolves the wheel at high velocity, and through a worm gear (which runs in oil) and a pinion traveling over a toothed plate, carries the irrigating nozzle in a complete circle or oscillates like an electric fan making a half circle.

The nozzle used is adjustable for distance of spray and enables an equal distribution of water over any desired area.

Its Durability-The Dayton is closely and substantially made. They are made to gain and maintain a place on every well-kept lawn.

Its Simplicity-It is by far the cheapest, simplest of all overhead irrigating systems. It is simplicity itself.

Appearance-The Dayton is neat and pleasing of appearance, and besides being the best method of sprinkling and cooling off the hot summer evenings, it adds much to the beauty and attractiveness of the lawn.

Every Dayton is guaranteed to give perfect satisfaction. All machines are thoroughly tested and closely inspected before leaving factory.


## A FEW FACTS REGARDING TRUCK GARDEN INSTALLATION OF <br> DAYTON ROTARY SPRINKIERS:

Fourteen machines may be operated from a $11 / 2$-inch main, with water at 40 lbs. pressure. AA 2-inch pipe will carry 20 machines at 40 pounds pressure. Machines should be placed 50 feet apart, 17 machines being required to the acre. It is desirable to lay the pipe mains under the ground, just below plow depth, with $1 / 2$-inch riser pipes. With such an installation the entire tract can be farmed. Each riser should have a shut-off valve, and a valve should be provided for each line. In this way any part or portion of a tract can be irrigated independently of the whole.

The water consumption of a Dayton Sprinkler, normally adjusted and operating at 40 pounds pressure, approximates $11 / 2$ gallons per minute.

Dayton Lawn Sprinklers are fitted with $3 / 4$-inch or $1 / 2$-inch hose connections. as may be desired. Price.......... $\$ 6.00$.

California
Lawn Sprinkler

$\mathrm{F}^{0}$OUR Arm Lawn Sprinkler which can be operated with sure, covers a sure, covers a
wide
area and distributes th e water evenly. The revolving arm throws the water in a fine water into the air and the motion produces a fine about 1 ft . $\$ \mathbf{2 . 0 0}$


## 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.
. \$1.25 Copper Head, each

## 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.
$75 C$
Crescent
Sprinkler
Each........75c
Handy
Sprinkler
Each...........35c

## 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. $1 / 2$ in., per ft., 20c; $3 / 4$ in., per ft., $22 c$. Hose. For Paragon Spray Pumps. Per ft.
Hose Reel. Iron............ \$2.50 to $\$ 3.50$ .20c

Hose Coupling Bands. Each, 10c; per dozen. . . . . . . . . . . . . . . . . . . . . . $\$ 1.00$ Hose Coupling Bands. For Paragon Pump, each.
Hose Washers. Rubber, $3 / 4$ in., per doz., 15c Hose Menders. Perfect clinching, each, 10c; per dozen.

Hose Nozzle. Graduating, each........75c


## DUNHAM WATER WEIGHT LAWN ROLLERS

Dunham Water Weight Rollers are electric welded-no rivets used-the drum cannot $p$ os sibly leak.

$I^{\text {F }}$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

The Dunham Two Section Roiler with counter balancing handle weights
 son, enabling young and tender grass to secure th 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.
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. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 12.00$.
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. .
H-W Style is equipped with handle weights which counterbalance the handle.
No. H-W-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.
$\$ 25.00$

## 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.
$\begin{array}{rccrr} & \text { Length } & \text { Diam. } & \text { Weight } & \text { Price } \\ \text { No. 401-2 Section. } 16 \text { in. } & 15 \mathrm{in} . & 150 \mathrm{lbs} . & \$ 12.00\end{array}$

# Lawn <br> Mowers 



## Coldwell's Improved Horse Lawn Mower

T
HIS 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 compositicn split bushings, and great care is taken to have the workmanship perfcet.

These Mowers are made regularly with four blades in the revolving cutter, but when exceptionally fine cutting is desirec, 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) . . . . . . . . . . . . . . $\$ 110.00$ 35 -inch, complete with shaft and seat (4 blades) . . . . . . . . . . . . . . 135.00

## Coldwell's "Rajah" Ball Bearing Lawn Mower

ISTRICTLY high grade ball bearing, and made of first-grade material throughout. It has large drive wheels ( $101 / 2$ 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, $\$ 15.00$; 16 -inch, $\$ 16.00$; 18 -inch, $\$ 17.75$; 20 -inch, $\$ 18.50$.



## 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. . . $\$ 27.00$ 1S-inch, including grass box . . . . 29.00

## 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.. . . . . . . . . . . . . . . . . . . . . $\$ 14.50$
18-inch
.$\$ 17.00$
16-inch.
15.50

20-inch.
18.25

## Cadet Lawn Mower

$I^{s}$a good Lawn Mower to sell at a medium low price and give the purchaser full value for his money.
14-inch.
. $\$ 6.00$
16-inch.
$\$ 6.25$

## Coldwell's Lawn Edger

$\mathbf{I}^{\mathrm{T}}$T 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 $\$ 8.00$

## Nox All Grass Catchers

No. 500. Made to fit mower, 12 to 16 inches.
\$1.25

No. 510. Made to fit mower, 16 to 22 inches.
1.50

## Suburban Ball Bearing Mower

$\mathbf{I}^{\text {s }}$S 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.\(\$ 7.50\)
```

16-inch


## " flanet Jr" Jarm si ©arden 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 D. Planet Jr. as a Hill and Drill Seeder only. $\$ 15.00$


No. 31. Planet Jr. New Combined Drill and Single Wheel Hoe. Price, $\$ 12.50$.
No. 31 D. As a Drill Only. Price, $\$ 10.00$.


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

A
RE 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 $41 / 2$-inch hoes, two pairs hollow steel cultivator teeth, one pair plows, two 3 -tooth rakes, two 5-tooth rakes and two leaf lifters. Price... $\$ 15.50$


Equipment: One pair of 6-inch hoes; four steel cultivator teeth; one pair of plows; two leaf lifters.


ANEW 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.

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. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 3.50$
3-prong cultivator teeth, per pair. . . . . . . . . . . . . . . . . . 2.00
Double Mouldboard Plow for Double Wheel Hoe
$\qquad$
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

## PLANET JR. SINGLE WHEEL HOES AND ATTACHMENTS

E 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.


You can do more and better hoeing with it in one day than you can do in three days with a hand hoe.

The Hoes exchange sides to work to or from the row, and change of wheel regulates the depth.

The Cultivating Teeth are oil tempered and work admirably, are changeable for pitch and are useful for marking out rows.

The Plow is large and capable of heavy work.

No. 16 Planet Jr. Single Wheel Hoe, Cultivator, Rake and Plow. Price, $\$ 10.00$.


It is light, handy and adapted to almost every garden use. The Steel Wheels are particularly well made, with heavy steel spokes, and they run easily and are made up true.

The Frame is steel and practically indestructible. The wheel arm and leaf guard are steel also. The handles are adjustable in height.

The Plow is of superior design, complete with landside; is large and capable of heavy work. It is generally the first attachment to be used in the spring.


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.


This new member of the "Planet Jr." family will appeal to all those who prefer a high wheel for their garden work. Where the soil has not been so thoroughly and carefully prepared, the high wheel undoubtedly makes an easy running tool. The handles are strong and are provided with "plow handle" grip. They are adjustable for height to suit adult or child. . . . . $\$ 5.00$.

No. 19. Planet Jr. Garden Plow and Cultivator. Equipment: One 2-inch cultivating tooth; one 10-inch sweep; one plow; one 5-prong cultivating attachment; 15-inch steel wheel............................... . $\$ 5.75$
Planet Jr. Grass Edger. With this edger you can cut the turf at the speed of a walk. It can be set to allow the wheel to run either on the walk or on the grass. $\$ 8.50$

## ATTACHMENTS

Double Mouldboard Plow for Single Wheel Hoe. . . $\$ \mathbf{\$ . 0 0}$
Steel Cultivator Teeth and Bolt.
.40
Hoes, complete, $41 / 2$-inch, per pair. . . . . . . . . . . . . . . . . . . . . . . . 1.20
Hoes, complete, 6 -inch, per pair. . . . . . . . . . . . . . . . . . . . . . . . . 1.30
Plow for Single Wheel Hoe, each. . . . . . . . . . . . . . . . 1.50
Rakes, 3-teeth, 55c; 5-teeth..............................
Wheel Hoe Sweep, per set of three with stand
Single Wheel Hoe, per set...................................
Onion Set Harvester, 8-inch size, for onions and onion sets.

## THE PLANET. JR. ONE - HORSE TOOLS



It does more kinds of work better, quicker and easier than any other cultivator. Indispensable on the up-todate farm.

No. 7. Planet Jr. Horse Hoe and Cultivator. Same as No. 8, without the depth regulator. With new steel wheel.
\$18.50
No. 9. Planet Jr. Horse Hoe and Cultivator. This tool has a plain wheel instead of the lever wheel. With has a plain wheel instead of the lever wheel. With steel wheel
Without wheel.
No. 90. Planet Jr. 12-Tooth Harrow, Cultivator and Pulverizer.
Price, complete. . $\$ 19.50$. No. 90B. Without Pulverizer, \$16.25.
No. 90D. Without Pulverizer or Wheel,


Planet Jr. 12-Tooth Harrow, Cultivator and Pulverizer is invaluable in strawberry, 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... . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 14.50$
A strawberry runner attachment consisting of a 10-inch flat steel disc mounted on an outrigger, extra.. $\$ 3.00$
No. 4. Planet Jr. Plain Cultivator is equipped with four $3 \times 8$ in. cultivator steels and one $4 \times 8$ 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....... .


## Flower $\mathfrak{f l o t s}$ 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 | \$1.50 |
| $21 / 2$ |  | . 03 | . 30 | 2.00 |
|  | " | . 03 | . 35 | 2.50 |
| $311 / 2$ | " | . 04 | . 40 | 2.75 |
| 4 | " | . 05 | . 50 | 3.50 |
| 5 | " | . 06 | 70 | 5.00 |
| 6 | " | . 10 | 1.00 | 8.00 |
| 7 | " | . 15 | 1.50 | 12.00 |
| 8 | " | . 25 | 2.50 | 18.00 |
| 9 | " | . 30 | 3.00 | 24.00 |
| 10 | " | . 45 | 4.50 |  |
| 12 | " | . 75 | 8.00 |  |
| 14 | " | 1.25 |  |  |
| 16 | " | 2.25 |  |  |

## Flower Pot Saucers

| Size | Ea. | Doz. | Per 100 |
| :---: | :---: | :---: | :---: |
| 4 inch. | \$0.04 | \$0.35 | \$2.50 |
| 5 | . 05 | . 45 | 3.25 |
| 6 | . 06 | . 60 | 4.25 |
| 7 | . 07 | . 70 | 5.50 |
| 8 | . 08 | . 90 |  |
| 9 " | . 10 | 1.10 |  |
| 10 " | . 15 | 1.50 |  |
| 12 | . 20 | 2.00 |  |

## 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


## 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 | \$0.70 |
| 6 | . 10 | 1.00 |
| 7 | . 15 | 1.50 |
| 8 | . 25 | 2.50 |
| 10 | . 45 | 4.57 |
| 12 | . 75 | 8.00 |


Fern Pans
These Pans are especially adapted for linings to porcelain and silver Fern Pans.

| Size | Ea. | Doz. |
| :---: | :---: | :---: |
| $51 / 2$ inch. | \$0.07 | \$0.80 |
| $61 / 2$ | . 10 | 1.00 |
| $7{ }^{\text {7 }}$ | . 15 | 1.50 |
| $71 / 2$ | . 20 | 2.00 |

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 |
| 7 | 24 | 2.40 |
| 8 | . 25 | 2.50 |
| 10 | . 28 | 2.75 |
| 12 | . 30 | 3.40 |
| 14 ، |  |  |

## 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.
Siz
5
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Ea.
$\$ 0.15$
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.30
.35
.50
.55
.60
Doz.
$\mathbf{\$ 1 . 5 0}$
2.50
3.00
3.50
5.00
5.50
6.25


## McCullough's Plant Tubs

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

| 7-12 inches |  |  | inches high |  |  | $\begin{aligned} & \text { Each } \\ & \$ 1.75 \end{aligned}$ | Per Doz. $\mathbf{\$ 2 0 . 0 0}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. 8-13 |  |  | 12 |  |  | 1.90 | 21.00 |
| No. 9-14 | " | " | 13 | " | " | 2.10 | 24.00 |
| No. 10-15 | " | " | 14 | " | " | 2.25 | 26.50 |
| No. 11-16 | " | " | 15 | " | " | 2.65 | 30.00 |
| No. 12-17 | " | " | 16 | " | " | 3.00 | 34.50 |
| No. 13-18 | " | " | 17 | " | " | 3.50 | 40.00 |
| No. 14-19 | " | " | 18 | " | " | 4.00 | 45.00 |

## Cedar Plant Tubs

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, but furnished with iron handles.

|  |  |  |  |  |  | Each | Per Doz. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. 7-12 | che |  |  |  |  | \$1.40 | \$16.00 |
| No. 8-13 |  |  | 12 |  |  | 1.60 | 18.50 |
| No. 9-14 | " | " | 13 | " | " | 1.75 | 20.00 |
| No. 10-15 | " | " | 14 | " | " | 1.90 | 21.00 |
| No. 11-16 | " | " | 15 | " | " | 2.25 | 26.50 |
| No. 12-17 | " | " | 16 | " | " | 2.50 | 28.50 |
| No. 13-18 | 6 | " | 17 | " | " | 2.90 | 33.50 |
| No. 14-19 | * | '6 | 18 | " | " | 3.50 | 40.00 |

## STUGGO BIRD HOUSES

T
HE birds which nest and harbor in cavities and nollows 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


Titmouse Hut by all bird lovers.

## PRICE LIST HUTS AND CABINS

| n Hutlet, each... \$1.50 | Bluebird Hut, each... \$1.75 |
| :---: | :---: |
| Titmouse, each..... ${ }^{\text {i }} 50$ | Bark Hut, each. . . . 3.00 |
| Chickadee Hutlet, each. | 1.50 |
| Woodpecker and Flicker H | t, each. . . . . . . . . . . . . 1.75 |
| Martin Houses | \$ 5.00 to \$50.00 |
| Feederies, Large | 15.00 to 35.00 |
| Feederies, Small. | 1.50 to 2.00 |
| Carved and Hewn Hut | 5.00 to 25.00 |
|  | 4.00 to 10.00 |

SUET BASKETS


WTINTER and Summer, you'll find a happy family of wild birds around vou. provided you feed them. It's got a metal back. curved to fit a tree trunk or nost 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, $\$ 1.00$; postage extra.


Chicago Bird Houses

MADE FROM $3 / 8$-INCE WHITE PINE LUMBER.

STAINED WITH GREEN
CREOSOTE SHINGLE
STAIN.


## Wren Houses

No. 44. Size $5^{3 / 4}$ inches wide, 6 inches deep, $53 / 4$ inches high, with 1 -inch entrance. Price, each.......... 25 c
No. 68. For Bluebirds, Violet-green Swallows and Tree Swallows. Size $53 / 4$ inches wide, $53 / 4$ inches deep, $81 / 2$ in. high, with $11 / 2$ in. entrance. Price, each..50c
No. 49. For Chickadees, Tufted Titmice, White-breasted Nuthatches and Downy Woodpeckers. Front, back and bottom $5 / 8$ inch, sides and roof, $3 / 8$ inch thick. Can easily be cleaned by unscrewing roof. Size $41 / 2$ inches wide. $53 / 4$ inches deep, $101 / 4$ inches high, with $11 / 4$ inch entrance. Price, each................... . . 50c
No. 59. For Redheaded Woodpeckers, Golden-fronted Woodpeckers and Flickers. Front, back and bottom $5 / 8$ inch thick. Can easily be cleaned by unscrewing roof. Size $6 \frac{1}{2}$ inches wide, $71 / 2$ inches deep, $151 / 2$ inches high, with $2 \frac{1}{2}$ inch entrance. Price, each.75c

## Martin Houses

Made from cloar 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. $151 / 2$ inches high. with $21 / 2$ inch entrance. Price, each.
$\$ 5.50$
No. 10. Has ten apartments. Size 20 inches wide. 22 inches deep, $221_{2}$ inches high, with $21 / 2$ inch entrance.
Price, each.. . . . . . . . . . . . . . . . . . . . . . . . $\$ 7.50$ Price, each.
No. 16. Has sixteen apartments. Size 24 inches wide, 30 inches deep. 21 inches high. with $21 / 2$ inch entrance. Price, each.
$\$ 13.00$
No. 20. Has twenty apartments. Size 24 inches wide, 30 inches deep, 25 inches high, with $21 / 2$ inch entrance. Price, each...

## 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.
$\$ 7.00$


# Foultry 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 Incubator was first marketed in 1889, incorporating three essential principles in design which have been continued to the present day-top-radiant heat, down-draft ventilation, and applied moisture. They have been improved from time to time as experience has warranted, but in points of efficiency, economy, safety and service they have held unchanged the

They are built of cypress-the wood everlasting-highly finished for attractive appearance, double-cased, positively insulated with high grade cotton and fitted with the best grade hardware on the market. Temperature regulation is automatic and sensitive, accomplished by zinc and steel toggle-joint thermostat. The heating and ventilating currents are in one, so that when heat is supplied ventilation is assured. These currents are furnished by an exclusive design heater, examined and
 approved under direction of Underwriters' Laboratories, Inc. Every Prairie State is insurable. Moisture is constantly supplied by the famous patented Prairie State Sand Tray, insuring uniform evaporation at all times and uniform, relative humidity in the egg chamber.

Built in four sizes, ranging from 100 to 390 eggs. Egg Trays of light basswood and galvanized wire cloth. Nursery mats are provided for the four machines. All Prairie States are equipped with thermometers, egg testers, lamps and everything complete, ready to operate. Air distribution in all models is effected by the patented eddy-current distributor sheet at top of machine. The four diffusion machines have double bottoms with nursery; ventilation accomplished by the air diffusion method.

PRICE LIST OF PRAIRIE STATE SAND TRAY DIFFUSION LNCUBATORS
Standard Series No. 0, 100 eggs; 135 lbs. crated, price. $\$ 29.00$
Standard Series, No. 2, 240 hen eggs; 240 lbs. crated,

$\$ 54.00$
Standard Series No. 1, 150 eggs, 160 lbs. crated, price. 38.00
Standard Series, No. 3, 390 hen eggs; 325 lbs. crated,
price. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
70.00

## Prairie State Stove Brooders


$T H E S E$ 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. Adapted to any system of brooding or type of brooder house. Hover Adapted to any system of brooding or type of brooder house. Hover canopies of galvanized stee, exclusive Prairie state fat design for most 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. The "Junior" stoves care for flocks of 200 up to 1000 or more. "No. 0 Junior', up to 700 . All canopies fitted with adjustable curtain. The "Junior", Stove Brooder is fitted with triple control wafer thermostatic regulator, 52 inch canopy, and shaker grates. "No. 0 Junior" has double regulator, 52 inch canopy, and shaker grates. "No. "Junior" has double inches high, 9 inches diameter, 9 inch grate. "No. 0 Junior"' 21 inches high, 11 inches diameter, 9 inch grate.
Prairie State "Junior'' Stove, Brooder-Weight 115 lbs. . . . . . . . . . . . $\$ 18.00$ Prairie State "No. 0 Junior" Stove Brooder-Weight 80 ibs........... . . . 13.00

## Prairie State Portable Hovers

No. 1. Capacity, 65 to 100 chicks, weigbt, 100 chicks, $\mathbf{~ c r a t e d , ~} 50$ lbs. $\$ \mathbf{1 2 . 0 0}$. Prairie State Junior Portable Hover. Capacity, 50 to 75 chicks, weight, crated, 37 lbs.,. $\$ 10.00$.

## Prairie State Universal Hovers

Universal Hover. With lamp case, smoke conductors, lamp, thermometer, and heat regulator....................................................... Universal Hover. With lamp case, smoke conductors, lamp and thermometer . . . . ' With lämp, smoke pipes and thermometer (withrut




## Prairie State Combination Outdoor Colony Brooders

ITo. 1. 3 feet wide, 6 feet long, two compartments, weight, crated, 300 lbs . . . . . . . . . . . . . . . . . . . . . . $\$ 22.00$
No. 2. $21 / 2$ feet wide. 5 feet long, two compartments, weight, crated, 208 lbs. . . . . . . . . . . . . . . . . . . . . . 18.00 Heat regulator attached to any of the above brooders, extra

## THE NEWTOWN GOAL BURNING COLONY BROODER

W
ITH the certainty that the highest prices ever 6ns 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 y ou have no Brooder or an inferior make of machine, because no one ever made money , by using a non-de pendable, 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 uther and is endorsed by the most successful poultry men 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. Made in four sizes:
No. 6. Capacity, 200 chicks or less.
$\$ 20.50$
No. 11. Capacity, 500 chichs or less
$\qquad$ . . . . $\$ 31.00$
No. 7. Capacity, 250 chicks or less. . . . . . . . . . . . 25.00 No. 12. Capacity, 1200 chichs or less.............. . 39.50
Ask for our Brooder Catalogue. It contains valuable information for every poultryman. It's free.

## The Newtown Oil-Burning Colony Brooder



FOR several years the coal-burning colony brooder has been generally recognized as the acme of brooding efficiency, but as a result of the inability to rocure the proper grade of chestnut anthracite coal, probably the greatest problem of poultrymen was to find a substitute for the coal heated brooder.

One of the big faults of oil-burning brooders has been their inability to produce and properly distribute over a large floor space sufficient quantity of heat to make possible the successful brooding of large flocks of chicks in cold weather.

The construction of the Newtown Oil-burning Colony Brooder is simplicity itself. It consists of the heater and deflector. The heater includes the blue flame wickless burner, automatic oil feeder, and oil fount all securely mounted on a heavr metal base, and the heat radiator which is bolted within the deflector.

Each brooder is shipped with everything complete in one crate, ready to operate. A thermometer and full instructions for operating are furnished with each brooder.

| No. | Diameter of | Hover |
| :---: | :---: | :---: |
| Niameter of Heat |  |  |
| Radiator |  |  |$\quad$| Haice |
| ---: |

## 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 rou 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 $\qquad$ . 9.50 No. 5-B. For flocks of 25 to 50 hens. Weight, 60 lbs. Price. 12.50 No. 5-B. M. For flocks of 25 to 50 hens. Weight, 85 lbs. Price.......... 16.00 The No. 5-C, No. 5-B, and No. 5-B M, do not have the split hinged cylinder. No. 7. For flocks of 75 to 150 hens. Weight, 107 lbs. Price. . 18.50

No. 9. For flocks of 200 to 300 hens
28.50 No. 11. Capacity, 100 lbs . and upwards per hr. Weight, 215 lbs . Price 40.00 No. 12. Capacity, 150 lbs. per hour. Weight, 260 lbs. Price....... 50.00 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.

## "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 $3 / 4$ to 1 bushel per hour. Price... $\$ 4.50$.
No. 2-This is the best $\$ 5.50$ 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 $11 / 2$ bushels per hour. Price. . . . . . . . \$5.50.
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. . . . . . . . . . . . . . $\$ 7.50$.
No. 10-Mounted on stand (See cut). This will grind Coffee, Spices, Chicken Feed, Cracks Peas, etc. Capacity 2 to 4 bushels per hour. Price. . . . . . . . . . . . . . . . . . . . . . \$9.00.
No. 12-Mounted on stand. We consider this the finest hand mill made. Steel axles, bronze boxes and a heavy fly wheel. Capacity 3 to 4 bushels per hour. Price.. \$15.00.
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.


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 $11 / 2$ 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, $21 / 4$ inch face. Reversible belt shift. Feed Regulator. All bearings, bronze bearing metal. Weight, crated, 100 lbs. Price. . . . . . . . . . . $\$ 20.00$, Stand, extra, $\$ 4.00$. Separator, extra, $\$ 6.50$.

## "RED CHIEF" Hand Corn Sheller

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.... $\$ 3.00$. Pop Corn Attachment, for shelling Pop Corn, 40c extra.
Red Chief Box Seed Corn Sheller. Price, $\mathbf{\$ 8 . 0 0}$

## DOUBLE QUICK GRIAIN SPROUTER

$\boldsymbol{T}$ HE 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, $18 \times 24 \times 23$ inches, 25 pounds. . . . . . . $\$ 1000$
No. 2. $1 / 2$ bushel, 4 trays, 50 to 75 hens, $18 \times 14 \times 30$ inches, 35 pounds. . . . . . . 12.00
No. 3. 1 bushel, 5 trays, 100 to 150 hens, $21 \times 17 \times 40$ inches, 55 pounds. . . . . . . 18.00
No. 4. 2 bushels, 6 trays, 200 to 300 hens, $25 \times 20 \times 44$ inches, 75 pounds. . . . . . 25.00
No. 5. 4 bushels, 12 trays, 400 to 600 hens, $39 \times 25 \times 45$ inches, 125 pounds. . . . 36.00
No. 6 . 8 bushels, 16 trays, 800 to 1,200 hens, $52 \times 27 \times 60$ inches, 200 pounds. .56 .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.


Lawn Park Coop


Size, closed, $18 \times 24$ inches; with park extended, $18 \times 48$ inches. Height, 24 inches. Price......... \$3.75.

## Egg Boxes

Eyrie. 15 egg size, each, 25c; 30 egg size, each, 35 c .
Paper Carton. 1 dozen size, per dozen, 15 c ; per 100, $\$ 1.00$.
Continental Safety Carton. 1 dozen size, per dozen, 20c; per 100, \$1.25

## Egg Cabinets

Wood's Revolving. 150 egg size, $\$ 3.50 ; 288 \mathrm{egg}$ size, $\$ 5.50$.
Wood's Pony Cabinet. 72 egg size, each, $\$ 1.00$.

## Lightning Lice Killing Machine

No. 1 Machine, surcable for young chicks or pigeons. No. 2 Machine, suitable for either young chicks or pigeons, or to clean 8 Leghorns or 4 fowls the size of Plymouth Rocks at a 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.


## Egg Carriers

Humpty Dumpty. 6 dozen size, each, 50c; 9 dozen Size, each, 55 c ; 30 dozen size, each, $\$ 1.00$. Moe's Regal. No. 14-15 eggs, each, ${ }^{20 \mathrm{c}}$; No. 1530 eggs, each, $\mathbf{3 5 c}$; No. 16-50 eggs, each, 65c; No. 17-100 eggs, each, \$1.10.

## Nest Eggs

Lice Expelling. Each, 10c; 3 for 25c; per dozen, 75 c. Porcelain. 3 for 10c; per dozen, 30c.
Lime. 3 for 10 c ; per dozen, 30 c .

## 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, $20 \mathrm{c} ; 25$ for $35 \mathrm{c} ; 50$ for $60 \mathrm{c} ; 100$ for $\$ 1.00$.
Pigeon and Baby Chick Sizes. (Celluloid.) Per dozen. $15 \mathrm{c} ; 25$ for $30 \mathrm{c}: 50$ for $50 \mathrm{c} ; 100$ for 75 c .

## UNION LOCK Poultry Fencing

$\mathbf{A}^{\text {s }}$S all of the cables are the same length, and run the whole length of the fabric, every part can be stretched perfence requires no top or bottom rail and no more posts than fence requires no top or bottom rail and no more posts than
the ordinary 12 -inch, bale of 10 rods $\$ 2.00 \mid 36$-inch, bale of 10 rods $\mathbf{\$ 3 . 7 5}$ 18 -inch, bale of 10 rods $2.50 \quad 48$-inch, bale of 10 rods 4.50 24 -inch, bale of 10 rods $3.25 \quad 60$-inch, bale of 10 rods 5.00 72 -inch, bale of 10 rods.. $\$ 5.50$

## Feeding Devices for Poultry



## Moe's Round Baby Chick Feeder

The most convenient and commodious feeder on the market. Can also be used for water. Manufactured in two sizes.
No. 11, small size, each, 20c. No. 12, large size, each, 35 c .

## Wall Chick Feeder

Wire screen keeps chicks from wasting the food. Sloping top prevents roosting.
10-in., each, \$0.75; doz., \$ 7.50 20-in., each. 1.25 ; doz., 12.50


Price.


## Poultry Feeder, 1-2-3

For dry mash. scraps, shells, grit, charcoal or any poultry feed. When used for one kind of feed only, take out separator; for two kinds put separator in one end; when used for three kinds, say scraps, shells and grit, put separator in the middle and you have three separate and you have three separate
feeders. -

Each, \$1.45.

No. 12 Feeder, 12 inches long. . . . . .each, 50 c ; doz., $\$ 5.00$ No. 24 Feeder, 24 inches long. . . . . .each, 80c; doz., 8.00


Prairie State Grit and Shell Box. Made of heavy galvanized iron, with 3 compartments. Each, 75c; doz., \$7.50.


Prairie State Beef Scrap and Dry Food Hopper. Capacity 10 pounds scrap. Each, 75c; doz., \$7.50.


Can be hung upon the wall of the house at any height desired. Price. Each, 25c; doz., \$2.50.


Moe's Grit Box;capacity about 1/s bushel . . $\$ 1.00$. No. 90. Four compartments... $\$ 1.25$. No. 45. Two compartments .....45c

## Moe's Dry Mash Hopper

A trial will convince you that it is a Hopper of the greatest merit. Manufactured of heary galvanized iron in three sizes.

No. 35-8 $1 / 2$ in. wide.

Each $\$ 1.50$.
No. 36-12 in. wide.

Each \$2.00.
No. 37-24 in. wide.

Each \$2.50.


## Hub Chicken Feeders



## Moe's Feeder and Exerciser



The exercise afforded by using this device keeps your hens in prime laying condition at all times. Manufactured in three sizes.
*No. 51. For low coops (see footnote)
$\$ 1.35$. No. 52. 8-qt. capacity. 1.65. No. 54. 1-bu. capacity. 2.75.
*This Feeder has a bracket for attaching to side walls.

## Round Bottom <br> Dry Food Hopper

Dry mash and beef scrap feed readily and never clog.
Price.
.each, 90 c .

## Chick Servers

These chick servers give out pure food and water at all times until the supply is consumed.
Price. . . . . . each, 25c ; doz., $\$ 2.50$.


No. 35. 12-quart capacity . . . . . . . . . . . . . . . . . . . . . . . . $\$ 1.25$.
No. 36. 18-quart capacity........................................... . . . . 1.75.
No. 37. 36 -quart capacity . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2.5 .

## DRINKING FOUNTAINS FOR POULTRY AND PIGEONS

McCullough's Sanitary Glass Chick Fountain
Best fountain made for chicks.
Each, 20 c; 6 for $\$ \mathbf{1 . 0 0}$.

## McCullough's

Wall Fountain
.This fountain is especially serviceable for chicks.

Each, 25c; per doz., \$2.50.


## McCullough's

Galvanized Drinking Fountain's

Cone Top
These fountains are light, nonbreakable and easily cleaned.


2-qt..
Each, \$0.25.

Moe's Fountain or Feeder to Fit Mason Jars

It will fit pint, quart or one-half gallon Mason jar.

Convenient, cheap and sanitary. Can be used for feed as well as water for little chicks. Manufactured in one size only, 6 inches in diameter.
Ea., 10c; 2 for 15c; 4 for 25 c


## Sanitary Stoneware Fountain

The top is removable, allowing the fount to be thoroughly cleaned inside. The proper thing to use where medicine is given in the drinking water. 1-qt. . . Each, 40c; doz., \$4.25. 2-qt. . . .Each, 50c; doz., 5.00 . 2-qt. . . . Each, 50c; doz.,
4-qt. . . Each, 60 c ; doz.,
$\mathbf{6 . 2 5}$.


Drop-Bottom Fount

## The Duplex Fountain

Top section slides into bottom section.

The latest sanitary fountain on the market. This is a double fount, keeps the water clean and pure. Easy to fill. Easy to care for. Made in two sizes, 4 and 8 quarts.
4-qt. size.
. Each, $\$ 1.00$.
. 2.50.
8-qt. size.

## Drop-Bottom Fount

28-gauge galvanized steel. Easiest thing in the world to open and clean. Clasp by which the bottom is fastened fits over the small hole under the hood, preventing slopping of water when the fount is handled. Solid brass hinge rod-no rust. 2-qt. . . . . . . . . . . . . . Each, \$0.50. 1-gal... . . . . . . . . . .Each, . 90. 2-gal. . . . . . . . . . . . Each,. 1.10


# floultry Jreeds and Supplies 

## SPEGIALNOTIGE

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 MASH WITH BUTTERMILK. 3 lbs., 25c; 25 lbs., $\$ 1.75$; 50 lbs., $\$ 3.20 ; 100 \mathrm{lb}$. bag, \$5.65.
"GLOBE"' CHICK FEED. 3 lbs., 25c; 25 lbs., $\$ 1.65$; 50 lbs., $\$ 3.00$; per bag of 100 lbs., $\$ 5.20$.
"GLOBE" DEVELOPING FEED. 3 lbs., 25c; 25 lbs., $\$ 1.65$; 50 lbs., $\$ 2.95$; per bag of $100 \mathrm{lbs} .$, \$5.15.
"GLOBE"' SCRATCH FEED. 3 lbs., $25 \mathrm{c} ; 25 \mathrm{lbs} ., \$ 1.60$; $50 \mathrm{lbs} ., \$ 2.85$; per bag of 100 lbs., $\$ 4.90$.
"GLOBE"' EGG MASH. 3 lbs., 25c; 25 lbs., $\$ 1.55 ;$ $50 \mathrm{lbs} ., \$ 2.75$; per bag of $100 \mathrm{lbs} ., \$ 4.75$.
SPRATT'S CHICK MEAL. 2 lbs., 30c; $25 \mathrm{lbs} ., \$ 3.00$; $50 \mathrm{lbs} ., \$ 5.65$; per bag of $100 \mathrm{lbs} ., \$ 10.50$.
SPRATT'S POULTRYMEAL. $2 \mathrm{lbs} ., 30 \mathrm{c} ; 25 \mathrm{lbs} ., \$ 3.00$; $50 \mathrm{lbs} ., \$ 5.65$; per bag of $100 \mathrm{lbs} ., \$ 10.50$.
SPRATT'S TURKEY MEAL, GAME MEAL AND PHEASANT MEAL. 2 lbs., 30c; 25 lbs., $\$ 3.00$; 50 lbs., $\$ 5.65$; per bag of 100 lbs., $\$ 10.50$.
PRATT'S BABY CHICK FOOD. 3-lb. pkg., 30c; $61 / 2-\mathrm{lb}$. pkg., 60c; 14-lb. bag, $\$ 1.20$.
PINHEAD OATS. 3 lbs., 30c; 25 lbs., $\$ 2.10$; $50 \mathrm{lbs} ., \$ 3.90$; per bag of $100 \mathrm{lbs} ., \$ 7.05$.
HULLED OATS. $3 \mathrm{lbs} ., 30 \mathrm{c} ; 25 \mathrm{lbs} ., \$ 2.10 ; 50 \mathrm{lbs} ., \$ 3.90$; per bag of $100 \mathrm{lbs} ., \$ 7.05$.
DIAMOND GLUTEN MEAL. 4 lbs., 25c; 25 lbs., $\$ 1.50$; $50 \mathrm{lbs} ., \$ 2.70$; per bag of $100 \mathrm{lbs} ., \$ 4.60$.
SUNFLOWER SEED. Per lb., 20c; 25 lbs., \$4.15; $50 \mathrm{lbs} ., \$ 8.00$; per bag of $100 \mathrm{lbs} ., \$ 15.25$.
ALFALFA MEAL. 4 lbs., 25c; 25 lbs., $\$ 1.10 ; 50$ lbs., $\$ 1.90$; per bag of 100 lbs., $\$ 3.05$.
MEAT SCRAPS. $50 \%$ Protein. 3lbs., 30c; $25 \mathrm{lbs} ., \$ 2.10$; 50 lbs., $\$ 3.90$; per bag of 100 lbs., $\$ 7.05$.
DIGESTER TANKAGE. $60 \%$ Protein. 2 lbs., 30c; 25 lbs., $\$ 2.40$; $50 \mathrm{lbs} ., \$ 4.00$; per bag of $100 \mathrm{lbs} . \$ 7.25$.
BLOOD MEAL. $80 \%$ Protein. 2 lbs., 30c; 25 lbs., $\$ 2.80$; 50 lbs., $\$ 5.25$; per bag of 100 lbs., $\$ 9.75$.
GRANULATED BONE. Furnished in three sizes; fine, medium and coarse. 3 lbs., 25c; 25 lbs., \$1.65; 50 lbs., $\$ 3.00$; per bag of $100 \mathrm{lbs} ., \$ 5.25$.
CHARCOAL. Furnished in three sizes; fine, medium and coarse. $4 \mathrm{lbs} ., 25 \mathrm{c} ; 25 \mathrm{lbs} ., \$ 1.45 ;$ per bag of $50 \mathrm{lbs} ., \$ 2.35$.
CRUSHED OYSTER SHELLS. Furnished in two sizes; fine and coarse. 6 lbs., 25c; 25 lbs., 75 c ; 50 lbs., $\$ 1.15$; per bag of 100 lbs ., $\$ 1.50$.
MICA CRYSTAL GRIT. Furnished in three sizes; fine, medium and coarse. 6 lbs., 25c; 25 lbs., 70c; $50 \mathrm{lbs} ., \$ 1.05$; per bag of $100 \mathrm{lbs} ., \$ 1.35$.
No charge for bags on any of the above Feeds.

## Miscellaneous Feeds

BARLEY, for feed. 4 lbs., 25c; 25 lbs ., $\$ 1.45$; 50 lbs., $\$ 2.55$; 100 lbs., $\$ 4.60$.
BRAN. (Burlap bags.) 4 lbs., 25c; 25 lbs., $\$ 1.25$; 50 lbs., \$2.15; 100 lbs., \$3.75.
BUCKWHEAT, for feed. 3 lbs., 25c; $25 \mathrm{lbs} ., \$ 1.50$; 50 lbs., $\$ 2.65 ; 100$ lbs., $\$ 4.80$.
CORN MEAL. 3 lbs., 25c; 25 lbs., $\$ 1.45$; 50 lbs., $\$ 2.50$; 100 lbs., $\$ 4.45$.
CRACKED CORN. 3 lbs., 25c; 25 lbs., $\$ 1.45$; 50 lbs., $\$ 2.50$; 100 lbs., $\$ 4.45$.
CORN, SHELLED. 4 lbs., 25c; 25 lbs., $\$ 1.30$; 50 lbs., $\$ 2.25 ; 100$ lbs., $\$ 4.00$.
KAFIR-CORN. White. 3 lbs., 25c; 25 lbs., $\$ 1.55$; 50 lbs., $\$ 2.80 ; 100$ lbs., $\$ 5.10$.
MIDDLINGS. 4 lbs., 25c; 25 lbs., $\$ 1.30$; 50 lbs., $\$ 2.25$; 100 lbs., $\$ 3.95$.
MILO MAIZE. 3 lbs., 25c; 25 lbs., $\mathbf{\$ 1 . 5 5 ; ~} 50$ lbs., $\$ 2.80$; 100 lbs., \$5.10.
No charge for bags on any of the above Feeds.

## Pigeon Feeds

"GLOBE" PIGEON FEED. No Corn-no grit. 3 lbs.,30c; 25 lbs., $\$ 2.00$; 50 lbs., $\$ \mathbf{3 . 7 5}$; per bag of $100 \mathrm{lbs} ., \$ 6.50$.
"KING" PIGEON FEED. 3 lbs., 25c; 25 lbs., $\$ 1.75$; $50 \mathrm{lbs} ., \$ 3.15$; per bag of $100 \mathrm{lbs} ., \$ 5.50$.
CANADA PIGEON PEAS. 3 lbs., 30c; 25 lbs., $\$ 2.15$; 50 lbs., $\$ 4.00$; 100 lbs., $\$ 7.50$.
HEMP SEED. 2 lbs., 30c; 25 lbs., $\$ 3.40$; 50 lbs., $\$ 6.50$; 100 lbs., $\$ 12.50$.
PIGEON MILLET. 3 lbs., 25c; 25 lbs., $\$ 1.55$; 50 lbs., $\$ 2.80$; 100 lbs., $\$ 5.10$.
McCULLOUGH'S HEALTH GRIT. 6 lbs., 25c; 25 lbs., 80c; 50 lbs., $\$ 1.25$; 100 lbs., $\$ 1.75$.
FOUST'S HEALTH GRIT. 5 lbs., 25c; 25 lbs., 90c; 50 lbs., $\$ 1.50 ; 100 \mathrm{lbs} ., \$ 2.20$.
ROCK SALT. 5 lbs., $\mathbf{1 5 c}$; per 100 lbs , $\$ 1.50$.
No charge for bags on any of the above Feeds.
TOBACCO STEMS. Per bale about 125 lbs., \$2.00.

## Pure Seeds for Birds

Canary Seed, recleaned. . . . . . . . . . . . . . . . . . . . . . Per lb., 25 c
Rape Seed, recleaned. . . . . . . . . . . . . . . . . . . . . . . . Per lb., 20c
Hemp Seed, recleaned. . . . . . . . . . . . . . . . . . . . . . . Per lb., 15c
Sunflower Seed, recleaned. . . . . . . . . . . . . . . . . . . . Per lb., 20 c
Millet Seed, recleaned. . . . . . . . . . . . . . . . . . . . . . . Per lb., 15c
Lettuce Seed, recleaned. . . . . . . . . . . . . . . . . . . . . . Per lb., 20c
Cuttle Bone.
10c per oz.; Per lb., 90c
Bird Gravel
Package, 15c

## Mustard for Poultry

FRENCH'S POULTRY MUSTARD. $11 / 2$ lbs., $55 c$; 3 lbs., $\$ 1.00 ; 5$ lbs., $\$ 1.75 ; 10$ lbs., $\$ 3.25 ; 25$ lbs., $\$ 7.80$.

Blatchford's Calf Meal
BLATCHFORD'S CALF MEAL.
25 lbs., \$2.00;
50 lbs., $\$ 3.35$; 100 lbs., $\$ 6.65$.

## Darling's Meat Crisps

DARLING'S MEAT CRISPS. 3 lbs., 50c; $61 / 2 \mathrm{lbs} ., \$ 1.00$; 25 lb. pail, $\$ 3.50$.

## 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., $\$ 12.50$. 32 gallons (half barrel), $\$ 32.00$; 55 gallon barrel, $\$ 49.50$. No charge for kegs or barrels.
Send for descriptive booklet.
"United States Food Administration License Number G-18737.'

Prices on all Poultry Feeds and Supplies Subject to Change Without Notice.
Write for Special Firm Prices on Lots of 5 Bags or Over.

## VALUABLE TABLE OF QUANTITIES OF SEEDS PER AGRE 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.
Quantity per Acre.
CLOVERS

| 20 to 25 lbs . |  |  |
| :---: | :---: | :---: |
| 6 | " 8 |  |
| 10 | " 12 | " |
| 12 | " 15 | " |
| 10 | " 12 | " |
| 6 | " 8 | " |
| 10 | " 12 | " |
| 15 | 25 | * |
| 20 | " 30 | " |
|  | " 20 |  |

## Alfalfa or Lucernc <br> Common Red or Medium <br> White Dutch. <br> Sweet or Bokhara, Hulled. . <br> Japan Clover'. <br> GRASSES

Pounds per Bushel. .60

Common Red or Medium. . . . . . . . . . . . . 60
Crimson or Scarlet. . . . . . . . . . . . . . . . . 60
Mammoth or Sapling . . . . . . . . . . . . . . 60
.60
Giant Sainfoin Esparette with Hull on. 25
Sweet or Bokhara, Hulled. . . . . . . . . . 60
.30

|  |  | lbs. | Awnless Brome Grass. | ut | bs |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 10 | 15 | " | Bermuda Grass | 36 |  |
| 30 | " 40 | " | Blue Grass, Kentucky | 14 |  |
| 30 | " 40 |  | Blue Grass, Canadian. | 14 |  |
| 30 | " 35 | ، | Crested Dogtail. | bout 30 |  |
| 30 | " 40 | " | Creeping Bent. | 14 |  |
| 30 | " 35 | " | Hard Fescue. | 14 |  |
| 45 | " 50 | " | Italian Ryc. | 24 |  |
| 20 | 25 | " | Johnson Grass | 25 |  |
| 60 | " 75 | " | Lawn Grass Sced. | 16 |  |
| 30 | " 40 | " | Meadow Fescue or Domesic I Blue Grass. | English $\text { . . . . . . } 24$ |  |
| 20 | " 25 | " | Meadow Foxtail | 9 |  |
| 25 | " 35 | " | Orchard Gra | 14 |  |
| 50 | " 60 | " | Percnnial Rye or Imported E Blue Grass. | English $\ldots . .$ | " |
| 40 | " 50 | " | Red Top Chaff. | 14 |  |
| 10 | " 12 | " | Red Top, Fancy Solid Sced. | bout 30 |  |
| 25 | " 40 | " | Rhode Island Bent | 14 | , |
| 30 | " 35 | " | Sheep Fescuc. | 14 |  |
| 15 | " 20 | " | Sudan-Broadcast | 40 | ، |
| 5 | " 6 | " | Sudan-In Drills | 40 |  |
| 3 | " 5 | " | Swect Vernal with cther Grasses | " 11 |  |
| 25 | " 30 | " | Tall Meadow Oat Grass. | 11 |  |
| 15 | " 20 | " | Timothy | 45 |  |
|  | " 25 | " | Wood Meadow |  |  |

MIS CELLANEOUS


## 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 contended dogs and puppies.

Put up in sanitary and economical packages, insuring freshness.

Made in sizes for dogs and puppies. 20c pkg., mailing weight 1 lb ; 35c pkg., mailing weight, 3 lbs.; postage extra,
 see postal rates-2nd page of cover.

## SPRATT'S PATENT DOG AND PUPPY GAKES

REQUIRE no preparation, no trouble, no cooking, and are adapted for all breeds of dogs. They ore 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. 2 lbs., 30c; 25 lbs., $\$ 3.30 ; 50$ lbs., $\$ 6.25$; 100 lbs., $\$ 11.75$.
SPRATT'S PATENT PUPPY CAKES. 2 lbs., 30c; 25 lbs., $\$ 3.40 ; 50$ lbs., $\$ 6.50$; 100 lbs., $\$ 12.25$.


## PRATT'S POULTRY AND STOCK REMEDIES



Pratt's Baby Chick Food.
3-1b. pkg., 30 c ; 61/2-lb. pkg., 60c; 14-lb. bag. $\$ 1.20$.
Pratt's Poultry Regulator.
24-oz. pkg., 30 c ; 4-lb. pkg., 60c; 12-1b. pail, \$1.75; 25-1b. pail, $\$ 3.00$. Pratt's Roup Remedy..... per pkg., 30c, 60 c and $\$ 1.20$. Pratt's Roup Tablets.....per plg., 30c, 60c and $\$ 1.20$. Pratt's Sore Head Chicken Pox Remedy.

Per pkg., 30c and 60c. Pratt's Condition Tablets for-Poultry.... per pkg., 30c. Pratt's Bronchitis Remedy................. per pkg., 30c. Pratt's Scaly Leg Remedy. Pratt's Head Lice Ointment.
$\qquad$ . .boxes, 30c. Pratt's Gape Remedy............................per pkg., 30c and 60c. Pratt's White Diarrhoea Remecy.per pkg., 30c and 60c. Pratt's Lice Killer. (powdered form.)
$1-\mathrm{lb}$. pkg., $30 \mathrm{c} ; 21 / 2-\mathrm{lb}$. pkg., 60 c . Pratt's Liquid Lice Killer.

1 -qt. can, $60 \mathrm{c} ; 2-\mathrm{qt}$. can, $\$ 1.00$; 1 -gallon can, $\$ 1.75$. Pratt's Poultry Disinfectant.

1 -qt. can, $50 \mathrm{c} ; 2$-qt. can, $\$ 1.00$; 1 -gallon can, $\$ 1.75$. Pratt's Chicken Cholera Remedy.per pkg., 30 c and 60 c . Pratt's Animal Regulator.

21-oz. pkg., 30 c ; 48-oz. pkg., 60c; 12-1b. pail, \$2.50; 25-1b. pail, $\$ 4.00$. Pratt's Heave, Cough and Cold Remedy.1-lb. pkg., 60c. Pratt's Veterinary Colic Remedy.......per bottle, 75c. Pratt's Distemper and Pink Eye Remedy. per bottle, 60c. Pratt's Dip and Disinfectant.

1 -qt. can, 60 c ; $2-\mathrm{qt}$. can, $\$ 1.00$; 1 -gallon can, $\$ 1.75$; Pratt's Liniment.
Pratt's Bag Ointment. $\qquad$ per bottle, 30 c . Pratt's Peerless Hoof Ointment. $\qquad$ per box, 35c. Pratt's Healing Ointment (for man or beast. per box, 30 c and 60 c .
Pratt's Healing Powder. ...... 4-oz. sifting top can, 30c. Pratt's Hog Tonic. per pkg., $\$ 1.20$. Pratt's Cow Tonic............................ per pkg., 60c. Pratt's Calf Tonic. ...... per pkg., 60 c . Pratt's Germ-a-thcl.................. per bottle, 25c and 50c. Pratt's Fly Chaser.... 1̌-๕al. can, 90c; 1-gal. can, $\$ 1.50$.


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............ 3 lb . pkg., 50 c .

## LAMBERT'S Death To Lice Remedies

Death to Lice Powder.
5-oz. size, $10 \mathrm{c} ;{ }^{2} 5$-oz. size, $25 \mathrm{c} ; 4 \mathrm{~S}$-oz. size. 50 c ; 100-oz. size, $\$ 1.00$.

## CONKEY'S REMEDIES



Conkey's Poultry Tonic.
 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 Bemedy................ . per phg., 60c. Conkey's Cholera Remedy....... per pkg., 30 c 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 plg., 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 00 c .
Conkey's Poultry Laxative................ . per phg., 30c.
Conkey's Healing Salve. per pkg., 30c.
Conkey's Head Lice Ointment.
$1-0 z$. tube, 15 c ; 3 -oz. tube, 30 c .
Conkey's Lice Powder.
5-oz. pkg., 15 c ; 15-oz. pkg., 30c; 49-oz. pkg., 60c;
Conkey's Lice Fix. . . . . . . . . . . . . . . . . . . . . . . . per pkg.. 60c.
Conkey's Lice Liquid.1-qt., 50c; 2-qt., 75c; 1-gal., \$1.25.
Conkey's Noxicide.
Small size, $40 \mathrm{c} ; 1$ i-qt., 70 c ; 1/2-gal., $\$ 1.00$; 1-gal., $\$ 1.75$.
Conkey's Sulphur Fumigating Candles.
Each. $10 \mathrm{c} ; 3$ for 25 c ; 1-doz., $\$ 1.00$.


## LEE'S REMEDIES

Lee's Liquid Lice Killer.
1 -qt. can, $35 \mathrm{c} ; 1_{2}$-gal. can, 50 c ; 1 -gallon can, $\$ 1.00$.

## CYPHER'S LICE PAINT

Cypher's Lice Paint.
1-qt. can. 30c; 1/2-gal. can, 50c; 1-gal. can. 75 c .

## RUST'S POULTRY REMEDIES

Rust's Havens Roup

|  |  | Pills |
| :---: | :---: | :---: |
| lb. box | \$0.25 | Box of 50 pills. . . . . $\$ 0.25$ |
| $21 / 2 \mathrm{lb}$. box | . 50 | Box of 112 pills. . . . . . 50 |
| 25 lb box | 3.50 | Box of 250 pills. . . . . . 1.00 |
|  | Rust's Havens Climax Powder |  |
| 32 oz . | \$0.50 | 5 lb . box... . . . . . . . . . $\$ 1.00$ |
|  | Rust's Soluble Roup Powder |  |
| 4 oz. size. | 25c 9 oz. size | . . 50c 20 oz. size. . . $\$ 1.00$ |
|  | Rust's Lice Killing Powder |  |
| 45 oz . box. | \$0.50 | 112 oz. box. . . . . . . . . . $\$ 1.00$ |
|  | Rust's Liquid Lice Killer |  |
| Quart can |  | \$0.35 |

## CARBOLA

A Disinfecting Germ-Killing White Paint. Trial pkg., $25 \mathrm{c} ; 10-\mathrm{lb}$. phg., $\$ 1.00$; $50-\mathrm{lb}$. bag. $\$ 4.00$

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