Historic, archived document

Do not assume content reflects current
scientific knowledge, policies, or practices.

237
Forty-Third Year of Successful Service

INDEXED

1929

Mann's

· SUPERIOR ·

SEEDS

Tested, Proven and
Dependable Seeds-
For Market Gardeners

J. MANNS & CO.

(EST. 1887)

FORREST AND HILLEN STS.

(AT BELAIR MARKET)

BALTIMORE, MD.

D. N. Shoemaker
Vegetable Seed Trials

FEB 20 1929

Why

You should order

Manns' Superior Seeds

Because they are selected from the World's Best.

Because they are thoroughbred types developed to the degree of perfection required by Market Gardeners.

Because quality is the outstanding feature of Manns' Superior Seeds and they are sold on the merits of high vitality and trueness to type.

Because we recognize our responsibility of supplying stocks in which the Trucker can safely invest his labor, his time and his land.

Because they cost less than inferior stocks when the market value of the crop is considered.

Because they are priced lower than the general competition on stocks of equal quality.

Because our low prices are not indicative of low quality but are made possible through our advantages of location, capable personnel, and long years of practical experience under the original management.

Because we maintain trial grounds for your protection.

Because your confidence, good will and satisfaction are our greatest assets.

Because your order will receive intelligent, prompt, and courteous attention.

J. MANNS & CO.

Established 1887

FORREST AND HILLEN STS.

AT BELAIR MARKET

BALTIMORE, MD.

"Where Market Gardeners Buy Superior Seeds"

43rd Annual Catalogue

J. MANNS & Co.

Superior Seeds

Farm, Garden, Florist and Poultry Supplies

FORREST AND HILLEN STREETS

BALTIMORE, MARYLAND

WE take this opportunity to express our sincere appreciation of the business with which our friends have favored us during the past year, and wish to renew our assurances to you that we will endeavor to serve you equally as well or better during 1929.

In offering "Everything for the Farm and Garden," we aim to render a complete service to Market Gardeners, Florists, Farmers, Home Gardeners and Poultrymen, and, therefore, present in this catalogue the following items, priced as low as thoroughly dependable quality will permit:

	Page		Page
Vegetable Seeds.....	2-35	Horticultural Supplies.....	62-64
Flower Seeds.....	37-44	Lawn Mowers.....	66
Lawn Seeds.....	Cover Page	Chicks.....	67
Field Seeds.....	52-54	Poultry Feeds and Supplies.....	68-71
Plants.....	36	Dairy Supplies.....	72
Bulb and Roots.....	45-48	Wire Fencing.....	73
Evergreens, Fruit Trees and Shrubs.....	49-51	Water Systems and Pumps.....	74
Insecticides.....	55-56	Fertilizers.....	78-77
Sprayers.....	57-58	Implements and Machinery.....	75-79
Garden Tools.....	59-61	Power Cultivators.....	80

Prompt, Courteous, and Intelligent Attention Always

MAIL ORDERS: We pay all Parcel Post or Express charges, except on Beans, Corn, Peas, Onion Sets, Field Seeds, Seed Potatoes, Fruit Trees, Evergreens and manufactured articles. This enables distant customers to use Manns' Superior Seeds at no additional expense. Mail Orders receive the same consideration as given to callers at our retail store.

LOCAL ORDERS are either forwarded via Parcel Post, prepaid, or delivered by our trucks. Telephone your wants to Wolfe 5161.

Our entire personnel is vitally interested in serving you in accordance with the practices which have brought us continued success for 40 years.

PLEASE READ—NON-WARRANTY. It is very evident to anyone who gives the matter the slightest thought that it is to our best interests to send out only such stock as will grow and prove true to name and description. There are, however, so many contingencies to be encountered, entirely beyond our control, such as the weather, soil and other conditions that: **J. Manns & Company give no warranty, express or implied, as to description, quality, productivity, or any other matter of any Seeds, Plants or Bulbs sent out, and will not be in any way responsible for the crop.**

Domestic Parcel Post Rates Within the U.S. and Possessions		For First Pound	For Each Addit'l. Pound
First Zone within	50 miles	\$0.07	\$0.01
Second Zone within	50 to 150 miles	.07	.01
Third Zone within	150 to 300 miles	.08	.02
Fourth Zone within	300 to 600 miles	.09	.04
Fifth Zone within	600 to 1000 miles	.10	.06
Sixth Zone within	1000 to 1400 miles	.11	.08
Seventh Zone within	1400 to 1800 miles	.13	.10
Eighth Zone over	1800 miles	.14	.12

All Prices Quoted Subject to Change

SPECIAL VARIETIES OF MERIT

OUR general stocks are unexcelled in quality and better seeds cannot be purchased at any price. The following recently improved strains however, are worthy of special consideration and should be grown by every progressive-market gardener.

BEET

MANN'S EARLY SPRING. A very profitable Market Gardeners variety, extremely early, excellent quality and attractive appearance. See page 8. Pkt. 10c; $\frac{1}{4}$ lb. 50c; lb. \$1.50.

BORECOLE

MANN'S SUPERIOR EXTRA CURLED GREEN SCOTCH. The leaves of this variety are very much more curled than the Dwarf-Green Scotch, and many more bushels per acre can be cut due to the extremely vigorous growth. (see page 9).

BROCCOLI

Two widely different types; both becoming very popular. See page 8.

CABBAGE

GOLDEN ACRE. Being of excellent quality and extremely early, Golden Acre commands very high prices. See page 10. Pkt. 10c; oz. 50c; $\frac{1}{4}$ lb. \$1.50; lb. \$5.00.

CANTALOUPE

EARLY IMPERIAL, or HALE'S BEST. Thousands of acres of this vigorous and prolific variety are grown annually in the Imperial Valley of California for shipment to eastern markets, and being the very earliest of all high quality shipping melons, it should be grown extensively in Maryland and Virginia. The fruits average 7 in. long and 5 in. in diameter, are well netted and ribbed, and have very thick, salmon-tinted, fine grain flesh, which ripens clear to the rind. Its good, sweet flavor makes it equally desirable for the home garden. Pkt. 10c; oz. 20c; $\frac{1}{4}$ lb. 60c; lb. \$1.50.

CORN

PORTLAND 60-DAY. Extremely early market gardener's variety, producing ears 6 to 7 in. long, having 12 to 14 rows of pure white grains. Dwarf growth. The first large eared sweet corn in the market. Pkt. 30c; qt. 50c; pk. \$3.00; bu. \$10.00.

MANN'S EARLY SUPERIOR. This new variety is of remarkable size considering its earliness. The ears are 8 inches long and have 16 to 20 rows of rather narrow deep grains. The quality is excellent and the attractive appearance of the rich, tender, well-filled ears make it a very desirable sort for the Market Gardener. Qt., 35c; pk., \$2.25; bu., \$8.00.

CARROT

SUNRISE. Specially valued for medium and late use, an excellent keeper. The brightest scarlet, smoothest grain and most dependable of all half long varieties. See page 13. Pkt. 10c; $\frac{1}{4}$ lb. 50c; lb. \$1.50.

CUCUMBER

LONG FELLOW OR STRAIGHT PACK. This new variety was developed primarily for greenhouse culture; its quality, size and attractive appearance however, have definitely established it as one of the best for outdoor production. Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 60c; lb., \$2.00.

LETTUCE

NEW YORK, or WONDERFUL. Also known as the famous "Iceberg" of California. Our strain is unsurpassed. See page 18. Pkt. 10c; $\frac{1}{4}$ lb. 60c; lb. \$2.00.

PEAS

EARLY BIRD. The most popular early variety. Grown extensively in the vicinity of Baltimore, Washington, Norfolk and Philadelphia for shipping and general market purposes. See page 24. Qt. 45c; pk. \$2.50; bu. \$9.00.

PEPPER

CALIFORNIA WONDER. Its large, smooth, extremely heavy, very mild, thick flesh make this variety truly a wonder. Combining the excellent quality of the Pimento and the size of Crimson Giant, California Wonder is being grown for all purposes. See page 26. Deserves the attention of every pepper grower. Pkt. 25c; oz. 75c; $\frac{1}{4}$ lb. \$2.50; lb. \$9.00.

SPINACH

Improved strains, grown in Holland by the originators of these strains; extensively imitated by other Holland growers, but universally recognized as the most superior types ever produced. See pages 30 and 31.

SQUASH

EARLY BUSH WHITE (Green Tinted). Preferred by many market gardeners by reason of true decided light green color, even when fully matured. Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 50c; lb., \$1.50.

RADISH

MANN'S SELECTED SCARLET GLOBE. One of the best selling and most attractive radishes on account of its bright scarlet color and handsome shape. Our stock of this is the very best, selected with special care as to size, shape, color and earliness, and market gardeners will find it a money maker, as it is just right in every respect. Pkt., 10c; $\frac{1}{4}$ lb., 25c; lb., 75c; 10 lbs., \$7.00; 25 lbs., \$15.00.

TOMATOES

EARLY CANADIAN. Developed in Ontario, Canada, for adaptability to their very short growing season, and regarded as the earliest tomato in cultivation. Pkt. 25c; oz. 60c; $\frac{1}{4}$ lb. \$2.00; lb. \$7.00.

IMPROVED ADVANCE. An extra early, large tomato of high quality, round or slightly flattened shape, and exceptionally smooth for such an early variety. Pkt. 10c; oz. 50c; $\frac{1}{4}$ lb. \$1.50; lb. \$5.00.

MANN'S SPECIAL STRAIN BONNY BEST. Our special strain of Bonny Best has become a favorite among large growers for the early market. It is truly so superior to the ordinary stocks that it might rightfully be considered a new variety. Pkt. 10c; oz. 25c; $\frac{1}{4}$ lb. 85c; lb. \$3.00.

MARGLOBE. This new introduction by the U. S. Department of Agriculture is without doubt the most wonderful development ever offered tomato growers. Oz. 50c; $\frac{1}{4}$ lb. \$1.50; lb. \$5.00.

MANN'S IMPROVED STONE. A favorite with canners and market gardeners, because of its heavy yields, excellent quality, and beautiful appearance. Very much superior to regular strains of New Stone, Pkt. 10c; oz. 25c; $\frac{1}{4}$ lb. 75c; lb. \$2.50.

1887

MANN'S

1929

SUPERIOR VEGETABLE SEEDS

Selected from improved strains having true commercial merit, offered at lowest possible prices consistent with highest quality. FOR MARKET GARDENERS and other judicious and careful growers who sow the best.

ASPARAGUS

1 ounce to 60 feet of drill; 1 lb. per acre; 3,000 plants per acre.

Asparagus grows easily in almost any good soil, but best results are obtained in well-enriched, deeply dug, sandy loam. It may be grown from seed, but much time is saved by planting roots.

If you wish to grow plants from the seed yourself, sow in spring in drills about eighteen inches apart and two inches deep in light, rich soil, planting fifteen to twenty seeds to each foot of row. When the plants are well up, thin to about one inch apart and give frequent and thorough cultivation during the summer. If this has been well done, the plants will be fit to set the next spring.

The permanent bed should be prepared by deep plowing or spading and thoroughly enriching the ground with stable manure or other fertilizer; a moist, sandy soil is best. Set the plants about four inches deep and one to two feet apart in rows four to six feet apart. After the plants are well started, give frequent and thorough cultivation. Early the next spring spade in a heavy dressing of manure and about one quart of salt and double the quantity of fresh wood ashes to each square rod and cultivate well as long as the size of plants will permit, or until they begin to die down. The next season the bed may be cut over two or three times, but if this is done, all the shoots, no matter how small, should be cut. After the final cutting, give a good dressing of manure, ashes and salt. Cultivate frequently until the plants meet in the rows.

In autumn after the tops are fully ripe and yellow, they should be cut and burned. A bed fifteen by fifty feet, requiring about one hundred plants, if well cultivated and manured, should give the following season an abundant supply for an ordinary family and continue productive for eight or ten years.

Giant Argenteuil Famous French variety noted for its earliness and size. It resists rust better than some domestic sorts and is also very prolific, producing an abundance of light green, tender shoots. Pkt., 10c; ¼ lb., 20c; lb., 60c.

Palmetto This is one of the most popular varieties grown for general garden purposes, being early, prolific and very uniform. Shoots are light green but frequently deep green when allowed to grow above ground. Pkt., 10c; ¼ lb., 20c; lb., 60c.

Mary Washington Superior to Martha Washington and Washington Pedigree, in quality and equally resistant to disease. It is larger and earlier and produces remarkably tender dark green stalks with very compact purplish green tips. Pkt. 10c; oz. 20c; ¼ lb. 60c; lb. \$2.00.

ASPARAGUS ROOTS

From one to two years may be saved by planting Asparagus roots instead of seed. Choice, 2-yr. old roots, all leading varieties. \$1.25 per 100; \$8.00 per 1000. MARY WASHINGTON, \$1.75 per 100; \$12.00 per 1000.

ARTICHOKE (Jerusalem of Tuberous Rooted)

Grown exclusively for their large potato-like roots which are valuable for feeding hogs. Price, 1/4 pk., 45c; pk., \$1.25; bu., \$4.00. Expressage extra.

Artichoke (Large Green Globe). About 500 plants from 1 oz. The scale like leaves of the flower heads are used as a salad or boiled, making a delicious dish which is very popular with the French and Italians. Pkt., 10c; oz., 50c; ¼ lb., \$1.50; lb. \$5.00.

Asparagus, Mary Washington Rust proof.

BUSH BEANS

1 pint to 100 feet of drill; 1 to 1 ½ bushels per acre.

Beans are tender and should not be planted until the soil is well warmed. Sowing too early will often result in a poor stand and uneven ripening. Sow the seed 1 ½ to 2 inches deep in rows not less than 18 inches apart and firm the soil to assist germination. Allow the plants to stand 4 to 10 inches apart in the row according to variety.

Shallow cultivating and hoeing should be done frequently until the vines are in blossom. To prevent blight do not cultivate deeply and avoid working them while the vines are wet. Beans grow best in a warm, well-drained, sandy loam. For succession plant every two weeks until about August 15th.

ROUND GREEN PODDED VARIETIES

Burpee's Stringless Green Pod This variety has justly become very popular and can be profitably grown by either trucker or home gardener. It combines vigor, earliness and productiveness. The pods are produced in abundance and are handsome in appearance, being rich dark green in color, smooth, absolutely round, meaty, stringless, free from fiber, and of exceptionally delicate quality. For the private gardener we recommend this as the most desirable first early. Mature for picking condition in 45 days. Qt. 75c; pk. \$5.50; bu. \$20.00.

Giant Stringless Green Pod A very productive long, round-podded variety, longer and straighter than Burpee's Stringless. The pods are round, meaty, brittle, entirely stringless and of fine quality. Vines are large, vigorous and spreading. A few days later than the Burpee's Stringless Green Pod. Qt. 75c; pk. \$5.50; bu. \$20.00.

Full Measure Stringless A second early, round-podded, stringless bean of recent introduction. The pods are straight, meaty, and are dark green in color. They are entirely stringless and measure 6 to 8 inches in length. Very prolific. Crop failure.

Dwarf Horticultural or Dwarf Cherry One of the best dwarf sorts for green shell beans for the home garden and market and can be used early as a snap bean. As a green shelled bean it is equal to the lima in quality while any surplus crop can be kept for winter use. The pods are 5 inches long, stout, flat and stringless. They are green at first changing as they mature to yellow splashed with carmine. The dried seeds are large, almost round, light buff spotted with dark red. Our special stock of this variety is superior to the old style Dwarf Cherry being entirely stringless and free from runners. Qt., 75c; pk., \$5.00; bu., \$18.00.

Burpee's Stringless Green Pod.

Black Valentine This variety has proven itself to be the most hardy of all string beans. It will resist cold and wet better than any other sort and therefore can be planted extremely early and very late in the season as well as during the summer. They should be picked as soon as ready as they will become too long if allowed to remain on the vines too long. Qt., 75c; pk., \$5.00; bu., \$18.00.

Late Refugee or Thousand-To-One Noted for its great productiveness, this variety has gained favor for canning and pickling. The dense foliage protects the pods from early frosts, thereby prolonging the season. The pods measure 5 to 5 ½ inches are round, somewhat slender, almost stringless and of good quality. Qt., 75c; pk., \$5.00; bu., \$18.00.

FLAT PODDED GREEN STRINGLESS

Bountiful Extra early, green pod, good cropper, hardy, prolific; pods long, straight, thick-flat, entirely stringless, good quality. The best extra early, semi-round variety. Qt. 75c; pk. \$5.50; bu. \$20.00.

:: For Control of MEXICAN BEAN BEETLE ::

CALCIUM ARSENATE - CALCIUM FLUOSILICATE

RED ARROW - EVERGREEN

: : : : : LET US QUOTE : : : : :

Aids in Prevention of Bean Spot

Bean Spot or Anthracnose is a disease caused by the fungus *colletotrichum lindemuthianum*, which is carried in seed, soil and dead vines, from previous years crop. It is very rare or unknown in the semi-arid region of the West where our Bean seed is grown, and with this disease-free seed, the damage from spot may be reduced considerably by the customary methods of crop rotation, burning the refuse, destruction of weeds, and improving the air and soil drainage.

For a successful crop, plant disease-free seed, and practice crop rotation, never planting Beans on land where the same crop grew the previous season; do not cultivate or walk through the Bean field or pick beans while wet with dew or rain. If the disease is present, it is then easily spread from one part of the field to another. Disease-free soil is just as essential as clean seed in the production of a crop free from spot.

Full Measure

SURE CROP STRINGLESS WAX BEANS

WAX BEANS--Flat Podded Sorts

Sure Crop Wax Decidedly better quality than Currie's Rust Proof but vine and seed very similar in appearance, and maturing about a week later. The pods are of a rich yellow color, growing an inch longer than Currie's and being stringless at all stages of growth. The disease resistant qualities found in Currie's are duplicated in this variety and it is vigorous, hardy, and very productive. For quality use Sure Crop, while for earliness Currie's is better. Qt., 75c; pk., \$5.00; bu., \$18.00.

Wardwell's Kidney Wax A very popular standard gardeners' variety, bearing a large crop of handsome, light golden yellow, long, broad pods which are nearly stringless and of very good quality. Very attractive and always command a good price in the markets.

Burpee's New Kidney Wax Resembles Wardwell's Kidney Wax, excepting that the pod is larger and thicker, though not so broad. Fairly productive and of high quality, stringless, very fleshy and brittle. Pods measure 6 inches and are of attractive, clear yellow color. Mid-season sort; not damaged by wet weather.

Davis' White Kidney Wax An early productive and attractive sort of fair quality. Pods 6 to 7½ inches, stringy, the white seed being the best feature as it makes a very satisfactory shell bean for winter use.

Currie's Rust Proof Wax This variety is not stringless, but being the earliest, hardiest and one of the most prolific of all flat wax-podded beans, has become a favorite among market gardeners and truckers. It is ready for picking in 42 days and the large, flat, straight pods which are of a bright golden yellow color make an attractive appearance when offered for sale. The vines are strong and upright, holding the pods well off the ground, their vigorous and hardy nature making them immune from rust, mildew or blight. Qt., 75c; pk., \$5.00; bu., \$18.00.

ROUND PODDED SORTS

Round Pod Kidney Wax (Brittle Wax). An excellent early round-podded variety of handsome appearance. Pods are long, straight, brittle, meaty; entirely stringless and of exceptionally desirable quality. The best round-podded wax bean for the home garden. Qt. 75c; pk. \$5.00; bu. \$18.00.

Refugee Stringless Wax This popular canner's variety is very hardy, vigorous and productive. The pods are about 5-in. long, slender, regularly curved, round, well-filled, with no depressions; fleshy, fine grained and of excellent quality. Qt., 75c; pk., \$5.00; bu., \$18.00.

Pencil Pod Black Wax The best black seeded wax variety. It is early and very productive, exceptionally strong and vigorous, producing pods 6½ to 7 inches long which are fleshy, brittle, strictly stringless and free from fibre. They are of fine quality and clear yellow in color. Qt., 75c; pk., \$5.00; bu., \$18.00.

Hardy Round Pod Rustless Wax

EDIBLE-PODDED POLE BEANS

For Cultural Directions See Pole Limas.

Burger's Stringless Green Pod or White Kentucky Wonder

A new pole variety of great merit, bearing large, brittle, stringless pods of excellent flavor, dark green in color. It resembles the Kentucky Wonder in form of pod but is much earlier, more productive and bears longer. Seeds white, fine for baking. Qt., 50c; pk., \$2.75; bu., \$9.50.

Kentucky Wonder or Old Homestead

This old standard variety is extremely productive and of finest quality. It is early and produces round, green pods about 9 inches long. Splendid for use as snaps for the home gardener as it continues to bear for a long period. Seed light brown. Qt., 50c; pk., \$2.75; bu., \$9.50.

White Creaseback Excellent as a snap bean as well as dried for winter use. Pods 5 inches long, fleshy, stringless and borne in clusters. Very productive. Qt., 50c; pk., \$2.50; bu., \$9.00.

Horticultural Cranberry or Wren's Egg

An old favorite, excellent both as a snap and shell bean. Medium early, producing large quantities of 5 and 6 inch pods which are broad, thick, and of fine flavor. Qt., 40c; pk., \$2.50; bu., \$9.00.

Lazy Wife One of the best general purpose pole beans; of superior quality as a snap, green shelled or dried bean. Pods which are borne abundantly throughout the summer are very easily gathered and entirely stringless, brittle, light green in color and of a mild, sweet flavor. Seed pure white, 6 to 8 in each pod. Qt., 50c; pk., \$2.75; bu., \$9.50.

Yard Long, Celestial or Asparagus Bean

Somewhat of a curiosity and yet possessing excellent qualities. It is very prolific, absolutely rust proof and a rank grower. It will produce pods 18 to 24 and sometimes 30 inches long. An excellent table vegetable, the pods being tender, stringless and of a rich asparagus flavor. Oz., 10c; lb., \$1.00.

BUSH BEANS

VARIETIES USED AS SHELL BEANS

Dwarf Horticultural, Fordhook Favorite, and Davis' White Kidney Wax. Three very satisfactory shell bean sorts have been listed previously.

White Marrowfat This is a very prolific variety and has become a choice family sort both for green shells and dry beans. Pods are broad, about 5½ inches long, medium green changing to yellow, having large, clear, white seeds which cook very dry and mealy. Qt., 35c; pk., \$2.00; bu., \$7.00.

White Marrowfat

Kentucky Wonder

Royal Dwarf or White Kidney Excellent late, variety, green shelled or dry. Seeds are large, white, kidney shaped, and of fine quality. Qt., 40c; pk., \$2.25; bu., \$8.00.

White Navy or Boston Pea Bean

The standard small seeded, pure white variety which has become so popular for its baking qualities. The yield is invariably very heavy. Sow during June and July in rows three feet apart dropping 2 to 3 seeds a foot apart in the rows. Qt., 35c; pk., \$2.00; bu., \$7.00.

Broad Erfurt Of foreign origin and entirely different from any other variety, being larger than the ordinary lima, with much darker pods. This sort will prove profitable for market gardeners who have Italian and Spanish trade. Qt., 40c; pk., \$2.25.

POLE LIMA BEANS

1 quart to 150 hills; 8 to 10 quarts per acre.

Pole beans do not bear as early as the bush varieties but they are more productive, their bearing season is longer and they are more easily gathered. They succeed best in a warm sandy loam which has been enriched with well rotted manure. If poles are used they should be set three to four feet apart each way. After the ground has become warm and dry, plant 4 to 6 beans to a pole and when well started thin out to 2 or 3 plants to a pole. By placing the seed eyes down they will germinate more quickly and for this reason are less liable to rot. Cultivate frequently but shallow.

Sunnybrook This variety was introduced in 1922 and has rapidly gained favor because of its extreme earliness and abundance of medium sized, well filled pods of deep green color, having four and often five large thick, meaty, light green beans of the finest quality. The vines are of most vigorous growth and produce pods which are ready for picking earlier than any other large seeded pole lima. Qt., 60c; Pk., \$3.25; bu., \$12.00

Early Leviathan The Early Leviathan stands supreme because of its combined qualities, earliness, size and productiveness. The large, well filled pods are borne in clusters of five to ten and are spaced over the entire vine. They are well filled with large fleshy beans of excellent quality, delicate pale green in color. Qt., 60c; pk., \$3.00; bu., \$11.00.

Carpinteria A very desirable pole lima for the home and market garden, producing an abundance of large four-seeded medium green pods. The color is distinctive in having a decided greenish tint, an indication of very finest quality. The beans are thin skinned, delicious flavor and retain the distinctly green tinge even when dried. Qt., 60c; pk., \$3.00; bu., \$11.00.

Ideal One of the largest and most valuable of the medium late varieties, producing a tremendous crop of seven-inch pods, which are filled with five to six large beans of excellent quality. Seed large, ovoid, flat white with slight greenish tinge. Splendid for market gardeners. Qt., 65c; pk., \$3.25; bu., \$12.00.

King of the Garden This is the best and most popular main crop variety. Vines are strong and vigorous; setting pods early and continuing to bear until frost. Is used extensively by market gardeners because of its very prolific nature and the immense size of the pods, which are very straight and handsome; of medium dark green color, broad, flat and filled with four or five large white beans of finest quality. Qt., 60c; pk., \$3.00; bu., \$10.50.

Challenger or Dreer's Pole Vigorous, productive, and quite early, producing pods which are much thicker than any other sort and filled with four thick beans so closely set that the ends are flattened. A favorite among market gardeners. Qt., 60c; pk., \$3.25; bu., \$11.50.

Giant Podded The largest podded lima in cultivation; extremely vigorous in growth, mid-season. Pods are borne in clusters of 6 to 8 and measure 7 inches long and 1½ inches broad. The beans are extra large and of excellent quality. Qt., 60c; pk., \$3.25; bu., \$12.00.

BUSH LIMA BEANS

Large seeded sorts, 1 quart to 100 hills; 1 bushel to the acre.

Small seeded sorts, 1 quart to 150 hills; 3 pecks to the acre

Sunnybrook

These varieties require no support, are about two weeks earlier than the pole beans, and can be planted closer in the rows. They are therefore used by large growers and by gardeners who do not find it convenient to use poles. After danger of frost is past and the ground has become warm, plant in 3 ft. rows dropping 3 seeds to a hill and the hills 15 inches apart.

Early Giant Bush Lima The largest and earliest bush lima; two weeks earlier than Fordhook, very prolific and of excellent quality. Pods contain 4 to 5 large, close set ing beans, and are borne in clusters of 5 to 8. Plant very vigorous and upright, often attaining a height of 30 inches. Qt., 75c; pk., \$5.50; bu., \$20.00.

Fordhook Bush Lima A most excellent variety and exceedingly popular with market gardeners. The plants are freely branching and very erect in their growth. Four or five large, very thick beans are contained in each pod and the plants continue to produce large quantities from July until frost. The green beans even when full size are tender, juicy and sweet when cooked, being a distinct improvement over the rather dry and mealy character of other varieties of this Potato Lima type. Qt., 75c; pk., \$5.50; bu., \$20.00.

Burpee's Improved Bush Lima A very prolific mid-season variety of very hardy, vigorous and true bush to 6 inches long. The pods are borne abundantly, enormous in size and well filled with handsome beans which are both larger and thicker than those of the regular Burpee's Bush Lima. Qt., 60c; pk., \$4.00; bu., \$14.00

Wood's Prolific or Henderson's Improved Bush Lima Greatly resembles Henderson's Bush Lima in form and habit of growth, but produces much larger and thicker beans, equally as good in quality and very prolific. Qt., 60c; pk., \$3.00; bu., \$10.50

Early Giant

TABLE BEETS

1 oz. to 50 feet of drill; 5 lbs. per acre.

The soil for beets should be light, rich fine and deeply cultivated. Smooth beets cannot be grown if fresh manure is used. If wanted very early, sow in hot beds and transplant, cutting off the outer leaves. For early outdoor crop plant the seeds about 1 inch apart and 1 inch deep in rows 1 to 2 feet apart, firming the soil about the seeds by walking on the row. This should be done as soon as the ground can be worked and for table use, plantings should be made every three weeks. Thin out the plants to 3 inches apart. For main crop sow in the early part of May while for winter use they may be planted up to July 1st.

Extra Early Flat Egyptian One of the very earliest, excellent for forcing and early crop. Roots are distinctly flat, very dark red, have very small tap root and are of fine quality when young. They measure 2 inches in diameter when mature and have very small tops. Pkt., 10c; ¼ lb., 30c; lb., \$1.00.

Manns' Early Spring Being extremely early, of a wonderful dark red color, and of exceptional quality, Manns' Early Spring Beet offers an unusual opportunity for profitable production. It is suitable for growing either out of doors or under glass and deserves the attention of every commercial grower. Pkt., 10c; ¼ lb., 45c; lb., \$1.50; 10 lbs., \$12.50.

New Model A very good early variety for growing under sash or in the open ground. Perfect in shape and of a beautiful red color, very uniform in shape and size, the entire crop maturing during the same week. Short tap root and small tops. This variety fills a definite need among the market gardeners and has met with success. Pkt., 10c; ¼ lb., 30c; lb., \$1.00.

Crosby's Egyptian This is most popular early variety for the trucker or home gardener, as the roots are smooth, globe shaped, deep red in color, tender, sweet and richly palatable when served. This should not be confused with Flat Egyptian as it is similar only in point of earliness, and size of tops and tap root. Pkt., 10c; ¼ lb., 30c; lb., \$1.00.

Crimson Globe An excellent main crop variety of medium size, globe shaped, with a remarkably smooth surface and high in quality, being tender, crisp and sweet, never stringy. The flesh is very deep purple, slightly zoned in lighter and darker shades. Is without rootlets and the foliage is small and attractive. Extensively used by market gardeners. Pkt., 10c; ¼ lb., 30c; lb., \$1.00.

Edmand's Blood Turnip Second early; short tops nearly round, flesh purplish red, with little zoning; a good keeper. Pkt., 10c; ¼ lb., 30c; lb., \$1.00.

Detroit Dark Red Beets

Detroit Dark Red Careful comparison with all prominent varieties on the market prove Detroit Dark Red to be the most uniform in size and shape, the most attractive in color, and unsurpassed in quality. The tops are small and upright in growth with dark green leaves shaded with red. The roots are globular, of medium size, very smooth and dark blood red in color. Excellent for bunching, making a handsome appearance when offered for sale. Decidedly the best variety for either the home or market gardener, and on account of its uniformly deep rich color is most desirable for canning. May be planted for early or main crop. Pkt., 10c; ¼ lb., 30c; lb., \$1.00.

Eureka Early sort, growing 3 to 4 inches in diameter. Of good quality and color and nearly as early as the extra early varieties. Pkt., 10c; ¼ lb., 30c; lb., \$1.00

BEETS—MANGEL AND SUGAR

The Mangel Wurzel, also called Mangel, Field Beet and Cow Beet is extremely valuable for stock feed. Very large yields are produced on almost any soil, but a deep, rich loam is most suitable.

Sow 1 ounce to 100 feet of drill, 6 lbs. to the acre in drills and 15 to 20 lbs. to the acre is sown broadcast.

Plant from middle of May to middle of June in drills about 2½ feet apart and 1 inch to 1½ inches deep. When the plants are about three inches high begin thinning out and continue at intervals until they stand 8 inches apart in the rows. By thoroughly firming the soil over the seeds after planting and frequently cultivating, more uniform germination and a more even maturing crop will result.

Mammoth Long Red Attains enormous size, producing thirty to fifty tons per acre. The roots are straight, well formed and much thicker than other sorts. Grows well above the ground and is therefore easily gathered. The flesh is white tinged with rose. Highest feeding qualities. ¼ lb., 20c; lb., 50c; 5 lbs., \$2.00.

Golden Tankard The best Yellow Mangel in cultivation. It contains a larger percentage of sugar than the red sorts. Very desirable for feeding purposes and easily harvested. ¼ lb., 20c; lb., 50c.

BROCCOLI

Calabrese Green Sprouting or Heading

This plant is somewhat similar to cauliflower in its nature of growth, but produces a large solid head which remains green. When this head is cut, numerous sprouts develop, forming small heads which command a fancy price among Italian trade. It is rapidly becoming popular and is being generally used in leading hotels because of its delicious, rich asparagus flavor. Pkt., 25c; ¼ lb., 60c; ½ lb., \$2.00; lb., \$7.00.

Italian Green Sprouting Known in the South as Salad Broccoli, grows more "greens" than seven top turnip and is fairly hardy in Maryland making a profitable cover crop. Sow in August broadcasting two to three pounds per acre and the first sprouts will be ready for market during February or early March, at which time they usually command a very good price. Pkt., 10c; ¼ lb., 45c; lb., \$1.50; 10 lb., \$12.50.

USE A FELINS TYING MACHINE
FOR BUNCHING BEETS

BORECOLE

Superior to the ordinary Kale in quality and extensively grown in this section for marketing during the winter months, when other vegetables are scarce. Borecole should be grown like cabbage, the seed being sown from early spring to the middle of August. It is customary to pull off the lower leaves and let the plant grow on to furnish a continuous supply.

Hardy Winter This variety is the most salable and profitable sort for either the home or market gardener. The plant attains a height of 18 inches and produces an abundance of beautiful light green leaves, which are densely curled and crimped. It is extremely hardy and has the additional advantage of putting forth a second crop of leaves after the first have been gathered or have fallen off. Pkt., 10c; oz., 20c; ¼ lb., 60c; lb. \$2.00.

Superior Extra Curled Green Scotch

The leaves of this variety are very much more curled than the Dwarf-Green Scotch, and many more bushels per acre can be cut due to the extremely vigorous growth, which is characteristic of this variety. Nearly as hardy as Hardy Winter, and very popular with many of our customers. Pkt. 10c; Oz. 20c; ¼ lb. 60c; lb. \$2.00.

New Blue Curled Scotch

Just as hardy as Hardy Winter and having very curly dark blue-green leaves. More dwarf than Dwarf Green Scotch. Every trucker who grows Borecole should have a portion of this variety. Pkt. 10c; ¼ lb. 30c; lb. \$1.00.

Dwarf Green Scotch This excellent sort is low spreading and compact in its nature of growth, forming a mass of leaves which are beautifully curled and mosslike in appearance. The color is an attractive bright green and the quality is excellent. Pkt. 10c; ¼ lb. 30c; lb. \$1.00.

DANDELION

French Cultivated, or Common An improvement on the wild dandelion, vigorous and hardy. Pkt. 10c; oz. 25c. ¼ lb. 75c; lb. \$2.75.

Improved Broad Leaved The best and earliest strain, forming a tuft of large broad slightly cut leaves. Pkt. 10c; oz. 60c; ¼ lb. \$2.00; lb. \$7.50.

Borecole—Dwarf Green Scotch.

BRUSSELS SPROUTS

1 oz. will sow 500 ft. of drill or 3,000 plants.

Brussels Sprouts are grown for use during the fall and winter months. An abundance of sprouts, resembling miniature cabbages are produced over the entire stem from tip to the ground. When the young sprouts are well formed the lower leaves should be stripped off to aid the formation of the heads. Sow the seed thinly in drills in April for early crop or in early June for a late fall crop. After the plants are 6 inches high transplant to rows which are 3 to 4 feet apart and 18 to 24 inches apart in the rows. The plants are hardy and in this section will live out through the winter without protection. The sprouts are improved in quality and flavor by frost.

Danish Prize Found to be the best variety both in quality and productiveness. The sprouts develop very evenly over the entire stem, the lower sprouts being as tightly folded and as solid as those higher up. Consequently a large crop can be gathered. Unsurpassed in quality. Pkt., 10c; oz., 30c; ¼ lb., 90c; lb., \$3.00.

SWISS CHARD

or Spinach Beet

This excellent vegetable is grown for its large, broad leaves which make a delicious dish when prepared like spinach or asparagus. The increasing demand proves conclusively that this variety is finally receiving the attention its many valuable characteristics deserve. It produces all tops and no edible root, the leaves stand 2 to 2½ feet high, growing well even in hot weather when spinach fails altogether. It soon sprouts again after cutting and gives several crops each year.

Plant the seeds the same as ordinary beet seeds but thin out at first to 6 inches apart, later to 1 foot apart. Ready for use in about 60 days.

Fordhook Giant The best Swiss Chard in cultivation, producing extremely large, heavily savoyed leaves of a beautiful glossy, very dark green color. The ribs average three inches broad and are pure white. Pkt. 10c; ¼ lb. 30c; lb. \$1.00.

Lucullus An improved type of Chard, being of more upright growth. The leaves are dark green with white mid-rib and veins; very much crumpled and curled. The stalks are thick and broad and as large as rhubarb. Pkt., 10c; ¼ lb., 25c; lb., 75c.

COLLARDS

This is a tall, loose leaved kale-like plant grown throughout the South for table use and for stock feeding purposes. Collards usually succeed in locations where cabbage cannot be grown to perfection. One ounce of seed will sow 300 feet of drill; two pounds per acre.

Georgia, Southern or Creole The chief Southern variety for greens, growing 2 to 3 feet high and forming a large, loose, open head or cluster of leaves with a rather long stem. Quality is improved by a light frost. Pkt., 10c; ¼ lb., 25c; lb., 75c.

CHIVES

Chives are a small hardy perennial plant, resembling the onion in appearance and growing in clusters. They are grown for the young leaves, which are produced freely from early in the spring and give a mild onion flavor to sausages, salads and various dishes. Pkt., 10c; oz. \$1.00; ¼ lb. \$3.50.

Swiss Chard—Fordhook Giant

FIELD OF MANNS' EARLY JERSEY WAKEFIELD CABBAGE

CABBAGE

1 oz. for 2,000 plants; $\frac{1}{4}$ lb. per acre.

CULTURE:—The best results are obtained from a well-drained, deep rich loam. The very early varieties should be sown about September 15th and in 4 or 5 weeks transplanted to coldframes, from which they are transplanted to open ground from March 15 to April 15. If this is not done the seed should be sown in hotbeds in February; making plantings later of course according to variety and time crop is wanted. The earliest sorts should be set out in rows 2 feet apart and 18 inches apart in the rows.

If it is not especially desired to have very early cabbage the seed may be sown in open ground and transplanted after 4 weeks. For second early crops sow in April and transplant in May; these will mature in July and August. The later varieties should be planted in May and transplanted in July to rows 3 ft. apart and 2 feet apart in the rows; these will mature from September to November.

Cabbages should be hoed every week and the ground thoroughly stirred as they advance in growth, drawing a little earth to the plants each time until they begin to head, when they should be thoroughly cultivated and left to mature.

Copenhagen
Market

FIRST EARLY SORTS

Extra Early Express Earlier than Jersey Wakefield, smaller and less compact but often a very profitable crop. Pkt. 10c; oz. 25c; $\frac{1}{4}$ lb. 75c; lb. \$2.25.

New Selected Jersey Wakefield An improved strain of Early Jersey Wakefield, grown and selected with the greatest care; there is none better. Plant compact and erect or very slightly spreading, with few outer leaves, which are smooth, thick, nearly oval and light green. Stem short. Heads of medium size, very solid, uniformly pointed and of excellent quality. Pkt. 10c; oz. 30c; $\frac{1}{4}$ lb. \$1.00; lb. \$3.00.

Charleston or Large Wakefield Produces larger and less pointed heads than Jersey and a week or two later in maturity. The heads are very solid and the leaves are large, smooth, thick. It is exceedingly hardy and has become very popular with growers and shippers because of its earliness and size. An excellent succession to Jersey Wakefield. Pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., 75c; lb., \$2.50.

Golden Acre This new extra early variety matures earlier than Jersey Wakefield. It forms a large round, solid head resembling Copenhagen Market; very uniform, and compact, having few outer leaves which permits close planting. Golden Acre commands very high prices. Pkt. 10c; oz. 50c; $\frac{1}{4}$ lb. \$1.50; lb. \$5.00.

Copenhagen Market This very fine, large round headed variety is of Danish origin and has proven to be very valuable to the American grower. It is nearly as early as Jersey Wakefield. The heads average about 10 lbs., and the stems are very short. Close planting is possible because of the fact that there are very few outer leaves, the stems are short and the heads very compact. Pkt., 10c; oz. 25c; $\frac{1}{4}$ lb., 75c; lb., \$2.50.

New Leader Very early flat heading sort forming small solid heads very early but developing larger heads if allowed to stand. Oz., 25c; $\frac{1}{4}$ lb., 75c; lb. \$2.25.

Eureka First Early The earliest short stem, round headed variety, comparing favorably with Copenhagen Market but a little smaller and earlier. The quality is excellent and it is a reliable header and a sure cropper. Popular with market gardeners as it matures at the same time as the early pointed varieties. Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 60c; lb., \$2.00.

Glory of Enkhuizen Large sure heading, dark green variety, globular, very hard and solid, few outer leaves, excellent quality. Pkt., 10c; oz. 25c; $\frac{1}{4}$ lb. 75c; lb. \$2.50.

CABBAGE

SECOND EARLY SORTS

Volga One of the earliest main crop cabbages of superior quality. Very desirable where a large, uniformly round head with short stem and compact growth is wanted. Exceptionally hardy and a good keeper. Pkt., 10c; oz., 25c; ¼ lb., 75c; lb., \$2.50.

All Head Early or New Early Remarkably solid and uniform in color as well as in shape and size, its sure heading qualities and tenderness make it a favorite for the home garden. By reason of its compact growth, it is possible to produce 1,000 more heads per acre than many other good sized varieties. For winter use sow in July. Splendid sort for kraut making. Pkt., 10c; oz., 25c; ¼ lb., 75c; lb., \$2.25.

Early Flat Dutch Excellent large early flat sort, producing solid heads that mature with Early Summer. The stem is short and it has comparatively few outer leaves. Compares favorably with Large Late Flat Dutch but much earlier and smaller. Pkt., 10c; oz., 25c; ¼ lb., 65c; lb., \$2.25.

American Drumhead Savoy This is the finest of the Savoy class and very distinct from all other sorts. It forms the hardest heads and is the best for either early or late crops. The leaves are heavily crimped or savoyed and grow closely about the large, solid, dark green heads. The flavor is far superior to that of other cabbages, and for this reason is very much in demand. It is an excellent keeper and very hardy. Entire "pits" of it will keep in perfect condition until May. Pkt., 10c; oz., 25c; ¼ lb., 75c; lb., \$2.50.

Early Summer Heads medium in size, round, somewhat flattened, compact and solid; outer leaves spreading and light green in color. Ten days later than Jersey Wakefield, and one of the best large second early sorts. Pkt., 10c; oz., 25c; ¼ lb., 75c; lb., \$2.25.

Henderson's Succession The best very large mid-season cabbage, about a week later than Early Summer but much larger and can be planted closer because of its compact growth. It is sure to head, very uniform in habit and the quality is excellent. Pkt., 10c; oz., 25c; ¼ lb., 75c; lb., \$2.50.

All Seasons A reliable variety to use when only one planting of cabbage is made. It is equally as good for fall and winter as for summer use. Nearly as early as Early Summer and much larger heads of the best quality are produced. Pkt., 10c; oz., 25c; ¼ lb., 65c; lb., \$2.25.

Sure Head Extremely popular with the private gardener because of the sure heading qualities and the remarkably large, uniform, heavy heads. A good keeper and one of the best for late crops. Pkt., 10c; oz., 25c; ¼ lb., 65c; lb., \$2.25.

Lupton A grand Cabbage, combining the qualities of the second early and late sorts. It is vigorous, perfect in type and has the fine qualities of the early maturing varieties. The stem is short and the heads are large, uniform and dark green in color. It is sure to head and is an excellent keeper. Pkt., 10c; oz., 25c; ¼ lb., 75c; lb., \$2.50.

Danish Ball Head or Hollander A very hardy sure heading variety which has proven to be the best keeper and the most desirable for distant markets. The plants are vigorous, compact and

American Drumhead Savoy.

have a stem of medium length. Exceedingly hardy and standing dry weather very well. Extremely solid, large and heavy heads are produced. Pkt., 10c; oz., 25c; ¼ lb., 75c; lb., \$2.50.

Penn State Ball Head This new variety has been developed by the State of Pennsylvania in response to the demand for a large, hard, round headed type, capable of resisting blight, club root, and other common cabbage diseases. Our seed has been grown on Long Island from some of the original stock seed supplied by the Pennsylvania authorities. Pkt., 25c; oz., 75c; ¼ lb., \$2.50; lb., \$8.00.

New Danish Round Head Compared with Danish Ball Head, has less outer foliage. The heads are larger in size and are set on shorter stalks, maturing two weeks earlier. They are extremely hard and solid, of sweet flavor and tender texture. It is very blight resisting and vigorous in growth during the hot summer, and a good keeper. Oz., 25c; ¼ lb., 75c; lb., \$2.50.

LATE OR WINTER SORTS

Premium Flat Dutch A very good variety for fall use or for making kraut. The heads are very solid, tender and of superior quality. They mature earlier than other late varieties but do not keep as well over the winter. Pkt., 10c; ¼ lb., 65c; lb., \$2.00.

Extra Large Late Flat Dutch The best and most profitable late variety, possessing all the qualities a winter variety should have. It is hardy, vigorous, and high in quality. The heads are "as solid as a stone" and for that reason keep well for winter use. The leaves are formed about the head in such a way as to resemble a saucer, in which the light rains and dews collect, the moisture then being absorbed through the stem by the roots. This gives an added advantage when a very dry season is experienced. A favorite with the private gardener as well as the trucker. Pkt., 10c; oz., 20c; ¼ lb., 65c; lb., \$2.00.

Autumn King or World Beater

One of the finest strains of late Cabbage. It produces regular, even heads of enormous size; a great cropper on account of few outside leaves. Pkt., 10c; oz., 25c; ¼ lb., 65c; lb., \$2.25.

Mammoth Rock Red

This is the largest red Cabbage yet introduced and much better than the stocks offered as Red Drumhead. The plant is large, with numerous spreading leaves. The head is large, round, very solid, of very attractive deep red color. Nearly every plant will form an extra fine head. Pkt., 10c; oz., 50c; ¼ lb., \$1.25; lb., \$4.50.

Extra Large Late Flat Dutch

CABBAGE PLANTS

Fresh Daily

See Page 36

CAULIFLOWER

1 ounce to 2,000 plants.

This delicious and very profitable vegetable is not as extensively grown as it should be because many gardeners have an erroneous opinion that cauliflower is difficult to grow. Anyone will be reasonably sure of success if the following suggestions are followed:

For an early crop sow the seed either indoors or in a hot-bed in January or February, transplanting them to 2 or 3 inches apart thus allowing the plants to put forth a vigorous growth before being set in the permanent rows.

As soon as danger of freezing is over, set the plants in the open ground in rows 2½ to 3 feet apart and 18 inches apart in the row. The soil for Cauliflower should be like that for cabbage, but it is better if an additional quantity of manure is used so that the ground is very rich. Cultivate often and thoroughly. For fall crop sow the seeds during April or May. It is well to plan so that the early crop heads before very hot weather and the late crop matures after hot weather.

Plenty of moisture is needed at all stages of growth but is especially necessary when the plants are heading. At this time the leaves should be loosely tied over the heads as a protection from the sun. Cauliflower is highly esteemed for its mild, delicate flavor and always commands a favorable price in the markets.

Early Snowball The best early variety in cultivation. If planted March 1st, large heads will be produced early in June, and scarcely a single plant will fail to form a head. Its compact habit renders it a very profitable variety to force under glass, and it does well for late planting also. Our stock cannot be excelled in quality. Pkt., 25c and 50c; oz., \$2.00; lb., \$25.00.

Dry Weather Cauliflower Especially adapted for growing in dry locations where nearly all other varieties fail, and for heads of good size. The heads are very large, white, firm and compact, and being well protected by the dense foliage, are easily blanched and remain fit for use for a long time. Pkt., 25c and 50c; oz., \$2.00; lb., \$25.00.

CAULIFLOWER PLANTS. (Ready in March, July and August).

Postpaid, per doz., 25c; 100, \$1.50; 1,000, \$12.00

Early Snowball Cauliflower

CHINESE CABBAGE

Chinese or Celery Cabbage belongs to the cabbage family but more closely resembles lettuce. It is a delicious vegetable served either as a salad like lettuce or a cold-slaw. When boiled it is even more palatable than cabbage and resembles Brussels Sprouts in flavor. For best results plant the seed late in July or very early in August as spring plantings in this section are liable to bolt to seed. Plant the seed in the permanent bed and thin out to stand 12 to 15 inches apart. Transplanting is not practical, cultivate same as cabbage. Thrives well in any good soil and matures full sized heads in 75 to 90 days.

Pe-Tsai Wong-Bok The finest Chinese cabbage in existence. The heads are large, compact and the crisp, tender interior blanches to a creamy white. It will stand long before bolting to seed and is not injured by light frosts. Pkt., 10c; oz., 35c; ¼ lb., \$1.00; lb., \$3.00

Chinese or Celery Cabbage

CELERIAC

Celeriac or Turnip Rooted Celery is grown for its edible roots which keep well for winter use and are excellent for flavoring. Sow seed and cultivate same as celery, with the exception that it is not necessary to blanch the plants. When the roots attain a diameter of two inches they are fit for use. To keep these through the winter, pack in damp earth or sand and store them in a cellar or leave them out of doors, covering with earth and straw for protection.

LARGE SMOOTH PRAGUE

An improved form of turnip rooted celery. One of the largest, very smooth and almost round with very few side roots. Plants are vigorous, with large dark green foliage. Pkt., 10c; ¼ lb., 50c; lb., \$1.75.

CRESS

Sprinkle seed freely along shallow drills 1 foot apart at intervals through spring and summer, as desired.

CURLED or PEPPER GRASS American Upland

This small salad is much used with lettuce. Pkt., 10c; oz., 15c; ¼ lb., 25c; lb., 75c.

TRUE WATER

Thrives only when its roots and stems are submerged in water. Pkt., 10c; oz., 40c.

Large Smooth Prague Celeriac

CARROTS

1 ounce to 150 feet of drill; 4 lbs. per acre.

Our stock is grown from choice selected and transplanted roots only, and are of the truest type and richest color money can procure.

CULTURE:—Any good soil will grow this vegetable, but the most perfect roots however, are developed in rich, friable soil, preferably sandy loam. The flavor and tenderness of the table varieties is secured by having a quick growth, which usually means good growing weather and proper cultivation. Sow as early as the ground can be worked or for late crop until the latter part of July, in drills 15 to 18 inches apart, finally thinning the plants to 3 to 4 inches in the drills. The seed is slow to germinate and if sown early or on moist soil, half an inch is deep enough. When sown during the hot summer months it is well to protect the seed bed with a thin layer of chips or straw as excessive heat will kill the vitality of the seeds before they germinate. After the seed has sprouted remove the covering, selecting the late afternoon for this work. Carrots are usually quite free from pests and diseases. The usual danger from ground worms and slugs if of course always prevalent, but once up they are easier to grow than most vegetables. They are ready for table use in about two months.

Early Horn The most popular forcing variety, producing top-shaped reddish-orange roots about three inches long. Very early with small tops. Second in size, fine grained and of good quality when pulled young. Popular for early marketing but small. **Pkt., 10c; ¼ lb., 30c; lb., \$1.00**

Oxheart or **Guerande**. One of the most popular sorts for table and stock. When full grown, 5½ to 6 inches long, but should be pulled young for table use. Very stout and thick, ending in an abrupt small tap root. If the soil is too wet this variety will sometimes split badly, but this can be prevented by properly controlling the drainage. Very easily harvested and can be grown in very shallow soils where other sorts would not thrive. Quality excellent. **Pkt., 10c; ¼ lb., 30c; lb., \$1.00.**

Chantenay or Model Carrot A most excellent, medium early, half-long variety. Its quality, shape and size make it one of the best and most profitable sorts for either the home garden or for marketing. The roots grow to a length of about 5 inches, very uniform, stump-rooted but tapering slightly. They are smooth, deep orange-red in color and the flesh is very crisp and tender. Although a medium early sort the roots are suitable for use nearly as early as any, and will also prove very satisfactory if grown for winter use. Very easily harvested and bunched. **Pkt., 10c; ¼ lb., 30c; lb., \$1.00.**

CHANTENAY

SUNRISE

New Sunrise This new variety has become a favorite with our Market garden trade because of its fine quality, perfect shape and attractive color. The crown stands above the ground causing the shoulders to turn green. Sunrise has been found to be specially valuable for medium and late use, an excellent keeper and thoroughly dependable. It is of most perfect form, pointed-rooted, with a broad, high shoulder; about 7 inches in length. It is the brightest scarlet and the smoothest grain of all the half-long carrots. **Pkt., 10c; ¼ lb., 50c; lb., \$1.50.**

Danvers Half Long This is an exceptionally fine Carrot for private and market garden use. It is slightly longer than Chantenay and our strain produces uniformly smooth and evenly sized roots of handsome appearance. They are orange-red in color and the flesh is sweet, crisp and tender, being fine grained and of highest quality for table use. The tops are a little larger than those of Chantenay and the crown as flat. The roots taper very slightly from the crown but form a blunt point at the tap root. For main planting this sort has no superior, and when sown during June may be depended upon to produce the very best crop of roots to store for winter. **Pkt., 10c; oz., 15c; ¼ lb., 30c; lb., \$1.00.**

Coreless or Scarlet Nantes The earliest of its type; size and shape uniform; bright orange in color; smooth skin; small top. Of a very fine grain and absolutely free from coarseness and stringiness. Excellent for bunching and extensively used for winter storage. **Pkt. 10c; oz. 15c; ¼ lb. 35c; lb. \$1.25.**

Improved Long Orange A standard late variety, beautiful and uniform in shape, deep orange in color. The roots grow to a length of 12 inches and are of good quality for table use as well as for stock. They require a deep soil and if full size roots are wanted they should stand at least 8 inches apart in 18 inch rows. **Pkt., 10c; ¼ lb., 30c; lb., \$1.00.**

French Golden Self-Blanching Celery.

Golden Self-Blanching (American Grown Seed). An early sort, of very compact growth, with thick, solid, heavily ribbed stalks which are very easily blanched to a clear waxen yellow. Pkt., 10c; oz., 35c; ¼ lb., 90c; lb., \$3.00.

Silver Self-Blanching Somewhat similar to French Golden Self-Blanching in habit of growth but resembling White Plume in color. High in quality, very brittle and free from strings. Pkt., 10c; oz., 35c; ¼ lb., 90c; lb., \$3.00.

CELERY PLANTS

All Leading Varieties

Ready During July and August

SEE PAGE 36

USE A

FELINS VEGETABLE TYING MACHINE
Described on Page 62

CORN SALAD

1 ounce will sow 20 square feet; 6 lbs. to the acre.

Ackersalad A vegetable used as a salad. It is sown in the opening of spring in rows 1 foot apart, and is fit to use in 6 or 8 weeks from sowing. If wanted in early spring, sow in September; cover with straw as soon as cold weather sets in. Can be grown in cold frames, covered with straw mats or shutters, and used any time during the winter. Large Seeded Dutch Pkt., 10c; ¼ lb., 25c; lb., 75c

POP CORN

Japanese Hulless The most popular variety. The pearly white grains pop free from hull. 10c per lb.

Queen's Golden Yellow It pops perfectly white, and produces very large flakes. 10c per lb.

CELERY

1 ounce to 1,000 plants.

Celery seed is very slow to germinate and therefore should be started indoors in boxes from February to April or sown out of doors in a finely prepared seed bed during April. See that the seed is not covered too deep and that the bed is kept moist, almost wet until the seeds germinate. When the plants are about two inches high thin out and transplant to a distance of two or three inches apart each way. These must be kept entirely free from weeds and when they are four inches high the tops may be cut off so that the plants will grow more stocky. The plants are usually set out in the permanent bed when five inches high and it is usually best to do this during July or the first of August. In some sections best results are obtained by transplanting in June.

The permanent beds should be thoroughly prepared and well enriched with rotted manure, which should be spaded in deeply, the rows being spaced 3 to 4 feet apart. Cut off some of the root and set the plants 8 to 12 inches apart in the rows, firming the soil tightly, and cultivate them frequently for a period of six weeks. Celery needs plenty of moisture.

When the plants are nearly full grown they should be blanched. This is done by drawing the soil closely about the plants to about two-thirds of their height, being careful not to allow any of the earth to fall between the leaves. Repeat this process every few days until only the top of the leaves are visible. Do not disturb the plants while they are wet or the soil is damp as this is liable to result in injury from rust.

Golden Plume This new strain of Golden Self-Blanching has been pronounced by authorities to be the best of all the early varieties. It matures two or three weeks earlier than any other sort, blanches more quickly and shows less tendency to blight or crown-rot. Distinctly larger and ranker in growth than Golden Self-Blanching; more plainly ribbed and does not grow hollow. The crisp, tender stalks are very broad and the large full plumed centers are displayed to advantage. Combining the assets of earliness, finest quality and appearance Golden Plume offers a splendid opportunity to Market Gardeners. Celery Growers in New York and New Jersey have met with tremendous success using this variety. Pkt., 25c; ¼ oz., 35c.; 1 oz., \$1.00; ¼ lb., \$3.00; lb. \$10.00.

White Plume A very popular market variety, being very early, easily blanched and of handsome appearance. The leaves are light, bright green and the flesh is a beautiful silvery-white color. Not as good a keeper as French Golden Self-Blanching. Pkt., 10c; oz., 25c; ¼ lb., 75c; lb., \$2.50.

French Golden Yellow Self-Blanching

(Originator's Stock). This is the standard celery for early use, being ready for use very early, and much superior to other varieties in a great many respects. Our strain of this very popular sort cannot be excelled in quality or appearance. The plants are of medium size, compact and stocky, with yellowish green foliage. As they mature the inner leaves and stems turn to a beautiful golden yellow, which adds much to their appearance and makes the work of blanching much easier. The stalks are solid, crisp, tender, free from strings and of a fine nutty flavor. A favorite with both large and small growers. Pkt., 10c; oz., 75c; ¼ lb., \$2.75; lb., \$10.00.

Easy Bleacher Two weeks later than Golden Self-Blanching. Blanches readily and is a great favorite with Southern growers who usually plant a full crop of this one sort. Vigorous in growth and a splendid keeper. Pkt., 10c; oz., 20c; ¼ lb., 60c; lb., \$2.00.

Winter Queen Of medium height, an excellent winter keeping sort, producing thick creamy white stalks which are broad, very solid and crisp. The hearts are large and it blanches well. Pkt., 10c; oz., 20c; ¼ lb., 50c; lb. \$1.75.

Evans' New Triumph This variety has a very strong and vigorous plant, with very large but crisp, brittle, tender and fine-flavored stalks. It is late and requires the whole season to develop, but will keep longer than other sorts. We recommend it as worthy of the first place as a late Celery. Pkt., 10c; oz., 20c; ¼ lb., 50c; lb., \$1.75.

Golden Heart A distinct variety of sturdy dwarf habit. It is solid, and an excellent keeper, and of fine nutty flavor. When blanched, the heart, which is large and full, is of a light yellow, making it exceedingly showy and desirable for either market or private use. Pkt., 10c; oz., 25c; ¼ lb., 60c; lb., \$2.00.

Columbia An exceptionally fine, early variety, which for size and shape is unsurpassed. The plant is of medium height, but very stocky, foliage is a light shade of green with yellow tinge, and the stalks are thick, almost round, and resemble Giant Pascal in shape, but are of a rich, yellow color, similar to the well-known Golden Self-Blanching, which it resembles very much when trimmed and bunched. It matures early, and its exceedingly fine flavor and crispness will please even the most critical. Pkt., 10c; oz., 20c; ¼ lb., 50c; lb., \$1.75.

Giant Pascal A superior keeping sort. The stalks are very large, thick, solid, crisp and of rich nutty flavor; it blanches very easily and quickly, and retains its freshness a long time. Pkt., 10c; oz., 20c; ¼ lb., 60c; lb., \$2.00.

CORN--Table Varieties

(FIELD CORN—Page 54).

1 quart to 200 hills; 1 peck per acre.

Sugar Corn should not be planted until May, or when the ground is warm. For succession, plant about every two weeks until the last of July. All varieties may be either sown one inch deep in rows three to four feet apart, the seeds being placed about 8 inches apart in the rows, or they may be planted in hills at distances of three or four feet apart each way, allowing not more than 3 plants stand to a hill. The size of the variety and the richness of the soil should determine the distance of planting. Cultivate frequently and thoroughly but shallow until the tassels appear.

EXTRA EARLY

First Early Neck This variety can be planted earlier than any other sort; ear short, grain white. It is not a Sugar Corn, but, on account of its being largely sold for table use, we class it among the Sugar Corns. Qt., 30c; pk., \$1.25; bu., \$4.50.

Adams' Early A splendid early variety and safe cropper. Doz., 65c; qt., 30c; pk., \$1.25; bu., \$4.50.

Improved Early Adams A distinct improvement over the Old Early Adams, fully as hardy; ears measure from 10 to 14 inches in length, with 12 or more rows to the ear. Grains are narrow and deep, of excellent table quality. Qt., 30c; pk., \$1.25; bu., \$4.50.

Early Superior This new variety is of remarkable size considering its earliness. The ears are 8 in. long and have 16 to 20 rows of rather narrow deep grains. The quality is excellent and the attractive appearance of the rich, tender, well-filled ears make it a very desirable sort for the Market Gardener. Qt., 35c; pk., \$2.25; bu., \$8.00.

Portland--60 Day Extremely early market gardener's variety, producing ears 6 to 7 inches long, having 12 to 14 rows of pure white grains. Dwarf growth. The first large eared sweet corn in the market. Pt. 30c; qt. 50c; pk. \$3.00; bu. \$10.00.

Golden Bantam A very early variety. The ears are but medium size, usually 8 rows, thickly set with delicious yellow kernels. Qt., 35c; pk., \$1.75; bu., \$6.50.

Whipples Early Yellow Ready for use 3 to 5 days earlier than Golden Bantam and nearly as large as Stowells Evergreen. Has 12 to 14 rows of deep kernels and the quality is excellent. Pt. 20c; qt. 35c; pk. \$2.25; bu. \$8.00.

De Lue's Golden Giant From 3 to 5 days earlier and 2 or 3 times as large as its own parent, the Golden Bantam, of better quality, deeper color and more productive. Pt., 20c.; qt., 35c; pk., \$2.00; bu., \$7.00.

Red Cob or Ninety-Day Corn A distinct and well-known sort of white Corn; matures in about 90 days; produces large, handsome ears. It adapts itself to any kind of soil, and can be used green as a table corn or when dry for stock feeding. It may be planted for early market at intervals as soon as the frost is out of the ground until middle of July. Used by many truckers for late planting, as it produces a sure crop. Qt., 30c; pk., \$1.25; bu., \$4.50.

MEDIUM EARLY

Howling Mob Stalks are of strong, vigorous growth, 5 feet in height; produces 2 large ears of sweetest quality. Qt., 35c; pk., \$2.00; bu., \$7.00.

Sheffield This cross-bred early variety combines the robust growth and extreme hardness of the Extra Early Adams with the finer sugary quality of the Cory. Ears average 7 inches long, and are well filled with grains of medium size, arranged in 10 or 12 regular rows. It is as hardy as the Adams, and of much sweeter quality. Qt., 30c; pk., \$1.75; bu., \$6.50.

Kendel's Early Giant Remarkably large in ear for a second early sort and very popular. The stalks are about 5½ feet high. The ears are about 8 to 9 inches long, 12-rowed. The grain is rather broad and shallow and the quality very good. Qt., 35c; pk., \$1.75; bu., \$6.50.

Black Mexican Although the ripe grains are bluish-black, they are remarkably white when in roasting ear stage. In tenderness and fine quality none can surpass it. We recommend it highly to follow the first early varieties. Pkt., 10c; qt., 40c; pk., \$2.25.

Trucker's Favorite Sugar Corn Is a very desirable second early variety, of sweet and delicious flavor, producing a large ear well filled to the end. Qt., 35c; pk., \$1.75; bu., \$6.50.

Country Gentleman Very deep grains, small cob and exceedingly rich flavor. Often produces 3 to 4 ears to the stalk. The grains are "staggered" on the cob, leaving no signs of rows. Qt., 35c; pk., \$2.00; bu., \$7.00.

Early Evergreen The ears grow 8 inches long; are mostly 14 to 16 rows. It ripens 10 to 12 days in advance of Stowell's Evergreen, and is equally as good in quality. Kernels sweet and tender; cob small, with irregular rows. Qt., 35c; pk., \$1.75; bu., \$6.50.

Early Mammoth Resembles the late Mammoth; ears are fully as long, but more tapering; ripens 2 weeks earlier. Qt., 35c; pk., \$2.00; bu., \$7.00.

MANNS' EARLY SUPERIOR.

MAIN CROP AND LATE VARIETIES

White Evergreen A pure white strain of the popular Stowell's Evergreen. The ears are very large and well filled from butt to tip with long, slender, pure white grains of the most delicious sweetness. Qt., 35c; pk., \$1.75; bu., \$6.50.

Stowell's Evergreen Extra Selected Grown more extensively than any other; a favorite with canners and market gardeners for late use. Ears of large size, kernels very deep, tender and sugary; very productive and remains for a long time in fit condition for table use. Qt., 35c; pk., \$1.75; bu., \$6.00.

Late Mammoth Produces larger ears than any other Sweet Corn; very weighty, profitable for growers selling by ton. Qt., 35c; pk., \$2.00; bu., \$7.00.

CUCUMBERS

1 ounce to 100 hills.

CULTURE:—Plant as soon as the weather becomes settled in hills 4 feet apart each way, with 8 or 10 seeds in each hill, cover half an inch deep, smoothing the hill off with the hoe. Keep the soil well stirred, and when the plants are out of danger of insects, leave 3 or 4 plants to the hill. For pickles, plant from the first of June to the first of August. The fruit should be gathered when large enough, whether required for use or not, for if left to ripen on the vines, it destroys their productive uses.

Arlington White Spine The cucumbers are very regular in outline, uniform in size, averaging 7 to 8 inches in length, straight and of a rich dark green color. Flesh white, crisp and solid, with comparatively few seeds. Vines of vigorous growth and very productive. Pkt., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00.

Klondike A favorite with market gardeners and shippers all over the country. The handsome dark green cucumbers average 7 inches long and 2 inches in diameter. Pkt., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00.

Fordhook Famous This extra long White Spine cucumber produces perfectly smooth, very dark green, handsome straight fruit, measuring 12 to 17 inches long. They are always solid, flesh being a greenish white, firm, crisp and of most delicious flavor. It is a great cropper, and fruit is full of flesh, with but few seeds. Pkt., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00.

Early Fortune One of the best of the very desirable "White Spine" type. It was selected out of a field of Davis Perfect by reason of its outstanding qualities and the strain has now become so well established that large plantings do not show any variation either in plant or fruit. Early, very productive, and having unusual disease-resisting ability. Fruits are 8 inches long with very dark green skin and thick, firm flesh which is crisp and tender. Excellent shipper. Pkt., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00.

Early Cyclone It is not only the earliest cucumber in cultivation, being fully two weeks ahead of White Spine, but it is of the desirable White Spine type, being shorter, thicker and holding better its deep green color than any other early Cucumber in cultivation. Very prolific, and grows its fruits in bunches of threes and fours, of uniform size and shape. A single hill will sometimes produce from 10 to 12 shapely Cucumbers. Pkt., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00.

Boston Pickling or Green Prolific Noted for its uniform growth, seldom yielding Cucumbers too large for pickling, immensely productive. Pkt., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00.

Long Green Our carefully-selected strain, under favorable conditions, produces fruit averaging from 12 to 16 inches in length. Skin is a deep rich green, flesh solid, crisp and of excellent quality. Pkt., 10c; $\frac{1}{4}$ lb., 40c; lb., \$1.25.

Japanese Climbing Vines are extra strong, vigorous; being a climbing sort, can be grown on trellises, etc.; valuable in small gardens. Very prolific, from 40 to 50 having been counted on single plants. Fruit long, round, of fine flavor. Pkt., 10c; $\frac{1}{4}$ lb., 40c; lb., \$1.25.

Evergreen Extra Long White Spine This is a strain of White Spine Cucumber with longer fruit than the old type. The cucumbers grow 10 inches long, and are straight and handsome and of fine quality, retaining their green color for a long time. Oz., 10c; $\frac{1}{4}$ lb., 40c; lb., \$1.25.

Longfellow or Straight Pack

This new variety was developed primarily for greenhouse culture; its quality, size and attractive appearance however, have definitely established it as one of the best for outdoor production. The beautiful dark green cucumbers average 12 in. in length and are adaptable for packing in flats for the very highest class trade. Pkt. 10c; oz. 20c; $\frac{1}{4}$ lb. 60c; lb. \$2.00.

Davis' Perfect As now selected, this popular new variety is well worthy of praise. The long, even fruits are of fine form, with an intensely dark rich green skin. With very few seeds, the solid white flesh is of superb quality for slicing. The vines are of strong growth and quite prolific. Pkt., 10c; $\frac{1}{4}$ lb., 40c; lb., \$1.25.

Jersey Pickle In size between the Half Long and Long Green and is used extensively by pickle growers, being productive and of deep green color. Pkt., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00.

Gherkins or Burr Very small, quite distinct from all others. It is grown exclusively for pickling, and should be picked when young and tender. Pkt., 10c; $\frac{1}{4}$ lb., 40c; lb., \$1.25.

Klondike.

Davis Perfect.

Early Fortune.

EGG PLANT

1 ounce will produce 1,000 plants.

Sow in March in hotbeds, and transplant when 2 inches high into a second hotbed, or let them remain and thin out to 4 inches apart. When the weather becomes settled, transplant into the open ground 3 feet apart each way. Good culture is quite as important as good seed. Work the ground deep, make it rich with well-rotted manure and hoe often.

Mammoth Smooth Stem A decided improvement on the New York Large Purple in quality, size and beauty. The plants are large and vigorous, leaves of a light green shade, stem smooth, fruit large, oval, early and of a fine deep purple. Pkt., 10c; oz., 40c; ¼ lb., \$1.25; lb., \$4.50.

Black Beauty The most beautiful and earliest of all large Egg Plants. Pkt., 10c; oz., 40c; ¼ lb., \$1.00; lb., \$3.75.

Florida High Bush Very vigorous and productive; of upright growth holding the fruit well off the ground; color light purple of oblong shape. Pkt., 10c; oz., 30c; ¼ lb., \$1.00.

New York Improved Purple Oval shaped, thornless, dark purple color, and rich flavor. Pkt., 10c; oz., 40c; ¼ lb., \$1.15; lb., \$4.00.

Black Beauty Egg Plant

KOHLRABI

1 oz. will produce 1,500 plants.

This forms a bulb above the ground and its flavor is somewhat similar to Cabbage. Sow in April in rows 18 inches apart, thinning out to 8 inches the plants.

Early White Vienna

Excellent for forcing and of fine quality. The bulbs grow to the size of an apple when ready for use, and are a pale whitish green. They are of delicate cabbage-like flavor. Pkt., 10c; oz., 15c; ¼ lb., 60c; lb., \$1.75.

ENDIVE

1 ounce to 100 feet of drill, 3 lbs. to the acre.

Ever White Curled

Plants moderately dense; leaves coarser than those of the Green Curled, but the mid-rib is yellow and the leaves almost white. Pkt. 10c; oz., 20c; ¼ lb. 40c; lb., \$1.25.

Broad-leaved Batavian

(Escarolle) Leaves broad and almost plain; color light green. Pkt., 10c; oz., 20c; ¼ lb., 40c; lb., \$1.25.

Green Curled

This is the hardest variety, and very desirable for the home and market garden. The deep green leaves are beautifully cut and curled, easily blanched and become very crisp, tender and fine flavored. Pkt., 10c; oz., 20c; ¼ lb., 40c; lb., \$1.25.

Early White Vienna

LEEK

1 oz. to 50 yards of drill.

Sow early in the spring in drills 1 inch deep and 12 inches apart, when about 6 inches high transplant into deep, rich soil, 5 inches apart; use a dibble and plant deeply, close to their leaves.

Large London Flag

A favorite market variety, of enormous size, leaves large and broad; flavor mild and pleasant. Pkt., 10c; oz., 20c; ¼ lb., 60c; lb., \$1.75.

Monstrous Carentan

or SCOTCH CHAMPION. Of extra large size; the leaves are fan-shaped, of a dark green color; the edible stem is 6 to 8 inches long and 3 inches in diameter. Pkt., 10c; ¼ lb., 60c; lb., \$1.75.

FENNEL (Florence)

(Finocchio) In great demand with Italian trade and deserves to be more generally used. The leaf stalks are clustered in a bulb-like formation, and when these are about 1½ in. wide, the plants should be hilled up to about half their height. Pkt. 10c; oz. 15c; ¼ lb. 40c; lb. \$1.25.

KALE

Broadcast, 2 to 3 lbs. per acre. 1 oz. to 200 feet of drill.

The Kales are more hardy than Cabbage, and make excellent greens for winter and spring use, and are improved by frost. For early spring use, sow broadcast in September and protect during winter. It may also be sown in April or May for later use.

Extra Curled

Long Standing

An improvement on the well-known German Extra Curled Kale; beautifully curled, of strong, vigorous habit, perfectly hardy and slow shooting to seed. Pkt., 10c; ¼ lb., 30c; lb., \$1.00.

Siberian Kale ¼ lb., 15c; lb., 40c.

Monstrous Carentan Leek

Kale, Extra Curled-Long Standing

LETTUCE

1 ounce to 2,500 plants; 3 lbs. per acre.

Lettuce to be at its best should be grown rapidly, hence the soil should be made as rich and friable as possible by liberal manuring and thorough preparation. For early crop sow in a seed-bed in September or October and protect through the winter with cold frames, which should be removed as soon as danger of severe freezing is past. Lettuce in the open ground will stand some freezing but is killed by prolonged frost or frequent freezing and thawing. The seed may also be sown in hotbeds in March, and the plants, if well hardened, may usually be set in the open ground in April, maturing a crop much earlier than complete open ground cultivation would produce. If, however, it is not convenient to get the plants started either in the fall or early spring in hotbeds, the seed may be sown in open ground from the middle of April until July, selecting varieties suitable for the season.

The plants should stand 8 to 10 inches apart in the rows, and the rows should be about 18 inches apart.

May King Extremely early, compact cabbage or heading variety, forming very firm heads of medium size and excellent quality. Color light yellowish-green, tinged with reddish-brown when mature. Inner leaves blanch rich golden-yellow, very tender and buttery. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.25.

Unrivalled

Unrivalled This lettuce might well be called an Improved Big Boston. Its usefulness and value are identically the same as Big Boston, but it is preferred by market gardeners because of its being a solid green color with no brownish tinge at the border of the leaves; its heads are larger and of better appearance than Big Boston. Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 60c; lb., \$2.00.

Baltimore Early Market Originated by a local market gardener, who for several years past has supplied the earliest and finest Butterhead Lettuce to the Baltimore market. In comparison with May King, it is earlier and free from the red tint; the outer leaves are a light green, with the entire head fully blanched to a rich buttery yellow tint, which makes it so attractive. Pkt. 10c; oz., 20c; $\frac{1}{4}$ lb., 50c; lb., \$1.50.

Large White Loaf This is a standard variety among truckers for planting early in the fall to stand out over winter. It is an exceedingly early heading variety, compact, tender, solid head and of fine quality. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.25.

New York or "Wonderful" This variety is also known as the famous 'Iceberg' of California, truly a wonderful lettuce. Plants of extra large growth, producing heads of immense size under favorable conditions. Inner portion is beautifully blanched and stands for a considerable time before running to seed. Outer leaves a deep, rich green. Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 60c; lb., \$2.00.

Tuccorodo

Tuccorodo Being of very vigorous and hardy nature, this variety is especially desirable for fall or early spring sowing. Large handsome heads, solid, crisp and of superb quality. The strain is well established and we do not hesitate to strongly recommend this dependable sort to the most critical market gardeners and private growers. Pkt. 10; oz., 20c; $\frac{1}{4}$ lb., 60c; lb., \$2.00.

Grand Rapids As a lettuce for greenhouse forcing this variety undoubtedly stands at the head of the list, being of quick growth, hardy, little liable to rot and remaining in condition several days after being fit to cut. The plant is upright and forms a loose cluster of large, thin, bright green leaves, savoyed, finely crimped at edges. The leaves do not wilt quickly after cutting, so that the variety will stand shipping long distances better than most sorts. Very attractive and desirable for garnishing. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.25.

Earliest "Wayahead" Shows a remarkable combination of earliness, firm heading character, handsome appearance and fine quality. In cold frames early in the spring and in the open ground—in spring, summer and early fall months—it has proven to be the very earliest and surest heading of all early lettuces. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.25.

Black Seeded Big Boston In comparison with Big Boston, the leaves are a trifle smaller and rather lighter shade of green with less color on edges, producing larger solid heads, which are always tender and crisp, more compact and will stand shipping better. Excellent for forcing or growing in the open ground, spring or fall. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.25.

New York or Wonderful

LETTUCE—Continued

BIG BOSTON GROWING FOR SEED—35 ACRE FIELD 100 PER CENT TRUE

Big Boston

This is a fine forcing variety for cold frames during the winter months, as it produces heads of very large size, often 12 inches or more across, and succeeds better in cooler temperature than most forcing strains. The large heads are beautifully blanched and of superior quality. It also heads well in the open ground during cool weather of spring and fall, and has lately become popular in the South to grow for shipping North. Our seed is an extra selected strain of the true stock. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.25.

Hanson

The plant is compact and forms a large, flat, cabbage-like head, and is so slow to form a seed stalk that it often fails to seed at all. Outer leaves bright green, with prominent light-colored veins; inner leaves white and usually curved and twisted at the base; very tender and sweet; a favorite variety for home use. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.25.

Manns' Defiance Summer

This variety, introduced by us several years ago, has made a very eventful impression upon the grower, as well as the consumer. It forms handsome, solid heads of enormous size, which remain in good salable condition long after all others have gone to seed. The flavor is excellent; the leaves are beautiful light green. Very profitable for market gardeners. Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 60c; lb., \$2.00.

Paris Cos Lettuce

COS, ROMAINE OR CELERY LETTUCE

Paris Self-Folding White Cos

Grows to very large size, producing long-pointed, compact bunches. The outer leaves are closely folded about the center and interior is well blanched. Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 50c; lb., \$1.50.

All Seasons

One of the best all-head Lettuces, standing the hot sun to a remarkable degree, slow to seed. The outer leaves are a bright soft green; the finely-blanched inner leaves are a rich golden-yellow, tender and mild in flavor. The heads are broad and nearly flat at the top; they continue to increase in size for about two weeks after they are ready for use. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.25.

Improved Mammoth Salamander

Grand mammoth hard-heading Cabbage Lettuce. Plants 12 inches across with extra large, solid round heads that are particularly rich and buttery in flavor; always well blanched and tender. The inner leaves are beautifully white and curled like a fine Savoy Cabbage. Splendid for summer use, both for the home table and for market. Most highly recommended. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 50c; lb., \$1.50.

All-Heart Lettuce

A very bright green and attractive variety. It forms large, solid heads, composed of thick, smooth, very tender leaves, the inner ones finely blanched and all of the finest quality. It remains a long time in head before running to seed. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 50c; lb., \$1.50.

Baltimore Oakleaf

This is a great improvement upon the old variety; instead of the loose, green oak-leaved-shaped plants, of inferior quality and taste, we are offering in this new strain a well-compact, large-headed, round-leaved variety of a beautiful light green color, which remains in fine condition long after other varieties have gone to seed. It is very hardy and largely used by market gardeners for late planting to stand out over winter and develop large, solid heads very early in the spring. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.25.

Tenderheart

The heads are large and round, tightly formed, tender, sweet and crisp, with waxy cream colored leaves. This fine lettuce matures in 40 days and will withstand the early summer heat splendidly. Pkt., 10c; $\frac{1}{4}$ lb., 50c; lb., \$1.50.

The "Deacon"

Heads are light green outside, while the inner blanched portion is beautiful cream yellow, of delicious rich buttery flavor. A splendid lettuce for summer use. It stands the hot summer heat to a remarkable degree. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.25.

LETTUCE PLANTS

FRESH DAILY IN SEASON—See Page 36

MUSKMELON

CANTALOUPE

1 oz. for 50 hills; 3 lbs. per acre.

The most suitable soil for melons is a warm, sandy loam, well worked and enriched with rotted manure. After danger from frost is over, sow ten to twelve seeds to a hill, about 2 inches deep; the hills being six feet apart each way. When the plants have the second pair of leaves and danger from insects is past, thin out to four plants to a hill. Cultivate frequently, deeply away from the plants and shallow close to them. When hoeing, remove the crust from around the plants and replace with fine, loose soil.

GREEN FLESHED VARIETIES

Knight's Early Maryland

An extremely early medium sized melon. Fruit oblong, showing the neck tendency; skin deep green, turning to golden at maturity, well covered with a close gray netting and distinctly ribbed; flesh fairly thick and very sweet; color medium green blending to light pink near the center. The earliest high quality melon and a good shipper. Pkt., 10c; $\frac{1}{4}$ lb., 75c; lb., \$2.50.

Extra Early Jenny Lind or Jersey Button

An extra early, small, green-fleshed melon; fruit round and flattened at the ends, deeply ribbed and heavily netted. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 75c.

Bottomly Is planted exclusively by the foremost cantaloupe growers of Anne Arundel County, in connection with the now famous Knight, maturing about 10 days later. The most exacting will be satisfied by the delicious quality while its appearance exhibits all the refinement of form, color and netting so necessary to a good melon. Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 75c; lb., \$2.50.

Honey Ball Posses characteristics that make it one of the finest melons that has ever been offered to the grower, the shipper and the consumer. Exceedingly prolific, producing as many as fifteen to twenty large cantaloupes to the plant. Every commercial grower and home gardener should have at least a trial patch of Honey Ball. Pkt., 10c; 1 oz., 35c; $\frac{1}{4}$ lb., \$1.00.

Honey Dew A melon of the Cassaba type. The fruit is large, oval in form, about 10 inches long and 8 inches in diameter; thick flesh is light green in color, ripening to the rind, very tender, with an extreme sweetness. The vines are vigorous and set 6 to 10 melons to the hill. An excellent shipper, will keep for several weeks even when fully ripe. Pkt., 10c; $\frac{1}{4}$ lb., 35c; lb., \$1.25.

Thoroughbred Rocky Ford This has become one of the most popular of small or basket melons. The fruit is oval, slightly ribbed, densely covered with coarse netting. Flesh light green, very thick and highly flavored. We offer an exceptionally fine stock of this sort, the fruit being wonderfully uniform in shape and quality. Pkt., 10c; $\frac{1}{4}$ lb., 25c; lb., 75c.

BOTTOMLY CANTALOUPE

Eden Gem This is one of the leading muskmelons of the Rocky Ford type. It is of medium size, nearly round in shape, very heavily netted and slightly ribbed. The flesh is extremely thick, seed cavity small, making it very heavy for a melon of its size. In quality it compares with the best strain of Rocky Ford. It is medium early and very prolific. The vine is vigorous and will resist blight better than most varieties. Pkt., 10c; $\frac{1}{4}$ lb., 25c; lb., 75c.

SALMON FLESHED VARIETIES

Golden Honey Dew Has a rich golden flesh which is deep and very sweet. It combines the spicy flavor of Emerald Gem with the sweetness and long keeping qualities of the original Honey Dew, of which it is a sport. Pkt., 10c; $\frac{1}{4}$ lb., 50c; lb., \$1.50.

Paul Rose, Petoskey, or Salmon-Fleshed

Gem This is the original salmon-fleshed "basket" Melon. It holds the same place in the salmon-fleshed sorts as the Netted Gem does in the green-fleshed. Pkt., 10c; $\frac{1}{4}$ lb., 35c; lb., \$1.00.

Burrell Gem Of sweet and aromatic flavor, oblong shape, smoothly rounded ends, closely netted and slightly ribbed dark green skin. Fruits average 6 inches long by 4 inches deep. Very fine for marketing. Pkt. 10c; $\frac{1}{4}$ lb., 30c; lb., 90c.

Emerald Gem Ripens early, medium size, nearly round flesh a delicate light salmon color, very thick, fine grained and of superb flavor. The rind is thin, dark green, ribbed, slightly netted. Pkt. 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00.

Hoodoo The fruits average nearly round. The netting is exceptionally dense. The rind, although thin, is so very firm that the Melons arrive in distant markets in perfect condition. The flesh is very thick, highly colored and of most delicious flavor.

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

Early Imperial or Hale's Best. Specialty, see page 2. Pkt. 10c; oz. 20c; $\frac{1}{4}$ lb. 50c; lb. \$1.50; 10 lbs. \$12.50.

CITRON

Red Seeded A small globular variety, striped and marbled with light green. Flesh white and solid; seeds red. Used exclusively for pickles and preserves. Pkt., 10; $\frac{1}{4}$ lb., 40c; lb., \$1.25.

IMPERIAL

WATERMELON

1 ounce for 30 hills; 3 or 4 pounds per acre.
Cultivate exactly as for Cantaloupe, except that the hills should be 8 to 10 feet apart.

Kleckley's Sweet, or Monte

Cristo This very popular melon is one of the best for nearby markets. Fruits are medium size, oblong, of a dark green color and have very thin rind. Flesh bright scarlet with solid heart, crisp, sugary and melting, and entirely free from stringiness. Pkt., 5c; ¼ lb., 25c; lb., 75c.

Halbert's Honey Fully equal in quality to Kleckley's Sweet, which it resembles. It is more even in outline, is blunter at the ends and the skin is of a richer, darker color. Pkt., 5c; ¼ lb., 25c; lb., 90c.

Tom Watson A large long melon with dark green rind and light crimson flesh of excellent quality. It is a splendid shipper, and is being grown extensively in the South for Northern markets. The seeds are white marked with brown. Pkt., 5c; ¼ lb., 25c; lb., 90c.

Alabama Sweet This excellent shipping melon is the leading sort grown by Texas and other Southern melon growers. The rind is dark green, marked with a still darker green mottled stripe, and while thin, it is very tough, making the melon a first class shipper. The

flesh is bright red, fine grained, sweet and luscious, entirely stringless and very firm. The seeds are white, slightly tipped with brown, and are firmly set in small cavities near the rind. Pkt., 5c; ¼ lb., 25c; lb., 75c.

Florida Favorite Fruit long, dark green, mottled and striped with a lighter shade. Rind thin but firm. Pkt., 5c; ¼ lb., 25c; lb., 75c.

Triumph A splendid shipping variety of large size and handsome appearance. The melons are rather shortened in form, but thick through. Skin deep bluish green, with dark-red flesh and of good quality. Pkt., 5c; ¼ lb., 20c; lb., 60c.

Dark Icing Skin dark green, indistinctly veined with a lighter shade. Fruit almost round. Pkt., 5c; ¼ lb., 25c; lb., 75c.

Sweet Heart

Sweetheart Most popular for market. Large heavy fruits of oval or round form; skin very pale green, with distinct netted lines of a slightly darker shade. The large handsome fruits bear shipping well. The solid flesh is a deep rich red, crisp and melting; its luscious quality has made it a leading favorite in the Eastern markets. Pkt., 5c; ¼ lb., 25c; lb., 75c.

Shaker Blue Melons grow as large as that great shipping variety, the Triumph, but are very much better flavored and even handsomer in appearance. The melons are a round oval in form, from 16 to 18 inches long by 12 to 15 inches in diameter. Well-grown melons average 40 to 50 pounds, but frequently there are some that weigh from 60 to 80 pounds each. The rind is dark green, striped with narrow bands of a lighter green, and when ready for shipping the melons are seemingly of a solid dark green color. The flesh is red, the heart large, with no core, and the flavor superb. For shipping to distant markets this melon is most satisfactory. Pkt., 5c; ¼ lb., 25c; lb., 75c.

Irish Gray In sweetness it is like Kleckley's Sweet; in shipping quality, uniformity in shape, size and in productiveness it is even better than Tom Watson. The thin rind is so tough it will not burst from rough treatment in transit; its keeping quality will appeal to shippers who have experienced losses on account of glutted markets. The color is a distinct mottled greenish gray; the flesh is red, sweet, crisp and free from stringiness. An unusual melon, for although a grand shipper it is equally fine for the home garden. Pkt., 5c; ¼ lb., 25c; lb., 90c.

OKRA OR GUMBO

10 lbs. to the acre.

Sow in drills during April and May. Thin until plants are 12 inches distant, and draw earth to the stems for support.

Improved Dwarf Green Prolific or Density

A distinct variety growing about 14 inches high. Grown in competition with the ordinary dwarf, it produces twice the number of pods, which are very smooth and beautiful. Pkt., 10c; ¼ lb., 20c; lb., 50c.

White Velvet Pods are large, perfectly smooth. Pkt., 10c; ¼ lb., 20c; lb., 50c.

Lady Finger Plants producing long, slender pods of pale green color. Pkt., 10c; ¼ lb., 20c; lb., 50c.

Perkins' Mammoth Green Pod A splendid variety. Very green pods of best quality and most desirable color for canning. Pkt. 10c; ¼ lb., 20c; lb., 50c.

MUSTARD

Fordhook Fancy Darker green and leaves more curled at the edges than any other sort. Pkt. 10c; oz. 15c; ¼ lb. 50c.

Giant Southern Curled

The largest variety, forming a mass of finely curled leaves; hardy, vigorous and highly recommended. Pkt. 10c; oz. 15c; ¼ lb. 20c; lb. 50c.; 10 lbs. \$4.00.

MUSTARD

Mushroom Spawn

These delicious fungi can be grown in a warm cellar or enclosed shed, in which an even temperature can be maintained of from 50 to 60 degrees, and where a plentiful supply of fresh horse-stable manure for making the beds can be obtained. Bricks weigh about 1¼ pounds, and a brick is sufficient to plant about 9 square feet.

English Mill Track Spawn Bricks 25c; 10 bricks \$2.25; If sent by mail, add postage.

OKRA

ONIONS

To grow large bulbs 1 oz. to 100 feet of drill; 4 to 5 lbs. to the acre.
To grow sets 10 ozs. to 100 feet of drill; 50 lbs. to the acre.

The Onion must have a clean and very rich soil. Use well-rotted manure freely, and get the seed in as early as possible in the spring, no matter if it is cold and unpleasant. If onions do not get a good growth before hot, dry weather, the crop is sure to be a failure. Keep the soil mellow and clear of weeds. Sow in shallow drills, not less than a foot apart nor more than half an inch deep. As onions grow on top of the ground, they may be allowed to remain pretty thick, no matter if they crowd each other. In hoeing, destroy weeds and keep the ground mellow; do not cover the young bulbs with earth. It is useless to try to grow onions on poor, unsuitable soil. Three days neglect when the weeds are growing rapidly will sometimes ruin a crop, and a week too late in sowing makes the difference between a good and a bad harvest. With proper manuring, onions can be grown on the same land for a score of years, and it will become cleaner and better every year.

White Silver Skin, or Portugal This is the most popular variety of all white Onions; is almost exclusively used for growing sets. It is a good keeper. The bulbs grow to good size, ripening early and quite evenly. The flesh is mild and sweet, the thin skin a clear silvery white, of handsome appearance if the bulbs are gathered as soon as ripened and carefully dried under shelter away from the strong sunlight. When seed is sown at the rate of 20 to 25 pounds per acre, it makes bulbs of suitable size and most desirable for pickling. Pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., 75c; lb., \$2.25.

White Pearl Very fine and very early variety. Bulbs when well grown are large, round, flattened, with a delicate pure white skin; flesh very mild in flavor. In the South this variety is largely planted for sets. Pkt., 10c; $\frac{1}{4}$ lb., 80c; lb., \$2.75.

Mammoth Silver King The large bulbs are of attractive form, flattened, but quite thick through, with silvery white skin, frequently measuring 20 inches in circumference. It matures quite early, coming just after Onions grown from sets are gone. Must be sown thinly to produce large onions. Our stock is true American grown, of finest strain. Oz., 30c; $\frac{1}{4}$ lb., 80c; lb., \$2.75.

White Silver Skin Onion

Japanese This new variety promises to be one of the best for the production of large onions for Fall and Winter market, yielding almost twice as many bushels per acre than any other set onion. Somewhat similar to Flat Danvers in color and shape but a trifle thicker and very much larger in circumference. They are very mild, excellent keepers, rapid growers and very few go to seed. The appearance, size, quality and wonderful yields of this variety give it a prominent place among the most valuable sorts. Pkt., 10c; oz., 30c; $\frac{1}{4}$ lb., 90c; lb., \$3.00; (Prices of sets on request).

Prizetaker (American grown). The seed we offer produces large, well-ripened bulbs the first season from seed; flesh white; crisp and mild in flavor. The skin is thin, of a bright straw-yellow; form nearly a perfect globe. Under ordinary cultivation this variety will yield bulbs nearly three times as large as the Globe Danvers, while under special cultivation specimen bulbs have been raised to weigh from 4 to 5 lbs. each. Pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., 75c; lb., \$2.25.

Yellow Dutch, or Strasburg The most popular and best variety for set purposes. Is similar to the Yellow Danvers. Flat in shape, good color and size, but as a set onion it has the quality of ripening down earlier and more uniformly. Pkt., 10c. $\frac{1}{4}$ lb., 60c; lb., \$2.00.

Yellow Globe Danvers Our superior stock of this celebrated variety is of fine round shape. It grows to good size, with thin yellow skin, white flesh, fine grained and excellent quality. It ripens early, keeps well and is very productive. Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 60c; lb., \$2.00.

Red Wethersfield Large sized, somewhat flattened; skin deep red and very hardy. Pkt. 10c; Oz. 25c; $\frac{1}{4}$ lb., 60c; lb., \$2.00.

Australian Brown An early and very hardy variety which does especially well in the South. Should be planted early, on low, wet ground, to get large bulbs. The skin is thick and the color is a rich brown. Is especially noted as a long keeper, as it keeps well into spring and much longer than other varieties. Pkt., 10c; $\frac{1}{4}$ lb., 60c; lb., \$2.00.

Australian Yellow Globe It is a fit companion to the new well-known Australian brown. The bulbs are globe-shaped, with a light brown-yellow skin. Solid and heavy. Oz., 20c; $\frac{1}{4}$ lb., 60c; lb., \$2.00.

Danvers Yellow Globe

ONION SETS

Fine quality market gardeners stock screened to $\frac{7}{8}$ inch
Yellow Danvers, qt. 20c; pk. 85c; bu. \$2.75.

Japanese, qt. 20c; pk. 90c; bu. \$2.90.

White Silverskin, qt. 25c; pk. \$1.00; bu. \$3.25.

One bushel weighs 32 lbs. Prices subject to change.

POSTAGE EXTRA.

USE A FELINS TYING MACHINE

For Bunching Spring Onions

See page 63

PUMPKINS

1 ounce to 15 hills; 4 lbs. per acre, in hills 10 by 10 feet apart.

CULTURE:—Sow in good soil in May, when the ground has become warm, in hills 8 to 10 feet apart each way, or in fields of corn about every fourth hill; always avoid planting near other vines, as they will hybridize.

Sugar Pie Pumpkins This is the best of all Pumpkins for pies. The fruit is small to medium in size, flesh solid and fine grained, the seed cavity small, and it is a splendid keeper. Pkt., 5c; ¼ lb., 30c; lb., 90c.

Quaker Pie It is oval in shape, and tapers toward each end; of a creamy color, both inside and out. Being fine grained and rich flavored, it makes a superior quality of pies. Pkt., 5c; ¼ lb., 30c; lb., 90c.

Connecticut Field Used principally for feeding stock, shape almost round, of medium size, skin deep yellow and smooth, flesh yellow. Pkt., 5c; ¼ lb., 20c; lb., 60c; 10 lbs., \$5.50.

Cushaw, or Crookneck One of the most popular varieties to grow for pies as well as for stock feeding. Fruits 2 feet in length, with long, solid neck, most frequently curved in form; seeds are located in the lower bulb-like end. Skin striped with mottled bands of creamy white. Flesh, rich, creamy yellow, tender and of exceptionally fine flavor. Pkt., 5c; ¼ lb., 30c; lb., \$1.00.

Sweet Potato Excellent for pies, pear-shaped, medium sized, flesh and skin creamy white, fine grained, sweet and delicious; first-class keeper. ¼ lb., 30c; lb., \$1.00.

Japanese Pie Crookneck variety, with extremely small seed cavity; nearly all solid meat; quality extra fine; seeds distinct in appearance, being curiously sculptured in the manner of Chinese letters. Productive, ripens early, medium size, good keeper. ¼ lb., 25c; lb., 90c.

King of Mammoths This giant variety grows to enormous size. Deep yellow, glossy color. Splendid to grow for stock and exhibition purposes. ¼ lb., 30c; lb., \$1.00.

Sugar Pie Pumpkin

Extra Dark Moss Curled Parsely

Extra Curled Dwarf, or Emerald

The plants are of dwarf compact growth, while the leaves are of a handsome bright green coloring, very finely crimped and curled, of a most ornamental appearance. One of the finest for garnishing or flavoring. Pkt., 10c; ¼ lb., 25c; lb., 75c.

The plants are of dwarf compact growth, while the leaves are of a handsome bright green coloring, very finely crimped and curled, of a most ornamental appearance. One of the finest for garnishing or flavoring. Pkt., 10c; ¼ lb., 25c; lb., 75c.

PARSLEY

1 oz. to 150 feet of drill.

Sow in rows 1 foot apart and 1 inch apart in the row. The seed is slow to germinate, and should be given the most favorable conditions. A deep, rich, loamy soil is required. For winter use a few plants placed in a box in the cellar will give a supply

Champion Extra Dark Moss Curled The large leaves are very heavily crimped and curled, being quite moss-like in appearance and of a peculiarly rich, extra dark green coloring. Very productive and most attractive as a garnish, both on account of this green coloring and fine mossy appearance. Pkt., 10c; ¼ lb., 25c; lb., 75c; 10 lbs. \$6.50.

Turnip-Rooted, or Hamburg

The edible portion of this variety is the large swollen or fleshy root, which resembles the root of a Parsnip, and is highly esteemed for flavoring soups, stews, etc. As the root is the portion desired, the young plants should be well thinned out. Pkt., 10c; oz., 15c; ¼ lb., 25c; lb., 75c.

PARSNIPS

1 oz. to 150 feet of drill.

Parsnips are well known as a delicious table vegetable, but their value for the purpose of feeding cattle and stock is but little appreciated. The parsnip is rich in saccharine food, which adds greatly to the richness of the milk when fed to cows, while the fresh, succulent roots increase the flow of milk as greatly as does the use of fresh, green food in the spring. It is especially valuable for the purpose from its extreme hardiness, as the roots can be left in the ground all winter and improve in quality by the continued freezing.

Sow as early in the spring as the weather will permit, in drills 15 inches apart and half an inch deep in rich, well-manured ground,

well dug. Cultivate similar to Carrots, and thin out to 6 inches apart in the rows. To keep well in the ground over winter, draw a little earth over the tops.

Hollow Crown, or Large Sugar The best variety in cultivation for general use; roots white, smooth, of intermediate length; sugary, of excellent flavor. Pkt., 10c; ¼ lb., 25c; lb., 75c.

Improved Guernsey An improved strain, which has given general satisfaction. The roots do not grow so long as those of the Hollow Crown, but are of greater diameter and more easily gathered. Of excellent quality. Pkt. 10c; ¼ lb., 25c; lb., 75c.

Hollow Crown Parsnip

Acquisition

PEAS (1 quart to 100 feet of drill; 1 ½ bushels per acre.)

Peas grow best on a light, rich, mellow soil under cool and moist weather conditions. Fresh manure and very rich or wet mucky soil should be avoided.

The extra early varieties are very hardy and should be planted as soon as the ground can be made ready, while the larger wrinkled varieties, which are not as hardy but of superior quality, may be planted when the soil has become slightly warmed, as the seed will rot if planted too early.

For private use, sow the seed in double rows, 18 inches apart and 3 inches apart in the row; for market, in single rows 2 to 3 feet apart and 1 inch apart in the rows. The peas will give quicker returns if covered only one inch deep, and where earliness is most important they may be treated this way. Larger pods and greater quantity will be produced if the seed is planted in trenches three to six inches deep and covered with only one to two inches of soil. When the plants are five or six inches high, fill the trench level with the surface. This will result in deep rooting, prevent mildew and prolong the bearing season. If the peas are covered to the full depth at first, or if water is allowed to stand in the trenches the seed will not germinate or grow well. The crop should be gathered as fast as it becomes fit for use, as even a few ripe pods left on the vines tend to retard the development of the young pods and prevent the formation of new ones.

FIRST EARLY SMOOTH VARIETIES

Extra Early Alaska Vine strong and vigorous, 2 to 2½ feet high, of a peculiar light green color; pods 3 to 3½ inches long, straight and blunt at the end. Is ready for picking 49 to 50 days from planting. Seed round, blue, slightly pitted. Matures crop very evenly. Qt., 35c; pk., \$2.00; bu., \$7.25.

Pedigree Extra Early This superb strain is a great favorite with large growers. Equally as early as the choicest stock of Alaska, the peas are much better in flavor. The vines are quite slender, of very quick growth, and average 18 to 24 inches in height. The pods are well filled, and the entire crop can be gathered generally in one picking. Qt., 35c; pk., \$2.00; bu., \$7.50.

Early Bird The best extra early, large podded Dwarf now on the market. Very desirable for market gardeners and truckers. Seed is practically smooth, dark green in color, can be planted as early as the Alaska. Produces a strong, vigorous vine, dwarfed in length. Pods produced in profusion and are long, large, pointed and well filled with good sized peas. Is an excellent cropper. Qt. 40c; pk. \$2.50; bu. \$9.00.

Prolific Early Market Longer podded and more prolific than Pedigree Extra Early, for which it is a fit companion and close second, as it comes in only four or five days later. The vines average 24 to 30 inches high and produce pods singly. One picking will take about three-fourths of the crop, and a second picking, which is to be made about three days later, will take the balance. Qt., 35c; pk., \$2.00; bu., \$7.50.

Long-Podded Alaska A favorite with truckers and shippers to Northern markets, producing a very early crop of large, broad, well-filled, dark green pods. Equally as hardy as Extra Early Alaska and much larger. The vines usually grow three feet high and the crop will remain fresh a long time after picking. Qt., 35c; pk., \$2.00; bu., \$7.50.

SECOND EARLY SMOOTH VARIETIES

Improved Sugar Marrowfat This fine Pea has given wonderful satisfaction to all who have planted it. It grows about 2 feet high, bears enormous handsome pods, which are completely filled with large, deliciously flavored, deep green peas. It is undoubtedly the most productive Pea offered. Qt. 40c; pk. \$2.25; bu. \$8.00.

EDIBLE PODDED PEAS

This is a class of Peas not generally known in this country, but much used abroad, in which the sweet, brittle and succulent pods have none of the tough inner lining found in the ordinary varieties of garden peas. They are used in the same way as snap or string beans.

Mammoth Melting Sugar This is by far the largest and finest of the true sugar or edible podded Peas. The vines are of strong, vigorous growth, frequently 4 to 5 feet in length, and the pods come rather late, or about the same time as the Telephone and Stratagem Peas. Broken and boiled like string beans and served with butter sauce, they have a luscious flavor. Qt. 60c; pk. \$3.75.

Bountiful Resembling the Alaska in general habit of growth. Vine 36 inches, foliage gray-green, pods 3½ inches in length, pointed, gray-green in color. Fit for table use 55 to 57 days from planting; a prolific bearer, making it a valuable variety. Seed blue, medium pitted. Qt., 35c; pk., \$2.00; bu., \$7.50.

Early Bird Peas

Extra Early Gradus or Prosperity

PEAS

Continued—

WRINKLED VARIETIES

Laxtonian This is the finest dwarf early pea offered today. The vines grow 18 to 20 inches high and produce an enormous crop of dark green pods as large as Gradus, maturing a few days ahead of this variety. Qt. 45c; pk. \$2.75; bu. \$10.00.

Admiral Dewey Similar to Alderman. Height of vine $3\frac{1}{2}$ to 4 ft. Large dark green pods, frequently 6 inches long. Pods pointed. Qt. 50c; pk. \$3.00; bu. \$10.50.

Alderman One of the best long vined, main crop varieties. Hardy, prolific, producing vines $3\frac{1}{2}$ to 4 ft. in length. Pods large, pointed, dark green in color. Maturing about the same time as the Admiral Dewey. Qt. 45c; pk. \$2.50; bu. \$9.00.

Dwarf Champion Similar to Champion of England, excepting that vines are about $2\frac{1}{2}$ ft. long, earlier, and more prolific, but of rather poor quality. Qt. 45c; pk. \$2.75; bu. \$10.00.

Gradus or Prosperity One of the best second early, long-strawed, wrinkled varieties. Produces long pointed pods, well filled and of fine table quality. Vines from $2\frac{1}{2}$ to 3 ft. in length. Considered one of the most desirable for the market, garden or home use. Qt. 45c; pk. \$2.50; bu. \$9.00.

Pioneer One of the newer varieties classed as one of the best large podded early Dwarfs. Vine 20 to 24 inches in length, pods large, long, pointed. Well filled with delicious quality peas. Qt. 45c; pk. \$2.75; bu. \$10.00.

Little Marvel Larger podded than Nott's Excelsior. Pods blunt ended, well filled with fine quality peas, a splendid cropper. Qt. 40c; pk. \$2.75; bu. \$10.00.

American Wonder One of the old Dwarf varieties. A good cropper, produces small sized pods, well filled with finest flavored peas. Qt. 45c; pk. \$2.50; bu. \$9.00.

Premium Gem A second early, longer vine than the American Wonder. Pods similar. Qt. 50c; pk. \$3.00; bu. \$10.00.

Nott's Excelsior More prolific grower than American Wonder. Pods about the same both as to size and quality. Perhaps a better yielder. Qt. 45c; pk. \$2.50; bu. \$9.00.

Dwarf Defiance The best late or main crop Pea. Produces a medium length vine and an abundance of large, long pointed pods of a rich dark green color. Well filled with large luscious peas. For main crop or late variety in the home garden, it cannot be excelled. Qt. 45c; pk. \$2.75; bu. \$10.00.

Daisy, or Dwarf Telephone A second early, of robust but remarkably even growth. From 16 to 18 inches high. The stout plants are fairly loaded with large, bright green pods. Each pod contains from 7 to 9 large peas of a light bright green color, tender and well flavored. Qt. 45c; pk. \$2.75; bu. \$9.50.

Prince Edward Hardy and very prolific. Vine $3\frac{1}{2}$ to 4 feet in height, with dark green foliage. Pods dark green, curved and pointed at the ends. Ready for table use 60 days after planting. Qt. 50c; pk. \$3.00; bu. \$10.50.

Boston Unrivalled An improved strain of the popular Telephone. Vines grow 4 to 5 feet high, and are covered with fine, large pods which are light green in color. Qt. 50c; pk. \$3.00; bu. \$10.50.

Dark Green Telephone A tall-growing, late sort, $3\frac{1}{2}$ to 4 feet in height, having beautiful dark green pods of very large size, containing 6 to 7 large peas of delicious flavor. Continues in bearing for quite a long time. Qt. 45c; pk. \$2.50; bu. \$9.00.

Potlatch Strong, vigorous vines of even growth, 20 to 24 inches in height, with luxuriant dark foliage, bearing pods medium green in color, $3\frac{1}{2}$ to 4 inches in length. Broad and pointed at the ends. No variety known will produce more pods, and no pods could possibly shell out better. The Potlatch is a variety from which everyone may expect great things. Fit for table use 61 days from planting. Seed green, wrinkled. Large in size. Qt. 45c; pk. \$2.75; bu. \$9.50.

Thomas Laxton This variety is of the same growth with that of the Gradus, but is usually three to four days later for market. The pods are square at the ends instead of having a long, sloping point, and considered by some to be of a better flavor than the Gradus. Qt. 45c; pk. \$2.50; bu. \$8.50.

Ideal This English variety is regarded by some as an improvement on Thomas Laxton; grows about $2\frac{1}{2}$ ft. tall with moderately heavy foliage. Pods medium green, average $3\frac{1}{2}$ in. long, are broad, thick and blunt, containing 7 peas of excellent quality. Slightly earlier than Thomas Laxton and fairly productive. Qt. 50c; pk. \$3.00; bu. \$11.00.

Champion of England A universal favorite, delicious flavor, profuse bearer of large pods, filled well with large green wrinkled peas. Height about 4 feet. Qt. 45c; pk. \$2.50; bu. \$9.00.

PEPPERS

1 oz. to 1,500 plants.

Peppers should be sown either indoors or in hotbeds early in April and transplanted to the permanent beds when about 3 inches high in two foot drills and two feet apart in the drills. The seed can also be sown in open ground when danger from frost is past but the crop will naturally be much later. A top dressing of fertilizer or poultry manure well mixed with the soil when the plants are about 6 inches high will materially aid in the production of a big crop.

Royal King Plants grow about 2½ feet high, and are vigorous; compact and very productive, commencing to bear very early and continuing until killed by frost. The fruit is very large, bright and glossy and the extremely thick flesh is sweet and mild. They will stand distant shipping and hold up well for market as they do not wilt nor become ripe near so quickly as other large varieties. This strain is extensively grown in the South by large shippers and deserves the attention of every trucker and home gardener, as the quality and marketing possibilities are unexcelled by any other variety. Pkt., 10c; oz., 35c; ¼ lb., \$1.00; lb., \$3.50.

Early Giant The earliest medium large pepper in cultivation; being earlier than Neapolitan. The plants are very uniform in growth, dwarf and compact, seldom over 18 inches in height, and very productive. Fruits pendant, mild and sweet, similar to Bull Nose in form. Pkt., 25c; oz. 65c; ¼ lb. \$2.00; lb., \$7.00.

Ruby Giant A variety of Mango Pepper which is of a desirable size and shape for stuffing. A cross of Ruby King and Chinese Giant. Grows to large size and is very mild. Pkt., 10c; oz. 35c; ¼ lb., \$1.00; lb. \$3.75.

California Wonder Its large, smooth, extremely heavy, very mild, thick flesh, make this variety truly a wonder. Combining the excellent quality of the Pimento and the size of Crimson Giant, California Wonder is being grown for all purposes. Plants are sturdy, productive and slightly spreading, bearing five to nine large glossy fruits to a setting, averaging one-half pound each. Deserves the attention of every pepper grower. Pkt. 25c; oz. 75c; ¼ lb. \$2.50; lb. \$9.00.

Royal King Pepper

California Wonder

Pimento or Perfection A medium early, prolific, perfectly mild variety with extremely thick flesh. On account of its thick flesh it will hold up for a long time, and is an excellent sort for canning whole. Pkt. 10c; oz. 30c; ¼ lb. 85c.

Chili, Small Red conical pod, about 2 inches long, very hot. Fine for pepper sauce and seasoning. Pkt. 10c; oz. 40c; ¼ lb. \$1.00; lb. \$3.75.

Cherry Red Fruit small, round, color rich scarlet, very hot. Pkt. 10c; oz. 40c; ¼ lb. \$1.00; lb. \$3.50.

Ruby King Good variety for mangoes or pickling; very productive and sweet. Pkt. 10c; oz. 25c; ¼ lb. 75c; lb. \$2.75.

Chinese Giant This desirable variety is one of the largest sweet peppers ever offered. The flesh is quite thick, very mild and remarkably sweet. Pkt. 10c; oz. 40c; ¼ lb. \$1.25; lb. \$4.50.

Large Bell, or Bull Nose This large early and productive sort has the most pungent flavor of all the large peppers. Thick flesh. Pkt. 10c; oz. 25c; ¼ lb. 75c; lb. \$2.75.

Neapolitan A variety of Sweet Pepper which matures very early. It grows about 3 inches long, and is remarkably sweet. Pkt. 10c; oz. 35c; ¼ lb. \$1.00; lb. \$3.50.

PEPPER PLANTS

In All The
Leading
Varieties

Fresh
Daily

See Pg. 36

TOPEPO (Tomato Pepper) A cross between the stone tomato and bell pepper. The Topepo is superior to the pepper for stuffing, baking, salads, gravies, etc., and is also used as a table decoration. Fruit shaped like tomato, large in size, beautiful in colors—red, yellow, green and orange. Have sold in Western cities as high as 25c each. Pkt. 10c; oz. 50c.

Long Red Cayenne The pods are long and slender; bright red color and very pungent. This is an old-time favorite and is used extensively for bunching with pot-herbs. Pkt. 10c; oz. 35c; ¼ lb. \$1.00; lb. \$3.00.

Mammoth Golden Queen A large, sweet, fine flavored, bell shaped pepper with very thick flesh. Fruit light green, turning to rich golden yellow when fully ripe. Pkt. 10c; oz. 35c; ¼ lb. \$1.00; lb. \$3.75.

World Beater or Sweet Mountain This splendid pepper or recent introduction is a cross between Chinese Giant and Ruby King, and combines the size of one and the earliness of the other. It is exceedingly mild, very large and the color is at first green changing to a beautiful shade of scarlet. The flesh is very thick, making distant shipment possible. Pkt. 10c; oz. 35c; ¼ lb. \$1.00; lb. \$3.75.

Chinese Giant Pepper

Selected
Seed Stock

SEED POTATOES

Let us quote close prices on highest quality seed on basis
of lowest market value

Strictly
Maine Grown

Potatoes will adapt themselves to various soil conditions as easily as most vegetables. A better crop will be produced, however, on a sandy loam which contains a quantity of well rotted vegetable matter. A clover sod, vetches turned under in the fall, or land which was heavily manured for a previous crop supply ideal conditions.

In preparing the seed the eyes should be cut so that the largest part of the surrounding flesh is situated toward the stem end, because the eyes of a potato always have a root system running toward that end and for that reason the sprouts cannot draw moisture from the opposite direction. If the ground you intend to use has produced a scabby crop previously or the seed shows any trace of disease, the pieces should be soaked in a formaldehyde solution as a preventative.

For a very early crop, run off furrows about three feet apart and about four inches deep. Drop the pieces about 15 inches apart in the furrows and cover to a depth of about 1½ inches, gradually filling in the furrows to level as the vines grow larger. For main crop it is just as well to cover the eyes with four inches of soil at once. If fertilizer is used, apply it either in the row or broadcast before planting and be sure that it is thoroughly mixed with the soil so that the seed is not burned. Fresh stable manure will cause the potatoes to become scabby.

Just before the sprouts have appeared above the ground run a light harrow over them to kill the weeds and break up the crust. Continue weeding and harrowing until there is danger of breaking off too many sprouts. Cultivate thoroughly and frequently, being careful not to cut any of the roots, continuing until the vines have attained full growth and begin to spread.

Spraying for insects and blight is very necessary. Pyrox, Bug Death, etc., giving very satisfactory results.

The size and quality of the crop and the ability to resist disease is directly dependent upon the seed planted and no amount of cultivation or attention will offset the uncontrollable results of poor seed.

Norcross

Early Six Weeks Medium sized, very smooth skinned and shallow eyed; in color light pink and of fine texture.

Red Bliss, or Bliss Triumph This variety is rapidly growing in favor. The tubers are round and uniform in shape, eyes slightly depressed and of a beautiful bright red color. Very hardy and vigorous, maturing with extra earlies.

Dakota Reds This very popular local variety has gained favor due to its very productive and fine cooking qualities. It often brings a higher price in Baltimore markets than the most fancy table stock from New York and Maine. Used for late crop only. Let us quote.

Irish Cobbler The biggest Potato and greatest producer known among the first early varieties. It will outyield all other early kinds and equal most of the later varieties. Fine quality, color a pure creamy white, shape round to oblong and smooth. Vines very stocky, with dark foliage.

Early Rose For a generation the standard Potato of the whole country for earlies, yield, thrift, beauty and table qualities, because it always succeeds well in any soil, in any climate and in any latitude. Too well known to need description. Our stock is strictly pure.

Maggie Murphy This is a decidedly valuable acquisition to the Potato family. The shape is flattened oblong with smooth eyes and of rose color. It is very hardy, productive and bears tubers of large size.

Green Mountain White skin, flat, oval form, smooth, of good appearance; fine for the table quality. Ripens slowly, and is a good keeper. Valuable for late crops. Now taking the lead in all markets.

Gold Coin A very desirable main crop variety of recent introduction; has proven to be very hardy, of vigorous growth, most productive, of the very best quality. The tubers are slightly oblong, rather broad and quite thick through. The eyes are small, and there is but little waste in paring. The skin is thin, smooth and glossy, of a light golden tint.

Second Crop Seed Potatoes are of medium size, and require less seed per acre than Maine-grown stock. Planters who have tried them will use no other. Prices on application.

Be sure of your crop and plant only the best Maine grown seed potatoes.

White Star Medium late, of good size and quality, white in color; eyes flush with the skin and a good keeper.

Norcross Its shape is a little oblong and slightly flattened, the skin is finely netted or rusty, which always indicates good cooking and eating qualities. The tubers are large and very uniform, maturing medium early.

American Giant Is one of the heaviest yielders grown, and a favorite with all large growers. It is a long, white, smooth, handsome Potato, of good quality, with shallow eyes; maturing with the second earlies and is a late keeper.

Prosperity This is a very handsome general crop Potato. Its skin is slightly rusty, of a light cream-white color; its shape is an oblong and slightly flattened. The eyes are very shallow, the size is large and desirable, very few under market size. Always smooth and regular in form and of splendid quality.

Burbank This variety is quite largely used as one of the reliable late Potatoes, is of good size, white skinned, of oblong shape and good yielder. It is a late keeper and also of good flavor.

Puritan A splendid early variety, fine quality, color a pure white, shape oblong, yielding large crops.

SEED SWEET POTATOES

Elzey's Improved The strain used every year by Maryland's most successful sweet potato growers. Yields 25 to 50 per cent more marketable stock and sells higher than any other Dry and sweet; decidedly the best of all.

Prices subject to market fluctuations.

Sweet Potato Plants See Page 36

RADISHES

1 oz. for 100 feet of drill; 9 lbs. per acre.

Light, sandy soil, rich in organic matter is essential to produce crisp and tender radishes. For an early crop sow the seed as soon as the ground can be worked, in drills 6 to 10 inches apart, covering the seed half an inch deep. When the plants are well started, thin out to one inch apart in the drills. Frequent watering in dry weather is very beneficial as high quality is largely dependent upon rapid growth. For a continuous supply, successive plantings should be made at intervals of 10 days to two weeks, selecting varieties best suited for the season.

Extra Early Scarlet Globe (Forcing)

This is the market gardener's favorite as a forcing Radish, very early; mild and crisp, juicy and tender; top small; will stand heat without becoming pithy. One of the best selling and most attractive Radishes on account of its bright scarlet color and handsome shape. Our stock of this is the very best, selected with special care as to size, shape, color and earliness, and market gardeners will find it a money maker, as it is just right in every respect. Pkt., 10c; ¼ lb., 25c; 1 lb., 75c; 10 lbs., \$6.50; 25 lbs., \$15.00.

Extra Early Deep Scarlet Turnip

Deep scarlet, turnip shaped, small top, desirable for frames or outside. Pkt., 10c; ¼ lb., 25c; 1 lb., 75c.

Early Deep Scarlet Turnip

For outdoor sowing this is the most important in the Baltimore market, thousands of pounds being annually used. Our stock is the very best. It has a rich scarlet color, ball shape, a little larger top and matures a week later than the forcing varieties. Pkt., 10c; ¼ lb., 25c; 1 lb., 75c.

Ruby-Pearl

The color is a bright scarlet and white. It is extremely quick to mature, being ready for the table in 20 days from the time of sowing the seed. It is invaluable for forcing under glass as well as for growth in the open air. The skin is very smooth, and its clear color gives it an appetizing appearance on the table. Its flavor is excellent, and its qualities high in all respects. Pkt., 10c; ¼ lb., 25c; 1 lb., 75c.

Early Scarlet Turnip, White Tipped One of the handsomest of the Turnip Radishes for early planting outdoors. Roots slightly flattened on the under side, color very deep scarlet with a white tip; flesh white and of the best quality. Pkt., 10c; ¼ lb., 25c; 1 lb., 75c.

Crimson Giant

A variety combining earliness and great size. It grows much larger than other extra early varieties, but does not become pithy, even when fully twice as large in diameter and a week older; beautiful crimson carmine; turnip-shaped; flesh firm, crisp and tender. We recommend it for outdoor garden planting as well as for greenhouse forcing. Pkt., 10c; ¼ lb., 25c; 1 lb., 75c.

(New) Round Scarlet China

This new variety of the China Radish may be sown at intervals from spring until autumn. Matures in from six to seven weeks, and is much harder than most other varieties. Valuable as a winter Radish, as well as for summer. Its handsome round shape, rich scarlet color and pure white flesh commend it to all. Pkt., 10c; ¼ lb., 35c; 1 lb., \$1.00.

Golden Globe

Second early, grows to a good size; stands the heat well; very popular with market gardeners, a beautiful golden yellow, flesh crisp and tender. Pkt., 10c; ¼ lb., 25c; 1 lb., 75c.

Half Long Deep Scarlet, or "Paris Beauty"

This is a splendid strain of similar season to the Early Long Scarlet. Very popular. The Radishes are of slightly larger diameter and most brilliant scarlet coloring. Flesh purest white, crisp and juicy. Pkt., 10c; ¼ lb., 30c; 1 lb., 85c.

Extra Early Scarlet Globe Forcing

Early Scarlet Turnip, White Tipped

RADISHES--Continued.

French Breakfast Color is a scarlet rose, shading to a waxy white at the tip; quick growth, mild and tender, good for forcing. Pkt., 10c; $\frac{1}{4}$ lb., 25c; lb., 75c.

Feton's Model White Box (Forcing) It is of most handsome shape very early and has but few leaves, thus making it of special value for growing in hotbeds or "boxes," and one-third more radishes can be grown in the same space than with most other sorts. It is of clear white color, solid, juicy and unsurpassed in flavor. Pkt., 10c.; $\frac{1}{4}$ lb., 25c.; lb., 75c.

Long Scarlet This is the standard extra early long scarlet market variety, short top, long scarlet roots; crisp, fine flavor. Pkt., 10c.; $\frac{1}{4}$ lb., 25c.; lb., 75c.

White Icicle Radish It fully equals in crisp, tender flesh and mild flavor the popular White Vienna or Lady Finger, while it is as early as Long Scarlet Short Top. Planted in spring the young Radishes are ready for use in 20 to 25 days from sowing the seed, and their long, slender form and pure paper-white skin are most attractive when bunched for market. Pkt., 10c.; $\frac{1}{4}$ lb., 25c.; lb., 75c.

Cincinnati Market ("Glass Radish") A selected strain of the Long Scarlet, growing to slightly larger size fully as early and darker in coloring. Pkt., 10c.; $\frac{1}{4}$ lb., 25c.; lb., 75c.

Long Bright Scarlet, White Tipped This is the brightest and handsomest colored scarlet Radish known. Pkt., 10c.; $\frac{1}{4}$ lb., 25c.; lb., 75c.

Improved Chartier The color at top is crimson, running into pink at middle, and from thence downward is pure waxy white. It is of a very quick growth, and ready for use nearly as early as Long Scarlet. Exceedingly tender and crisp. Pkt., 10c.; $\frac{1}{4}$ lb., 25c.; lb., 75c.

White Strasburg

brittle, and never woody. Market gardeners will find this a special seller. Pkt., 10c.; $\frac{1}{4}$ lb., 30c.; lb., 85c.

White Round Spanish Root large, often five inches in diameter, turnip-shaped, skin pure white, flesh white crisp and not becoming pithy, very compact and highly flavored; an excellent sort for winter, as the roots keep a long time. Pkt., 10c; $\frac{1}{4}$ lb., 30c; lb., 85c.

Improved Half-Long, Black Spanish Radish This new sort is intermediate in shape between the Old Round and Long Black Spanish, and much superior to either. Flesh mild, very sweet and crisp, never pithy, and is decidedly the best of all black radishes. If stored in damp sand in the cellar, they will keep all winter. Pkt., 10c; $\frac{1}{4}$ lb., 30c; lb., 90c.

Round Black Spanish Like the Long White Spanish, except in shape. Pkt., 10c; $\frac{1}{4}$ lb., 25c; lb., 75c.

Chinese Rose A splendid rose-red variety that keeps during winter; tempting flavor and very crisp. Pkt., 10c; $\frac{1}{4}$ lb., 25c; lb., 75c.

Long White Spanish This variety is of a snow white color, similar to the White Strasburg in shape, but rather more stump-rooted. Pkt., 10c; $\frac{1}{4}$ lb., 25c; lb., 75c.

Long Black Spanish Black skin, white flesh, very firm and solid, good keeper, grows long and large. Pkt., 10c; $\frac{1}{4}$ lb., 25c; lb., 85c.

California Mammoth Was first introduced into this country by the Chinese in California. It is pure white, about one foot long, and two or three inches through, tapering regularly to the tip. The flesh is tender and crisp, keeping well through the winter. Pkt. 10c; $\frac{1}{4}$ lb., 30c; lb., 90c.

White Icicle

Pearl Forcing This variety is a cross between Wood's Early Frame and White Strasburg. The color is a pearl white with a fine waxy appearance, very firm and solid. They will remain in good condition longer than any other extra early variety. Pkt., 10c; $\frac{1}{4}$ lb., 25c; lb., 75c.

Long White Vienna, or Lady Finger This is the finest Long White Radish in cultivation; it is most beautiful in shape, white in color, both skin and flesh are pure snow-white, crisp, brittle, and of rapid growth. Highly recommended Pkt., 10c; $\frac{1}{4}$ lb., 25c; lb., 75c.

New White Strasburg A very new desirable summer variety, a favorite with our gardeners. skin and flesh both white. It is excellent quality and a quick grower. Pkt., 10c. $\frac{1}{4}$ lb., 25c.; lb., 75c.

Perpetual White Summer This variety introduced by us, has given splendid satisfaction to all who have tried it. They are pure white, of uniform good quality, crisp and brittle, and they keep longer in a fit condition for the table than any variety we know of, hence their name. Perpetual White Summer can be sown any time of the year, and will always produce good radishes fit for market earlier than the Chartier, and keep in perfect shape for marketing about four weeks, or longer for home use. Pkt., 10c.; $\frac{1}{4}$ lb., 25c., lb.; 75c.

White Stuttgart Quick growing and therefore very early. Of the largest size, and both flesh and skin are pure white; quality fine, firm, and brittle, can be pulled for use at any stage. Pkt., 10c.; lb., 25c.; lb., 75c.

Large White Summer Round, smooth, very white, crisp, and tender. The market gardener's favorite for summer use. Pkt., 10c.; $\frac{1}{4}$ lb., 25c.; lb., 75c.

WINTER VARIETIES

White Chinese New Celestial

Large, stump-rooted Radish with white skin and flesh. Can be sown from July 1 to August 15, and will keep in prime condition, mild, in flavor

Long Scarlet

Grown by MR. JOHN T. GORSUCH, Bear Creek, Md.

Our improved strains are grown by the originators and when better quality is produced we are always among the first to offer it.

"I am pleased to tell you that your Reselected and New Early Long Standing varieties of Savoy Spinach Seed surpass all other strains that I have ever grown. Crops produced have been found to command the very highest market price."

W. P. Kofskey, Dundalk, Md.

Manns' Reselected Bloomsdale Savoy

This new strain has been developed in response to the urgent demand on the part of large spinach growers for an improvement in the quality of the regular commercial Bloomsdale grown in Holland.

The crops produced from it are so far superior in quality to the regular commercial stocks of Bloomsdale Savoy, that practically all large growers are using it to the exclusion of the un-selected stock. There is just a little difference in the prices of the seed but the market value of the crop is greatly increased. Mann's Reselected Savoy cuts more bushels per acre because of its perfectly savoyed luxuriant growth, and commands a higher price per bushel because of its fancy quality.

The plants are large, heavy, uniform and in every way especially re-selected to match the ideal Bloomsdale Savoy type. **Lb., 20c; 10 lbs., \$1.75; 25 lbs., \$4.00; 100 lbs., \$14.00.**

Manns' Reselected Bloomsdale Savoy

SPINACH

1 oz. to 100 ft. of drill; 12 to 15
lbs. per acre.

One of the most staple vegetables of the American table, possessing highly valuable and health giving qualities; easily grown, requiring but little attention and in sections where the soil is rich, very profitable crops are produced.

Select a rich piece of ground, the richer the better; and for late spring and early summer use, sow the seed during February, March and April in drills one foot to 20 inches apart, one-half to one inch deep. When the plants are well started thin out to 4 to 6 inches apart, or sow the seed thinly and allow all the plants to stand.

For winter and early spring use, sow either in drills or broadcast during August, September and October. A top dressing of Nitrate of Soda will make a vast improvement in the earliness, size and quality of the crop.

Virginia Blight Resistant Bloomsdale

A strain of Bloomsdale Savoy especially developed by the Virginia Experimental Station for the purpose of resisting the disease commonly called yellows. Used extensively in the vicinity of Norfolk and in other sections where blight is encountered.

Being an American sort, it matures very quickly and it therefore preferred by some growers for early Fall sowing. Our seed is grown from thoroughly reliable, genuine Virginia Blight Resistant stock. **Lb., 25c; 10 lbs., \$2.00; 25 lbs., \$4.75; 100 lbs., \$17.50.**

Mann's Extra Dark Green Savoy

As with other important introductions of new strains having real merit, we are among the first in America to offer this improved type of Bloomsdale Savoy. It is only about two days later than Reselected, but the plants are larger, less liable to bolt to seed, more heavily crumpled and of more upright growth. The very dark green color, however, is its chief advantage and in making the selections for this deep color the expert plant breeder has also improved the strain in its savoyed characteristics and absolute freedom from smooth leaved plants. Some of the most successful spinach growers in this section have already reported this new strain a very profitable crop. **Lb. 25c; 10 lbs. \$2.00; 25 lbs. \$4.50; 100 lbs. \$16.00.**

Holland Field of Early Long Standing Savoy for Seed.

Manns' Early Long Standing Savoy

Just as early as regular and reselected savoy but has the very valuable advantage of standing in perfect condition, without bolting to seed, 10 to 14 days longer than these other varieties. This feature is worth thousands of dollars to spinach growers, for with this variety it is possible to market the crop when it is convenient and advantageous for the grower to do so. Many severe losses have been incurred because cutters were not available, weather conditions unfavorable, or prices were too low, but Early Long Standing will wait for cutters, for weather, and for prices. Last season many of our customers doubled their receipts from the crops, by simply waiting ten days for a higher market. Early Long Standing holds up exceedingly well for shipping as it is of good heavy substance. The leaves are intensely savoyed and of a beautiful dark green color. It possesses such wonderful marketing possibilities, that it deserves the attention of every spinach grower. Lb., 25c; 10 lbs., \$2.00; 25 lbs., \$4.75; 100 lbs., \$17.50.

King of Denmark Plants remain in condition from a week to two weeks after all other varieties have gone to seed. One of the leading sorts for home gardeners. Pkt., 10c; lb., 25c; 10 lbs., \$2.25; 100 lbs., \$20.00.

Princess Juliana Greatly resembling savoy as the picture opposite will show; much slower in growth however, and very late in going to seed. The ideal variety for late spring sowing, as it thrives well in warm weather and is great demand as long as the weather permits shipping. Lb., 25c; 10 lbs., \$2.00; 25 lbs., \$4.75; 100 lbs., \$18.00.

New Zealand (TETRAGONIA EXPANSA) Not related to regular spinaches but forming larger spreading plants producing fleshy brittle tips and leaves which are used as spinach. Of delightful flavor and practically ever-bearing. Pkt., 10c; oz., 15c; ¼ lb 25c; lb., 75c.

Princess Jullana Grown by Krastel Bros.

Mammoth Sandwich Island Salsify

SALSIFY

or Oyster Plant

1 oz. for 50 feet of drill.

Requires a well enriched, mellow soil, which, previous to sowing the seeds, should be stirred to a depth of 18 inches. Sow early in the spring in drills 15 inches apart; cover the seed with fine soil 1½ inches in depth, and when the plants are strong enough thin out to 6 inches apart. As the leaves resemble grass, be careful they are not mistaken for it when weeding.

Mammoth Sandwich Island A new and improved type, producing roots of nearly double the size and weight of the old varieties; mild and delicately flavored. Pkt., 10c; ¼ lb., 50c; lb., \$1.75

RHUBARB or Pie Plant

Sow in April or May, in drills 1 foot apart; when 3 or 4 inches high, thin out in rows 6 to 10 inches apart. Transplant the ensuing fall or spring in rich soil. Set out the roots 3 to 4 feet apart each way; the following spring it will be fit to use.

Linnaeus Pkt., 5c; oz., 20c; ¼ lb., 40c; lb., \$1.25.

Victoria Very large, the finest cooking variety. Pkt., 5c; oz., 20c; ¼ lb., 40c; lb., \$1.25.

RHUBARB ROOTS—See page 36.

HERBS

	Pkt.	Oz.	¼ lb.
Anise.....	\$0.10	\$0.15	\$0.40
Basil.....	.10	.15	.50
Caraway, lb., 25c.....	..	10	.15
Coriander.....	.10	.15	.35
Dill, extra large, lb. 75c.....	.10	.15	.25
Fennel, lb. \$2.50.....	.10	.25	.75
Lavender.....	.10	.25	.75
Marjoram, sweet.....	.10	.25	.75
Sage.....	.10	.40	1.25
Summer Savory.....	.10	.20	.50
Thyme.....	.10	.40	1.25

SORREL

A hardy plant grown for its leaves, which are used as boiling “greens” or salad. Seed should be sown thinly in drills early in spring. When well started thin out to stand 4 to 6 inches apart in the row. The leaves can be gathered for use at any time after the plants are well started in growth, and the roots will continue to produce a further supply. The plant is entirely hardy, and, starting into growth early the following spring, will afford a large supply of fine “greens” quite early.

Large-Leaved French

Pkt., 5c; ¼ lb., 30c; lb., \$1.00.

SQUASH

1 oz. of bush sorts to 40 hills; large seeded 15 hills.
2 lbs. of bush sorts to acre; large seeded 3 to 4 to acre.
Squashes, like other vines, are partial to a light, dry, rich soil. Plant the running varieties in hills 10 feet apart each way; thin out to three plants in a hill. Cultivate frequently until the vines commence running, after which do not work the soil deep. Use Paris Green to destroy bugs, as with Cucumbers. Plant Bush Squashes in hills 5 feet apart each way; thin out to four plants in a hill.

Extra Early White Bush Squash

Extra Early Jersey White Bush Scallop This is an improved strain of the Old White Bush. It sets fruit 10 days earlier, of a beautiful clear waxy white. Very productive and shows less ridge or scallop; containing a larger amount of solid flesh. Pkt., 10c; ¼ lb., 25c; lb., 75c.

Green Tinted Preferred by many market gardeners by reason of true decided light green color, even when fully matured. Pkt., 10c; oz., 20c; ¼ lb., 50c; lb., \$1.50.

Summer Crookneck A beautiful bright yellow, bears all summer, and commands good prices. Very desirable for market and private use. Pkt., 10c; ¼ lb., 25c; lb., 75c.

Cocozza Large Green Italian Produces pale green fruit, 3 ft. long and 3 to 4 in. in diameter; very straight if vines are trailed so that squashes are suspended. The numerous runners are sometimes cut, bunched and sold for boiling greens. Pkt., 10c; oz., 15c; ¼ lb., 50c; lb., \$1.50.

Hubbard Well-known winter variety, with very hard firm shell, fine grain, sweet and rich flavor, and excellent for table use. A splendid keeper. Pkt., 10c; ¼ lb., 35c; lb., 90c.

Winter Crookneck Flesh red, of fine flavor and good keeper. Pkt., 10c; ¼ lb., 25c; lb., 75c

Boston Marrow A fall and winter variety regarded very highly in the markets. Oval form, pointed, thin rind, fine grain; salmon-colored flesh, remarkably sweet and delicious. Keeps well in winter and will boil dry as a mealy potato. Pkt., 10c; ¼ lb., 25c; lb., 75c.

Improved Hubbard

TOMATO

1 oz. to 2,000 plants; $\frac{1}{4}$ lb. per acre.

All our tomato seeds are grown from stocks, exclusively for seed purposes, by the originators, experienced growers and experts. We are fully convinced of the merit of all new varieties before placing them in our catalog, and therefore strongly recommend our strains as being absolutely reliable.

For early, the seed should be sown in hotbeds during February or the first week in March, in drills 5 inches apart and half an inch deep. Later sowing may be made until the last of April. When the plants are 3 or 4 inches high they should be set out 4 or 5 inches apart in another hotbed or cold frame, or removed into small pots allowing a single plant to the pot. Expose to the air as much as possible to harden. Water freely at time of transplanting, and shelter from the sun a few days until the plants are established. Cultivate thoroughly as long as the vines will permit, but the last two or three workings should be very shallow or the crop may be badly injured especially if the cultivator is run too near the plants.

Extra Early Varieties

Improved Advance An extra early, large tomato of high quality, round or slightly flattened shape, and exceptionally smooth for such an early variety. As early and hardy as Earliana and yielding more fruit both in the first and subsequent pickings. It is more shapely, more free from cracks and shows less green about the stem than other extra early sorts. With Improved Advance the grower can produce a crop which will stand superior in appearance and quality, in competition with the other extra earlies and command the fancy prices of an early market. Pkt., 10c; oz., 50c; $\frac{1}{4}$ lb., \$1.50; lb., \$5.00.

Early Canadian Developed in Ontario, Canada, for adaptability to their very short growing season. Extremely early, perfectly shaped and quite prolific. Pkt., 25c; oz., 60c; $\frac{1}{4}$ lb., \$2.00; lb., 7.00.

Sparks' Earliana This is an extremely early variety and produces large clusters of fair-size fruits, which are very uniform in size and shape. It is hardy, and can be set out early. Color of flesh deep red, very solid and fine flavor. Pkt., 10c; oz., 30c; $\frac{1}{4}$ lb., 90c; lb., \$3.00.

IXL Extra Early For description see King of the Earlies. Pkt., 10c; oz., 30c; $\frac{1}{4}$ lb., 90c; lb., \$3.00.

King of the Earlies A very productive and quite early variety, very similar to Sparks, Earliana; the vines are somewhat heavier and leaves more plentiful, which furnish great protection for the fruit; and for this reason it has become a favorite with many growers. Pkt., 10c; oz., 30c; $\frac{1}{4}$ lb., 90c; lb., \$3.50.

Comet Very smooth and highly colored, round red sort, medium sized. Used almost exclusively for forcing. Pkt., 10c; oz., \$1.00; $\frac{1}{4}$ lb., \$3.00.

Second Early and Main Crop Varieties

Bonny Best Our special strain of Bonny Best has become a favorite among large growers for the early market. It is truly so superior to the ordinary stocks that it might rightfully be considered a new variety. It is earlier than Chalk's Early Jewel, and within two or three days as early as Earliana. Very prolific, with liberal foliage to protect the fruit from the sun. The beautiful scarlet-red fruit is set in clusters of 5 or more. Its great characteristic is that it ripens each setting of fruit nearly all at once, and ripens evenly all over up to the stem. Pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., 85c; lb., \$3.00.

I want to say a word of praise for your special strain of Bonny Best Tomato. For heavy cropping, large size, and earliness and smoothness, it can not be beat. It will suit any critical market gardener if he wants the best strain obtainable. I have been growing Bonny Best Tomato for 20 years and have paid as much as \$5.00 per oz. but I must say that you have about the best strain I ever used. They are extra fine.
Geo. T. Robinson, ———, Md.

Chalk's Early Jewel Ripens 10 days later than Sparks, Earliana, but more desirable for home use, as fruits are thicker through and more solid, comparing favorably with the later maturing sorts. Color bright scarlet and quality very best. Pkt., 10c; oz., 30c; $\frac{1}{4}$ lb., 85c; lb., \$3.00.

John Baer A second early variety, maturing 10 days later than the King of the Earlies. Fruit is borne in clusters of 3, of bright red color, averaging 3 inches across and 2 $\frac{1}{4}$ inches from stem to blossom end. Pkt., 10c; oz., 30c; $\frac{1}{4}$ lb., 85c; lb., \$3.00.

Livingston's Globe One of the main varieties grown by the leading Tomato growers in Florida. It is of beautiful globe shape, very deep through from blossom end to stem, which permits of a greater number of slices being taken than with the flat fruited sorts. Among the very first to ripen, although of large size; very smooth, firm fleshed, few seeds, ripens evenly; color a beautiful glossy rose-tinged purple. A good cropper and one of the best for greenhouses or first crop on stake or trellis. Pkt., 10c; oz., 35c; $\frac{1}{4}$ lb., \$1.00; lb., \$3.50.

Early Detroit (Purplish-pink.) Vines vigorous and productive; fruit round or nearly globe shaped, firm, and purplish-pink in color. Ripens with Chalk's Early Jewel and is a splendid second early variety. Bears its large, uniform, smooth fruit throughout the season, yielding more marketable tomatoes than the popular Beauty, which it most closely resembles. Pkt., 10c; oz., $\frac{1}{4}$ lb., \$1.50; lb., \$5.00.

Livingston's Beauty

A decided favorite for home market or shipping, being early, hardy, a strong grower, productive, large, always smooth, of perfect shape and excellent quality. Color is very glossy crimson, with a tinge of purple. Pkt., 10c; $\frac{1}{4}$ lb., 90c; lb., \$3.00.

Kelley's Red The plants grow vigorously and are very productive. The fruit is very large, slightly flattened, bright scarlet, smooth, ripening evenly to the stem without a crack, twenty tons having been grown to the acre. Pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., 75c; lb., \$2.50.

Matchless The vines are of strong, vigorous growth, well set with fruit, the foliage is very rich, dark green color. They are entirely free from core, of a very rich cardinal red color, and are not liable to crack from wet weather. The fruits are of the largest size, and this is maintained throughout the season, the healthy growth of foliage continuing until killed by frost. Oz., 30c; $\frac{1}{4}$ lb., 90c; lb., \$3.00.

Bonny Best Tomatoes

TOMATO—Continued

MARGLOBE

Ponderosa The largest purple fruited Tomato in cultivation: very solid and of finest quality. Pkt., 10c; oz., 40c; $\frac{1}{4}$ lb., \$1.25.

Wisdom Tomato Medium early, perfectly smooth deep red and uniform. Pkt., 10c; oz., 35c; $\frac{1}{4}$ lb., \$1.00; lb., \$3.50.

Manns' Improved Stone This variety has attained great favor with canners and market gardeners everywhere. Its solidity and carrying qualities are remarkable. Its color is a desirable red; in shape perfectly smooth, and thicker from stem to blossom end than most varieties, making it most handsome and salable. Pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., 75c; lb., \$2.50.

Marglobe This new introduction by the U. S. Department of Agriculture is without doubt the most wonderful development ever offered tomato growers. We quote the following description given us by Dr. Fred J. Prichard, of the Bureau of Plant Industry, U. S. Department of Agriculture.

"In regard to the description of the Marglobe I would say that it is a very prolific, second-early, red-fruited variety. It usually produces heavy yields of large smooth, globular, meaty, red fruits. They have a delightful flavor, and are covered with a thick skin which hinders cracking. Moreover, the plants shade the fruits well and thus protect them from sun-scald.

Marglobe has been developed primarily to resist wilt. In addition to this extremely valuable feature however, the variety has many other characteristics of merit. The heavy yields produced make this a very profitable variety to grow. Fruits average one half pound each, of a perfect globe shape, beautiful deep scarlet in color, and only mildly acid; vines grow vigorously without spreading, have abundant foliage furnishing adequate cover for the fruits without too much shade, and ripening its first fruits from 90 to 95 days. Marglobe is unsurpassed for table use and canning purposes, and is worthy of careful consideration of every tomato grower. Pkt., 25c; oz., 45c; $\frac{1}{4}$ lb., \$1.35; lb., \$5.00; 5 lbs. \$22.50.

Wilt Resistant In developing this wilt proof strain the plant breeder has made his selections from a strain of the very highest quality in points of production, size, flavor, weight, thickness of skin and color. A very profitable main crop sort. Pkt. 10c; oz. 25c; $\frac{1}{4}$ lb. 75c; lb. \$2.50.

Maryland Pride Since our introduction of it in 1905 it has been grown with great success by canners and market gardeners, who pronounce it "the very best second early and main crop Tomato they have ever grown." The fruit is a beautiful bright red color, magnificent size and handsome, smooth shape. The vines grow vigorously and produce abundantly until killed by frost. Pkt., 10c; oz., 30c; $\frac{1}{4}$ lb., 90c; lb., \$3.00.

B. B. Tomato For description see New Stone. Pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., 75c; lb., \$2.50.

Enormous So named on account of the large size of Tomatoes, which are very solid and smooth. Quality good. Pkt., 10c; oz., 40c; $\frac{1}{4}$ lb., \$1.25; lb., \$4.00.

Greater Baltimore Large, smooth, solid, bright scarlet; second early Tomato; a prolific bearer and fine shipper. Pkt., 10c; oz., 40c; $\frac{1}{4}$ lb., 85c; lb., \$3.00.

MARYLAND PRIDE TOMATO

TOMATO—Continued

Red Rock One of the most popular varieties for general crop. Very productive, yielding one third more tomatoes than New Stone; the vines are very vigorous and have dense protective foliage. The brilliant red fruit has very tough skin and is not apt to crack from wet weather. Pkt., 10c; Oz. 30c; ¼ lb., 85c; lb. \$3.00.

Livingston's Paragon Color of skin deep red. Flesh solid and highly flavored. It is larger than several of the standard varieties, and grows large fruit up till frost. Oz., 25c; ¼ lb., 75c; lb., \$2.50.

Success The vines are of strong, vigorous growth, with abundant foliage. The fruits, set in clusters, average three inches in diameter and two to two and a half inches through from stem to blossom end. Color bright scarlet; perfectly smooth; very meaty; of fine flavor. Pkt., 10c; ¼ lb., 85c; lb., \$3.00.

PRESERVING TOMATOES

The following small-fruited varieties are used for making preserves, and are also quite ornamental while growing in the garden:

Pear-Shaped Red

Pear-Shaped Yellow

Yellow Plum

Pkt., 10c; oz., 30c; ¼ lb., \$1.00.

TOMATO PLANTS—*Fresh Daily*

See Page 36

Red Rock Tomato

TURNIP

1 oz. to 150 feet of drill; 1 lb. per acre.

Being primarily a cool weather vegetable, turnips thrive best when planted in early spring or in the fall. For spring crop sow the seed early in April, while for fall and winter use, plantings should be made from July to August. Sow in rows not less than 18 inches apart and one-half to three-quarters of an inch deep. A very popular method, however, is to broadcast the seed between rows of corn or in the cultivated orchard. Proper control of root maggots is effected by rotation of crops, the use of commercial fertilizers instead of manure and the application of Mag-o-tite or other carbolic acid emulsion.

Extra Early Six Weeks Pure white all over and perfectly globe shaped. Very early. Oz., 10c; ¼ lb., 20; lb., 60.

Extra Early Purple Top Milan A white variety, purple-top and strap leaf. This, with the White Milan, is the earliest of all turnips. Remains in good condition a long time. Oz., 10c; ¼ lb., 25c; lb., 75c.

Extra Early White Milan Similar to above, except it is pure ivory white in color, and about one week earlier. Oz., 10c; ¼ lb., 25c; lb., 75c.

White Early Flat Dutch A standard variety, good size, pure white; small top, few leaves and very sweet. ¼ lb., 15c; lb., 40c.

Purple Top Strap Leaf The popular variety, either for family or market use large size, white, purple above ground, flesh fine grained. ¼ lb., 15c; lb., 40c.

Yellow Globe Orange Jelly One of the best for general crop; flesh firm and sweet; grows to a large size; splendid for table or stock, and keeps well until late in spring. ¼ lb., 20c; lb., 50c.

Purple Top White Globe Also known as Red Top White Globe. This excellent turnip is decidedly the most popular variety and more extensively grown than any other. The roots are globular, very handsome and of superior quality; either for table use or stock feeding purposes. It is a heavy producer, early, of rapid growth, and one of the best for winter storage. ¼ lb., 15c; lb., 50c; 10 lbs., \$4.50; 25 lbs., \$10.00.

Cow Horn Very heavy cropper, a quick grower, most practical for stock feed. ¼ lb., 15c; lb., 40c.

Seven Top This variety is principally planted in the South for the green tops which are produced very abundantly. ¼ lb., 20c; lb., 50c.

Purple Top White Globe Turnip

RUTABAGAS or SWEDES

Rutabagas require about four weeks longer to mature than ordinary varieties of turnips, but are more solid, of firmer flesh and therefore keep later into the spring. They are for this reason more desirable for storage, while turnips are better adapted for the early market. Sow during July either in drills or broadcast.

Neckless Purple Top Our superb strain of this excellent variety has become a favorite because of its hardy and productive nature. The flesh is sweet and solid, excellent for table use or stock feeding. ¼ lb., 20c; lb., 50c.

Manns' Vegetable Plants And Roots

We are large producers of the following plants and can fill orders daily with fresh, strong, stocky plants grown from the best strains of seed. Varieties not grown by ourselves are contracted for with the most reliable and trustworthy plant growers in this section, who, we know from experience, produce only the best plants. We shall be pleased to quote special prices on lots of 5,000 or more.

CABBAGE PLANTS. Frame-grown and transplanted. (Ready in March and April).

Early Jersey Wakefield. Pointed head.
 Charleston Large Wakefield. Pointed head.
 Copenhagen Market. Round head.
 Golden Acre. Flat head.
 All Head or New Early. Flat head.
 Postpaid, per 100, 50c; 1,000, \$2.50.

FROST PROOF PLANTS—Same prices.

CABBAGE PLANTS. Field-grown, strong and stocky (Ready May and June).

All Head Early. Flat head.
 Early Flat Dutch. Flat head.
 Succession. Flat head.
 Improved Lupton. Flat head.
 Large Late Flat Dutch. Flat head.
 Imperial Drumhead Savoy. Flat head.
 Postpaid, per 100, 50c; 1,000, \$2.00.

CABBAGE PLANTS. For late planting. (Ready September and October).

Extra Early Jersey Wakefield. Pointed head.
 Charleston, or Large Wakefield. Pointed head.
 All Head, or New Early. Flat head.
 Postpaid, per 100, 50c; 1,000, \$2.50.

CAULIFLOWER PLANTS. (Ready in March, July and August).

Postpaid, per doz., 25c; 100, \$1.50; 1,000, \$12.00.

BORECOLE PLANTS. (Ready in May and June).

Hardy Winter.
 Dwarf Green Scotch.
 Postpaid, per 100, 75c; 1,000, \$4.50.

CELERY PLANTS. (Ready in July).

Self-Blanching. Golden Plume.
 Giant Pascal. Winter Queen.
 Postpaid, per 100, \$1.10; 1,000, \$6.00.

EGG PLANTS. (Ready in May and June).

Mammoth Imp. Purple.
 Black Beauty.
 Postpaid, per doz., 25c; 100, \$1.50. By express, 1,000, \$10.00.

LETTUCE PLANTS. (Ready in March, April, September and October).

Postpaid, per 100, 50c. By express, 1,000, \$4.00.

PEPPER PLANTS. (Ready in May and June).

Ruby Giant. Ruby King.
 Chinese Giant. Bull Nose.
 Perfection. Needle.

Postpaid, per doz., 25c; 100, \$1.50. By express, 1,000, \$10.00.

SWEET POTATO PLANTS. (Ready May and June).

Up Rivers. Big Stems. Yellow Jerseys.
 Postpaid, per 100, \$1.00. By express, 1,000, \$7.00.

TOMATO PLANTS. Hotbed grown. (Ready in April and May).

Advance. Bonny Best. Marglobe.
 Postpaid, per doz., 20c; 100, 75c. By express 1,000, \$5.00.

TOMATO PLANTS. Field-grown plants. (Ready June and July).

Maryland Pride. Red Rock.
 New Stone. Greater Baltimore.
 By express, per 100, 60c; 1,000, \$3.50; 5,000, \$15.00.

POTTED VEGETABLE PLANTS

Success with transplanting plants depends largely on the condition of the root system. Plants with well established roots, thoroughly protected with soil, are best prepared to withstand adverse weather conditions. We offer strong well rooted stocky plants from 2 inch pots as follows:

EGG PLANTS	PEPPERS	TOMATOES
5c ea.; 50c doz.; \$3.75 per 100		

ASPARAGUS ROOTS. See page 3.

HORSERADISH ROOTS.

Maliner Kren or Bohemian.
 Postpaid, doz., 25c; 100, \$1.25; 1,000, \$9.00.

RHUBARB ROOTS. (Best market varieties).
 Postpaid, each, 15c; doz., \$1.50; 100, \$9.00.

STRAWBERRY PLANTS

October 15th to May 10th.

We can supply fresh, strong, healthy plants of all the leading varieties in any quantity. Following is a partial list of the most popular sorts for planting in the vicinity of Baltimore.

Mitchell's Early. Extra early.

Big Joe. Midseason.

Gandy. Late, very productive.

\$1.25 per 100; \$7.50 per 1,000. Postage or expressage extra.

EVERBEARING

PROGRESSIVE. Undoubtedly the best everbearing variety in cultivation, producing a large crop of high quality fruit the same year they are set out. The main crop ripens in the fall.

\$1.75 per 100; 1,000, \$12.00. Postage or expressage extra.

GET OUR PRICE ON BERRY BOXES

MANNS' SUPERIOR FLOWER SEEDS

Our constant aim is to supply our customers with the very best domestic and imported strains obtainable. We spare no expense in our efforts to maintain the highest standard of quality. Our list contains those varieties which are most popular because of their beauty, usefulness, and ease of cultivation.

Annuals are those which attain full growth, bloom and die the same year, and are raised from seed exclusively.

Biennials attain full growth, bloom and die the second year from the planting of seed.

Perennials produce plants the first year, which with a few exceptions do not flower until the second year from planting of seed, after which they bloom every year and last several years.

The class to which each variety belongs is indicated as follows: (A) for Annuals; (B) for Biennials; (P) for Perennials

ACHILLEA (P)

PTARMICA, fl. pl. Small double white flower in great profusion. 2 ft. tall. Blooms freely during July and August. An excellent perennial for cutting, and very fine for the foreground of shrubs and for borders. Pkt., 10c; $\frac{1}{8}$ oz., 60c.

AGERATUM (A)

☞ Splendid for bedding or pot culture, covered from June until frost with a mass of very attractive flowers of a tufted appearance. Very effective when contrasted with geraniums. Large-flowered White, large-flowered Blue or Mixed. Pkt., 10c; oz., 75c.

ALYSSUM (A)

Sweet Alyssum. Little Gem. Very popular border flower, coming into bloom six weeks after planting seed and requiring the least attention of all flowers. Very erect and dwarf, its white flowers greatly enhancing the beauty of any bed or border. Height 4 inches. Pkt., 10c; oz., 50c.

AMARANTHUS (A)

Very useful in borders of tall plants, among shrubs, or in centers of large beds. One type has large feathery plumes or sprays of rich crimson coloring while the other is grown exclusively for the brilliant-colored leaves.

CAUDATUS. (Love Lies Bleeding). Plants of erect growth three to four feet high producing numerous feather sprays of rich crimson color. Pkt., 10c; $\frac{1}{4}$ lb., 35c.

SALICIFOLIUS. (Willow-Leaved or Fountain Plant). Grows two to three feet high, with long hanging flower heads and foliage of a deep purple coloring. Pkt., 10c; $\frac{1}{4}$ oz., 40c.

SPLENDENS. (Rainbow Plant). Beautiful variegated foliage with large crimson flower heads. Pkt., 10c; $\frac{1}{4}$ oz., 25c.

TRICOLOR. (Joseph's Coat). Similar to Splendens, having a single erect stalk of brilliantly colored foliage. Pkt., 10c; oz., 35c.

ANCHUSA ITALICA (P)

One of the finest blue flowered plants growing 4 ft. tall. Magnificent spikes from June until frost. An excellent plant for the background to hide walls or fences. Pkt., 10c; oz., 75c.

ANTIRRHINUM or Snapdragon (P)

This border and bedding plant of long blooming season is now one of the best perennials suitable for flowering as an annual. The long showy spikes of curiously-shaped tubular flowers with spreading lobes and finely marked throats are fragrant as well as brilliantly-colored. They are very desirable for cutting as the blooms are borne well above the dark glossy leaves and keep fresh for a long time.

For flowers the first season outdoors, sow seed very early under glass and transplant to open border as soon as the ground is warm and dry, in rich loamy soil in a sunny situation, setting one foot apart each way and giving them plenty of water; or sow the seed in August or September and cover the plants with a mulch on approach of cold weather. These fall-sown plants may be transplanted into pots and flowered, and in this case give them the same temperature and treatment as geraniums and carnations.

nations. Tender perennial, often treated as an annual or biennial, attains a growth of one and one-half to two feet high. Special mixtures of the very best delicate colors. Giant Mixed, pkt. 10c; $\frac{1}{4}$ oz. 60c; oz., \$2.00. Tall Mixed and Semi-Dwarfed Mixed, pkt. 10c; $\frac{1}{4}$ oz. 50c; oz. \$1.50. SEPARATE COLORS: Giant Type, pkt. 10c; oz. \$3.00.

Antirrhinum

AQUILEGIA OR COLUMBINE

(P)

As a cut flower the long spurred Aquilegias are the daintiest of our outdoor grown flowers. Very hardy, blooming profusely early in the season and remaining in bloom for a considerable period.
LONG SPURRED GIANT HYBRIDS. Pkt. 25c; ¼ oz. \$2.00.

ASTERS (A)

Very popular because of their beauty and ease of culture. The varieties listed represent the finest Asters of the early, midseason and late types and will give a profusion of bloom from July to late October. Asters require good rich soil and during the growing period should be well supplied with water.

QUEEN OF THE MARKET. Branching habit, 1 ft. high, large flowers borne on long stems, blooming in July. Mixed colors, pkt., 10c; ¼ oz., 25c; oz., 75c.

GIANT COMET. Very distinctive, the outer petals being broad, flat and reflexed, while the center of the flower has a feathery appearance. Follows Queen of the Market in season and grows 12 to 24 inches high. Deep scarlet, dark blue, light blue, delicate yellow, snow white and rose. Pkt., 10c; ¼ oz., 35c; oz., \$1.25. Mixed, ¼ oz., 20c; oz., 65c.

CREGO. Flowers of immense size, 4 to 5 inches in diameter borne on very long stems. Plants are of strong branching growth, 2 to 2½ feet high. Separate colors, pkt., 10c; ¼ oz., 40c; Mixed pkt., 10c; ¼ oz., 35c.

LATE BRANCHING. A handsome and very distinct variety resembling Japanese Chrysanthemums. The plants grow 1½ feet in height and width and the large full petaled blossoms are borne on long stems or branches. Comes into flower ten days later than other asters. Separate color, pkt., 10c; ¼ oz., 35c; Mixed, pkt., 10c; ¼ oz., 30c.

AMERICAN BEAUTY, Giants of California; Mixed, Pkt. 10c; ¼ oz. 50c.

BELLIS PERENNIS-DOUBLE DAISY (P)

Favorite perennials producing their handsome double flowers in the spring. Rich soil and a cool situation suit them best.

MONSTROSA. Extra double giant flowered red, pink or white. Pkt., 10c; ¼ oz., \$1.50.

BALSAM or LADY SLIPPER (A)

An easy growing annual of quick growth, producing numerous

Giant Comet Aster

flowers resembling tiny roses. Splendid double mixed, pkt., 10c; oz., 75c.

COREOPSIS - CALLIOPSIS (A)

Very handsome and showy plants with numerous flowers of brilliant colors excellent for bouquets. Thrive well in any soil.
TINCTORIA-MIXED. Pkt., 10c; oz., 35c.

CALENDULA—POT MARIGOLD (A)

effective in beds or potted; showy, free-flowering, hardy annuals.
Extra Double Orange Giant. Pkt., 10c; oz., 40c. Finest mixed, pkt., 10c; oz., 25c.
THE BALL. Pkt., 10c; oz., \$1.25.

Campanula-Canterbury Bells (B)

An old-fashioned favorite, stately, showy, and easily grown, hardy biennial. Single and Double Mixed, Pkt. 10c; oz. 50c.

CANDYTUFT (A)

This hardy annual is universally known and its clusters of small flowers are very beautiful and useful for cutting and borders.

EMPRESS. Large spikes of the purest white, erect growth. Pkt., 10c; oz., 40c.

FINEST HYBRID MIXTURE OF ALL COLORS. Pkt., 10c; oz., 40c.

CARNATIONS (P)

With protection these well known half-hardy perennials can be wintered over outdoors. When planted early they will begin to bloom in about four months and continue until late in the fall. For winter blooming they should be cut back by removing the flower shoots early in the fall and transplanted to pots and kept in a cool room.

BORDER or GARDEN Carnations. Extra Double Flowered. Pkt., 10c; ¼ oz., 50.

PERPETUAL (Famous Chabaud type). Choicest mixture. Pkt., 10c; ¼ oz., 70c.

PERPETUAL. (Very popular Marguerite type) Half dwarf mixed. Pkt., 10c; ¼ oz., 45c.

Pure White or Pure Pink. Pkt., 10c; ¼ oz., 75c.

Double Mixed. Pkt. 10c; ¼ oz. 50c.

CELOSIA or COCKSCOMB (A)

PLUMOSA. Feathered varieties mixed. Pkt., 10c; oz., 40c.

EMPRESS. Dark-leaved, bright crimson. Pkt., 10c; ¼ oz., \$2.00.

GLASGOW PRIZE. Pkt., 10c; ¼ oz., 50c.

CHILDSII. (Chinese Woolflower). Pkt., 10c. oz. \$1.50

Marguerite Carnations

Centaurea Cyanus or Bachelors' Button

CENTAUREA (A)

CENTAUREA CYANUS or BACHELOR'S BUTTON or CORN FLOWER. Charming old-fashioned flowers, requiring little or no care and flowering within eight weeks from planting of seed. Free and uninterrupted in its flowering habit, reseeding itself year after year. Useful as a cut flower as well as a garden decoration. Double blue or double mixed. Pkt., 10c; oz., 50c.

CENTAUREA GYMNOCARPA or DUSTY MILLER. One foot, foliage finely cut of silvery gray color, used for bedding. Pkt., 10c; oz., 40c.

CENTAUREA IMPERIALIS or SWEET SULTAN. Beautiful, sweet scented, artistic shaped flowers borne on long stems, when cut will last for several days. Mixed. Pkt., 10c; ¼ oz., 25c.

CHINESE LANTERN PLANT (P)

(Physalis Franchetti)

Perfectly hardy plants, bearing white flowers, which bloom during June and July. It is grown, however, for its showy scarlet-red seed-pods which are easily dried for winter bouquets; thrives in any kind of soil, whether sunny or semi-shaded. Pkt., 10c; ¼ oz., 50c.

CHRYSANTHEMUM (P and A)

The annual Chrysanthemums are free-blooming, easily grown plants, having large flowers in a variety of brilliant colors, fine for cutting.

Mixed. Finest double hybrids. Pkt., 10c; ¼ oz., 20c; oz., 45c. - Perennial Chrysanthemums are grown chiefly from divisions of roots of the Japanese varieties and cultivated by florists for late fall and winter cut flowers. The following perennials however, can be very satisfactorily grown from seed, producing beautiful, double flowers.

Finest Mixed. Pkt., 10c; ¼ oz., 30c.

CINERARIA (P—Greenhouse)

Among the most ornamental plants that can be grown for hot-house or conservatory decoration, producing large heads of brilliant flowers in all shades of blue, purple and red. One of the most beautiful potted plants.

HYBRIDA. Extra large flowered, first quality mixture. Pkt., 50c; 1/8 oz., \$6.75.

MARITIMA. Entirely different from the popular Cineraria, being most useful for bedding. Silver-leaved: also called Dusty Miller. Pkt., 10c; oz., 50c.

CLARKIA (A)

Very pretty, profuse flowering annuals, much used for edging. They grow from nine to eighteen inches high, producing mostly red or white flowers. Useful for hanging baskets. Pkt., 10c; oz., 50c.

CLEMATIS. See page 45.

COLEUS (P—Tender)

An attractive foliage plant for ornamental bedding. **Finest hybrid mixture.** Pkt., 25c; ¼ oz., \$2.00.

COSMOS (A)

One of the most satisfactory hardy annuals, flowering in late summer. Fine for cutting and easily grown. Can be sown anywhere and transplanted. Grows 4 to 6 feet high. Mammoth large flowered. Mixed and early flowering mixed, pkt., 10c; oz., 35c; Double-crested mixed, pkt., 10c; oz., 50c. Extra Early Double Crested. Pkt., 10c; ¼ oz., \$1.25.

CYCLAMEN (P—Tender)

Universally admired, tuberous rooted house plants with beautiful foliage and richly colored flowers. Sow the seed in light rich soil, barely covering, and keep at a temperature of 50 to 60 degrees F. Water freely until well started. Seeds sown in spring, by autumn will produce little bulbs, which placed in pots will bloom the following spring.

AMSTERDAM GIANTS, Florists Prize Mixture. Pkt., 25c; 100 seeds \$2.00; 1/16 oz., \$2.00.

DAHLIA (P—Half Hardy)

For Roots, see page 46.

Seed should be planted very early indoors and the plants transplanted in May or June. Most of the plants will bloom the year. The roots should be dug before freezing weather and stored in sand in a cool place.

CACTUS HYBRIDS. Extra double mixed. Pkt., 25c; ¼ oz., \$2.00.

DECORATIVE. Pkt. 25c; ¼ oz. \$3.50.

DATURA (A)

Large branching plants producing very large handsome, double or single, trumpet-shaped blossoms of exquisite fragrance. Excellent for late summer and autumn flowering. Mixed colors Pkt., 10c; ¼ oz., 20c.

DELPHINIUM or HARDY LARKSPUR (P)

Splendid border perennial of vigorous growth, strikingly effective as a background for borders and for planting among shrubbery. The blooming season is very long and the beautiful irregular flowers are clustered on long spikes 3 to 5 feet high.

SUPERIOR LARGE HYBRID, Mixed. Pkt., 25c; ¼ oz., \$1.00. **BELLADONNA.** Everblooming. Pkt., 10c; ¼ oz., \$1.50.

FORMOSUM. Rich Blue with white center. Pkt., 25c; ¼ oz., \$1.50.

CARDINALE, Scarlet. Pkt. 25c; ¼ oz. \$1.50.

DIANTHUS OR PINKS (B)

These very beautiful and popular biennials flower freely the first year from seed, and in most locations they are quite hardy and produce larger flowers the second year.

CHINENSIS. Extra double flowered in choicest mixture. Pkt., 10c; ¼ oz., 30c.

HEDEWIGII. Fringed single, very large flowers. Pkt., 10c; oz., 50c.

HEDEWIGII PLUMARIUS. Double and semi-double mixed. Pkt., 10c; ¼ oz., 50c.

FLORISTS PERPETUAL. Large clusters, fragrant, very useful for cut flowers. Double mixed. Pkt., 10c; ¼ oz., 30c.

DIGITALIS or FOXGLOVE (P)

Handsome and highly ornamental hardy perennial plant of stately growth, very effective among shrubbery, thriving best in half-shady places. Three feet high. **Giant mixed.** Pkt., 10c; ¼ oz., 75c.

FEVERFEW (P) (Matricaria)

Beautiful, small, white button-like double flower heads. Plants of husky growth with very finely cut dark green foliage; desirable for bedding. Pkt. 10c; oz. 75c.

GAILLARDIA GRANDIFLORA (P)

A very showy flower easily raised from seed. Should be sown early to produce large plants which will bloom profusely the first year. Very beautiful in beds or borders and very useful for cutting. Extra fine mixed. Pkt., 10c; ¼ oz., 20c.

GERBERA (Jamesoni Hybrids) (A)

NEW AFRICAN TRANSVAL DAISY, producing wonderfully beautiful daisy-like blooms of large size, in a wide range of colors. Grown either as a greenhouse plant or propagated in hot beds and set out early in May. Very profitable cut flower for florists. Pkt., 10 seeds, 10c; 100 seeds, 75c; 1000 seeds, \$5.00.

GILIA (A)

Exceedingly graceful and attractive, with tiny ball-shaped flowers, borne profusely on plants 15 to 24 inches tall; especially valuable for bees. Charming in flower border; a good cut flower. Pkt. 10c; oz. 25c.

GYPSOPHILA (Paniculata) (A-P)

Single—(A) Graceful plants with light fairy-like growth. A quick growing annual with myriads of small open bell-shaped flowers. These fine mist-like flowers are excellent for their delicate effect in bouquets. Pkt. 10c; oz. 25c.

Double—(P) An improved strain with densely double snow-white flowers. Pkt. 25c; ¼ oz. \$2.50.

GLOBE AMARANTH - GOMPHRENA (A)

Similar in type to Bachelor's Button but having flowers of perfect globe shape. Mixed colors. Pkt., 10c; oz., 25c.

HILICHRYSUM-EVERLASTING FLOWER

Also called Immortelles and Strawflowers. The Helichrysum is the most beautiful of all the everlastings. The plants grow from two to three feet high and are literally covered with fine, large, double flowers in a variety of brilliant colors. The blooms should be cut as soon as they are open, tied in small bunches and dried slowly in a dark cool place, hanging the flowers downward to keep the stems straight.

Monstrosum. Double, first quality, mixed. Pkt., 10c; ¼ oz., 20c; oz., 60c.

HELIOTROPE (P—Half Hardy)

The delightful fragrance and duration of bloom of this flower make it a garden favorite. Can be grown from seed as easily as Verbenas, and should be started early so that large plants may be had for bedding out. The colors of the blossoms range from white through all shades of violet to the deepest purple.

GIANT LEMOINI, mixed. Pkt., 10c; ¼ oz., 75c.

HESPERIS MATRONALIS (P)

(SWEET ROCKET)

Old fashioned garden plants growing 2 to 3 feet high, bearing spikes of white or purple flowers. Excellent for planting in a border or among shrubbery. Pkt., 10c; oz., 50c.

HOLLYHOCK (P)

Tall old-fashioned garden perennial of great beauty, very useful as a background to a flower-garden. The large, richly colored blossoms are crowded around the strong flowering stalks. Seed planted in open ground in June or July will furnish blooms the following summer.

IMPERATOR. Giant double flowers measuring 5 to 6 inches in diameter. Pkt. 35c.

DOUBLE MIXED. Extra fine quality. Pkt., 10c; ¼ oz., 40c.

SINGLE MIXED. Large very artistic blooms. Pkt., 10c; ¼ oz., 20c.

Helichrysums

KOCHIA - SUMMER CYPRESS (A)

Quick growing hedge plant about two and one-half feet high. Very symmetrical and attractive, the bushes taking on a distinctive red tinge late in the summer; for this reason often called Mexican Fire Bush. Pkt., 10c; oz., 25c.

LARKSPUR (A)

One of the best known of garden flowers and if planted in April will produce flowering plants by the first of July and continue to bloom until frost.

IMPERIAL DOUBLE MIXED. Pkt., 10c; oz., 50c.

GIANT HYACINTH FLOWERED. Pkt., 10c; oz., \$1.00.

For Perennial Larkspur see Delphinium.

LANTANA (P—Half Hardy)

One of the most desirable greenhouse or bedding plants, constantly in bloom, somewhat resembling Verbenas; 2 to 3 feet. Mixed colors. Pkt., 10c; oz., 50c.

LINARIA

CYMBALARIA. (Kenilworth Ivy). Lavender and purple, charming perennial trailing plant, suitable for baskets, rock work, etc. Pkt., 10c; ¼ oz., \$1.00.

LOBELIA (P)

ERINUS COMPACTA. This charming variety forms compact bushes about 6 inches high and are covered with bloom throughout the season. Highly desirable for edging and garden decoration as well as for pot culture. They flower the first season from seed. Pkt., 10c; ¼ oz., \$1.00.

CARDINALIS. (Indian Pink). The flowers are rich crimson, borne on fine long stems. The foliage is bright green. Height 2 to 4 ft. Thrives best in moist and slightly shaded position. Pkt., 10c; ½ oz., \$1.25.

LYTHRUM ROSEUM SUPERBRUM (P)

Fine long heads of rich purplish red flowers from early July until late September. 2 to 4 ft. tall. Pkt., 10c; ¼ oz., \$1.00.

LUPINUS (Lupines) (P)

These are very beautiful and thrive in any good garden soil and make a wonderful display of white, rose, and blue long graceful spikes of 15 inches tall. Free blooming lasting long after cutting. Pkt., 10c; ¼ oz., 25c.

LUPINUS (A)

Free-flowering, easily grown annuals with long graceful spikes of richly colored pea-shaped flowers. Prefers a little shade. 2 feet high.

DWARF ANNUAL MIXED. All colors. Pkt., 10c; oz., 50c.

TALL MIXED. Blooms in May and June. 3 feet high. Pkt., 10c; oz., 25c.

LYCHNIS (P)

Handsome hardy perennial plants of easy culture, for massing in beds and borders; blooming the first year if sown early. Very popular by reason of their beauty and ease of culture. Also called Maltese Cross, Jerusalem Cross, Lamp Flower and Burning Star. 1 foot high.

CHALCEDONICA. Scarlet or white. Pkt., 10c; ¼ oz., 35c.

HAAGEANA HYBRIDA. Brilliant colors mixed. Pkt., 10c; ¼ oz., 75c.

VISCARIA SPLENDENS (Ragged Robin). Bright rose-red, very showy. Pkt., 10c; ¼ oz., 25c.

Double Hollyhock

MARIGOLD (A)

The African and French Marigolds are old favorite free-flowering annuals of easy culture, extremely effective and well adapted for large beds. Thrive best in a light soil fully exposed to the sun. The flowers of the French type are smaller than the African but are marked and spotted with varied shades of red and orange. The African are very large, double and in solid colors.

AFRICAN. Double, extra mixed, first quality. Pkt., 10c; ¼ oz., 20c.

FRENCH. Dwarf double mixed. Pkt., 10c; oz., 50c.

MARVEL OF PERU - FOUR O'CLOCK (A)

Large showy fragrant flowers, blooming the entire season. Succeed well in any ordinary garden soil in a sunny location. Mixed. Pkt., 10c; oz., 20c.

MESEMBRYANTHEMUM (A)

CRYSTALLINUM or ICE PLANT. Dwarf trailing annual plants. Flowers white prized for its distinctive icy foliage. Pkt., 10c; oz., 50c.

MIGNONETTE (A)

Well known fragrant bedding or potting plant. Sowings made in April and again in July will result in a succession of bloom from early summer until frost.

GOLIATH. Large flowering. Pkt., 10c; ¼ oz., 75c.

MACHET GIANT. Large spikes, very fragrant. Pkt., 10c; oz., 75c.

MIMULUS (P—Half Hardy)

Showy, profuse flowering plants, fine for greenhouse or moist shady situations, blooming the first year from seed if sown early; 1 foot high. Often used for hanging baskets or window boxes.

MOSCHATUS, or MUSK PLANT. Fragrant foliage. Seed extremely small. Pkt., 10c; 1/8 oz., \$3.00.

MYOSOTIS OR FORGET-ME-NOT (P)

These dainty and greatly admired spring flowers are especially effective when grown in masses. They are hardy if given slight protection through the winter.

ALPESTRIS. Blue, 9 inches; flowering in April. Pkt., 10c; ¼ oz., 20c.

ALPESTRIS. Dwarf white. Pkt., 10c; ¼ oz., 50c.

PALUSTRIS. Blue, everblooming; flowers from May until frost. Pkt., 10c; ¼ oz., \$1.50.

NICOTIANA (A)

AFFINIS. Gives a continuous display of flowers through the summer and autumn; plant 2 to 3 feet high. The blooms are white, sweet scented and measure 3 inches in diameter. Pkt., 10c; ¼ oz., 20c.

NIGELLA OR LOVE-IN-A-MIST (A)

Free-flowering plant, 1 foot high, producing curious flowers surrounded by the finely cut foliage. Easily grown; useful for cutting.

DOUBLE BLUE. Pkt., 10c; oz., 50c.

Pansies

Nasturtiums

NASTURTIIUM (A)

TOM THUMB. The very popular dwarf or bedding variety, producing very showy large flowers. Our mixture contains all the newest hybrids as well as the distinct old varieties, all in proportion to assure a marvelous display of colors, ranging from cream white to the very darkest red. Pkt., 10c; oz., 15c; ¼ lb., 40c; lb., \$1.25.

SPENCER. Choice mixed, very brilliant, in all shades of yellow, red and purple. Pkt., 10c; oz., 15c; ¼ lb., 45c; lb., \$1.50.

LACINIATUM. Dark leaved, very showy, mixed. Pkt., 10c. oz., 20c; ¼ lb., 50c; lb., \$1.50.

ORNAMENTAL GRASS

COIX LACRYMA. (Job's Tears). Pkt., 10c; oz., 25c.

PENTSTEMON (P)

HARTWEGII. Beautiful bell-shaped flowers on 18 inch spikes. Pkt., 10c; ¼ oz., \$1.00.

PANSIES

These very popular and beautiful flowers may be sown in April or May for summer flowering or in August for early spring blooming. They thrive best in an open exposure, with protection during the winter.

BUGNOT'S GIANT. Flowers of enormous size, nearly circular in form and in a great variety of the most rare and handsome colors. Pkt., 10c; ¼ oz., \$2.00; oz., \$6.00.

BRILLIANT MIXTURE, TRIMARDEAU Giants; Pkt., 10c; ¼ oz., 50c.

MASTERPIECE or GERMANIA. Giant frilled or ruffled flowers, wonderfully blotched; in choicest mixture. Pkt., 10c; oz., \$3.75.

CASSIER'S SUPERB STRAIN. Large, well formed, beautifully blotched flowers in great variety of color. Pkt., 10c; oz., \$3.25.

MAMMOTH EXHIBITION MIXTURE. True round and solid pansy form of giant size, each color an attraction. Pkt., 10c; ¼ oz., \$1.50; oz., \$5.00.

MANNS' TRIUMPH OF THE GIANTS. (Frilled) Finest for commercial or private use. Blooms enormous, most striking in brilliancy and beauty of color. Pkt., 25c; oz., \$7.50.

PHYSOSTEGIA VIRGINICA (False Dragon Head) (P)

One of the prettiest hardy perennials; forms dense bushes 3 to 4 ft. high bearing freely during the summer months spikes of delicate pink tubular flowers. Pkt. 10c; ¼ oz., \$1.00.

PETUNIAS

FLUFFY RUFFLES. Choice mixed. Pkt., 25c; $\frac{1}{8}$ oz., \$5.00.
HYBRIDA GRANDIFLORA. Giants of California mixed. Pkt., 25c; $\frac{1}{8}$ oz., \$5.00.
ROSY MORN. Pink, white throat. Pkt. 10c; $\frac{1}{4}$ oz. \$1.00.
DE LUXE BEDDING MIXTURE. Pkt., 10c; $\frac{1}{4}$ oz., 75c
HYBRID. Choice mixture, first quality. Pkt., 10c; $\frac{1}{4}$ oz., 75c.
HOWARD'S STAR. Finest striped colors mixed. Pkt., 10c; $\frac{1}{4}$ oz., 60c.
NANA COMPACTA. Of dwarf habit, excellent for bedding. Pkt., 10c.; $\frac{1}{4}$ oz., 60c.
HYBRID FIMBRIATA. Giant flowering fringed varieties, extra selected. Pkt., 25c; $\frac{1}{8}$ oz., \$9.00.

PHLOX (A and P)

Phlox makes a magnificent show in beds and masses where their brilliant and varied colors produce a gorgeous effect. Very easily raised and afford a bright display of flowers, all through the summer.
DRUMMONDII. Choice mixture, first quality. Pkt., 10c; $\frac{1}{4}$ oz. \$1.50.
STAR PHLOX. (Cuspidata). With star-shaped flowers, dwarf growth. Pkt., 10c.; $\frac{1}{4}$ oz., 50c.
FIMBRIATA. Fringed flowers of beautiful form and color. Pkt., 10c; $\frac{1}{4}$ oz., 50c.

LARGE FLOWERING DWARF VARIETIES

DEFIANCE. Deep scarlet, very compact, free-flowering. Pkt., 10c.; $\frac{1}{4}$ oz., \$1.50.
DWARF MIXED. Selected colors, compact habit of growth, very effective in beds or borders. Pkt., 10c; $\frac{1}{4}$ oz., 70c.

HARDY PERENIAL PHLOX

DECUSSATA. Quite distinct from the above mentioned annual varieties, being very hardy and producing large heads of beautifully colored flowers, blooming in August and September. Pkt., 10c; $\frac{1}{4}$ oz., \$2.00.

POPPIES (A and P)

AMERICAN LEGION. Shirley type; large, brilliant orange-scarlet, with yellow anthers. Pkt. 10c; Oz. 75c.
TULIP POPPY. One of the most brilliant annuals, the flowers are 3 inches in diameter and of a brilliant scarlet color, greatly resembling tulips. Pkt., 10c; $\frac{1}{4}$ oz., 30c.
THE SHIRLEY. Special strain mixed; fine for bedding or cutting; single annual. Pkt., 10c; $\frac{1}{4}$ oz., 10c.
CARNATION FLOWERED. Splendid double fringed flower annual; mixed. Pkt., 10c; oz., 10c.

Scabiosa

PEONY FLOWERED. Dwarf annual, very useful for bedding. Pkt. 10c; oz. 25c.

ROMNEYA COULTIN MATILIJIA. (Hardy California Tree Poppy). 4 to 5 ft. Flowers white, 5-in. in diameter, very fragrant. Pkt., 10c; $\frac{1}{4}$ oz., \$1.25.

HARDY PERENNIAL ORIENTAL POPPIES; ORIENTALE. Very charming, producing numerous leafy stems, $2\frac{1}{2}$ ft. high, with large deep crimson flowers, having a conspicuous black blotch on each petal; exceedingly showy. Pkt., 10c; $\frac{1}{4}$ oz., 50c.

MIXTURE of all the very best Oriental Varieties. Pkt., 10c; $\frac{1}{4}$ oz., 50c.

PORTULACA (A) Mexican Rose

Very showy annual, easily grown, and very effective when massed in beds or edgings. A profusion of brilliantly colored flowers are produced throughout the summer. They thrive best in rather rich soil in a sunny situation.

LARGE-FLOWERING EXTRA DOUBLE MIXED. Pkt., 10c; $\frac{1}{4}$ oz., 75c.

LARGE-FLOWERING SINGLE MIXED. All colors. Pkt., 10c; $\frac{1}{4}$ oz., 20c.

PRIMROSE (Primula)

VULGARIS. Old English garden favorite, beautiful shade of yellow. Pkt., 10c; $\frac{1}{8}$ oz., \$1.25.

AURICULA. Finest mixed, all colors. Pkt., 10c; $\frac{1}{8}$ oz., \$2.00.
COWSLIP or OENOTHERA. Evening Primrose. Pkt., 10c; $\frac{1}{4}$ oz., 20c.

CHINESE PRIMROSE. (Primula sinensis fimbriata). Popular winter blooming pot plant. Special florist strain, giant mixed. Pkt., 25c; $\frac{1}{8}$ oz., \$8.00.

MALACOIDES. Fine house plant, lilac. Pkt., 10c; $\frac{1}{8}$ oz., \$2.00.

PYRETHRUM (P)

Hardy extra double and semi-double mixed. Ranging in color from white to deep red, with yellow centers, blooming in May and June and again in the fall. The flowers are very large and somewhat similar to the Daisy or Cosmos. Pkt., 10c; $\frac{1}{8}$ oz., \$2.00.

SENSITIVE PLANT - MIMOSA (A)

Curious and interesting annuals, with pinkish-white flowers; the leaves close and droop when touched or shaken. Pkt., 10c; $\frac{1}{4}$ oz., 15c.

RANUNCULUS ASIATICUS

Improved Palestine strain (Ragionieri) Pkt. 25c; $\frac{1}{8}$ oz. \$2.50.

RICINUS-CASTOR OIL BEAN (A)

Ornamental plants of strong, stately growth, the foliage having the appearance of a tropical plant, very effective when planted in masses or as centers of Canna or Dahlia beds.

ZANZIBAR. Extra mixed. Oz., 25c.

SCABIOSA or MOURNING BRIDE (A)

Fine free-flowering plants for mixed borders and highly esteemed for cut flowers. The blooms are borne on long, erect stems in globular heads in colors ranging from white to dark maroon. Height 2 to $2\frac{1}{2}$ feet. Double mixed. Pkt., 10c; oz., 50c.

SCABIOSA, (Caucasica) (P)

GOLDINGENSIS. Deep purple, long stems. Pkt. 25c; $\frac{1}{8}$ oz. \$1.75.

PERFECTA. Large, pale lilac flower, which blooms all summer. Extremely handsome. Pkt. 10c; $\frac{1}{4}$ oz. \$1.25.

ALBA. Pure white. Pkt. 10c; $\frac{1}{4}$ oz. \$1.75.

SALVIA SPLENDENS or SCARLET SAGE (A)

Very popular bedding plant, extensively used for lawn and conservatory decoration, bearing long spikes of brilliant flowers from July to frost. Pkt., 10c; $\frac{1}{4}$ oz., 75c.

SNAPDRAGON. See Antirrhinum, page 38.

SWEET ROCKET. See Hesperis.

STOCKS-10 WEEKS (A)

One of the most popular annuals, either for potting or bedding. For brilliancy and diversity of color, fragrance, profusion and duration of bloom it is unsurpassed.

DWARF GERMAN DOUBLE MIXED. Pkt., 10c; $\frac{1}{4}$ oz., 80c.

MAMMOTH BEAUTY OF NICE. Choice mixture. Pkt., 10c; $\frac{1}{4}$ oz., \$1.00.

EARLY GIANT IMPERIAL. (Bismarck). Mixed. Pkt., 10c; $\frac{1}{4}$ oz., \$1.25.

EMPORER OR PERPETUAL. These fine stocks will live outdoors for several years if protected with a fairly thick layer of straw, which must be lifted early in the spring before it gets warm. If sown any time before July will bloom the following spring. Pkt., 10c; $\frac{1}{4}$ oz., \$1.25.

VIRGINIA. Very early bedding variety. Six inch plants bearing a profusion of small flowers continuously during cool weather. Pkt. 10c; oz. 30c.

SWEET WILLIAM DIANTHUS BARBATUS (P)

A universally admired perennial flower, which, when once started, will last for years. Free-flowering and attractive, producing a splendid effect in beds and borders. It is preferable to sow the seed very early in the spring every year and have vigorous young plants coming into bloom the same season. They may be sown, however, in August to bloom the following spring. Very satisfactory results are also obtained by dividing the roots of old plants.

SINGLE MIXED. All shades of white, pink and red. Pkt., 10c; oz., 60c.

DOUBLE MIXED. Very fine; all colors. Pkt., 10c; oz., 75c.

HARDY SWEET PEAS LATHYRUS (Latifolus) (P)

Large clusters of red, white or pink showy flowers, resembling Sweet Pea bloom. Free flowering; excellent for covering walls, stumps, trellises, etc. Pkt. 10c; ¼ oz. 40c.

SHASTA DAISY (P)

Splendid hardy perennial plants, having large white flowers with yellow center, borne singly on long stiff, wiry stems; excellent for cutting; profuse bloomers. Pkt. 10c; oz. 50c.

VINCA (A)

Very attractive bushy plants with luxuriant glossy green foliage, producing in abundance handsome flowers that bloom freely all summer. Excellent for borders, summer bedding and window boxes. Pkt. 10c; oz. \$1.00.

SWEET PEAS

CALIFORNIA GROWN SUCCESSFUL EVERYWHERE

One ounce for 50 feet of row.

THE SPENCERS are of exceptionally large size, the petals waved and frilled and the general effect remarkably graceful and effective. The plants are of vigorous growth and remain in bloom for a longer time than the Grandiflora sorts.

THE GRANDIFLORA type, owing to its vigor of growth, its freedom of bloom and extremely wide range of colors is well suited for most conditions and locations.

CULTURE.—Early in the spring make a trench three to four inches deep in rich, mellow soil, so arranged that no water can stand in it and plant the seed in the bottom, covering at first only one inch deep. When the plants are two inches high, cultivate; and as they grow, gradually fill in the trench. When the plants are about five inches high they should be supported by poultry netting, strings or brush. Water should be applied thoroughly once or twice a week early in the morning or in the evening. The blooms should be picked before they form pods or the plants will soon stop flowering. The following have been selected from hundreds of varieties, as being those of the highest quality in their respective classes.

SPENCER VARIETIES

ASTA OHN. Pinkish-lavender.

AUSTIN FREDERICK IMPROVED. Large pure lavender.

BLANCHE FERRY SPENCER. Bright rose, standard wings white flushed pink.

DOREEN. Large carmine.

ELFRIDA PEARSON. Giant blush pink.

GLORIOSA. Deep orange scarlet.

HAWLMARK CERISE. Bright salmon cerise.

HEBE. Giant rose pink.

KING EDWARD SPENCER. Pure red.

KING WHITE. Giant white.

MAJESTIC CREAM. Large deep cream.

MARGARET ATLEE. Rosy salmon buff.

MARY PICKFORD. Cream pink suffused with salmon.

MRS. TOM JONES. Deep amethyst-blue; very fine form the best of the deep blues.

PICTURE. Cream pink suffused with apricot.

ROYAL PURPLE. Rich purple.

TANGERINE IMPROVED. Salmon orange.

WARRIOR. Giant maroon.

PRICES

Packet 10c; ounce 25c

¼ lb. 75c; pound \$2.50

EARLY FLOWERING SPENCERS

EARLY BLUE BOY. Clear blue.

EARLY COLUMBIA. Best pink and white bi-color.

EARLY HARMONY. Clear lavender.

EARLY SNOWFLAKE. Pure white.

EARLY VULCAN. The most vivid scarlet in Sweet Peas and does not burn.

ZVOLANEK'S ROSE. Bright rose pink.

Prices: Pkt., 10c; oz., 50c; ¼ lb., \$1.50; lb., \$5.00.

SWEET PEA MIXTURES

Our Sweet Pea Mixtures are combined of carefully considered proportions of varieties which have proven themselves to be the very choicest of their respective types and colors. These mixtures cannot be equaled in their beauty and flowering qualities.

MANN'S SUPERB SPENCER MIXTURE. Pkt. 10c; oz. 25c; ¼ lb. 75c; lb. \$2.50.

MANNS' GRANDIFLORA SUPERIOR MIXTURE. Pkt. 10c; ¼ lb. 25c; lb. 75c.

VERBENA (Mrs. Lucifer) (A)

One of the finest bedding plants and also suitable for borders, with its heads of brilliantly colored flowers, producing one mass of bloom throughout the summer. Seeds may be planted as soon as the ground can be worked or earlier indoors and transplanted to the beds in April or May. They succeed in almost any good garden soil.

DEFIANCE. Deep scarlet, large attractive blooms. Pkt., 10c; ¼ oz., 75c.

HYBRID MIXED. Extra large flowered, brilliant colors and vigorous. Pkt., 5c and 10c; ¼ oz., 50c.

HYBRID COMPACTA MIXED. Very compact and erect in its habit of growth; excellent border variety. Pky., 10c; ¼ oz., 50c.

ROYAL BOUQUET. Special quality. Mixed. Pkt. 25c; ¼ oz. \$2.50

STOKESIA CYANEA (Cornflower Aster)

A lovely hardy plant producing an abundance of handsome lavender flowers, blooming all summer. Pkt., 10c; ¼ oz., 25c.

VERONICA SPICATA (Speedwell)

Bright blue, pink and white flower-spikes, borne most profusely during August. 18 inches tall. Pkt., 10c; ½ oz., 35c.

VIOLAS or TUFTED PANSIES (P)

Well-known, free-flowering hardy perennials, easily grown from seed. While flowers are not so large as the regular type of Pansy, the blooms are produced in such an abundance and the flowering season so much longer that they are superior to pansies for some purposes. Seed sown in April produces flowering plants by June and from then on until frost they are a sheet of bloom.

PURPLE QUEEN. Clear distinct blue. Pkt., 10c; ¼ oz., 35c.

VIOLET-ODORATA (P)

This beautiful, sweet-scented hardy perennial can be easily grown from seed, thriving best in a partially shaded, moist situation. Pkt., 10c; ¼ oz., \$1.50.

WALLFLOWER (P)

These deliciously fragrant half-hardy perennials should be better known. Their beautiful spikes of double flowers in their rich Oriental shades of red, yellow and purple are very effective in beds or potted. 1½ feet high.

GIANT GOLIATH. The earliest and best single variety; large flowered, extra dark blood red. Pkt., 10c; ¼ oz., 20c.

SINGLE MIXED. Pkt., 10c; oz., 25c.

BRANCHING-TALL. Double mixed. Pkt., 10c; ¼ oz., \$2.00.

ZINNIAS-DOUBLE (A)

We have given particular attention to these annuals, developing them into perfection unsurpassed.

GIANT WHITE. Pkt., 10c; oz., 50c.

GIANT BUTTERCUP. Pkt., 10c; oz., 50c.

GIANT PINK. Pkt., 10c; oz., 50c.

GIANT DOUBLE MIXED. Pkt., 10c; oz., 50c.

DAHLIA FLOWERED MIXED. Pkt., 10c; oz., 75c.

CURLED AND CRESTED. Pkt., 10c; oz., 50c.

Dahlia Flowered Zinia

VINES

BALLOON VINE. (Cardiospermum). Very graceful, rapid grower, producing inconspicuous flowers, foliage light green. Pkt., 5c; oz., 20c.

BALSAM PEAR. (Momordica Charantia). Fine for trellises or low fences. Rapid growing vines with lobed light green leaves and beautiful fruits of a rich golden yellow color, which when ripe, open up, disclosing the seeds enclosed in a carmine covering. Pkt., 10c; ¼ oz., 25c.

CARDINAL CLIMBER. (Ipomoea Cardinalis). An easily grown climber developing to perfection in sandy loam soil. The brilliant scarlet flowers are borne profusely. The leaves resemble those of a fine Japanese Mahle. Pkt., 10c; ½ oz., 35c.

CANARY BIRD FLOWER (Nasturtium perigrinum). A most beautiful climber of rapid growth with handsome fringed, rich yellow flowers and fine delicate foliage. Pkt., 5c; ¼ oz., 15c.

CLIMBING FOXGLOVE. (Lophospermum Scandens). Start the seed indoors during March, cover thinly with fine soil. A graceful annual climber from Mexico. The beautiful flowers are of large size and resemble Foxgloves in shape. They are of a rich purple color. The foliage is of a velvety texture. Blooms continuously from July until frost. Under favorable conditions the vines grow 10 ft. tall. Pkt., 10c; ½ oz., 50c.

COBAEA SCANDENS. Of rapid growth, with fine foliage and large bell-shaped flowers of a beautiful violet blue color. Pkt., 10c; ¼ oz., 25c.

WILD CUCUMBER VINE. (Echinocystis lobata). A quick-growing and attractive climber, will grow 20 feet in six weeks, the large foliage affording plenty of shade. Covered during the summer and fall with sprays of small white flowers. Pkt., 10c; oz., 20c.

CYPRESS VINE. (Ipomoea quamoclit). Beautiful and very popular, slender vine, with fern-like foliage and a mass of small star-shaped flowers. Mixed colors. Pkt., 10c; ¼ oz., 15c.

GOURDS. A large and interesting class producing a great variety of curious fruits, many of which are peculiarly marked. Pkt., 10c; oz., 25c.

NEST EGG. This is a small white-fruited variety, resembling hens' eggs. When properly dried will make the best nest-eggs. Pkt., 5c; oz., 25c.

DIPPER. A well known variety. When grown on the ground the stems or necks are curved, but when climbing, they grow straight. If followed out when ripe the bowl will hold 2 to 3 pints of water. Pkt., 5c; oz., 25c.

DISHCLOTH OR LUFFA. It is easily grown and climbs readily giving fine shade for garden houses. The fruits should be allowed to hang on the vines until well ripened, when the skin can be removed and the fibrous or sponge-like interior taken out, cleaned and dried, this makes a fine dish cloth or can be used in place of a sponge. Pkt., 10c; oz., 25c.

KUDZU VINE. (Pueraria thumbergiana). One of the most rapid growing of all climbers, providing a dense screen of large rich green leaves. The purple flowers are borne in clusters and resemble Wisteria. Well grown vines attain a height of 40 to 50 ft. This is a perennial climber. The seed should be started indoors in March and the young plants set out early in May. Protect the roots with straw during severe freezing. Pkt., 10c; ¼ oz., 25c; oz., 75c.

HYACINTH BEAN. (Dolichos). Of extra rapid growth, introduced from Japan and very much superior to the old-fashioned flowering bean. Darkness, purple flowers; daylight, white flowers; or mixed. Pkt., 5c; oz., 10c.

JAPANESE HOP VINE. (Humulus Japonicus). Where an attractive climber is desired that will stand rough usage there is nothing better. Pkt., 5c; ¼ oz., 20c.

MOON FLOWER. (Ipomoea mexicana). Very pretty, rapid growing vine, with handsome trumpet-shaped flowers. Pkt., 5c; ¼ oz., 20c.

MORNING GLORY. (Convolvulus). This splendid and very popular climber needs no introduction. Our Giant Japanese Imperial Mixture is unsurpassed. Pkt., 5c; oz., 15c.

CLIMBING NASTURTIUM. Flower and foliage similar to dwarf Nasturtiums; the growth, however, being much more vigorous. 5 to 7 ft. They may be used for porches or urns or left to run freely over the ground. Choiceat Mixture, oz., 10c; ¼ lb., 30c; lb., 75c.

PASSION FLOWER. (Passiflora). A most interesting and well known climber, bearing singularly beautiful flowers. Pkt., 10c; ¼ oz., \$1.00.

SMILAX. (Medeola). This popular Boston Smilax is a most desirable window vine, on account of its charming, glossy green, graceful foliage. Perennial, splendid for greenhouse or conservatory. Pkt., 5c; ¼ oz., 25c.

THUNBERGIA. (Black-eyed Susan). Free-flowering and of rapid growth. May be trained on a slender trellis or allowed to run freely over the ground to cover bare spaces. Pkt., 10c; ¼ oz., 35c.

SCARLET RUNNER. Of very rapid growth, producing clusters of showy bright scarlet pea-shaped blossoms, followed by edible beans of very fine quality. Pkt., 5c; lb., 50c.

TROPAEOLUM CANARIENSE. Pkt., 10c; ¼ oz., 15c.

CINNAMON VINE

Hardy climber, small white flowers. Strong tubers, 15c each.

MADEIRA VINE

Rapid growing climber. 15c each. \$1.50 per doz.

HARDY CLEMATIS

One of the most beautiful hardy climbers; of strong rapid growth producing a profusion of deliciously fragrant flowers. 50c each.

Exhibition and

DAHLIAS

Garden Favorites

Various Dahlia Types

Prices quoted are for strong tubers and well rooted, sturdy plants from 2-in. pots. Many growers, have found plants preferable to tubers, and we offer plants for delivery after May 1st and until June 15th.

The following varieties of dahlias are selected for beauty, utility and free flowering qualities. We offer a wide range of colors and shades in each of the important types and can confidently recommend them for the ornamental garden and for cut flowers. The tubers are taken from healthy, vigorous field-grown clumps; are in first-class condition and with proper attention are sure to bloom and give entire satisfaction.

Dahlias do well in almost any kind of soil, but thrive best in a medium loam. The tubers should be planted in a horizontal position, with the sprout up and about four inches below the surface; they should be set three or four feet apart each way, in deeply spaded soil. A good plant food applied just as the buds start to form will increase the size and improve the color of the blooms. If large exhibition blossoms are desired, it is absolutely necessary to disbud. After the frost has killed the flowers, the roots should be removed from the ground, allowed to dry for two or three days, and then stored away in a cool, dry, dark place, where frost will not reach them.

Amarillo Grande (Hy. Cac.) Beautiful light yellow broad petaled blooms on excellent stems. A western introduction of real merit	Plants each	Tubers each
	\$1.25	\$2.50
Ambassador (Hy. Cac.) A beautiful dahlia greatly admired; strong grower, and free bloomer. Has many gorgeous colors, blending from a soft yellow center to salmon-pink tips.....	.75	1.50
Amun Ra (Dec.) A well known variety of immense size, perfect formation and exquisite beauty. Petals are copper and orange toned, darkening towards the center to a reddish bronze, strong stems and one of the best for cutting.....	.50	1.00
Attraction (Hy. Cac.) Beautiful and greatly admired 6 inches in diameter, soft, silvery mauve-rose with white suffusion	.20	.40

Carmencita (Dec.) More consistently true in coloring than any other decorative variety. Large beautiful blooms of unusually graceful formation; bright yellow striped with red.....	Plants each	Tuber each
	\$.50	\$1.00
Champagne (Dec.) This mammoth flower is a model for shape; of a remarkable and distinct golden champagne, varying to chamois in color.....	.75	1.50
Copper King (Dec.) Immense blooms of exquisite copper color. Strong stem	.50	1.00
Edna Ferber (Hy. Cac.) The leading attraction of 1927. Exhibition Hybrid Cactus of enormous size. Color a glistening coral, shading to old gold at the base of petals, which are curled and twisted, making a very full flower of extreme beauty and poise. Foliage dark green and thick, medium to tall habit of growth.....	2.00	
El Dorado (Dec.) Exceptionally attractive in size, quality and color. Low growing bush bearing immense golden-yellow blooms.....	1.00	2.00
Elite Glory (Dec.) This wonderful dahlia was introduced in 1926. Monstrous flower of a brilliant rich red, without any apparent purple or maroon shading. Blooms and foliage huge in size; fine keeping qualities as a cut flower. Consistent prize winner.....	.75	1.50
Ellinor Vandever (Dec.) A giant decorative with most attractive well-formed large blooms of a glowing satiny rose-pink. Vigorous in growth with good habits and held erect on strong stiff stem. Early bloomer.....	.50	1.00
Emperor (Dec.) A large maroon variety of the finest type; blooms are made up of long flat petals of enormous size, borne on long stiff stem	1.00	1.50
Gay Paree (Jean Chazot) (Hy. Cac.) An autumn tinted variety of splendid Hybrid Cactus form; beautiful golden bronze color heightened by a suffusion of nasturtium red, supported by erect, long, stiff, wiry stems, which holds bloom high above the dark green foliage, effectively displaying its charm and beauty	.20	.40
Gladys Sherwood (Hy. Cac.) A beautiful large perfect white flower, produced in wonderful profusion, and held erect on strong stems.....	.40	.75
Goldene Sonne (Cac.) Large flower of rich golden yellow with soft rose suffusion.....	1.50	
Jean Kerr (Show) Pure white. Foremost garden and cut flower variety; compact, stocky growth; free flowering....	.15	.25
Jerseys Beacon (Dec.) A decided novelty of merit; chinese scarlet with a paler reverse, giving a two-toned effect. An exhibition flower of vigorous growth; excellent stem.....	.50	1.00
Jersey's Beauty (Dec.) This wonderful Dahlia was introduced by W. H. Waite in 1923, and is numbered as one of the favorite varieties. Most delicate cut flower on good stiff stem, of an erosine pink; a wonderful keeper; plant of erect habit and growth....	.50	1.00
Jersey's King (Dec.) Brilliant oriental red with carmine suffusion; immense flowers; long stiff stems, vigorous grower.....	1.00	2.00
Judge Marean (Dec.) One of the outstanding Dahlias which are noted for their changeable colors during the stages of development; salmon-pink, yellow-orange, and gold.....	.30	.60

	Plants Each	Tubers Each
Junior (Dec.) Enormous flower of pure lavender, supported on good stem.....	\$.40	\$.75
King Solomon (Hy. Cac.) A beautiful orange - buff Hybrid with an iridescent sheen on the twisted and twisted petals; perfect stem, profuse bloomer. Has been awarded many prizes, highly recommended..	.75	1.50
Margaret Woodrow Wilson (Dec.) Broad petals, well placed, terminating in points. Opalescent pink; blooms held on perfect stem above the dark green foliage. Awarded certificate of merit by the Dahlia Society of New York.....	1.00	2.00
Mariposa (Hy. Cac.) Delightful shade of true pink, intensified by a deeper colored center; long, narrow incurved petals which twist and curl in a charming formation making it very attractive.....	.50	1.00
Marmion (Dec.) One of the finest exhibition varieties with very large full flowers of splendid form. Color pure golden yellow with bronze suffusion on reverse of petals, having a deeper bronze tone in the centre. Good bloomer.....	1.25	2.50
Merritt (Dec.) Known as one of the best of recent introduction; fine habit of growth, profuse bloomer, long stemmed, lemon-yellow.....	.50	1.00
Miss America (Hy. Cac.) One of the best novelties. Rich orange buff, blending into a lemon chrome towards center. Its wavy petals are twisted and curled, showing a light jasper red on reverse side; a most remarkable and charming variety.....	.75	1.50
Mrs. Carl Salbach (Dec.) Large bloom of lavender-pink, supported on massive stem. Wonderful exhibition variety.....	.30	.60
Mrs. Crowley (Dec.) Exquisite shade of a bright salmon-pink, base of petals yellow; foliage dark green of good substance. One of the finest cut flowers on the market; good keeper.....	.50	1.00
Mrs. Eleanor Martin (Dec.) The color of this wonderful Dahlia is most odd, described as mulberry; its petals being a peculiar rose with reverse of violet.....	.50	1.00
Mrs. I. De ver Warner (Dec.) Vigorous grower on splendid stems; true to type; fine form, orchid lavender.....	.50	1.00
Mrs. John Gardner (Hy. Cac.) An exceptionally attractive large bi-colored Hybrid Cactus, having brilliant blood-red petals, edged in white. The most attractive and generally admired variety in our entire display at the Baltimore Dahlia Show.....	.50	1.00
Patrick O'Mara (Dec.) Pleasing shade of deep orange slightly tinged with rose. Very large flowers on long stiff stems.....	.20	.40
Pop Stewart (Dec.) Remarkable flower of great size. In the young state the flower appears rosy pink, but as it matures it undergoes a complete transformation, toning out into a most exquisite shade of the purest lilac pink. Splendid; stem; wonderful grower.....	.50	1.00
Pride of California (Dec.) Brilliant cardinal red, enormous in size, free blooming, good keeper...	.25	.50
Queen of the Garden Beautiful (Dec.) Extremely large flower measuring 7 to 9 inches in diameter. Very free bloomer of rich, deep yellow;	1.25	2.50
Rollo Boy (Hy. Cac.) Vigorous grower, carried erect on good strong stem. Delicate shade of amber, shading to oldgold.....	1.00	2.00
Roman Eagle (Dec.) A large exhibition decorative of high merit. Color flaming brilliant, burnished copper, held on strong stem well above the dark green foliage, blooming profusely.....	.50	1.00
Sagamore (Dec.) Free flowering and dependable; golden yellow; long stemmed; exhibition and cut variety.....	.75	1.50
Shudow's Lavender (Dec.) Very large bloom of silvery lavender, held erect by long stiff stem well above the dense foliage; fine cut flower of excellent keeping quality. This variety attracted much attention in our display at the Baltimore Dahlia Show.....	.50	1.00
Siskiyou (Hy. Cac.) Considered largest flower in cultivation. Pink tinged mauve. A prize-winning novelty.....	1.00	2.00
Snow-Drift (Dec.) For garden decoration and exhibition, one of the best large white varieties in existence, having broad waxy-white petals.....	.50	1.00
Trentonian (Dec.) Color is that of an Indian's skin, changeable shading; blending of old gold, amber and coppery bronze, supported by strong perfect stem. Pleasing to all because of its harmonious display of autumn colors.....	.50	1.00
Violetta (Hy. Cac.) Large flower of good form, produced on fine stem; color rich petunia-violet. An added attraction to any garden.....	.50	1.00
Watching Sunrise (Dec.) An artistic, huge flower combining a brilliant shade of gold with a subtle suffusion of pink. Truly glorious in every respect. ...	...	5.00
William Slocombe (Dec.) Clean cut, pure canary yellow; immense flowers of splendid form; blooming early and continuing to the end of the season...	.25	.50
Wizard of Oz (Dec.) A leading variety which attracts great attention. Remarkable for its formation, size, color and habit of growth; free blooming. Extra fine exhibition variety; glowing amber-pink.....	.65	1.25

DAHLIA SEED

Very satisfactory results are obtained from seed planted early indoors and transplanted permanently in May or June. With proper care the plants will bloom the same year. (See page 39.)
Use granulated peat moss for growing and storing Dahlias.

Gladiolus Mary Pickford

GLADIOLI

The wonderful results which our customers are having with our Northern grown Gladioli, have led us to increase our stocks and enlarge our list, adding many new varieties, selected from hundreds of old and new introductions, which have been found to be the most desirable sorts. Beauty of form and color, height, substance, number of blooms open at once and keeping quality, have been determining factors upon which we have judged and made selections.

Plant Manns' Gladioli Bulbs. They are strictly $1\frac{1}{2}$ inch or more in diameter, sound, true to name, and can be absolutely depended upon to produce large, beautiful well-formed blooms.

Cultural Suggestions: Set bulbs 4 inches deep and 6 inches apart, either in rows or massed in beds, borders or among shrubbery. Successive plantings from April to July will bloom from July until frost. They will thrive in any good garden soil, but a sunny location is best. Cultivate frequently and water freely while blooms are forming.

ALICE TIPLADY. Primulinus hybrid type of much beauty, rich saffron orange. 7c each; 70c doz; \$5.00 per 100.

ANNA EBERIUS. Beautiful deep rhodamine-purple, with amaranth purple center, the whole a warm, "velvet" color, large slightly ruffled flowers on strong stem. 7c each; 70c per doz; \$5.00 per 100.

BYRON L. SMITH. Delicate lavender, deepest at the edges of the petals and lighter in the center. Its orchid shaded coloring make it one of the most desirable sorts; well arranged on good stem. 9c each; 85c per doz; \$6.50 per 100.

CRIMSON GLOW. Rich glowing velvety crimson, shaded deeper in the center; tall, strong grower; flowers well placed; considered the best in its color. 7c each; 70c per doz; \$4.50 per 100.

EARLY SUNRISE. Deep orange-salmon, with yellowish blotch on lower petals; very early, excellent forcing variety. 8c each; 80c per doz; \$6.00 per 100.

E. J. SHAYLOR. Splendid deep rose-pink; one of Kunderd's best ruffled varieties; good cut flower. Very popular with florists. 7c each; 70c per doz; \$5.00 per 100.

EVELYN KIRTLAND. Very warm rose-pink, deeper at the edges of the petals shading towards shell pink in the center, brilliant scarlet blotches on the lower petals; strong stem, making it one of the most desirable varieties for cutting. 7c each; 70c per doz; \$5.00 per 100.

GOLDEN MEASURE. Finest and most vigorous pure golden yellow in existence; very large flowers of good substance; robust grower and considered the best yellow on the market; a superior quality Gladiolus. 10c each; \$1.00 per doz; \$8.00 per 100.

GRETCHEN ZANG. A lovely tone of soft pink, blending into scarlet in the lower petals. 7c each; 70c per doz; \$5.00 per 100.

HALLEY. Delicate salmon-pink with creamy yellow blotch on lower petals; very early and great favorite as a commercial cut flower. 6c each; 60c per doz; \$4.00 per 100.

HERADA. Clear mauve, shaded with deeper markings in the center; large flowers, many open at a time; very attractive. 7c each; 70c per doz; \$5.00 per 100.

LE MARECHAL FOCH. Clear, light pink, a shade brighter than America; very large, wide open flowers on strong, stiff stem; very early and useful cut flower. 5c each; 50c per doz; \$3.50 per 100.

PANAMA. Rich rose-pink, self color; very large, wide open flowers on stiff stems; many open at a time. 5c each; 50c per doz; \$3.50 per 100.

PEACE. One of the best, pure white with lilac feathering on lower petals; large flowers on long, strong stem, many open at a time; great variety for late blooming. 5c each; 50c per doz; \$3.50 per 100.

PRINCE OF WALES. Delicate salmon-pink, lighter towards the center; well shaped flowers on long stems; the earliest on the market. One of the very best for forcing. 7c each; 70c per doz; \$5.00 per 100.

ROSE GLORY. Purest rose pink, with deeper throat; splendidly ruffled flowers on good spike. 9c each; 90c per doz; \$7.00 per 100.

SCHWABEN. Light yellow with little red stripes on lower petals; strong grower, with large flowers and sturdy stem; an old favorite and always dependable. 6c each; 60c per doz; \$4.00 per 100.

VIRGINIA. Flaming scarlet; large, massive flowers, many open at a time, making a gorgeous display of dazzling red; good forcer. 8c each; 80c per doz; \$6.00 per 100.

WILBRINK. Flesh pink with yellow blotch on lower petals; large well placed flowers on tall, strong stems; the first pink to bloom, together with Halley of which it is a sport; extra fine cut flower. 6c each; 60c per doz; \$4.00 per 100.

MARY PICKFORD. Lovely creamy white, with soft sulphur-yellow throat; stem also creamy instead of green, giving the whole a delicate, unique appearance. 8c each; 80c per doz; \$6.00 per 100.

MRS. DR. NORTON. Silvery white base, tinged with pink, deepening towards the edges of the petals, creamy blotches in throat on lower petals; tall, vigorous grower, splendid cut flower. 7c each; 70c per doz; \$5.00 per 100.

MRS. FRANCIS KING. Brilliant flame red, shaded salmon toward throat; very tall, strong spike; an old favorite florist variety. 5c each; 50c per doz; \$3.50 per 100.

MRS. FRANK PENDLETON. Deep rose-pink, shading to pale pink in throat, large bright crimson blotches on lower petals, giving it a striking appearance; tall, vigorous grower; extra cut flower sort. 5c each; 50c per doz; \$3.75 per 100.

MRS. H. E. BOTHIN. Geranium pink, tinted salmon, flaming scarlet center, a very striking color combination; well placed, heavily ruffled flowers on strong stem; a leader. 9c each; 90c per doz; \$7.00 per 100.

NIAGARA. Primrose yellow, splashed and striped with bright pink; large flowers on good, strong spike; an old standard variety. 8c each; 80c per doz; \$6.00 per 100.

GLADIOLUS MIXTURES

Manns' Special Named Variety Mixture: Exactly equal proportions of the above 25 named varieties, Mixed to serve our customers who want variety of color with the highest quality sorts included.

25 Bulbs (one each of every variety) \$1.50
100 Bulbs (four each of every variety) 5.50

Manns' Superior Rainbow Mixture: Made up of varieties which because of their commercial value and reliable flowering qualities are being produced in such large quantities that low prices are made possible. These bulbs are strictly first class and are selected to give a perfectly harmonious color scheme.

35¢ per doz.; \$2.50 per 100

GIANT FLOWERED CANNAS

APRICOT. 4 ft. Buff-yellow base, overspread with salmon-pink. 10c each; \$1.00 per dozen.

CITY OF PORTLAND. 3½ ft. pink. Flowers of largest size. A glowing shade of pink. Foliage green. 15c each; \$1.50 per dozen.

INDIANA. 6 ft. Very large flowers of a rich, golden orange color. 7c each; 75c per dozen.

KING HUMBERT. 4 ft. Leaves are purple-brown over bronze. Crowned with immense heads of velvety orange-scarlet. 10c each; \$1.00 per dozen.

MRS. ALFRED F. CONARD. 4 ft. The grandest salmon-pink in existence. 10c each; \$1.00 per dozen.

PRESIDENT. 4 ft. The most wonderful green leaved, red flowered canna in cultivation. The immense well-rounded flowers often measure 7 inches across and are produced on strong, erect stalks well above the foliage. Free bloomer. 10c each; \$1.00 per dozen.

YELLOW KING HUMBERT. 4 ft. Green leaves, golden-yellow flowers blotched red. 10c each; \$1.00 per dozen.

STARTED CANNAS

Fresh daily, in all leading varieties. 2 for 25c; \$1.25 per dozen.

CALADIUM ESCULENTUM or ELEPHANT'S EAR

These are very effective either as single plants on the lawn, in beds, or along the edges of a pond or stream. The leaves often attain a length of 36 inches. Bulbs can be kept over winter and used year after year by storing them in dry sand. Large bulbs, 3 to 4 inches in diameter. 15c each; \$1.50 per dozen; Medium sized bulbs, 10c each; \$1.00 per dozen. Add postage. Special price on quantities.

FANCY-LEAVED CALADIUMS.

Brazilian varieties, bright colors. Large fine bulbs. 25c each; \$2.50 doz.

EXCELSIOR PEARL TUBEROSE

One of the most fragrant and most popular of the summer flowering bulbs. May be started early in hotbeds or pots, or planted in open ground after the first of May. Extra large size bulbs, 5c each; 50c per dozen; \$3.00 per 100.

Hardy German Iris

HARDY OUTDOOR LILLIES

AURATUM (Gold Banded Japanese Lily)

One of the most beautiful and popular varieties in cultivation. The very fragrant large flowers are ivory-white, spotted with crimson and marked with a clear gold band through the center of each petal. Auratum may be planted in the fall or spring and grows from 3 to 5 feet tall and begins blooming in July or Early August. Mammoth bulbs, 35c each; \$3.50 per dozen.

REGALE (Mynophyllum)

Coming from China, this extremely hard, and yet excellent variety for forcing has rapidly become a favorite and is predicted to soon become the most popular Easter Lily. The flowers are white, shading to yellow in the center, with a pink tinge on the outer edges. Delightfully fragrant, blooms outdoors in July; they grow 3 to 4 feet. 50c each; \$5.00 per dozen.

SPECIOSUM RUBRUM

Especially valuable as a cut flower, its heavy substance making it a good keeper. Flowers are white spotted with red. 25c ea; \$3.50 pr doz.; \$2.00 per 100.

TIGRINUM FLORA PLENO (The Double Tiger Lily)

Producing a great number of double orange-colored blooms, spotted with black, and grows from 4 to 6 feet in height. 25c ea.; \$2.50 per doz.

TIGRINUM SPLENENS (Single)

The most beautiful of the Tiger Lilies, orange-red spotted purple-black. Very hardy. Bears 8 to 20 blooms when well established. 25c ea.; \$2.50 per doz.

AMARYLLIS

Giant American Hybrids

The most desirable type of Amaryllis, especially beautiful and easily managed in the amateur's window or conservatory, produces from four to six gigantic blooms of perfect form. 50c ea.; \$5.00 per doz.

TUBEROUS ROOTED BEGONIAS

Especially adapted to window or conservatory culture. We offer bulbs produced from the best seed strains, largest size 2 inches and up in diameter. Scarlet, pink, yellow. Single or double. 25c ea.; \$2.50 per doz.

HARDY-IRISIS GERMANIA

JEAN D'ARC. The predominating color of both the standard and falls is pure white and the edges show a delicate penciling of light blue. A lovely flower carried on long and stocky stems. 15c ea.; 3 for 40c; \$1.25 per doz.

KING OF IRIS. The standards a clear lemon color, falls deep satiny-brown with a broad border of golden yellow. A striking variety 2 feet high. 10c ea.; \$1.00 per doz.

PARISENSIS. The fine blue standard harmonizes well with the deeper blue falls. The flowers are large and are borne very early. The free-blooming habit has made it a great favorite. 10c ea.; \$1.00 per dozen.

MANNS' SUPERIOR NURSERY STOCK

More
Ornamental Plants
On Your
Property Will
Greatly Enhance Its
Beauty And
Value

Foundation Planting makes Lawn part of Home

Most
Beautiful Varieties
Of Strictly
Highest Quality
Strong and Healthy
Well Developed
Stock

Evergreens

All Evergreens are burlaped and balled, other packing for shipments being charged at cost. Prices f.o.b. Baltimore. Small orders are forwarded via parcel post at an advance of 10% to cover postage. Shipments to distant points are made via express collect.

AMERICAN ARBORVITAE: (*Thuja Occidentalis*) A fast growing pyramidal tree with light green foliage. Very useful for hedging and screening as well as for ornamentation. 18 to 24 in. \$1.75; 2 to 3 ft. \$2.50.

CHINESE ARBORVITAE: (*Biota Orientalis*) Grows tall and slender with dark green foliage. Useful in border planting also for formal gardens; rapid grower. 18 to 24 in. \$1.75; 2 to 3 ft. \$2.50.

GLOBE ARBORVITAE: (*Thuja Occidentalis Globosa*) Very dwarf and compact; grows naturally into a rounded almost ball-like form. 18 to 24 in. \$3.25; 2 to 3 ft. \$4.50.

SIBERIAN ARBORVITAE: (*Thuja Occidentalis Wareana*) Of a slower and bushier growth than the American variety. Very hardy and holds its dark green color through the winter. 18 to 24 in. \$3.50; 2 to 2½ ft. \$4.50.

JUNIPER: (*Pyramidalis*) One of the finest and hardiest evergreens. Pyramidal in outline with silver-green scale-like foliage. It retains its dense habit and is very desirable. 2 to 2½ ft. \$4.50; 2½ to 3 ft. \$5.00.

JUNIPER (*Pfitzeriana*) A beautiful new form with branches spreading nearly horizontally as broad as tall. Low growth foliage pleasing bluish-green. 18 to 24 in. \$4.50; 2 to 3 ft. \$6.00.

RETINOSPORA: (*Obtusa Compacta*) Almost spherical in shape. Good green throughout winter. Very useful in foundation or formal work. 12 to 15 in. \$2.00; 15 to 18 in. \$3.00.

RETINOSPORA: (*Pisifera*) Bright green pendulous branches loosely pyramidal quick grower. 18 to 24 in. \$3.00; 2 to 2½ ft. \$4.00.

RETINOSPORA: (*Filifera*) Graceful and decorative having long stringy, drooping branches and bright green foliage. 18 to 24 in. \$3.50; 2 to 2½ ft. \$5.00.

RETINOSPORA: (*Filifera Aurea*) Golden Thread Branched Cypress. Very bright conspicuous yellow. Grows more slowly than preceding. 15 to 18 in. \$4.00.

TAXUS: (*Cuspidata*) Spreading Japanese Yew. Rich, deep, broad green leaves. Spreading, bushy habit. Valuable in foundation plantings.. Exceptionally hardy. 15 to 18 in. \$3.50; 18 to 24 in. \$4.50.

TAXUS: (*Brevifolia*) Dwarf Japanese Yew. Broad, thick leaves, blackish green. Slow growing and irregular, spreading habit. Exceptionally hardy. 15 to 18 in. \$4.50.

YUCCA: (*Filamentosa*) Long lance-like leaves. Tall flower spike grows up quickly in June-July. Numerous creamy flowers and general appearance give tropical effect. Useful for massing with either evergreens or shrubbery. 2 year. Transplanted, burlaped and balled. 50c each; \$4.00 per 10.

Hardy Ornamental Shrubs

Growing in beauty and usefulness year after year, these wonderfully effective plants are being extensively used for permanent corner plantings, hardy borders, hedges, screens to hide unsightly buildings, and foundation plantings.

Our shrubs are sold strictly according to size, and when making comparison of prices this should be considered. Sizes specified as medium, large, extra large, etc., are very indefinite and misleading.

Order sufficiently early to secure dormant stock, and plant as soon as possible after frost is out of the ground.

ALTHEA

(*Rose of Sharon*) A very useful shrub, with large, single or double flowers that appear in great profusion in late summer, a time when flowering shrubs are scarce. 2 to 3 ft. 75c each.

CALYCANTHUS FLORIDUS

(*Sweet Shrub*) Chocolate colored, double flowers, pineapple-scented, fine and glossy foliage. Blooms in June. \$1.00 each.

CORNUS

ALBA SIBIRICA: (*White Flowering Dogwood*) Bright red bark, porcelain blue fruits. Quick grower. Useful for winter effect. 2 to 3 ft. 75c each.

FLORIDA RUBRA: (*Red-Flowering Dogwood*) A rare variety, the flowers of which are rich rosy red. The two varieties make a fine contrast. 2 to 2½ ft. \$4.00 each.

Wigelia-Rosea

Spirea—Van Houttei

DEUTZIA

2 to 3 ft. 75c each.

Profuse blooming shrubs, useful for massing or planting in borders, very attractive.

GRACILIS: (Slender Deutzia) A small shrub with slender, often arching branches, covered with clouds of pure white flowers in graceful nodding racemes. Good for edging borders.

CRENATA ROSEA PLENA: Double white, tinged with pink; very desirable tall shrub. Slightly fragrant; June.

Pride of Rochester: Vigorous flowers, borne in large panicles, are pinkish white, with under-side of petals, rose. June.

FORSYTHIA

FORTUNEI: (Golden Bell) One of the very earliest shrubs to bloom and unsurpassed in splendor and brilliancy by other spring flowering varieties. The tall, arching branches are covered with golden yellow blooms in April. Good as single specimens or as a hedge. 2 to 3 ft. 75c.

HYDRANGEA

ARBORESCENS GRANDIFLORA ALBA: The snow-white blooms are of the largest size, coming into flower early in June and lasting until late in August. Is more hardy than any other sort and especially suited for shaded places. \$1.00 each.

PANDICULATA GRANDIFLORA: Without doubt the best-known and most popular summer-flowering shrub in cultivation. The flowers, which are borne in dense pyramidal panicles, are white when they first open but gradually change to rose color, and remain in good condition for weeks. They are excellent for planting as specimens or grouped in large beds. \$1.00 each.

TREE FORM: A very desirable form of Hydrangea, the branches starting out 3 ft. from the ground. Fine for specimens or background. 3 to 4 ft. \$1.75 each.

Hedge Plants

AMUR RIVER PRIVET

Most popular of all hedges. Thrives under the most adverse conditions. Being absolutely hardy, it increases in beauty with each successive year. No further expense after planted and adds beauty and charm to any home. 12 to 18 in. \$8.00 per 100; 18 to 24 in. \$10.00 per 100.

BARBERRY

THUNBERGI: Popular for mixing in the shrubbery border, as single specimens, or for planting in clumps on the lawn, as well as for foundation plantings and for hedges. 12 to 18 in. \$12.00 per 100.; 18 to 24 in. \$18.00 per 100.

NEW RED-LEAVED JAPANESE BARBERRY

Similar in all respects to the green-leaved Japanese Barberry but of a rich, lustrous, bronzy red, becoming more brilliant and gorgeous throughout the summer. In the fall its foliage changes to vivid orange, scarlet, and red shades, more brilliant and more effective than in the ordinary Japanese Barberry. It is followed by the same brilliant scarlet berries common to the type which remain on the plant the entire winter.

All that is required to develop its brilliant coloring at all seasons is that it be planted in full exposure to the sun. 75c each; 10 for \$4.50; \$30.00 per 100.

Hardy Ornamental Shrubs

—Continued

MALUS

FLOWERING CRAB APPLE: (Bechtel's) A shapely little tree producing quantities of very double large, pure pink flowers with noticeable fragrance. Vigorous grower. 3 to 4 ft. \$2.50 ea.

LILAC

2 to 3 ft. 75c each.

PURPLE: (Syringa Vulgaris)

WHITE: (Syringa Alba)

PHILADELPHUS

VIRGINALE: (Mock Orange) One of the finest new ornamental shrubs. The flowers are snow-white, large, crested, fragrant, and come in great quantities. The best feature of this variety is its constant bloom, for unlike other Philadelphus, it blooms throughout the season. Makes splendid specimen plants. \$1.25 each.

RHUS

SUMAC: (Copallina) The leaves are beautifully cut like a delicate fern and in fall assume the most brilliant colors, this combined with its showy clusters of crimson fruit, makes it a most valuable subject either as a single specimen or for mass planting. \$1.00 each.

SPIREA

ANTHONY WATERER: A perpetual bloomer of dwarf habit, flowering profusely when small. Flowers of a lovely dark crimson-red, borne in dense clusters, and have a peculiar feathery appearance. 18 to 24 in. 75c each.

PRUNIFOLIA: (Bridal Wreath) One of the best and earliest blooming shrubs. Flowers double, white, and very abundant along the stem, handsome dark green shining foliage, turning orange in autumn. May. 2 to 3 ft. 75c.

VAN HOUTTEI: One of the most beautiful spring-blooming shrubs. The arching branches bend to the ground under the immense number of blossoms, making a complete fountain of small white flowers. Beautiful ornament for the lawn at any season. 2 to 3 ft. 75c.

VIBURNUM

PLICATUM: (Japanese Snowball) A desirable variety bearing an abundance of ball-shaped white flowers, in May. One of the most popular hardy shrubs, having highly ornamental foliage, with purple autumn coloring. 2 to 3 ft. \$1.75.

STERILIS: (Common Snowball) This is the popular white snowball, bearing large round clusters of pure white flowers in May. Strong growth and spreading habit. 2 to 3 ft. 75c.

WEIGELIA

ROSEA: A strong symmetrical grower. An attractive shrub with spreading branches covered with beautiful dark green foliage and a wealth of trumpet-shaped, slightly fragrant, rose-colored flowers. June. 2 to 3 ft. 75c.

Hedge of Barberry Thunbergi

FRUIT TREES

APPLE

5 to 6 ft. \$1.25 each; \$12.00 per doz.

BALDWIN: (Winter). Vigorous growth; large, bright red, crisp, juicy, subacid, good. The most popular and profitable market sort. Ripening November to March.

DELICIOUS: (Winter). The color is brilliant dark red, shading to yellow at the blossom end. The flesh is crisp, fine grained and quite juicy; flavor slightly acid but very pleasing. November.

GRIMES GOLDEN: (Winter). A high quality apple, golden in color; flesh juicy, tender, spicy and rich. January to March.

RAMBO: (Autumn). Well flavored juicy fruit; very large, yellow, striped with red; subacid. September.

RED ASTRACHAN: (Summer). Free growth; large, roundish; deep crimson, juicy, rather acid. Ripening late July.

ROME BEAUTY: (Winter). Handsome fruit of good quality; large yellow, striped and splashed with red. November to January.

STAYMEN'S WINESAP: (Winter). Large, bright red of fine quality. Good keeper.

YELLOW TRANSPARENT: (Summer). Free growth, roundish; oblate, slightly conical; pale yellow; tender, juicy, sprightly, subacid. Ripening late July.

YORK IMPERIAL: (Winter). A wonderful keeping, well-flavored variety; greenish yellow, flushed with red. October.

CRAB APPLE

TRANSCENDANT: Largest of any Crab Apple; golden yellow, red cheek. September.

PEAR

5 to 6 ft. \$1.50 each

BARTLETT: (Summer). Summer variety; golden yellow in color; usually with red cheeks. Exceptionally fine for eating out of the hand, and without a doubt the best desert and canning pear.

SECKEL: (Autumn). Small, delicious fruits, extremely popular; green at first, becoming dull, yellowish-brown, with russeted red cheek. August and September.

QUINCE

ORANGE: Large, roundish, bright golden yellow; very productive. The best. 5 to 6 ft. \$1.50 each.

PEACH

5 to 6 ft. \$1.00 each; \$10.00 per dozen

BELLE OF GEORGIA: Very large, skin white with red cheeks, free-stone.

CARMAN: A hardy rot-proof Peach. Large, round, pale yellow skin and red blush on sunny side; white flesh, sweet flavor. July.

CRAWFORD EARLY: One of the best for canning. Free-stone. Large, yellow, juicy, melting. First of August.

ELBERTA: The standard finest yellow; large, highly flavored fruits, of unexcelled quality. Early August.

HALE: One-third to one-half larger than Elberta and superior in flavor. Very large; fine, even yellow; perfectly round; excellent quality.

PLUM

5 to 6 ft. \$1.50 each

BURBANK: Large and beautiful; cherry-red, with a thin lilac bloom; flesh yellow; sweet. First of September.

GERMAN PRUNE: Long, oval, purple; flesh green; stand more frost than others. August.

GREEN GAGE: Small, yellowish-green. August.

CHERRY

4 to 5 ft. \$1.50 each

SWEET CHERRIES

BLACK TARTARIAN: Vigorous growth; large; purplish black, one of the best; very sweet.

NAPOLEON: Prolific; large size; yellow with red cheeks, mid-season.

SOUR CHERRIES

MONTMORENCY: A large, red, acid Cherry; very prolific and hardy. Valuable for canning.

APRICOTS

ALEXANDER: Very large, yellow. July. 4 to 5 ft. \$1.25 each

SMALL FRUITS

GRAPE VINES

2 year old, 50c each; \$5.00 per dozen

CONCORD: Large, always reliable. Best Black.

MOORE'S EARLY: Vigorous and a great bearer. Large, fine quality. Early.

NIAGARA: Finest white grape grown. Berry and bunches, large, sweet and pulpy. Very productive.

CATAWBA: Luscious dark red berries; sweet and rich with pleasant flavor. Best table variety; late ripening and keeps well.

DELAWARE: Small, sweet, spicy, delicious berries; compact growth; light red in color.

BLACKBERRIES

ELDORADO: Medium size; jet-black; pleasant, melting flavor, sweet and rich; hardy and very productive. 2 year, \$2.00 per dozen; \$12.00 per 100.

CURRANTS

25c each; \$2.00 per dozen; \$12.00 per 100

CHERRY: Large, red berries. Popular sort; fine for preserving.

WHITE GRAPE: Large white berries, in long clusters. Best white variety; very productive.

GOOSEBERRIES

25c each; \$2.25 dozen; \$15.00 per 100

DOWNING: Most widely planted and highly-prized sort. Large whitish-green berries.

HOUGHTON: Red, small berries, enormous bearer.

RASPBERRIES

2 year, \$2.25 per dozen; \$12.50 per 100

CUTHBERT: Queen of the market. Largest and best flavored of all red raspberries.

ST. REGIS EVERBEARING: Fruit ripens very early, bears extremely heavy crops that sell for fancy prices. Then in Summer, until frost, gives fair to good pickings, dependent in part on the season. Extremely hardy and vigorous.

STRAWBERRY PLANTS

See Page 36.

Everblooming Hybrid Tea

ROSES

Most popular of all classes, blooming steadily from June until frost.

2 year old No. 1 Grade, Dormant, 75c each; \$7.00 for 10.

BETTY: Coppery rose-pink. Beautiful buds for cutting.

COLUMBIA: Glowing pink flowers which last a long time.

KAISERIN AUGUSTE VICTORIA: Lemon-White; very double and shapely.

KILLARNEY: Bright pink of beautiful form in bud.

MME. BUTTERFLY: Pale pink and gold; lovely when cut.

OPHELIA: Almost white, shaded pink and gold.

RADIANCE: Sparkling pink. The freest blooming of all.

RED RADIANCE: Light red. Equal to Radiance.

SOUVENIR de CLAUDIUS PERNET: The best pure yellow Rose grown today.

SUNBURST: Orange and cream; delightful.

Special FIVE FAVORITE Offer

Large Plants; wintered outdoors, in bud; showing color; 5 in. pots.

\$1.00 each; \$10.00 dozen

COLUMBIA WHITE COCHET GOLDEN OPHELIA
PINK RADIANCE RED RADIANCE

MANNS' SUPERIOR FARM SEEDS

Our fair dealing and conservative methods have resulted in an enormous increase in the volume of our field seed business, and we are thoroughly convinced that high quality seed at a reasonable price will make many more pleased customers during this year.

Our experience in this line and our equipment protect you from the many losses which must result from the planting of inferior seed, which is expensive at any price. All seeds offered must strictly conform to our high standards, and purchasers may depend upon our best efforts to supply only seed which is fresh, pure and free from weeds.

Continual market fluctuations make it impossible to quote firm prices here; changes are made almost daily. We shall, therefore, appreciate the opportunity to mail samples and quote the very latest price on any quantity.

When comparing quotations, consider both purity and germination.

GRASS SEEDS

KENTUCKY BLUE GRASS. (*Poa pratensis*). Universally known; desirable for pastures and lawns. Sow in fall or spring at rate of 2 or 3 bushels per acre. Fancy clean seed.

RED TOP GRASS. (*Agrostis vulgaris*). Thrives well in any soil, but best on low land; produces a firm sod. Sow 1 to 2 bushels per acre.

TIMOTHY. (*Phleum pratense*). Well known variety. When ready to buy write for latest prices, whether a bag or a carload. (Bushel 45 lbs.)

ORCHARD GRASS. (*Dactylis glomerata*). Extremely hardy and widely known. One of the earliest to start in spring; grows rapidly; furnishes an abundance of pasture the entire season. 1½ to 2 bushels per acre. (Bushel 14 lbs.)

RHODE ISLAND BENT GRASS. (*Agrostis canina*). Valuable for lawns. Sow 3 to 4 bushels per acre for lawn. 1½ to 3 bushels for pasture. (Bushel 12 lbs.)

TALL MEADOW OAT GRASS. (*Avena elatior*). Used for soiling. Succeeds well in sandy lands, and owing to its long, fibrous roots, stands cold and drought well. Sow 3 bushels per acre. (Bushel 10 lbs.)

SWEET VERNAL. (*Anthoxanthum odoratum*). Very fragrant, especially when bruised or cut. Mixed with other grasses for pasture it is quite valuable, as it starts early in the spring and grows until late in the fall. (Bushel 10 lbs.)

CREeping BENT GRASS. (*Agrostis stolonifera*). Excellent for pasture when mixed with other grasses; succeeds well in most situations and thrives in moist land. Sow 40 pounds per acre. (Bushel 14 lbs.)

WOOD MEADOW GRASS. (*Poa nemoralis*). Recommended especially for low, wet pasture, or for lawns in damp, wet situations. It starts early in the spring and produces a beautiful green turf, which lasts a long time. (Bushel 14 lbs.)

DROUGHT RESISTING GRASSES

PERENNIAL RYE GRASS. (*Lolium perenne*). Very nutritious; valuable for meadows or permanent pastures; rapid grower; most prominent grass in England. Sow 1 to 1½ bushels per acre. (Bushel 24 lbs.)

MEADOW FESCUE. (*Festuca pratensis*). Thrives in all soil; excellent for permanent pastures; starts early; very productive. Sow 1 to 1½ bushels per acre.

SHEEP'S FESCUE. (*Festuca ovina*). Grows naturally on light dry, sandy soils and mountain pastures; considered quite valuable mixed with other grasses for permanent early spring pasture. (About 12 lbs.)

HARD FESCUE. (*Festuca duriuscula*). Not very productive, but it is of a very fine quality, and thrives well in dry situations where many other grasses would fail, thus making a desirable pasture variety.

MILLET

GERMAN or GOLDEN MILLET. True Southern grown German Millet Seed is far superior to Western grown seed.

HUNGARIAN GRASS. A very valuable forage plant of the Millet family, but not so coarse. Two or three weeks earlier than German Millet.

MANNS' PERMANENT PASTURE MIXTURES

are giving wonderful results. They contain pure seed of high vitality, with varieties proportioned to meet the specific requirements of our individual customers. Let us know your particular needs and we shall be pleased to quote attractive prices.

BIRD SEED

Fresh, Recleaned Stock
Postage extra.

Canary.....	lb.	10c
Rape.....	lb.	10c
Millet.....	lb.	10c
Hemp.....	lb.	10c
Maw, ¼ lb., 10c.....	lb.	30c
Sunflower.....	lb.	10c
Lettuce Seed.....	lb.	25c
Mixed Canary Seed.....	lb.	10c
Cuttle Fish Bone.....	doz.	40c

Orchard Grass.

SUDAN GRASS

CLOVERS

MEDIUM or COMMON RED. (*Trifolium pratense*). The Clover Seed of Commerce, and the most important and valuable of the Clover family for agricultural purposes. Sow 15 lbs. per acre. (Bushel 60 lbs.)

ALSIKE or HYBRID. (Swedish). (*Trifolium hybridum*). Hardest of all Clovers; perennial. On rich, moist soils it yields large quantities of hay or pasturage, as it forms a thick bottom; has fibrous roots like White Clover. Esteemed highly by bee keepers.

MAMMOTH CLOVER. (*Trifolium pratense perenne*). Valuable with other grasses for mixed hay; ripens about with Timothy. Being a rank grower, it is largely used for plowing under as a fertilizer.

WHITE DUTCH. (*Trifolium repens*). Grows naturally in pastures in a great variety of soils and situations; indispensable in parks and lawns.

CRIMSON CLOVER. (*Trifolium incarnatum*). Being an annual, it must be sown in July, August, and September of each year, and, the spring following, can be cut for soiling by April 20th; for ensilage, May 1st to 15th; for seed, about first week of June. Can be grown in corn, or any cultivated crop. Ten to fifteen pounds necessary to seed an acre. Cover with a light harrow. (Bushel 60 lbs.)

ALFALFA or LUCERNE. (*Medicago sativa*). This Clover claims to bear the palm as a forage plant, coming earliest in spring and remaining latest in fall. It delights in plenty of sun, being a veritable child of the sun; must be sown at the rate of from 10 to 25 pounds of seed per acre on well drained, well pulverized deep soil after danger of freezing is over, and prefers sand or gravel subsoil. Wet sub-soil is fatal to the plant. Roots 3 to 4 feet deep, and when well established lasts for years. 2 to 3 crops a year can be cut. Not recommended for pasture. (Bushel 60 lbs.)

BOAKHARA or WHITE BLOSSOM SWEET CLOVER. (*Melilotus alba*). This slightly resembles Alfalfa in growth, but is much taller, with leafier and stiffer stems. It frequently grows 5 to 6 feet in height and branches freely, with slender spikes of small, fragrant, white flowers, which afford an excellent food for bees. (Bushel 60 lbs.)

JAPAN CLOVER. This makes most nutritious and desirable summer pasture. Grows well and spreads rapidly on poor lands, hillside and under the shade of trees. (Bushel 25 lbs.)

SUDAN GRASS

Sudan, the greatest forage crop, should be grown on every farm, where either hay or pasture is desired. It is highly resistant to drought and stands very heavy grazing. Yields from 2 to 10 tons per acre, is superior to either Millet or Sorghum in feeding quality, and may be fed in unlimited quantities.

Sow 10 to 20 lbs. per acre, 1 to 1½ inches deep, the highest quality hay resulting from heavy seeding. Should be harvested just before the heads appear, in the same manner as other grasses. Cures quickly and matures as early as Millet, the first cutting being ready in about 6 to 8 weeks.

Successive cuttings may be made every 30 to 45 days until frost. Highly recommended by the Government as being very nutritious and easily digestible. Being an annual, this must be seeded every year and therefore never becomes a pest.

COW PEAS

There is no surer or cheaper means of improving and increasing the productiveness of our soils than by sowing the Cow Pea. It has the power to extract costly nitrogen from the atmosphere and to store the same in the vines and roots, so that the land is enriched and its condition improved. From five to nine tons of green fodder per acre have been produced. For ensilage they are unsurpassed. When it is desired to turn the whole crop under, as a soil improver, it is better to do so after the vines are partly dead. Cow Peas can be sown in May or June, at the rate of one and a half bushels per acre.

BLACK. Quick to mature, adapted for late planting in Northern sections; vigorous grower and great yielder.

BLACK EYE. A prolific vine-growing variety of merit, seed often sold for table use.

WHIPPOORWILL. A favorite early bunch-growing variety. A prime favorite in the North and West on account of its early maturity and habit of growth.

SOY or SOJA BEANS

A Great Drought-Resisting Forage Crop. Producing Immense Quantities of Nutritious Food, Beside Being an Excellent Soil Improver.

The Soy Bean is coming right to the front as a great soil enricher, as a food for hogs or cattle, both in the green and dry state. To plow under in the green state it is certainly one of the very best plants, next to Cow Peas.

SAND or WINTER VETCH

Sometimes called Hairy Vetch. The most valuable of all Vetches. It succeeds on nearly all soils and is especially recommended for poor lands, where it thrives and improves the soil wonderfully, as it is very rich in nitrogen. It belongs to the pea family, but the vines are more leafy and longer. It may be sown in the spring or in the fall, preferably with rye. It remains green all winter and is valuable for early pasturing, as well as a fertilizer. 60 pounds per acre.

CANADA FIELD PEAS

Sown in open weather during December, January, February and March, making large yields of most nutritious food, which can be used either green or cured for hay. It also makes a good green manuring crop to turn under, but not equal to Cow Peas. A light seeding of oats, rye or barley will increase the yield and help to support the vines when the crop comes to maturity. Ready for cutting in May and June, cures easily and makes splendid hay.

CYCLONE Seed Sower

Has a national reputation as absolutely the best hand sower on the market.

Price—\$2.25 each

Mulford Cultures
FOR LEGUMES

See Page 79

FIELD CORN

The stock we offer has been especially grown and selected for seed purposes

Clark's Early Smoky Dent This new introduction has been developed by one of the largest and most reliable growers of corn in this country. Early Smoky Dent is today the earliest Dent Corn in cultivation, maturing in 75 to 80 days; is a good yielder and entirely free from disease; grows strong, quick and has splendid 7 to 8 ft. fodder. Pk., \$1.00; bu., \$3.50.

Ninety-Day Red Cob See page 13.

Golden West This variety will yield a larger crop than any other yellow corn in existence. It is vigorous in growth very deeply rooted and produces broad-leaved stalks of medium height. It is most attractive in appearance, and the ears usually have 18 to 20 rows of large kernels which are tightly wedged to make a solid ear. It requires about 100 days to mature and deserves the attention of any grower who wants a big crop of fine quality yellow corn. Pkt., \$1.00; bu., \$3.50.

Pride of the North Maturing perfectly in 90 days and being very hardy and prolific. Pride of the North has become a favorite among Northern growers and planters needing a 90-day yellow variety. The ears are of medium size with very small red cob. The kernels are closely set, long and compact. Pk., \$1.00; bu., \$3.50.

Leaming Improved Dent A very popular and extremely productive variety. On good lands the stalks grow tall, producing two good ears to each stalk. The ears are long, with small red cob well filled with grains of medium size, but deep, of a rich golden color. It ripens with us in from 100 to 110 days and makes a good crop. Pk., \$1.00; bu., \$3.50.

Iowa Silver Mine The National White Corn. A remarkable drought resister and under adverse conditions seems to pull through and make a crop where other varieties fail. Silver Mine is deep grained, pure white, rough-topped, with a small, white cob. Ears run from 9 to 12 inches long, with 16 to 20 rows of pure white kernels. Stalks medium height, very leafy, with broad blades, frequently bearing two ears weighing 1 to 1½ pounds each. Iowa Silver Mine has probably taken as many sweepstakes and first premiums as any corn in existence. Pkt., \$1.00; bu., \$3.50.

Iowa Gold Mine With the expert farmer Gold Mine is known as medium early, between the 110 day and the extra early sorts that mature in 85 days. It is a great producer and sure cropper. Ears are medium, symmetrical. Color bright golden yellow. The grain is deep and the cob is small. Pkt., \$1.00; bu., \$3.50.

Improved Maryland Yellow Dent

A cross with the Golden West and Maryland Yellow Dent, both well known varieties. Ears measure 12 to 15 inches in length with 14 to 18 rows of very deep grains closely placed on the cob. The strain has been fully established and will mean larger and more profitable crops to the grower. Pkt., \$1.00; bu., \$3.50.

Golden Beauty It is a large and broad-grained yellow corn. The ears of perfect shape with from ten to fourteen straight rows of grains. The cob is very small. Pk., \$1.00; bu., \$3.50.

Boone County White Boone County is a very large white corn, something like Silver Mine, but larger and later in maturing. Ears well filled out at both ends, cylindrical, 9 to 11 inches long, averaging 20 rows, some 18 to 22. Grain very deep, a little rough. Cobs white, of medium size. Matures in 110 to 120 days. Pk., \$1.00; bu., \$3.50.

No. 311—Acme Segment Corn Planter

Automatic slide type, adjustable for number of kernels and depth of planting. Has Chinese bristle brush cut-off. Can be used for beans. \$2.00

No. 309—Acme Rotary Automatic Corn Planter

Full rotary Drop; having adjustable cast disk or seed plates, and depth gauge. Extremely accurate; also plants, beans and peas. \$2.50

Golden West

Maryland White Dent An old standard variety and great favorite of every farmer who has grown it. The stalks are of a strong growth, bearing from one to two large ears, which have 10 to 12 rows to the cob. Grain is pure white and of fine quality. Pk., \$1.00; bu., \$3.50.

Improved Hickory King Largest grains of any white variety. Matures early and very productive. Ears set low, are of large size, well filled, very deep grained. It produces well, even on light land. Pk., \$1.00; bu., \$3.50.

Cuban Giant Ensilage Well known as the leading variety for the production of fodder. Pkt., 90c; bu., \$3.00.

KAFFIR CORN

The heads are greedily eaten by horses and cattle and make splendid food for poultry, fed either in the grain or ground and cooked. Excellent forage. Cultivate same as common corn, requiring four or five pounds per acre.

DWARF ESSEX RAPE

This plant is extensively grown for forage, especially for sheep, and for green manure. Prepare the ground as for turnips and sow in June or July in rows two and a half feet apart at the rate of two and a half pounds of seed per acre.

SORGHUM or CANE

EARLY AMBER SORGHUM. Furnishes a large yield of most nutritious forage, which can be fed either green or cured, and will yield two or three cuttings a year, stooling out thicker each time it is cut. It grows ten or twelve feet high. Sow at the rate of one peck per acre in drills three and a half to four feet apart.

EARLY ORANGE SORGHUM. This variety is similar in growth to Early Amber, but under fair conditions produces a heavier crop. It is better for stock feeding than the Amber.

BUCKWHEAT

JAPANESE. This variety yields very largely. The kernels are larger than other sorts, but owing to its branching qualities it need not be sown so thickly.

SILVER HULL. A superior variety in every way to the ordinary Buckwheat which it has almost entirely superseded.

OATS

WHITE SPRING OATS. Our best re-cleaned stock of these are Choice Northern grown, all heavy oats, which have been re-cleaned by us.

RUST-PROOF OATS. A favorite spring variety in the South, particularly where the land is rich; produces enormous yield, and excellent for cutting for hay.

DUSTING AND SPRAYING MATERIALS

AGRI-PAX-CONTACT INSECTICIDE

Kills insects surely, economically. No foliage injury. Stainless. Non-poisonous. Spreads evenly, completely. Does not corrode. Does not settle or clog nozzle. Recommended by florists and market gardeners. 1 pt. makes 2 to 4 gallon of solution.

½ Pint.....	\$.40
1 Pint.....	.60
1 Quart.....	1.00
1 Gallon Can.....	3.25

ARSENATE OF LEAD.

For destroying leaf eating insects, not harmful to the foliage, greatly adhesive. Powdered arsenate of lead is more economical than other forms. Prices: Powder, 1 lb., 30c; 4 lbs., 85c; 100 lbs., \$20.

ARSENATE OF ZINC.

Kills quicker than Arsenate of Lead, adhesive and less liable to burn foliage than Paris Green. Excellent for potatoes. Lb., 30c; 4 lbs., 85c; 100 lbs., \$20.00.

ATOMIC SULPHUR.

(One lb. to 10 gal. water).

Pure sulphur manufactured into a paste which may be readily diluted with water and sprayed upon the fruit and foliage to prevent fungous growth. Particularly useful for spraying stone fruits for the control of brown rot and scab. 25 lb. keg, \$3.50; 100 lbs., \$9.50.

BLACK LEAF 40.

A highly concentrated solution of Nicotine Sulphate, easily soluble in cold water. It is highly recommended by Experiment Stations and Spraying experts, for use against aphids and other sucking insects. Full directions on each package.

1 oz. bottle, 35c; ½ lb. tin, \$1.25; 10 lbs., \$11.85.

BORDEAUX
(Orchard Brand)
(12½ Per Cent
Metallic Copper)

Use 8 lbs. to 50 gallons of water.

For preventing many fungus growths, blights, etc. May be either sprayed or dusted. Powder, 1 lb., 25c; 4 lbs., 70c; 50 lbs., \$7.00; 100 lbs., \$13.00.

BORDEAUX-PARIS GREEN MIXTURE

Has the same insect killing qualities as Paris Green and in addition protects against blight. Very useful for treating potatoes, tomatoes, and other crops. 50c per lb.; 5 lbs., \$2.25; 10 lbs., \$4.00.

BORDEAUX - ARSENATE OF LEAD

3 to 7 lbs. to 50 gallons of water.

To kill leaf-eating insects and control fungous diseases; a double purpose spray in one application. Lb., 40c; 4 lbs., \$1.00; 24 lbs., \$5.25.

BUG DEATH

The popular non-poisonous insecticide and can therefore be used safely and very effectively on Cabbage, Tomatoes, Celery, Lettuce, Berries, Egg Plants, Squashes, Melons, Cucumbers, etc. Highly recommended

for Potatoes. Can be used dry or with water. 1 lb. pkt., 20c; 3 lbs., 50c; 5 lbs., 70c; 100 lbs., \$10.00.

B. T. S.

Barium-Sulphur.

Barium is very similar to Lime (or Calcium) in its chemical properties but when combined with Sulphur it greatly improves the value of both elements as a spray for controlling scale. May be used in both dormant and growing period applications. 1 lb., 20c; 5 lbs., 85c; 100 lbs., \$10.50.

CARBON DI-SULPHIDE.

For control of insects in grain. Lb., 50c.

CORONA COPPERCARB

Glow clean wheat free from bunt or stinking smut and receive top prices for your crop. Corona Coppercarb is a dust recommended by experimental stations to be applied dry to seed wheat any time before sowing. Use 2½ to 3 ounces per bu. of wheat, 30c per lb.; 5 lbs., \$1.00.

CUTWORM KILLER.

Lb., 30c; 5 lbs., \$1.25.

SEED DISINFECTANTS

These effective seed disinfectants are sold by the Bayer-Semesan Company, a consolidation of E. I. du Pont de Nemours & Company, Inc. and The Bayer Company, Inc. They comprise the following products:

CERESAN. This is

a new dust disinfectant for the seed treatment of wheat, oats, barley, rye and sorghum. Controls nine diseases of these crops. Prevents crop losses due to smuts. Quickly and easily applied. 8 oz. 50c.; 1 lb. 75c.; 5 lbs. \$3.00.

SEMESEAN, Jr. The dust disinfection for seed, field and sweet corn. As only 2 ounces per bushel are necessary, the cost for field corn is only 2½c. per acre. Protects the seed from rotting in cold, wet soil, and increases stands and yields. 4 oz. 50c., 1 lb. \$1.75., 5 lbs. \$8.00.

SEMESEAN BEL. The instantaneous dip treatment for seed, white and sweet potatoes. One pound treats 16 to 22 bushels. Controls seed-borne diseases and increases yields. 4 oz. 50c.; 1 lb. \$1.75; 5 lbs. \$8.00.

SEMESEAN. May be used as a dust or liquid to treat vegetable and flower seeds and bulbs. Prevents and controls a large number of seed-borne diseases. Remarkably effective against damping-off. Especially useful in protecting against Gladiolus diseases, black spot and mildew of roses. Costs only ¼ to 1c. per pound of seed. 2 oz. 50c; 8 oz. \$1.60; lb. \$2.75; 5 lbs. \$13.00.

Treat Your Seeds Before Planting.

CARBOLA

Is a white paint and a powerful disinfectant combined in powder form. Just mix it with water and it's ready to be applied with spray pump or brush. No waiting, no straining, no slaking—no bother of any kind. Carbola is better than whitewash in every way. It will not clog a sprayer. It will not blister, flake or peel off. It will not spoil if left standing. You can mix it today and use it any time. And it's economical—a pound of Carbola makes enough disinfecting whitewash to cover 100 square feet.

Carbola applied to the walls, ceilings, partitions, nests, etc., of your poultry houses will help to prevent the start and spread of contagious diseases among your flock. It will aid in keeping your fowls free from the health and profit-destroying ravages of lice and mites. 5 lbs., 75c; 10 lbs., \$1.25; 50 lbs., \$5.00.

EVERGREEN

Kills most plant pests, including even cutworms. Use it freely on tender plants and flowers—it can't burn or otherwise injure them. Neither will it injure the soil. Harmless to man, live-stock, birds and pets.

1 oz. bottles \$0.35 16 oz. bottles \$2.00
6 oz. " 1.00 32 oz. " 3.50
1 gal. bottles...\$13.00

FORMALDEHYDE.

Extensively used in the preparation of potatoes for seed, as a preventative against potato scab and to destroy other germs on the seed. Will also control some forms of grain smut. For potatoes a solution of 1 pt. to 15 or 20 gallons of water is made and and cut pieces are soaked for 2 hours. One to two gallons of this will be sufficient for 1 bushel of seed. Pt., 50c.

HELLEBORE.

Finely powdered remedy against rose slugs, cabbage worms and other leaf eating insects. Can be applied dry or sprayed. Per lb., 45c; ½ lb., 25c.

KAY-SO

A combined adhesive and spreader, making spray materials more economical and effective, inexpensive. Use 1 lb. to each 100 gallons of spray. 2-lb. pkg. 50c; 10-lb. pkg. \$2.00.

LEMON OIL.

Soluble in water; will destroy Aphids, Rust, Scale, and Bugs on Palms, Ferns, Rose Bushes, etc. Highly recommended as a wash for dogs and other animals, destroying lice and relieving mange. ½ pt., 35c; 1 pt., 60c; 1 qt., \$1.00.

LIME AND SULPHUR SOLUTION.

The popular spray material for dormant spraying against scale and as a Summer spray against certain fungus diseases. 1 qt., 45c; 1 gal., 80c; 5 gal., \$3.25; 50 gal., 17½c per gal. Drum \$3.00 extra, (returnable before August 1st).

DRY LIME AND SULPHUR.

Dormant Season: 12 lbs. to 50 gallons. Growing Season: 3 lbs. to 50 gallons. Just as effective as liquid but more economical because of the absence of water. Dissolves readily in cold water and complies with Government specifications. 1 lb., 30c; 5 lbs., \$1.25; 10 lbs., \$2.25; 25 lbs. 1, \$4.50.

DUSTING AND SPRAYING MATERIALS—Continued

Mag-o-tite is now available in the following size packages and prices: 1 lb. tins 50c per package; 5 lb. tins, \$1.50 per package; 25 lb. steel containers with handles, \$5.00; 50 lb. steel containers with handles, \$9.00.

NICO-FUMELIQUID

Very powerful tobacco extract. Soluble in water. Guaranteed 40% nicotine. $\frac{3}{4}$ lb. tin, 75c; 1 lb. tin, \$2.25; 4 lbs., \$8.00; 8 lbs., \$15.00.

NICO-FUME.

This is the strongest tobacco paper on the market. Does not injure blooms and furnishes the easiest method of fumigation ever devised. Tin box of 24 sheets, \$1.25; 144 sheets, \$5.50; 288 sheets, \$10.00.

NIKOTEEEN.

An economical and powerful nicotine extract. Effective remedy against aphids and fly insects. Half lb., \$1.15; 1 lb., \$2.00; 4 lbs., \$6.75.

PARIS GREEN.

A poisonous, insoluble powder similar to arsenic in its effects; used extensively against potato bugs, worms and caterpillars etc. $\frac{1}{4}$ lb., 15c; $\frac{1}{2}$ lb., 29c; 1 lb., 35c; 5 lbs., \$1.50.

PURE PARA-DICHLOROBENZENE
For Peach Borer Control.

Very powerful and effective remedy just coming into general use as a result of the experiments of the Department of Entomology. Should be applied September 1st to October 10th, according to latitude. Some growers prefer to make two applications, the first being in the month of June. One pound is sufficient for 10 to 30 trees, according to size. It is not advisable to treat trees under 4 years of age with Para-Dichlorobenzene, and apple trees should never be treated.

Remove all grass, weeds and rubbish from around the tree, make a smooth, bare surface and about sixteen inches wide around the tree at the soil level.

Remove any gummy exudation adhering to the crown or collar of the tree.

After the ground is prepared, distribute the crystals of Para-Dichlorobenzene evenly in a narrow circular band around the tree, keeping the inner edge of the band at least two inches away from the bark of the tree.

After the crystals are placed on the soil around the tree cover them with earth, at first lightly so as not to disturb the chemical, and complete by mounding the earth against the trunk of the tree until a cone shaped mass of dirt four or five inches deep has been made, tamping the dirt down with the back of the shovel.

Use one ounce to a tree 6 years old or older; in case of very large tree, $1\frac{1}{2}$ ounces may be needed to form a satisfactory band. On trees four or five years old, use $\frac{1}{2}$ to $\frac{3}{4}$ ounces to a tree.

1 lb. package, pr lb., 50c; 5 lb. package, pr lb., 40c; 10 lb. package, pr lb., 35c; 25 lb. package, pr lb., 30c; 100 lb. package, pr lb., 28c.

PYROX.

Kills Insects—
Prevents Fungus and Diseases.

1 lb. Jars....	\$.50
5 lb. Drums...	1.75
10 lb. Drums...	3.00
25 lb. Drums...	6.25
50 lb. Drums...	10.75
100 lb. Drums...	15.50
300 lb. Drums...	43.50

RED ARROW

The most economical and most efficient contact spray on the market, non-poisonous, will not injure blossoms, foliage of fruit; positive death to all types of insects. Poison sprays only kill if eaten, while Red Arrow Pyrethrum Spray kills every insect it strikes.

1 oz, making 4 to 6 gal.	\$.30
$\frac{1}{2}$ pt, making 35 to 50 gal.	1.75
1 qt, making 140 to 200 gal.	6.00
1 gal, making 560 to 800 gal.	22.00

SLUG SHOT.

(Hammond's). Guaranteed to destroy potato bugs, cabbage worms, lice, fleas, beetles, striped bugs, etc., on currants, egg plants, melons, turnips, beets, etc.; canker worms and caterpillars on fruit and ornamental trees. 1 lb. sifter, 15c; 5 lb. pkg., 45c.

SULPHUR

Commercial Flour of Sulphur. 1 lb., 6c; 10 lbs., 50c; 25 lbs., \$1.00; 100 lbs., \$3.00.

Superfine Dusting Sulphur. 1 lb., 10c; 10 lbs., 70c; 25 lbs., \$1.25; 100 lbs., \$4.25.

TOBACCO DUST.

Excellent insecticide and fertilizer combined, extensively used against black and green aphids, fleas, beetles, etc. Finely powdered and high in nicotine content. Grade 1: 1 lb., 10c; 5 lbs., 35c; 10 lbs., 60c; 50 lbs., \$2.50; 100 lbs., \$4.25; ton, \$74.00.

Grade 2: Per 100, \$2.25; ton, \$39.00.

STRAWBERRY DUST

85-15 Mixture successfully used for many years. 1 lb., 15c; 10 lbs., \$1.00; 25 lbs., \$2.25; 100 lbs., \$7.00.

TREE TANGLEFOOT.

Applied directly to the bark of trees, protecting them from climbing insect pests. Easily applied and will remain sticky for three months fully exposed to the weather. 1 lb. can, 60c; 5 lb. can, \$2.75; 10 lb. can, \$5.25.

GOOD'S No. 1 FISH OIL SOAP

Keeps trees, plants and vines clean and healthy, effectively controlling sucking insects and many forms of scale. Price, 1 lb. 20c; 5 lbs., 75c.

GRAPE DUST.

A readily diffusible, light weight powder fungicide, very efficient in destroying mildews and preventing blights. 5 lbs., 70c.

Scalecide is truly the complete dormant spray. Applied in the fall it controls scale of all kinds, bud-moth, pear psylla, peach leaf-curl, and fungous cankers. The delayed dormant spray with Scalecide controls scale, aphids, pear thrips, leaf miner, case bearer, leaf roller, European red mite, bud-moth, and fungous cankers. And in addition year after year use of Scalecide invigorates the trees. Scalecide is guaranteed to make a better orchard than lime-sulfur.

Scalecide is pleasant to use; it does not injure even the eyes. It is non-poisonous. It saves half the labor of spraying—a tankful of dilute Scalecide goes as far as two tankfuls of dilute lime-sulfur. Scalecide saves the cost of nicotine; saves the cost of spreader; saves more than three-fourths the freight and haulage. A fifteen-gallon drum of Scalecide covers the same trees as a fifty-gallon barrel of lime-sulfur. Prices—Qt., 75c; gal., \$1.75; 5 gals., \$6.25; 10 gals., \$10.60; 15 gals., \$13.50; (drum included; returnable @ \$2.00 less freight.) 50 gals., \$38.00.

Sulfofocid is a highly concentrated non-poisonous liquid sulfur fungicide—entirely distinct from lime-sulfur. Within a few minutes after the spray is applied and before it is dry, Sulfofocid is decomposed by the action of the air leaving a film of extremely fine sulfur in its most active fungicidal form. Prices—Pt., 70c; qt., \$1.00; gal., \$2.75; 5 gals., \$8.75; 10 gals., \$15.00; 15 gals., \$20.00; 30 gals., \$39.00; 50 gals., \$60.00.

VOLCK

For Safe and Sane Control of Nursery, Garden, and Greenhouse Insects

VOLCK is one of the most powerful insecticides known. It is effective on practically all insects on ornamental & flowering plants. Wonderful results have been obtained against red spiders

cyclamen mite, aphids (green fly), scale, mealy bugs, thrips, and caterpillars. Many pests that could not be controlled before are now killed with VOLCK. Even mildews and rusts are prevented and stopped by VOLCK. Not only does VOLCK give effective control of pests, but it also prevents reinfestation for a considerable period. VOLCK is odorless, colorless and non-poisonous. There is no unsightly residue. Plants are deep glistening green after using VOLCK.

Volck Does Not Burn

The most tender foliage is safe where VOLCK is used. Coleus, cyclamen, evergreens, ferns, orchids and many other types of plants can be sprayed with safety. VOLCK is the most effective remedy known for red spider on indoor vegetables. It is used because it is safe and sure.

Volck is packed in convenient sizes— $\frac{1}{2}$ pint cans, 50c; 1 pint cans, 75c; 1 quart cans, \$1.00; 1 gallon cans, \$3.00; 5 gallon cans, \$12.00; 14 gallon drums, \$25.00; 28 gallon drums, \$40.00.

SPRAYERS

THE "MISTY" SINGLE ACTION

A low-cost sprayer made of heavy tin for general purposes; holds one quart.
Misty.....\$.40
Rapid......55
Midget, 1-pint size .30

GLASS JAR SPRAYER

Holds one quart; has long, powerful pump; two discharge tubes, which send the spray over a wide area. Price, 75c.

AUTO SPRAY No. 23

Designed to handle liquids not easily applied with ordinary sprayers. Siphon tube and brass ball check valve removable for cleaning. A steady spray of great volume can be maintained with very little effort. 1 gallon capacity.

All Brass—cheaper when long life is considered.....\$2.50

AUTO SPRAY No. 26

This continuous atomizer will spray insecticide in a continuous fog of great volume. Unequaled for small garden and house plant sprays. 1 quart Brass Tank, \$1.25.

SPEEDEX

Very practical for general garden purposes. Galvanized tank of 1/2 gal. capacity, brass pump cylinder, with extra angle-outlet nozzle. Price \$1.75.

CONTINUOUS COMET

Heavy tin, fitted with cupped plunger leathers; all working parts brass. Tank heavy tin; capacity 1 quart. Price, 60c.

COG-GEAR BARRELL SPRAY PUMP

The construction is such that the entire pump sets inside the barrel containing the liquid, being bolted fast at its upper end to the head of the barrel. Has bronze ball valves and brass seats. The air chamber is 32 inches in length, enabling the pump to throw a uniform, constant and elastic spray. It has good leverage, is very powerful and easily operated. Complete with 15 feet of 1/4-inch 5-ply hose, Vermorel or Bordeaux nozzle and agitators. Price, No. R305B, \$15.00. No. 318B (illustrated) \$16.00.

PERFECTION

This is the most powerful machine in its class. The barrel is 7 1/2 in. in diameter and 20 in. high. The pump is 1 3/4 seamless brass tubing. The valves are metal and work automatically from 8 to 15 minutes, and may be recharged in 12 seconds. Galvanized Steel, \$6.00; Brass, \$9.00.

HUDSON JUNIOR SPRAYER

Capacity about 2 1/2 gallons. Shipping weight 8 pounds.

No. 140C. Junior with galvanized tank, \$4.50. No. 140B, Junior with brass tank, \$6.75.

HUDSON ECONOMY SPRAYER

The Economy sprayer meets the demand for large capacity at a minimum cost. (No. 125). Capacity 3 3/4 gals. With galvanized tank. \$4.50.

"KANT KLOG" COMPRESSED AIR SPRAYER.

Galvanized Tank, \$6.00. Brass Tank, \$9.00.

AUTO SPRAY No. 9

Tank of heavy, best quality sheet brass or strong copper bearing galvanized sheet steel. Air Pump of one piece seamless brass with new all metal brass ball check valve. Capacity, 3 1/2 gallon. Brass, \$9.00. Galvanized, \$6.00.

MYERS TANK SPRAYERS

Made of heavy galvanized iron or brass, side walls double seamed riveted and soldered. Equipped with 20 in. brass extension and 45 degree nozzle.

No. 2296—Galvanized—2 1/2 gal. capacity (weight 11 lbs.) \$5.50.

No. 2297—Galvanized—4 1/4 gal. capacity (weight 14 lbs.) \$6.75.

No. 2297-B—Brass—4 1/4 gallon capacity (weight 11 lbs.) \$10.50.

LITTLE GIANT AND PEERLESS BUCKET SPRAY PUMPS.

Made entirely of brass, malleable footrest, provided with large air chamber and throws a continuous spray. Price, with 4 ft. 1/2-inch hose and two nozzles, \$4.50.

PERFECT LEVER BUCKET SPRAY PUMP

The air chamber is 50 per cent. larger than the Little Giant Sprayer. Price, complete with agitator, hose and nozzle, \$6.00. 8-foot extension pipe, 50c.

No. 28 LIGHTNING WHITEWASH BUCKET SPRAYER

Price.....\$2.25

JUNIOR No. 5 BUCKET SPRAYER.

Does away entirely with the objectionable foot-rest, clamps, leather suction, packing, etc.

This Pump requires no fastening of any kind, holds itself down and works anywhere and everywhere.

Will pump from a pail, barrel, tank, spring or creek. Weighs only 4 lbs. and is ready for instant use everywhere. Price, \$3.75.

AUTO SPRAY No. 50

Capacity 2 1/2 gals. Brass \$7.00; galvanized \$5.00.

MYERS POWER SPRAYERS

The use of an efficient power sprayer assures a better crop because the straying can be done more thoroughly and more rapidly, making it possible to spray just at the proper stages in the development of the fruit blossoms. A power sprayer will very soon pay for itself on any orchard two acres or over.

The No. 17 Junior, illustrated, is equipped with a 100-gallon tank, all steel truck and double-acting pump, belt driven (engine not included), one Myers Spray Gun, 25 ft. High-pressure Spray Hose, pressure gauge, agitator, belt tightener, relief valve, etc. Price, \$165.00.

No. 15 Junior. Same as No. 17, but without truck. Price, \$105.00.

No. 25 Power Outfit. With Duplex (double cylinder) pump, without steel truck. Price, \$185.00.

Engine prices on application. 1½ to 2 h. p. required.

LOW DOWN SPRAY PUMP.

R309B. This is an entirely new type of pump, with double the power of any other. Fitted with removable 2½-inch brass cylinders and poppet valves, and adapted for the use of hot or cold mixtures. They are built for use in extensive spraying operations of any kind, as their capacity is sufficient to carry from 1 to 3-leads of hose. Complete with 6 feet wire bound suction hose, 15 feet of 7-ply discharge hose, 8-foot extension pipe and one Fembro nozzle. Price, \$40.00.

EUREKA HIGH-PRESSURE SPRAYING OUTFIT

One of the best spraying contrivances on the market. Mounted on a very substantial all-steel cart; equipped with high-pressure steel tank, double-acting force pump, air gauge and one lead of 6-foot 3/8-inch hose and 4-ft. extension pipe. Price, \$45.00.

EXTENSIONS.

Extension Pipe, 5-foot length, ¼-inch steel, with couplings. Price, 50c. Assortment of spray Pump Fittings are carried in stock.

The Bamboo Extension as illustrated is made of selected bamboo 8 and 10 feet in length, through which is placed a 5/16 brass tube, equipped with brass shut-off lever, and has a wide shield on top to prevent solution running down the pole. Price, 8 ft., complete, \$5.00; 10ft., complete, \$5.25.

SUNSHINE WHEELBARROW SPRAYER

Especially useful for spraying operations where large capacity but compact construction are required. Has two 16 in. wheels, 5 ft. spray hose, 2 ft. extension and angle nozzle. Capacity 12½ gal., \$14.00.

IDEAL PORTABLE SPRAYER

An ideal wheelbarrow type sprayer, with 15 gal. galvanized tank and operated with a large removable barrel pump. The frame is made of heavy steel tubing reinforced with channel iron cross braces. Discharge equipment consists of 6 ft. spray hose, 4 ft. extension pipe, an Ideal angle nozzle and leakless shut-off. No. 32, \$24.00; No. 33—above outfit with air pressure tank and 200 lb. pressure gauge, \$32.00.

No. 316B. Complete outfit, cog gear double action Spray Pump mounted on platform with very substantial 50 gal. barrel. Mechanical agitator, pressure gauge, 15 ft. of 3/8 inch, 7-ply discharge hose, nozzle, 8 ft. pipe extension and lever shut off. Equipped with No. R309B low down pump described above. Price \$50.00

MEYERS "HANDY"

The Myers Handy Portable Sprayer is made for general use about the home, greenhouse or orchard, for spraying or whitewashing. Fitted with cog gear handle. Has the No. R318B pump, rigidly placed in an extra heavy galvanized iron tank of 12½ gal. capacity. Complete with dasher agitator, 15 feet ½ inch 5-ply discharge hose, extension rod and nozzle. Price \$25.00.

HUDSON DUSTERS

Very effective for controlling insects on beans, potatoes, tomatoes, cabbage, melons, cucumbers and other garden truck.

All parts are pressed from lead coated sheet steel, attractively painted and finished. Gears are steel, machine cut, housed in a dust proof case filled with oil. All bearings are self lubricating. Discharge equipment consists of two nozzles, two elbows, a Wye connection, and four 15 inch tubes. Can be used with one or two nozzles, arranged for dusting from above or under surfaces of low lying plants, shrubs, etc.

The indicator has a very wide range of adjustment making it possible to feed exactly the amount of dust required. Will handle any powder, whether light or heavy.

No. 602—Simple in construction, light in weight, well balanced and very effective in operation. Rotary agitation prevents clogging. Capacity 2 to 5 pounds, depending upon material used. \$10.50.

No. 604—Develops unusually powerful air blast and has two agitators, one rotary and one oscillating. Capacity 5 to 10 pounds, depending upon the material used. \$12.50.

FEENY MODEL B.

The Feeny Model B is one of the most popular dusters made. It sends forth a dust cloud which thoroughly envelopes the plants, reaching both top and bottom surfaces and thoroughly penetrating every crack and crevice. This high efficiency is made possible by the patented features of the cylinder packing found only in the Feeny. It is easily filled, operated with greatest ease, is very effective, saves material and requires no cleaning. \$1.00 each.

HUDSON DUSTERS

Scout. Powder Reservoir, 1½x3 in., ea. \$.35
Cadet. Powder Reservoir 1¾x4 in., ea. \$.45
Major. Powder Reservoir 2¼x5 in., ea. \$1.00

LET US SEND YOU LITERATURE AND PRICES ON POWER DUSTERS AND DUSTS

HOT BED SASH

Finest quality; white pine lumber, free from knots, substantially made, grooved for glass to lap or for putty, (unglazed). \$1.75 each.

HOT BED GLASS

1 box of glass will glaze 3 sash, 8x10 and 10x12. \$2.50 per box.

HOT BED MATS

Burlap. Made of strong burlap interlined with wool.
Size, 40x76 inches, each..... \$1.60
Size, 76x76 inches, each..... 2.60

MILO WATERPROOF HOTBED MATS

Made from heavy weight burlap, absorbent pulp and felt cemented together with a specially prepared waterproof compound. This combination forms a covering both airtight and waterproof. Easy to handle. Wear for years. Milo mats are made in sizes 40" x 78" and 78" x 80", also in continuous lengths. 40" x 78", \$1.75 ea.; 78" x 80", \$3.50 ea.

MARLINE

Made from Indian Hemp and the best product in making Straw Mats. Furnished in 1 and 5-lb. balls. Per pound, 25c.

RAFFIA. (West Coast).

The best material for tying plants, vines etc. Per pound, 25c; 10 pounds, \$2.25.

PEERLESS GLAZING POINTS

These will positively keep the glass from sliding and are interchangeable, right or left. The use of a special pincers is recommended. Price, per box of 1000, 65c.

PINCERS

Price per pair, 70c; by mail, 75c.

PUTTY BULBS

A very useful tool for applying liquid Putty and Mastic for glazing Sash or Greenhouses. Large size, \$1.15.

MASTICA

For glazing greenhouses, sashes, etc., new and old. It is elastic, adhesive and easily applied. It is not affected by dampness, heat or cold. Price, 1/2 gal., \$1.50; 1 gal., \$2.50.

MASTICA GLAZING MACHINE

Price, \$2.25.

TWEMLOW'S OLD ENGLISH GLAZING PUTTY. Semi-Liquid.

For bedding glass in sash and filling cracks or seams in roof joints or frames of greenhouses or hotbeds. 16-pound can (1 gallon capacity), \$2.75.

GALVANIZED WATERING POTS "WIDE SPOUTS"

Made of heavy galvanized iron, with removable Sprinkler.

4 quarts.....	\$.60
6 quarts.....	.70
8 quarts.....	.80
10 quarts.....	1.00
12 quarts.....	1.10
16 quarts.....	1.25

WOODEN LABELS

	Painted	Plain
4 inch pot, per 1000.....	\$2.00	\$1.50
4 1/2 inch pot, per 1000.....	2.30	1.60
5 inch pot, per 1000.....	2.50	1.90
6 inch pot, per 1000.....	3.00	2.40
12 inch pot, per 100.....	.75	
3 1/2 inch Tree, iron wired.....	2.50	2.00
3 1/2 inch Tree Copper Wired.....	2.75	2.40
8 inch Garden, per 1000.....	6.50	
10 inch Garden, per 1000.....	8.00	
12 inch Garden, per 1000.....	11.50	

Prices, per 100—3 1/2 to 6 in., 50c; 8 in., \$1.00; 10 in., \$1.25; 12 in. \$1.75.

HARDWOOD FAN TRELLIS

Very durable and artistically made; will not scorch the most tender plant, and far superior to any metal trellis.

No.	Wide	Ea.	No.	Wide	Ea.
2 24"x10"	\$0.45		6 4"x27"	\$1.75	
3 30"x13"	.70		7 5"x32"	2.25	
4 36"x16"	1.10		8 6"x38"	3.00	
5 42"x21"	1.30		9 7"x42"	3.50	
			10 8"x46"	4.00	

FLOWER POTS

We carry a complete line of Regular Pots, Azalea Pots, Bulb Pans and Saucers in stock and quote as follows:

size	each	dozen	100	1000	Saucer each
2 in..	\$.02	\$.15	\$1.10	\$9.25	...
2 1/2 in..	.03	.20	1.40	12.25	...
3 in..	.03	.25	1.75	15.50	...
4 in..	.05	.45	3.25	25.00	\$.03
5 in..	.07	.70	5.00	...	.05
6 in..	.10	1.00	7.25	...	.06
7 in..	.15	1.50	12.00	...	.08
8 in..	.25	2.50	16.75	...	.11
9 in..	.35	3.50	24.00	...	.15
10 in..	.45	4.50	32.00	...	.18
11 in..	.65	6.50	50.00	...	.22
12 in..	.75	7.50	64.00	...	.25

NEPONSET FLOWER POTS

Made of waterproof paper, extensively used for starting seeds and seedlings in frames and hot houses.

size	per doz.	per 100	per 1000
2 1/4 in.....	\$.08	\$.50	\$ 3.75
3 in.....	.15	.70	5.75
3 1/2 in.....	.20	1.00	7.25
4 in.....	.25	1.25	9.00

HOSE NOZZLES

Mystic Spray Nozzle..... \$ 60
Justrite Spray Nozzle..... 75

CEDAR PLANT TUBS (Richmond Style)

Made of Selected Virginia White Cedar, bound with electric welded hoops, painted green.

No.	Inside Top Dia.	Inside Bot. Dia.	Inside Depth	Price
5	10	7 1/2	9	\$.80
7	12	9	11	1.20
9	14	11	13	1.70
11	16	12 1/2	15	2.10
13	18	14 1/2	17	2.95

PLANT BANDS

The simplest way to handle plants for transplanting is to grow them in our Ready-to-Use Plant Bands, because they are ready to use and no time is lost in setting them up.

size	depth	per 5000	per 1000	per 250
2x2" 2 1/2"		\$11.00	\$2.50	\$0.75
3x3" 3"		16.50	4.50	1.25

BANDS WITH FOLDING BOTTOMS
2x2" 2 1/2" \$13.10 \$3.00 \$1.00

WOOD PLANT STAKES "SQUARE"

Particular Gardeners prefer the wood stakes for their heat-resisting qualities.

Light Plant Stakes.

Height	Each	Doz.	100
1 1/2 ft.....	\$0.03	\$0.25	\$1.60
2 ft.....	.04	.35	2.65
2 1/2 ft.....	.05	.45	3.75
3 ft.....	.07	.70	5.00
4 ft.....	.09	1.00	8.00

Heavy Dahlia Stakes.

Height	Each	Doz.	100
4 ft.....	\$0.19	\$2.00	\$15.00
5 ft.....	.24	2.75	20.00
6 ft.....	.30	3.40	25.00

BAMBOO PLANT STAKES

3 feet high, 85c per 100 \$6.00 per 1000
5 feet heavy, 75c per doz. \$5.00 per 100
6 feet " \$1.00 per doz. \$7.00 per 100

The SAVO Steel All - Year - Round FLOWER BOX

For windows, porches, sun parlors, etc. Scientifically constructed; perfect air circulation, sub-irrigated, the most perfect plan ever devised for the growth of any kind of plant life. Savo Flower and Plant Boxes are made of the best grade of galvanized steel with neat round corners and a full roll rim, finished with green enamel inside and out.

	High	Wide	Long	
Model A.....	8"	9 1/2"	23"	\$2.70
Model B.....	8"	9 1/2"	29"	3.60
Model C.....	8"	9 1/2"	35"	4.05
Model D.....	8"	9 1/2"	41"	4.50

SUCCESS FLOWER BOXES

24 in. \$1.20 30 in. \$1.55 36 in. \$2.25

GALVANIZED HARD STEEL WIRE PLANT STAKES

Very durable, neat and strong, and extensively used for carnation and rose beds. No. 8 gauge.

Height	Doz.	100	1000
3 ft.....	\$0.20	\$1.20	\$10.85
3 1/2 ft.....	.25	1.40	12.65
4 ft.....	.30	1.60	14.45
5 ft.....	.35	2.00	18.00

OAT AND BARLEY FORKS.

All steel. Each, \$2.00.

GENERAL UTILITY FORK
D Wood Handles.

Stone Fork, 10 square $1\frac{1}{2}$ in. tines. Steel D Handle. Price, \$2.50.
 10-tine, 15-inch Diamond tine, scoop shape, heavy strap ferrule and cap, wood D-handle. Price, \$3.00.
 Coal Forks, 12-tine, 14 inches long, D-handle, strap ferrule. Price, \$3.25.
 Coal Forks 14-tine, 15 inches long, D handle, strap ferrule. Price, \$3.70.
 Ensilage Forks, D-handle with strap ferrule and cap, 8-16 inch tines. Price, \$2.40.

HEAVY MILL AND STREET FORKS

4 extra heavy, 16-inch Diamond tines, steel D-handle. Price, \$2.15.
 5 extra heavy 15 in. oval tines, steel D-handle. Price, \$2.50.
 5 extra heavy, 16-inch Diamond tines, steel D-handle. Price, \$2.75.
 6 heavy, 14-inch Diamond tines, steel D-handle. Price, \$2.75.
 6 light, 14-inch oval tines, steel D-handle. Price, \$2.75.

MANURE FORKS.
4 and $4\frac{1}{2}$ -ft. Handle.

Acme, 4-tine. Price, \$1.65
 Ontario, 4-tine, \$1.00.
 Banner, oval 4-tine, strap ferrule. Price, \$1.50.
 Continental, oval, 4-tine, strap ferrule. Price, \$1.45.
 Continental, oval, 5-tine, strap ferrule. Price, \$1.65.
 Continental, oval 6-tine, strap ferrule. Price, \$1.80.
 Herkimer, oval, 4-tine, strap ferrule. Price, \$1.30.
 Herkimer, oval, 5-tine, strap ferrule. Price, \$1.45.
 Herkimer, $4\frac{1}{2}$ ft. handle, 6-tine, strap ferrule. Price, \$1.65.

MANURE FORKS,
D-Handle.

Continental, oval, 4-tine, light strap, mall. D-handle. Price, \$1.45.
 Oval, 5 13-inch heavy tines, cap ferrule, mall. D-handle. Price, \$1.65.
 erkimer, iron D-handle, 5-tine, strap ferrule. Price, \$1.45.

POST-HOLE DIGGERS.

Baldwin Brand. Price, \$1.75.

EARTH AUGER.

Bores holes 8 to 14 inches in diam-
 $3\frac{1}{2}$ ft. deep. Price, \$6.00.
 Bores holes 8 to 16 inches in diam-
 $\frac{1}{2}$ ft. deep. Price, \$6.75.

ENGLISH DIGGING FORKS.
 4 square tines, 12 inches long, $7\frac{1}{2}$ -inch spread. Price, \$2.30.

HAY FORKS.

Continental, 2-tine, plain ferrule, 6-foot straight handle. Price, \$1.15.
 Herkimer, 3 tines, 6-foot straight handle. Price, \$1.30.

SPADING FORKS, D-HANDLE

Continental, heavy, polished angular tines. Wood D-Handle, \$1.85; Iron D-Handle, \$1.50.
 Jumbo, extra heavy, wood D-handle. Price, \$2.00.
 Boys' Spading Fork, iron D-handle. Price, 85c.

Planter Hoe, heavy handled, large eye, suitable for stiff ground. Price, 65c.
 Mattock Hoe, double pointed, very useful. Price, 85c.
 Ladies' Hoe, 5-inch blade, 4-ft. handle. Price, 70c.

WARREN HOES.

Heart-Shaped
 Large size, $7\frac{1}{2}$ inch.
 Price, \$1.15.
 Square eye, handled, 5
 $\frac{1}{2}$ in. blade, \$1.00

PRONG HOES OR
POTATO HOOKS.

4 broad tine, solid steel. Price, 95c.
 5 round tine, solid steel. Price, \$1.15.
 6 flat tine, solid steel. Price, \$1.70.
 Nurseryman's Hook, 2-prong extra heavy. Price, \$1.80.

RAKES.

Lawn Queen—24 steel wire teeth, reversible head. Price with handle, 70c.

STEEL GARDEN RAKES.

Bow Shank Curved Teeth, gold bronze finish. Price, 12 teeth, 90c; 14 teeth, 95c; 16 teeth, \$1.00; Flat Bow, 14 teeth, 90c.
 Road Rakes, extra heavy, 14 tine, Price, \$1.20.
 Single Shank, bronze finish. Price, 12 teeth, 90c; 14 teeth, 95c; 16 teeth, \$1.00; 18 teeth, \$1.10.

Wood Lawn Rake. 3 Wire Brace, 22 teeth, 65c; 1 Wire Brace, 20 teeth, 50c.
 Wood Hay Rake. 2 Wire, 10 teeth, 40c.

SCYTHES.

Best American Grass. Price, \$1.50.
 Bush or Brier Scythes. Price, \$1.50.
 English T. Waldron, 34, 36 and 38-inch. Price, \$2.25.

SNATH, OR SCYTHE HANDLES.

Two Ring, plain. Price, \$1.40.
 Patented Fasteners. Price, \$1.40.
 Bush Snath, heavy. Price, \$1.50.

GRASS AND BRUSH HOOKS.

American Grass Hook. Price, 60c.
 Draw Cut Grass Hook. Price, 75c.
 German Grass Hook. Price, 60c.
 Best English Grass Hook. Price, 90c.

BRUSH HOOKS.

For shrubbery and underbrush.
 Tempered steel. Price, \$1.75.
 Imported solid socket. Price, \$1.25.
 Imported solid socket, with Cutter, Price, \$1.40.

LIGHTNING HAY KNIFE.

Crucible steel. Price, \$1.75.

HAND-MADE GRAIN CRADLES

Hand-made, 4-finger Cradle, with best American scythe. Price, \$5.00.
 With English Waldron scythe. Price, \$5.75

KNOX ALL SHOVELS.

No. 2	\$1.25	No. 3	\$1.35
No. 4	1.40	No. 6	1.50

Boss No. 6 D. H. Scoops \$1.25
 Fox No. 2 Long Handle Round Pt. \$1.25

HOES—Acme.

For weeding and cultivating, double prong. $4\frac{1}{2}$ inch blade. Price, 90c.
 Acme W. & C., single prong polished steel. Price, 65c.
 Onion or weeding, two-prong, polished steel. Price, 45c.

SPADES.

Semper D-handle, carbon steel. Price, \$1.50.
 Nursery, extra heavy D-handle, full strap. Price, \$2.00.
 U. S. Army spades. Price, 75c.

DOCK CUTTERS.

$4\frac{1}{2}$ foot handles, with foot rest. \$1.15.

DIBBLES

Decidedly the best tool for transferring plants.
All steel, D-handle..... \$0.80
All steel, bent handle..... .60
Wood bent handle, steel point..... .65
Steel points for same..... .35

HAND GARDEN FORKS

No. 2. 11 inches long, hardwood handle, 3 tines, Japanned. Price, 40c.
No. 3. 10 inches long, hardwood handle, 4 tines, Japanned. Price, 30c.

ASPARAGUS KNIFE.

Made of solid steel; see the cutting point. Price, 45c.

ASPARAGUS BUNCHER.....\$4.00

GARDEN TROWELS

6-in. Steel Blade, Malleable Shank, each 15c
6-in. Extra Strong, Hollow Back, each, 35c.
6-in. Solid Steel, Bronzed and Polished, each, 50c.
6-in. American Solid Steel, Hollow Back finely finished, each, 50c.
5-in. Solid Steel, Forged Shank, each, 60c.
6-in. Florists' favorite, solid steel forged, Shank and Blade one piece, each, 75c.

TRANSPLANTING TROWELS

No. 2, 5-inch blade..... \$0.20
No. 1, 8-inch blade..... .25

EVERLAST ALL STEEL GARDEN TOOLS

The one piece construction and quality of steel make them practically unbreakable. Trowel, transplanting trowel, weeder, and cultivator, made of heavy steel, enameled. Each tool guaranteed. Set of 4 pieces, 75c.

THERMOMETERS.

8-inch, Tin, Japanned. Price, 50c.
10-inch, Hardwood Cabinet. Price, 60c.
12-inch, Tin, Japanned. Hot-Water Reg. Price, \$1.00.
Mushroom Bed and Hot Bed, Brass Point. Price, \$2.00.

AMERICAN EDGING KNIVES.

All Steel. Price, \$1.00.

SCUFFLE or PUSH HOES.

Price, \$1.00.

NORCROSS CULTIVATOR.

The Norcross is an adjustable garden cultivator of 5 blades. A very handy garden tool. By removing the center tooth you can straddle the rows. The teeth can be made to set close or wide apart. Can be detached from handle and attached to any wheel hoe. Price, \$1.00.

MIDGET NORCROSS.

3-prong, short handle Price, 50c.
3-prong, long handle. Price, 85c.

MAGIC WEEDER.

A perfect and efficient tool, made of best tempered steel and furnished with 6 and 18-inch handle. Price, 15c and 20c.

FRUIT PICKER.

Made of galvanized hard-steel wire, shaped so as to imitate the human hand. Without pole. Price, 50c.

GRAFTING WAX.

Trowbridge Brand.
Price, ¼ lb., 15c; lb., 50c.

PRUNING SAW.

16-inch.....\$1.20
18-inch..... 1.50
20-inch..... 1.75

SIMPLICITY HEDGE TRIMMER—SIMPLICITY PRUNER AND TRIMMER.

“Cutting more surface with more cutting surface,” the Simplicity tools will make it possible to trim and prune hedges quickly, easily and accurately.
The Trimmer is designed to cut new growth only, but the Pruner and Trimmer does both the trimming of the fresh growth and pruning back the old growth. Both patterns are so easily operated that no experience is necessary to do a first class job. They will trim every variety of hedge grown to any shape or cut desired.
“Simplicity” tools are made of the finest high-grade carbon steel, and will give you long service and satisfaction. Price, Trimmer, \$4.00. Pruner and Trimmer \$6.00.

(Write for descriptive circular).

WATERS' IMPROVED TREE PRUNER.

8 ft.....\$2.00
10 ft..... 2.20
12 ft..... 2.40

Extra Knives, 30c each.

LITTLE GIANT PRUNING HOOKS.

Without pole.
Extra heavy.
\$2.00 each.

HEDGE SHEARS.

American		English	
8 in.....	\$1.75	8 in.....	\$2.45
9 in.....	1.90	9 in.....	2.75
10 in.....	2.00	10 in.....	3.15
12 in.....	2.50	12 in.....	4.75

LOPPING SHEARS

No. 6 Forged blade and ferrule.... \$1.75
No. 4 Handy Andy (9-in. handles)...1.75
No. 3 American Draw Cut (22-in. handles)..... 2.75

THE RODERICK MOLE TRAP.

Self-setting by pressing down on lever. Very convenient feature, found on no other trap. Made from best spring steel, thoroughly galvanized. Simple and durable in its construction. Price, 85c.

OUT-O'-SIGHT MOLE TRAP.

This, while possessing all the good qualities of other traps, is especially adapted for setting under glass in hot beds. Price, \$1.25.

PRUNING SHEARS

No. 0 Pexto—Wire Spring; 8", each..... \$.50
No. 140 Pexto — Rose Shear; 6", each..... .60
No. 37 Tempered blades, polished; Black handles; 9", each..... .75
No. 41 Best steel, full polish; 9", each..... 1.25
No. 44 Nickel plated German Shear, best steel; 6", each..... 1.35
No. 39 Same as No. 41 but with ratchet nut; 9", each... 1.50
No. 100 Pexto — French style; 8", each..... 2.00
Pexto — Extra heavy full polished; 9", each..... 2.25

BUNCH VEGETABLE WASHER

Wash 200 Dozen Bunches An Hour

Save Time. Increase Profits.
Especially good on heavy soil.

Let Us Send Literature and Price.

*Beautiful Plants
Successful Gardens*

Guaranteed
to improve
your plants

These TABLETS are very concentrated, are high in per cent of vital elements, nitrogen, ammonia, phosphoric acid and potash, properly balanced, they dissolve quickly, giving immediate fertilization which promotes vigorous growth, more blooms, richer colors and bring vegetables two weeks earlier.

We recommend Plantabbs also because there is no waste. Economical, especially in larger sizes. 25c; 50c; \$1.00 and \$3.50.

Unbreakable Weather proof Screen Glass, transmits violet rays (Glass does not). Ideal for poultry house, fronts, windows and doors, and many other uses Standard Roll 36 in. wide, 100 ft. long. 15c per sq. ft.

Glass Fabric Scientifically processed white cloth, thin enough to admit violet rays, and yet strong enough for all weather. 5 yds., \$2.00; 10 yds., \$3.50; Larger quantities, 30c yd.

IMPORTED GRANULATED PEAT MOSS TORF MULL

Promotes growth by improving texture of soil and regulating supply of moisture

Investigate Its many advantages

Granulated Peat Moss has rapidly come into general use for horticultural purposes, and large commercial growers recommend it highly as a moisture retaining humus, unsurpassed for mulching. It is inexpensive and should be used liberally about the garden, greenhouse; for pot plants, window boxes and growing bulbs, etc. It is excellent for clayey soils, light or sandy soils, gravelly soils, beds, hotbeds, coldframes, greenhouse benches, in potting soil and as a winter protection for lawns. Also as a mulch on strawberry beds, perennial beds, for lillies, roses, vines, bush fruits, rhododendrons, azaleas, kalmias, blue berries, ferns, etc. Excellent as a top dressing for all evergreens. Every florist, market gardener and home gardener should thoroughly investigate the wonderful possibility of this material. Instructive literature on request.

Half bushel package (about 7 lbs.), 50c; Large Bale (13 cubic feet and covers 240 square feet 1 inch deep), \$3.50; 5 to 9 Bales, per bale, \$3.25, 10 bales or more, per bale, \$3.00.

O. K. POULTRY LITTER

is a coarse grade of Peat Moss and makes an ideal covering for floors of poultry houses and scratch pens. Absorbs dampness thereby keeping the flock healthy, and affording opportunity for plenty of exercise scratching for feed. \$3.50 per bale.

NEW FELINS VEGETABLE TYING MACHINE

•••••

Bigger and Better Than Ever

•••••

Save 3 to 8 Hours A Day
On Your Bunching Time

INCREASE YOUR PROFITS

Let Us Send Literature and Price

OLIVER CHILLED PLOWS.
Wood or Steel Beam.

A1 Light, one horse, wood beam, \$10.00.	Steel Beam,.....\$10.50
B Medium, one-horse, wood beam, \$12.00.	Steel Beam..... 12.75
10 Full, one-horse, wood or steel beam.....	16.00
13 Heavy, one-horse, wood or steel beam.....	18.00
19 Light, two horse, wood or steel beam.....	19.50
20 Medium, two-horse, wood or steel beam.....	21.00
40 Two- or three-horse, wood or steel beam.....	24.00
E Full, two-horse, wood.....	24.00
Wheel and jointer extra.	

OLIVER TRACTOR PLOWS.

The No. 9xx Oliver (two 12-inch bottoms) has been found to be the most practical for use with Fordson Tractors. Comparative tests in which this plow has been placed in competition with other makes have always resulted in favor of the Oliver. There are more Oliver tractor plows in use among our customers than any other and all are giving entire satisfaction. Let us send illustrated literature giving full description. Price, \$101.00.

SYRACUSE CHILLED PLOWS.

John Deere Syracuse Plows are the result of forty years study and experience in plow manufacture and "Quality" always has been the motto of the Syracuse Plow Co.

The Company has made a special study for years of shapes and the assembly of different materials in the same plow, with the purpose of fitting properly a particular plow for a particular section.

Syracuse plows have proved their worth through years of use. They are scientifically designed, built of the best material obtainable and are equipped with attachments which will permit of a fine, accurate and reliable adjustment for governing the plow.

Prices quoted are subject to 5% cash discount. Wheel and jointer extra.

One-horse Plows.

No. 50. Right, wood beam, light, one-horse, making furrow 2 to 5 inches deep and 8 to 10 inches wide: \$10.00.	
No. 52. Right, wood beam, medium, one-horse, making furrow 3 to 5½ inches deep and 9 to 11 inches wide. \$15.50.	
No. 53. Right, wood beam, heavy, one-horse or light two-horse making furrow 3 to 6 inches deep and 9 to 12 inches wide. \$17.50.	
No. 1464. Right, steel beam, \$17.50.	
No. 1465. Right, steel beam, \$15.50.	

Two-horse Plows—Wood Beam.

No. 603. Right, wood beam, light two-horse, making furrow 4½ to 6½ inches deep and 10 to 12 inches wide, \$20.00.	
No. 602 Right, and No. 502 Left. Wood beam, medium, two-horse, making furrow 5 to 7 inches deep and 11 to 14 inches wide, \$22.00.	
No. 601 Right, and No. 501 Left. Wood beam, heavy, two-horse or light, three-horse, making furrow 5½ to 8 inches deep and 12 to 16 inches wide. \$23.00.	

Two-horse Plows—Steel Beam.

No. 401 Right, and No. 301 Left. Steel beam, making furrow 5 to 8 inches deep and 12 to 15 inches wide. \$24.00.	
--	--

PLOW REPAIRS AT POPULAR PRICES.

SHOVEL PLOWS

Steel beam, single shovel. Price, \$4.00.	
Steel beam, double shovel. Price, \$4.50.	
Steel beam, triple shovel. Price \$6.25.	

DRAG SCOOPS.

No. 1. With runners..... \$9.50	No. 1 Maumee.... \$8.00
No. 2. With runners..... 8.50	No. 2 Maumee.... 7.00
No. 3. With runners..... 7.50	

STEEL FRAME SPRING TOOTH HARROW.

This Steel Frame Spring Tooth Lever Harrow is now a favorite with every farmer. The frame is made of angle steel and the bottoms are equipped with detachable runner shoes, which can be renewed when they become worn. Adjustable to any depth. 15-Tooth 2 Section Cuts, 53-inch.....\$24.00 17-Tooth 2 Section Cuts, 64-inch..... 25.50 23-Tooth 3 Section Cuts, 87-inch..... 36.00

SYRACUSE CULTIVATOR.

7-Tooth Diverse Cultivator, with regular spring teeth, adjusted by two levers. Very efficient one-horse tool. Weight 60 lbs. \$9.75

WOOD FRAME SPRING TOOTH HARROW.

This is the well-known, favorite Perry Harrow, Steel lined, guarded, protected bolt heads, perfect tooth seat.

16-Tooth Harrow.....	\$18.00
18-Tooth Harrow.....	19.50
20-Tooth Harrow.....	22.00

ALL-STEEL SPIKE TOOTH HARROW.

A spike-tooth Harrow with ever up. A smoothing Harrow with lever down. Made entirely of steel. The teeth can be instantly set at any angle from forward pitch to straight up or flanging backward.

One-horse, One Section, 4 ft. Cut, with Bale.....	\$ 8.75
Two-horse, Two Sections, 8 ft. Cut.....	20.25
Two-horse, Two Sections, 10 ft. Cut.....	21.75

DISK HARROWS.

8 Disk, 16 inches, 4 ft., 2 horse eveners and pole.....	\$42.50
10 Disk, 16 inches.....	47.00
12 Disk, 16 inches.....	52.00

TONGUE TRUCK FOR DEEP DISK HARROW

The Harrow Truck is a new device and enables the user to make a short turn and relieves the neck weight entirely. \$10.00.

EMERSON-BRANTINGHAM DISK HARROWS.

For Horse and Tractor Power.

If you are farming to make money, you cannot ignore the advantages and the economy of labor-saving machinery, and the farmer who labors along without the good implements that modern conditions demand, pays a higher price in the end.

The E-B Tandem Disk Harrow enables you to do more work in shorter time and with less man labor. With one of these double action machines one man can do the work of two men with single disks in the same length of time and the work will be done better. Besides it may be equipped with either a horse or tractor hitch, which is an advantage when both kinds of power are available. If desired, the rear section may be detached and the front section used alone as a horse or tractor-drawn single disk harrow. Many of our customers operating Fordson Tractors now have these harrows in use and are highly pleased with them. Quality and usefulness are built in. Let us send you illustrated literature and prices

72 Page
Catalog

Planet Jr. Farm and Garden Tools

Get Your
Copy

No. 4. Price.
complete, \$18.00.
Weight, 50 lbs.

No. 4-D. As a
Seeder only, Price
\$14.25.

Holds $2\frac{1}{2}$ qts. of
seed. The most
popular of all seed-
ers. Always gives
entirely satisfactory
results.

No. 4.—Combined
Hill AND DRILL
SEEDER AND CULTI-
VATOR

No. 300 DRILL SEEDER.

A plate or disc seeder for all seeds from the smallest up to and including peas, beans and corn. Growers of peas and beans will appreciate this seeder as it does not break the seed and sows with great regularity. Only three plates each with thirteen holes, making ample adjustment for various seed. Hopper holds four quarts and is removable which makes easy filling and emptying. Net weight 36 pounds. \$20.00

NO. 35.—PLANET, JR. SEEDER ATTACHMENT FOR WHEEL HOES AND GARDEN PLOWS.

Price,
\$6.50.

Can be attached to any Planet, Jr. Wheel Hoe or Garden Plow, with the exception of the Fire Fly Plow. Sows a five cent packet of seed as economically as a full hopper, at the proper depth and thickness, and produces a uniform stand. Attached with one bolt in an instant. Seed index accurate

and arranged for all garden seeds

NO. 220.—NEW PLANET JR. FERTILIZER DRILL.

Saves Time, Money—Produces Bigger Crops

Will distribute 100 to 2000 pounds of commercial fertilizer to the acre, in 9 in. to 36 in. rows. Perfect agitation of fertilizer. Built to give many years of service without requiring repairs. Easily operated by hand, but equipped for drawing by horse. A very profitable investment for any market gardener. Price \$27.00.

No. 12.—DOUBLE AND SINGLE WHEEL HOE.

Equipment: One pair of 6-inch hoes, four steel cultivator teeth, one pair of plows, two leaf lifters. All oil-tempered. Price, with attachments as in cut, \$10.75.

NO. 13.—WHEEL HOE.

Most useful. Has same frame, wheels and handles as No. 12, but has for equipment one pair of 6-inch hoes only. Price, \$8.00.

NO. 16.—SINGLE
WHEEL HOE,
CULTIVATOR,
RAKE AND PLOW.

Equipment: One pair of 6-inch hoes, three cultivator teeth, one large garden plow, one 7-inch rake, one 4-inch rake, one leaf guard. All oil tempered. Price, \$9.00.

NO. 17.—SINGLE WHEEL HOE.

Is of the same construction as No. 16, omitting the two rakes. Price, \$7.75.

NO. 17½.—SINGLE WHEEL HOE.

Equipment. One pair of 6-inch hoes, three steel cultivator teeth, one leaf lifter. Price, \$6.75.

NO. 18.—SINGLE WHEEL HOE.

Frame and wheel as No. 16, but has for equipment one pair hoes only. Price, \$5.75.

NO. 19.—SINGLE WHEEL HOE CULTIVATOR AND PLOW.

Is strong, well made, with 15-inch high wheel, which makes it easy running; equipped with one 2-inch cultivating tooth, one 4-inch cultivating tooth, one 5-inch sweep, one 10-inch sweep and one plow. Price, \$6.00.

NO. 119.—GARDEN PLOW AND CULTIVATOR—HIGH WHEEL.

The favorite high wheel tool. 24-inch steel wheel. Wonderful assortment of cultivating attachments. Does all plowing, cultivating, and furrowing required in the home garden. Price, \$4.00.

NO. 8.—HORSE HOE AND CULTIVATOR.

Equipment: Four 3x8 inch cultivator steels; one 4x8 inch cultivator steel; two 6 inch hillers; one 7 inch shovel; lever wheel; lever expander; depth regulator. The farmer's favorite. Price, \$16.25.

NO. 9-D.—HORSE HOE AND CULTIVATOR.

Same as the No. 8, less the depth regulator and steel lever wheel. Strong and light. Does perfect work. Price, \$12.25.

NO. 9-D.—PLAIN 5-TOOTH CULTIVATOR.

Equipment: Four 3x8 inch cultivator steels; one 4x8 inch cultivator steel; lever expander. Hollow steel standards and steel draft hook. Simple, practical—always ready for work. Price, \$10.75.

NO. 4-D.—PLAIN CULTIVATOR.

Same as the No. 9-D, but does not include lever expander. Patent beveled steel teeth. An every-day, all-day tool. Price, \$8.50.

NO. 101-D.—PLAIN CULTIVATOR.

Equipment: Five 3x8 inch cultivator steels; lever expander. Lever is all steel; simplified and improved; works very easily. Just the tool for sandy soils or light cultivating. Price, \$9.25.

NO. 100-D.—PLAIN CULTIVATOR.

Same as the No. 101-D, less the lever expander. The right tool for sandy soils in this section. Price, \$7.50.

NO. 90-D.—12-TOOTH HARROW.

The fruit, berry and vegetable grower's favorite. Does fine, thorough cultivation. Expands to 32 inches; contracts to 12 inches. Price, \$10.75.

NO. 92-D.—PLAIN 12-TOOTH HARROW—NO WHEEL.

A light, but effective cultivator for fine work—at a moderate price. Price, \$9.75.

BUCH'S SOIL PULVERIZER

Simple in construction. Strong, rigid frame. Angles 2½x3x½" with Heavy Cast Hangers, 1½" Axle. Inclosed Dust Proof Wood Bearings with Hard Oil Cups.

Solid one-piece Discs 4" face, 15" front, 12" rear. Pulverizer so constructed that Discs must alternate and impossible to get out of alignment. End Discs closed to keep out stones and dirt.

With our Trailer Arm, both front and rear Gang work independent. No division of weight, both front and rear gang pulverizing the soil under all conditions in uneven ground. This feature makes our pulverizer light in draft.

No trouble to set up. Can't be put together wrong. Tongue Truck Extra.

No.	Length	Rolling Capacity	Weight	Price
625	6 ft.	62 inch	800	\$ 62.50
626	7 ft.	74 inch	900	68.50
627	8 ft.	84 inch	1000	75.00
628	9 ft.	98 inch	1100	83.00
630	11 ft.	122 inch	1350	100.00

Fore Truck, Extra \$8.50; Extra for Eveners, \$2.75.
Tractor Hitch, in addition to Pole and Seat, Extra \$3.00.

IRON AGE CULTIVATORS
Plain 5-tooth cultivator; expands 9 to 24 inches. Price, \$5.85. Lever Expander, \$1.50 extra.
I. A. extra heavy Cultivator, plain. Bent Frame. Price, \$7.65.
Plain Wheel, \$1.00 extra

I. A. Cultivator and horse hoe combined, as illustrated.
Price, \$11.50.

WHITE'S PLAIN 5-TOOTH BENT FRAME CULTIVATOR, \$5.00

IRON AGE COMBINED HARROW AND CULTIVATOR.

A splendid tool for cultivating crops in rows; thoroughly pulverizes and loosens the soil without throwing dirt on the small plants. The teeth are reversible and can be changed in 4 different positions. Expands 11 inches to 36 inches. Price as shown in illustration, \$8.00.

Price, with lever expander, \$9.25.

HAYING TOOLS AND IMPLEMENTS.

EMERSON-BRANTINGHAM STANDARD MOWER

E-B Standard Mowers are more easily handled, run lighter and are more durable than any other mowing machine. The manner in which the cutter bar is carried on the wheels, together with a proper distribution of the weight, greatly increases the traction power of the machine, overcomes side draft and weight on the horses' necks, giving it a powerful cutting capacity which enables it to cut through the heaviest grass without materially increasing the draft. The gear and driving mechanism is the three motion gear and is especially valuable in obtaining the high speed required without undue strain on any portion of the machine. This mower has many other points of superiority and we would be pleased to give you full information. Prices on request.

EMERSON-BRANTINGHAM SELF-DUMP RAKE.

The only absolute automatic lock-down self-dump rake. Built for light draft, efficient work and durability.

8 foot 20 teeth.....	\$40.50
8 foot, 25 teeth.....	42.00
9 foot 23 teeth.....	43.25
9 foot, 28 teeth.....	45.00

STEEL LAND ROLLERS

Drums of Heavy Tank Steel. Angle Steel Tops—Angles 3x3x5-16 inches—Extra Strong. Axles—1½-inch Round Steel. Closed Pressed Steel Heads. Hardwood Boxings—Acknowledged by all to be the best. Tractor or Horse Hitch.

- No. 102½—8 ft., 2 section, 26 inches diameter; 550 lbs., \$40.00;
No. 103½—8 ft., 3 section, 26 inches diameter; 600 lbs., \$42.00;
No. 105½—8 ft., 2 section, 24 inches diameter; 510 lbs., \$36.00;
No. 106½—8 ft., 3 section, 24 inches diameter; 535 lbs., \$40.00;
No. 120½—9 ft., 3 section, 24 inches diameter; 585 lbs., \$44.00;
No. 118½—4½ ft., 2 section, 24 inch diameter; 370 lbs., \$34.00.
Extra for Eveners, \$2.75.

McWHORTER FERTILIZER DISTRIBUTORS

McWhorter Fertilizer Distributors have been used for many years with great success and have features not to be found on any other fertilizer distributor. The McWhorter does not depend on gravity for feeding fertilizer, but positive belt force feed which can be adjusted to feed any amount required. The spouts are adjustable and can be set to feed the number of rows desired, or to broadcast. Each set of spouts can be adjusted to feed any amount of lime or fertilizer desired from a few pounds to over a ton per acre. The feed adjustment of each set of spouts is regulated independently. By moving a lever the entire machine can be shut off while going to or from the field. The hopper on the larger machines is so constructed that it sits down over the wheels. This patented feature brings the hopper very close to the ground, thereby eliminating waste of material on windy days, and making the loading much easier.

No. 21—Hand Fertilizer Distributor—Capacity 80 lbs.; width 30 inches; weight 85 pounds. Has all McWhorter features; ideal for gardeners requiring a small distributor. \$20.00.

No. 12—Light-draft one-horse machine, excellent for both furrow work and top and side dressing growing crops, as it makes a fine and even distribution. Capacity 200 lbs. width 3 ft. 2 in., weight 145 lbs. \$40.00.

No. 11—Constructed on the same general lines as No. 12, but is much lower in price. It has only one feed belt and one set of spouts and will spread from 3 to 15 inches. Capacity 200 lbs., weight 136 lbs. \$33.50.

No. 34—One-horse machine, equipped with 16 Spouts. Will sow broadcast or in rows. Can be used for side dressing on both sides of two rows of growing crops or one side of four rows. Capacity 375 lbs., width 6½ ft., weight 260 lbs. \$68.00.

No. 44—One-horse machine similar to No. 34, but with wheels adjustable to any width row, a patented feature not found on any other machine. It will broadcast 7 ft. wide or can be adjusted to fertilize three furrows 3 ft. apart and two furrows up to 6 ft. apart. Will side dress both sides of two rows of growing crops or one side of four rows. Capacity 400 pounds., width, 7 ft., weight 266 lbs. \$73.50.

No. 13-C—One-horse machine intended for row work only. Has adjustable rubber spouts so that they can be set for any width row desired. Capacity 400 lbs., width 7 ft., weight 260 lbs. \$66.75

No. 13-D—Similar to the 13-C but has three wider belts with six adjustable rubber spouts to each belt, and can be used as a broadcaster as well as for rows. \$72.00.

No. 26—Two-horse machine, equipped with 24 spouts, used for broadcasting fertilizer or lime. Capacity 540 lbs.; width 9 ft, weight 373 lbs. \$93.50.

Light running;
practical design.

12 in.—\$6.00
14 in.— 6.40
16 in.— 6.75

TERRACE SPECIAL and PLAIN STERLING

12 in.—\$5.00
14 in.— 5.25
16 in.— 5.50

STERLING—BALL BEARING

LEADER MOWER

High wheel
Ball Bearing.
Very light run-
ning. Wheels 9
in. high; reel 6
in. in diameter;
all latest im-
provements;
noiseless action;
keen cutting;
self-sharpening;
high speed.

12 in., \$6.75; 14 in. \$7.00; 16 in. \$7.40; 18 in. \$7.75.

ARDMORE LAWN MOWER (Style J). BALL BEARING.

High Wheel. Case-hardened Bearings, double geared. Every detail of this Mower is in keeping with any highgrade machine on the market. High cylinders and very easy running.

14-in. cut 4 knives, net. \$ 7.50
16-in. cut, 4 knives, net. 7.75
18-in. cut, 4 knives, net. 8.25

SUPREME LAWN MOWER

Ball bearing; 4 Crucible Steel Blades; no screws or bolts to adjust; all necessary adjustment made by one thumb screw; floating knife bar; quiet in operation; 10 inch drive wheels; revolving cutter 6 inch in diameter; 14-in., \$11.50; 16-in., \$12.00; 18-in., \$12.75.

KING HIGH GRASS MOWERS

Driving wheels 9½ inches high; 6-inch ball-bearing revolving cutter; blades crucible steel, hardened and tempered in oil.

14-inch cut., \$13.50
16-inch cut., 14.25
18-inch cut., 15.00

Ball
Bearing

Plain Bonehardened Bear-
ings, 5 Blades, 10-inch
Drive Wheels.

PHILADELPHIA STYLE "K" PLAIN BEARING

16-inch. . . . 17.50
18-inch. . . . 18.75

INDEPENDENCE MOWER Roller Bearing

Philadelphia
Independence
14-inch. . . . \$13.50
16-inch. . . . 14.00
18-inch. . . . 14.50

Philadelphia All Day Mower. Plain Bearings.

14-inch. . . . \$12.00
16-inch. . . . 12.50
18-inch. . . . 13.00

PHILADELPHIA HIGH-WHEEL "GRAHAM" MOWER

Represents the
highest achieve-
ment in lawn
mower manufac-
ture.

All steel cylinder
6½-in. diameter;
four blades; driv-
ing wheels 10 in.
No front rod. Re-
movable box caps
to take out cylin-
der for sharpening

Price, 15-in., \$22.75; 17-in., \$25.00; 19-in., \$28.00.

PHILADELPHIA EAGLE HORSE LAWN MOWER AND ROLLER.

This is the latest production of this well-known factory, and is now acknowledged by every user to be the best Mower in operation. 30-in., with seat, shafts and draft pole, \$135.00; 35-in., \$160.00; 40-in., \$180.00. Special price on motor mowers.

CALIFORNIA SCIENTIFIC SPRINKLERS.

These sprinklers, which are especially adapted for use on lawns and golf links, supply a long-felt need for an efficient simply constructed sprinkler, which has no movable parts to get out of order. The spray produced is just like rain and a remarkable distance is covered. Four, five, six and seven foot lengths. 50c per foot.

FOUNTAIN
SPRINKLER

FOUNTAIN SPRINKLER Made of Heavy Brass.

Easily moved over the lawn without turning off the water. The mist-like spray is a veritable "thing of beauty." Price, 75c.

REVOLVING SPRINKLER

These sprinklers are compactly and strongly made with phosphor-bronze bearing.

Eureka Sprinkler, 12 in. high, Price, \$1.85.

Newport Sprinkler, 24 in. high. Price, \$3.25

REVOLVING SPRINKLER

GRASS COLLECTOR

Made of best quality duck with galvanized iron bottom, easily attached or detached. 12 in., \$2.75; 14-in. \$3.25; 16-in. \$4.00; 18-in., \$5.00. D & M Collectors, No. 1 \$1.50; No. 2 \$1.60.

LAWN ROLLERS

These rollers represent all the latest and up-to-date improvements; they are fitted with hardened steel roller bearings, which reduces the draft by 40 percent; the counter-balance attached on the outside of the drum induces the handle to stand in an upright position. The outer edges of the drum are well rounded to prevent cutting.

No. 605 has plain bearings and no scraper.

Water Ballast
Lawn Roller

WATER BALLAST LAWN ROLLER

No. 601—14x24 Empty	70 lbs.; filled 175 lbs.	Price,	\$15.50
No. 602—18x24 Empty	85 lbs.; filled 265 lbs.	Price,	18.00
No. 603—24x24 Empty	110 lbs.; filled 420 lbs.	Price,	21.00
No. 605—14x24 Empty	68 lbs.; filled 175 lbs.	Price,	12.00

	Diameter	Total Length	Weight Pounds	Price
Cast Drum Rollers	Face			
No. 504—2 section	20	20	250	\$24.50
No. 507—2 section	20	24	300	30.00
No. 509—2 section	24	20	400	39.00

MANNS' *Quality-Bred* CHICKS

FRESH, HEALTHY CHICKS

Day-old Chicks can not be properly cared for in a show-window or in a busy seed store and for this reason we do not regularly carry them in stock. It is requested therefore, that you anticipate your requirements and order as far in advance as possible. You can in this way, specify a definite delivery date and we can serve you direct from our hatchery with strong chicks full of vitality.

ORDERS

It is very important that you let us have your order as early as possible. Just as soon as you have read this page is the very best time. Should there be a decline in the market price of chicks, we will make an adjustment to equal the reduction.

Customers not having charge accounts with us are requested to send at least one-fourth of the price when placing orders; remittance for balance to reach us before shipment is made. No chicks sent C.O.D. No orders accepted for less than 25 chicks of any one variety.

DELIVERIES

Chicks are forwarded postpaid and brief instructions are sent with each order, suggesting best methods of care and feeding. Be prepared; see that hovers are in good condition, and have a ready supply of grit, charcoal, and Buttermilk Starting Feed.

Please Note—Inspect chicks immediately upon arrival. If full count live chicks are not received, have postman sign a statement showing number dead, mail this to us and a satisfactory adjustment will be made.

Rhode Island Red

RHODE ISLAND REDS

One of the best layers of the heavy breeds and an excellent table fowl. Somewhat rangier than Plymouth Rocks but the strongest competitor. A very profitable breed for the farmer. They are universally popular however, with all poultrymen.

WHITE ROCKS

Differ from Barred Rocks only in their plumage. Quiet and easily confined. Popular because of their beauty, productiveness and value for market purposes; they dress easily having no dark pin feathers. Notable layers of large brown eggs.

White Wyandotte

WHITE WYANDOTTES

One of the oldest and most popular of all American breeds, and ranking among the highest as egg producers. They have broad backs, deep round bodies, large red rose combs, yellow skin, and heavy close fitting plumage which enables them to withstand cold weather. Very striking in appearance; unsurpassed for table fowl.

We Guarantee Delivery
100% LIVE VIGOROUS CHICKS
with profit producing characteristics bred into them

They are hatched from eggs of free-range stock and inherit the physical perfection made possible only by an abundance of sunshine, fresh air and exercise.

Place your order with us for your season's supply of Day-old chicks, and you will have taken the first step toward a very profitable poultry year.

White Leghorn

WHITE LEGHORNS. Most widely used breed of chickens, being the best of all for egg production.

The strain which we offer are bred to suit the requirements of commercial egg farms and every possible means has been employed in developing the stock for this purpose.

BUFF ORPINGTONS

A choice table bird—either as broiler or roaster. They develop rapidly, eight week old cockerels often weighing two pounds. They are excellent winter layers, stately in appearance, with long, round deep bodies, full breasts and broad backs.

JERSEY BLACK GIANTS

This new breed is becoming more popular every year. The plumage is lustrous greenish black, skin a rich yellow, finest; table fowl, extremely large and heavy; excellent layers of large brown eggs.

BLACK MINORCAS

Noted chiefly for their very large white eggs which command highest prices in the New York Market. They are hardy and begin laying when four to five months of age. They have glossy black plumage, large combs, black legs and white skin.

BARRED PLYMOUTH ROCKS

First distinctively American breed and still the most popular of the all-purpose breeds. Barred Rocks are hardy and vigorous; excellent winter layers, and also preferred by experienced buyers of table fowl because of their abundant breast meat and bright yellow skin. Easy to raise and will thrive anywhere.

Barred Plymouth Rock

PRICES

	Jan.-Feb. March	April	May	June
All Breeds (Except Leghorns and Jersey Giants)				
25	\$4.50	\$4.25	\$4.00	\$3.75
100	16.00	15.00	14.00	13.00
1000	150.00	140.00	130.00	120.00
White Leghorns				
25	\$4.25	\$4.00	\$3.75	\$3.50
100	15.00	14.00	13.00	12.00
1000	140.00	130.00	120.00	110.00
Jersey Black Giants				
25	\$5.00	\$4.75	\$4.50	\$4.25
100	18.00	17.00	16.00	15.00

Order Early—You will be given full benefit of any reduction in prices until shipping date.

POULTRY SUPPLIES, FEEDS AND REMEDIES

DON'T BREAK THE CHAIN OF

Conkey's

THE ORIGINAL

BUTTERMILK FEEDS**Conkey's Buttermilk Starting Feed**

with Y-O (Yeast and Cod Liver Oil)

This superior chick mash was the first commercial poultry feed containing buttermilk; that is why we call it the only original buttermilk starting feed.

Conkey's carries buttermilk in just the right proportion as an aid in prevention of bowel troubles, white Diarrhoea, "leg weakness," etc. The buttermilk is semi-solid buttermilk, blended with the other ingredients by the original process in such a way as to preserve the appetizing, tonic, and other properties of the newly-churned product. Buttermilk is also rich in one of the vitamins necessary to growing birds. It is a wonderful appetizer, aid to digestion, and flesh builder.

FEED IT FIRST 8 WEEKS.

Conkey's is all the chicks need the first eight weeks, except greens, charcoal, grit, clean water and some fine scratch grains in the litter for exercise. Give grit and water from the start. During the second week add green stuff and in the fourth week finely cracked grains, like Conkey's Chick Grains. Prices 2½ lbs. 20c; 5 lbs. 35c; 10 lbs. 60c; 25 lbs. \$1.25; 100 lbs. \$4.75.

Conkey's Buttermilk Growing Mash

This mash is fed after the chicks are eight weeks old. It is balanced for rapid and even development of muscles, bone, vital organs and feathers. Like all Conkey's mashes it is low in fibre, clean and always uniform.

The Growing Mash differs materially from the Starting Feed—meat scraps are added, bone is increased, and corn decreased—growing birds demand a heavier diet than delicate baby chicks. Prices, 10 lbs. 50c; 25 lbs. \$1.15; 50 lbs. \$2.25; 100 lbs. \$4.00.

Conkey's Gecco Buttermilk**Grower with Y-O** Priced same as above.**Conkey's Buttermilk Laying Mash**

To produce eggs abundantly, the flock must have a good scratch grain mixture, a regular supply of green feed, plenty of water, and a good Dry Mash. One or two of these items will not be sufficient to permit the hens to do their best; all four feeds are absolutely necessary and experienced poultrymen have learned this from experience. Our laying mash is very low in fibre and just right in protein for layers: it is uniform in quality and always dependable.

Prices, 10 lbs. 50c; 25 lbs. \$1.10; 50 lbs. \$2.10; 100 lbs. \$3.85.

Conkey's Chick Grains

Well balanced, clean, fresh, nutritious feed. Price, per 100 lbs. \$3.15

Conkey's Growing Grains

The very necessary small scratch feed for the proper development of young fowls. Price per 100 lbs. \$2.95.

Conkey's Scratch Grains

Wholesome, clean grains, correctly mixed to give a well-balanced ration. Contains no grit and no corn. In mixing this feed we have made quality the first consideration but believe that our price is attractive as well. We shall be pleased to mail sample. Price, per 100 lbs. \$2.90.

AVICOLFor White
Diarrhea
Stops Chicks Dying

Avicol is positively guaranteed for both prevention and treatment. Easy to give. Simply drop it in the drinking water. It will pay you to give Avicol to all your chicks this year, and keep them healthy and free from disease. Prices, 50c and \$1.00.

"T. S. F."Kills Chicken Lice
Both Young and Old

This is the method endorsed by the U. S. Department of Agriculture for killing all poultry lice. It never fails to do the work. Three sizes, 35c; 60c and \$2.50. (If by mail, add 10c for postage and packing.)

DONSUNGMAKES HENS
LAY
GUARANTEED

A wonderful tonic that acts directly on the egg-laying organs and is beneficial in every way. Makes chickens healthy, keeps them developing, and gets the eggs. Prices, 50c, \$1.00 and \$5.00.

Roup Over

The sure way to treat Colds Roup and Canker. Used and endorsed by leading poultrymen everywhere. Prices, 50c and \$1.00.

Conkey's
Y-O
TRADE MARK
YEAST WITH COD LIVER OIL

Y-O is a smooth brown powder in which Marmite yeast and cod liver oil is combined—by a special sealing process—in a highly concentrated form, whereby vitamins A, B, and D retain their potency over a long period of time. Y-O is Nature's own storehouse of Vitamins A, B, and D; plus man's ingenuity in concentrating their numbers and prolonging their effectiveness.

A small amount of Y-O introduced in the mash supplies Baby Chicks with an abundance of vitamins. Result: chicks make amazingly rapid growth, have NO LEG WEAKNESS and practically NONE die.

Feed the growing stock Y-O. Then their rapid development, their blood-red combs, yellow legs, lustrous plumage and alert bearing will amaze and delight you. You will experience the "big thrill" that always comes when the whole flock of pullets snap into a lay almost simultaneously and, like a great factory, throb and pulsate with life and action.

One cent's worth of Y-O will feed one hen 13 days. Just one extra egg will pay the cost and make a profit. Prices—1 lb. 65c; 2 lb. pkg. \$1.15; 5 lb. pkg. \$2.50; 25 lb. drum, \$11.25; 50 lb. drum, \$20.00; 100 lb. drum, \$32.50.

SELL EGGS By Mail

To Your City Friends Shipped in Aluminized

METAL EGG CRATES

Indestructible; pays for itself in a few shipments; lasts years; makes interchangeable shipping easy. Buy yours now and realize more money for your eggs. Your friends want them.

The Metal Edge Filler is a wonder. A new invention and cannot be beat for safely carrying Eggs by mail. Light in weight but strong.

Write us about Butter-Egg
Crates

11-doz. size.....	\$1.25	6-doz. size.....	\$2.50
2-doz. size.....	1.50	9-doz. size.....	3.25
3 doz. size.....	1.75	12-doz. size.....	4.00
4-doz. size.....	2.00	15-doz. size.....	4.75

Postage Extra

TOP FILL FOUNTAINS

Provides pure, fresh water at all times. The double wall construction retards freezing and keeps water cool in summer. Fills from the top, easily cleaned, and feeds automatically.

- No. 1—Cap. 1 gal, ea... \$1.50
 No. 2—Cap. 2 gal., ea.. 2.25
 No. 4—Cap. 4 gal., ea.. 2.75

DROP BOTTOM FOUNTAIN

Drop Bottom, easy to fill and to clean. Has wire handle and may be hung on the wall out of the litter and dirt.

- No. 40—Cap. 2 qts., ea... \$.85
 No. 41—1 gal., ea..... 1.00
 No. 42—2 gal., ea..... 1.25
 No. 136—Buttermilk feeder, 1 gal.....\$1.50

INSULATED WALL FOUNTAIN

Thick double walls packed with an efficient insulating material which keeps the water at an even temperature in winter or summer.

Feeds the water automatically, no valves or springs. Made of heavy galvanized iron with strong carrying handle.

- No. 5—Cap. 2 gal., ea.. \$3.00
 No. 6—Cap. 3 gal., ea.. 3.50
 No. 7—Cap. 5 gal., ea.. 4.50

WALL FOUNTAINS

A large capacity fountain, made of heavy, tight coated, galvanized iron. Easy to fill, and nothing about it to get out of order.

- No. 74, 5 gal. Each... \$1.75
 No. 78, 10 gal. Giant Fountain, each.... \$2.95

HEATER FOUNTAINS

A good reliable fountain with heater. Made of heavy galvanized iron, easily filled, with nothing about it to get out of order.

Made in two sizes, with a capacity of 5 and 10 gallons, and the lamp holds sufficient kerosene to burn continuously for one week.

- No. 75—5 Gal., each..... \$3.60
 No. 79—10 Gal., each..... 4.85

DRY MASH HOPPERS

A strictly high quality hopper, properly designed. The curved bottom keeps the feed in easy reach, and the taper shape of the hopper prevents the feed from clogging. Height 19 inches.

- No. 35—Width 8½ in., ea..... \$1.50
 No. 36—Width 12 in., ea..... 1.75
 No. 13—Width 18 in., ea..... 2.25
 No. 37—Width 24 in., ea..... 2.60

AUTOMATIC FOUNTAIN

A perfect automatic valve and float, to regulate the flow of water to a drinking dish. The valve mechanism is entirely of brass, nickel finish, with nothing about it to rust or clog up. Positive in action.

- No. 30—Automatic Valve and Float only, each \$.90
 No. 31—Water Pan only. Heavy galvanized iron. each..... .40
 No. 31A—Automatic Valve and Pan complete, ea. 1.25

GRIT BOXES

Economical and practical for feeding grit, shells, etc.

Thoroughly well made, no solder used in their construction

- No. 45—2 Compartment, ea..... \$.40
 No. 9—3-Compartment, ea..... .80
 No. 90—4-Compartment, ea..... 1.00

OAT SPROUTER

The frame is of steel, well braced and neatly painted. Has six heavy galvanized iron pans. Five of the pans have perforated bottoms to secure the proper drainage, and the bottom pan is solid to hold the drippings. Packed knocked down, one in a crate. Shipping weight 25 pounds.

- No. 110—Each..... \$6.00

FOUNTAIN AND BROODER HEATER

Can be used with all styles of fountains, and effectively prevents water from freezing.

It is also an excellent heater for small brooders.

- No. 10—Each..... \$1.90

STAR FOUNTAIN AND FEEDER

Made of a single piece of rust-resisting metal. No solder, no seams, no loose parts. Suitable for feed as well as water. Little chicks cannot drown. Fits any Mason jar in 1-Pint; 1-Quart, and 2-Quart sizes.

(Glass jar not included)

No. 32—Each \$.10
No. 133—Tin plate, Each.10

ROUND CHICK FEEDERS

A great feed saver, and can also be used for water or milk. Accurately stamped with dies. Top fits snugly, yet is easily taken off for filling and cleaning.

No. 11—Diam. 6 in., with 8 holes, each. \$.10
No. 12—Diam 8 in., with 12 holes, each.20

FEEDERS

For chicks and growing stock. Galvanized iron. No seams, rivets, or solder. Sliding top easy to fill and keep clean.

No. 27—Length 10 inches, each. \$.20
No. 28—Length 20 inches, each.30

ALUMINUM LEG BANDS

No. 130. Aluminum, with extra large raised numbers. Easy to read, adjustable for any size fowl. Quickly applied.

Package of	12	25	50	100	500	1000
Price	.15	.25	.45	.75	3.50	6.00

SPIRAL BANDS

Best quality. Fast colors. Made in Six sizes and ten colors: White, Black, Dark Blue, Light Blue, Red, Pink, Garent, Green, Yellow, Purple.

Sizes: Asiatic, American, Mediterranean, Bantam. 25 bands, \$.25; 50 bands, \$.40; 100 bands, \$.75.
Baby Chick and Pigeon. 25 bands, \$.20; 50 bands, \$.35; 100 bands, \$.50.

LARGE CAPACITY FEEDERS

Fine Feeders for growing stock, ample capacity and great time and labor savers. Two sizes.

No. 140—Length 21 in. Holds 10 qts. 32 Feeder holes, ea. . \$1.20
No. 141—Length 35 in. Holds 17 qts. 54 Feeder holes, ea. . 1.80
No. 146—Hopper only, to fit No. 140 Feeder. Holds 5 qts. each. \$.50
No. 148—Hopper only, to fit No. 141 Feeder. Holds 9 qts., each.75

SINGLE FEEDING TROUGHS

Made of the best quality galvanized iron, accurately stamped with dies. No sharp or rough edges to injure the chicks. Sliding top. Easy to fill and clean.

No. 55—12 in., 9 holes, each. \$.25
No. 56—18 in., 13 holes, each.35
No. 57—24 in., 18 holes, each.45

DOUBLE TROUGHS

Double troughs with sliding top, easily filled and cleaned. Accurately stamped with dies. No rough edges.

No. 58—Length 12 inches, each. \$.30
No. 59—Length 18 inches, each.45
No. 60—Length 24 inches, each.60

RED CHIEF HAND CORN SHELLER.

Clamps on barrel or box; has patented oval-shaped teeth, shelling the corn without cracking the grains. It shells very easily and throws out the cob every time. Price, \$2.25.

RED CHIEF RAPID GRINDING MILL.

It is built on scientific lines and combines all the elements which make up the most satisfactory Hand-Power Mill for grinding small grain. The burrs are extra hardened and self-sharpening; they cut; do not mash.

The only Mill that can be cleaned and adjusted in a moment's time without the use of a wrench.

No. 2. Is operated by a crank; chains or bolts to a box as desired. Has hooks on which to hang a bucket.

Capacity 1-2 bushels per hour.

Price, \$5.00.

No. 5. Has a fly wheel which makes the Mill run steady, and requires the least possible power to turn it. It fastens by chains or bolts.

Capacity 2-4 bushels per hour. Price, \$7.25.

No. 10. This Mill has beautiful outlines, as shown in illustration; will grind any kind of small grain; also oyster shells and dry bone.

Capacity 2-4 bushels per hour.

Price, \$9.00.

No. 20. Combined Hand-Power Mill. It is substantially constructed; all bearings bronze metal, and when run a speed of from 300-450 revolutions per minute will grind from 10-20 bushels per hour. Power required, from 1½ to 2 horse-power engine. Price, \$21.00.

Extra Attachments for No. 20 Mill.

These devices, including Corn Sheller and Table Meal Separator, can be attached to any No. 20 Mill now in use, and can be operated combined or independently, as may be desired, and enable the user to shell, grind or crack corn, also save fine table meal in one operation.

Table Meal Separator. Price, \$6.50.

Corn Sheller Attachment. Including hand crank. Price, \$9.00

MANN'S NEW MODEL GREEN BONE CUTTERS.

The easiest running and the most rapid, green bone cutting machine made. Has a perfect automatic and self-governing feed. Adjustable to cut coarse or fine, fast or slow. The hinged opening cylinder is easy to clean and adjust without taking the machine apart. The bones are dropped into the open cylinder, no careful feeding or packing necessary. The machine regulates itself to the resistance of various size bones.

No. 231, Style 5B. With balance wheel cylinder 6 inches in diameter. Price, \$15.00

No. 232, Style 5BM. With balance wheel and mounted on heavy iron stand; cylinder 6 inches in diameter. Price \$18.00.

No. 234, Style 7½. Hand or power. Tight and loose pulleys 11½x2½; cylinder 7½ inches in diameter. Capacity 50 to 100 lbs. of bone per hour. ½ to 1 h. p. required. Price, \$28.00.

(Send for Complete Catalogue on Power Machines)

103 Degree Incubators

The Hen's Only Rival

Six Sizes: 110 to 1100

CAN BE OPERATED IN ANY KIND OF ROOM. NO SPECIALLY PREPARED CELLAR NECESSARY

Absolute Automatic Control
Ease of Operation

- Three Remarkable Patented Features:
- THE TILTING CHIMNEY
 - THE TWO-WAY CIRCULATION
 - THE VENTILATION AND MOISTURE CONES

It hatches like the hen. It cannot overheat. It cannot underheat. It's ventilating system hatches more eggs. It supplies the right amount of moisture. It needs less attention than any other incubator. It is the most durable and reliable incubator built. It is safe from fire and carries the Underwriters' label. It hatches the highest per cent of chicks.

IT IS GUARANTEED TO GIVE SATISFACTION.

With this excellent machine, having many patented features, and built to last a lifetime, you can easily take off big hatches of strong, healthy chix that will live, grow rapidly, and **Make You Money.**

The 103-Degree is the best incubator investment your money can buy. It will be your silent, active partner, because it will hatch bigger hatches of strong, healthy chicks that will live and grow; without worry, bother and attention on your part.

The 103-Degree has so many exclusive features, is so different, so unusual, so far ahead of all others, that you must see it, run off a hatch with it, compare it point by point, and in results with others that you have in mind—then you will see how superior the 103-Degree is in every way. You run no risk—a rigid guarantee protects you. We know the 103-Degree will satisfy you, absolutely—and in the long run is the cheapest incubator for you to buy. There is no incubator "just as good."

Large 48-page special catalogue will be mailed you for the ask ing. Or call and inspect the machines at our warerooms

PRICES

110 Egg—weight 105 pounds.....	\$39. 40
150 Egg—weight 120 pounds.....	45. 85
200 Egg—weight 135 pounds.....	57. 40
300 Egg—weight 185 pounds.....	76. 50
550 Egg—weight 285 pounds.....	115. 80
1100 Egg—weight 570 pounds.....	231. 60

All sizes equipped with new automatic turning trays,

OAKES HOT WATER INCUBATOR

This round shaped, all-metal incubator has been approved by poultry raisers because of its simplicity of construction and economy of operation. There is nothing to get out of order, nothing complicated that needs watching—no failures. Thoroughly dependable and reliable.

No. D-98, 60 egg capacity, weight 25 lbs.....	\$11.00
No. D-99, 100 egg capacity, weight 40 lbs.....	14. 50

OAKES ELECTRIC HEN

The most modern incubator: thoroughly efficient, highly convenient and very economical. Heat and ventilation regulated automatically. Also serves as a perfect brooder when the lid is removed and the legs and curtain attached. Furnished for either 32 volt or 110 volt currents. The Electric Hen, if properly handled, will last a lifetime, and is guaranteed to give satisfactory results. Each machine is thoroughly tested before it leaves the factory and is adjusted to maintain the proper temperature

Prices include thermometer, egg tester, hover-curtain and legs.	
No. D-87, 60 egg capacity, weight 25 lbs.....	\$16. 00
No. D-88, 100 egg capacity, weight 40 lbs.....	21. 00

LITTLE PUTNAM STOVE. Made of galvanized iron and equipped with a burner which embodies an entirely new principle in oil combustion. The combustion is complete and perfect, doubling the heat value of the oil. The oil tank holds three pints of oil and burns three to four weeks without refilling or other attention. This stove is absolutely fire-safe and non-explosive. If it is tipped over it will go out. Size, 4 inches high and 9 inches in diameter. **Price, \$1.95 each, postpaid.**

PUTNAM BROODER STOVES.....\$4. 25

"STANDARD" INCUBATOR OIL.

"Standard" Incubator Oil is a superfined kerosene. It is far superior to the best grades of water-white kerosene hitherto obtainable, both in point of heat and light resulting from its use. **Price, per 5-gallon can, \$2.50.**

OAKES SANITARY METAL BROOD COOP... \$2. 00

IDEAL[®] BROODER FOR INDOOR AND OUTDOOR USE HOT-AIR HEATED.

The brooder is divided into two compartments: The hover, which is directly under the heater pipes, and the exercise-room in front next to the glass windows. The two compartments are separated by a heavy felt curtain. The chicks go into the hover to get warm the same as they do when they go under the old hen in the natural way. The brooder is well finished, well manufactured, and will last indefinitely. Only first-class lumber is used in its construction.

Made in two sizes, priced as follows.

	Floor Space	Weight	Price
No. 1, 100-chick size.....	24x30 inches	85 lbs.	\$10. 25
No. 2, 200-chick size.....	32x44 inches	110 lbs.	13. 00

COLONY BROODER STOVES.

Burn any kind of fuel. are safe, dependable and easily operated.

Galvanized steel, fastened with bolts to a strong cast-iron ring that fits perfectly to the top of the stove. Hover is 42 inches in diameter, and is removable: it requires a floor space of 6 to 8 feet.

350-chick size,	
42 in. Hover	\$14.75
500-chick size,	
52 in. Hover	 18.50
1000-chick size,	
56 in. Hover	 22.50

HI-BROOD

No. 8

52 inch hinged front canopy, stove 24 1/4 inches high, 40 lbs. coal capacity.

Special price.....\$13.50

ECONOMY PORTABLE BROODER.

The Economy Hover is simple in construction, made of steel throughout, and all parts are seamed or welded together, making it light, strong and durable.

No. D-102 (18 in. drum), weight 14 lbs.....	\$5. 25
No. D-103 (22 in. drum), weight 32 lbs.....	7. 75

Wire Fencing

UNITED STATES POULTRY NETTING.

U. S. Poultry Fence is strictly a "NO SAG" fence, as the combination of line and mesh wires, closely woven, prevents any lengthening or narrowing between posts. In erecting U. S. Poultry Fence the line wires permit of being stretched to a high tension, which compels

the fence to remain rigid and upright without anchoring it to a baseboard or top rail. These features place it a long stride beyond the Hex mesh netting, which never fails to narrow and lengthen if you attempt to stretch it to a tension required to prevent sagging.

There is no netting on the market that compares with U. S. Poultry Fence for strength, beauty and durability, and we invite comparison with other makes, feeling confident that all our claims of superiority will be substantiated.

Made of No. 19 hard steel wire, double twisted and galvanized after weaving.

2-inch Mesh Put up in Rolls of 150 feet.

	19 gauge	20 gauge
12 in.	\$1.25	\$1.15
24 in.	2.30	2.00
36 in.	3.10	2.75
48 in.	4.25	3.60
60 in.	5.25	4.50
72 in.	6.25	5.50

In less than Roll lots, $1\frac{1}{2}$ ¢ a square foot.
Also made in 1 inch Mesh. Price on application.

1-inch Mesh. (Hexagon)

12-inch, 150 sq. ft.	\$2.75
18-inch, 225 sq. ft.	4.00
24-inch, 300 sq. ft.	5.00
30-inch, 375 sq. ft.	6.10
36-inch, 450 sq. ft.	6.90
48-inch, 600 sq. ft.	9.20

Less than roll lots, 3¢ sq. ft.
Poultry Netting Staples, lb. 10

American Steel Fence Posts

Made by American Steel & Wire Company

LINE POSTS

5 ft.	\$0.60
6 ft.	.65
6½ ft.	.70
7 ft.	.75
7½ ft.	.80
8 ft.	.85

Special prices on quantities

Ball Tops for Line Posts, 25¢;
Corner Posts, 40¢; Pig-Ear Latch, 75¢;
Driving Caps for Line Post, 40¢.

6 ft. End Posts each.	\$3.75
7 ft. End Posts, each.	4.25
6 ft. Corner Posts, each.	5.50
7 ft. Corner Posts, each.	6.00

STEEL-CHANNEL BAR POSTS Bar Iron—Special Price on Quantities

5 ft.	35c
6 ft.	40c
6½ ft.	45c
7 ft.	50c
7½ ft.	55c
8 ft.	60c

CHAMPION WIRE STRETCHER

No. 1 has hickory handle and malleable clamp; can be quickly adjusted, and is a favorite with fence builders. Price. \$1.50

RATCHET WIRE STRETCHER

Is operated by one man and holds the wire in any desired position. Price. \$1.50

BARBED WIRE—GALVANIZED.

Four points, price per 100 lbs. \$4.40
Same in 80 rod spools. Each, \$3.85

RIBBON WIRE

Galvanized. per 100 lbs. \$8.00

ORNAMENTAL LAWN FENCE.

Very attractive and we believe the most durable wire lawn fence made. Can be furnished heavy galvanized, or, in addition, coated with a specially prepared Gray Enamel Paint. Spaces, $1\frac{1}{4}$ inches: wire, No. 9 Crimped Pickets in No. 12½ Tw. Cables.

Price, 36-inch, per ft., 13c; per 100 ft.	\$11.50
Price, 42-inch, per ft., 14c; per 100 ft.	12.50
Price, 48-inch, per ft., 16c; per 100 ft.	14.50

In Rolls of 165 feet, deduct 1¢ a foot.
Style 100—36 in. per 100 ft. \$9.00 42 in. per 100 ft. \$10.00

FLOWER GUARD.

Designed for protecting Flower Beds.
16-inch, per ft. 7c. 22-inch, per foot. 9c.
100 feet or more, 1¢ per foot less.

ORNAMENTAL GATES.

Heavy steel frames, filled to match the fence; fittings for wood or metal posts.

Height	3 ft.	3½ ft.	4 ft.	5 ft.	8 ft.	10 ft.
36-inch.	\$4.10	\$4.20	\$4.40	\$4.85	\$ 9.50	\$11.00
42-inch.	4.20	4.50	4.65	5.10	9.75	11.50
48-inch.	4.40	4.75	4.90	5.40	10.00	11.65

CATTLE, HOG and POULTRY FENCE.

Thoroughly galvanized, "Pioneer" patent double lock knot. Let us send descriptive folder.

No. 635, 6 strands, 35 in. high, 12-in. stays, per rod.	\$0.30
No. 845, 8 strands, 45 in. high, 12-in. stays, per rod.	.31
Regular No. 1047, 10 strands, 47-inch height.	.39
Hog Style, No. 726, 7 strands, 16 stays, 12-in. apart.	.28
Hog Style, No. 726, 7 strands, 32 stays, 6 in. apart.	.33
Hog Style, No. 832, 8 strands, 16 stays, 12 in. apart.	.31
Hog style, No. 832, 8 strands, 32 stays, 6 in. apart.	.39

Put up regular in 20-rod Rolls.

Prices subject to change.

10 Rod Rolls, 25¢ per Roll, Extra.

POULTRY FENCE

An ideal fence against poultry and small animals. The spacing is graduated from $1\frac{1}{4}$ inches at the bottom to 5 inches at the top, and the distance between the stays is 6 inches.

No. 1948. 48 inches high, per roll of 165 ft. \$5.25

No. 2260. 60 inches high, per roll of 165 ft. 5.75

PIONEER POULTRY FENCE

4 ft. high—10 rod Roll.	\$5.00
5 ft. high—10 rod Roll.	5.40
6 ft. high—10 rod Roll.	6.20
7 ft. high—10 rod Roll.	7.35

Dairy Supplies

FARM AND CONTRACTORS CARTS

These carts are made of the best well - seasoned hickory and white oak wood and are heavily ironed. They are well made throughout and especially designed to withstand the heavy loads and rough treatment of a farm; nicely painted, striped and varnished. The body is 4 ft. 8 in. long, the axle 1½ in. and the tires have a 3 in tread. Price \$75.00.

AMERICAN CREAM SEPARATOR.

The advantages of the Centrifugal Cream Separator are now acknowledged everywhere, and the American possesses the following points of merit:

Simplicity, durability, clean skimming, ease of operation and price. No. 10, 125 lbs. milk per hr., \$30.00; No. 2, 550 lbs. milk per hr. \$71.00; No. 1, 425 lbs. milk per hr., \$62.00; Fully guaranteed

BOSS CREAM SEPARATOR.

Every small dairy should certainly have the Boss. It means one-quarter more cream of better quality and saves one-quarter the time. No machinery to run or look after. Separation is effected by circulation of cold water in outer can. All the cream rises to the surface in an hour or two and is drawn off sweet. Suitable for table use or other purposes.

2½ gallons, capacity 1 to 2 cows...	\$6.00
4 gallons, capacity 3 to 4 cows...	6.50
6 gallons, capacity 4 to 5 cows...	7.25
8 gallons, capacity 5 to 7 cows...	8.00

TWIN SEPARATOR.

Has many advantages over the separator with a single milk vessel; one can be used in the morning and the other in the evening. Made in 5 to 20 gallon sizes. 2 cans, 12 gallons, capacity 6 to 7 cows.....\$14.25

WATER MIXERS.

In the Diluters or Water Mixers the water is poured right into the milk so as to chill it instantly and cause the cream to rise in about one hour.

8 gallons, to hold 4 gallons of milk....	\$4.00
12 gallons, to hold 6 gallons of milk....	4.65
16 gallons, to hold 8 gallons of milk....	5.25

DAIRY THERMOMETERS.

Each.....\$0.75

CREAM-TESTING TUBES.

Each......60

PARCHMENT BUTTER PAPER.

Is furnished in sizes: 24x36, 9x12, 6x9, 6x6. Price, per pound, 30c. By mail, add regular Parcel Post rate.

HAND BUTTER PRINTS.

½ lb. Seeley Pattern, as shown in cut.....\$0.75
Baltimore Pattern..... 1.25
Round Print and Mould..... .40

BUTTER WORKER.

Inside Measurement.	Cap.	Price
No. 1. 23x36x2½ in.	50 lbs.	\$15.25
No. 2. 20x36x2½ in.	30 lbs.	13.25
No. 3. 17x27x2½ in.	20 lbs.	8.50

DANDELION BUTTER COLORING.

Dandelion Brand Butter Coloring is guaranteed to be purely vegetable, and that the use of same for coloring butter is permitted under all Food Laws—State and National.

Will not color the buttermilk; will never turn rancid; gives the brightest and best color; butter never becomes reddish; perfect economy in use. It is cheaper than any other colorings. Put up in four sizes.

Small size to color 500 lbs.....	\$0.35
Medium size to color 1250 lbs.....	.65
Large size to color 2800 lbs.....	1.25

HUDSON COW STANCHIONS.

Tubular Stanchions (No. 105). These stanchions are wood lined, and so constructed as to be comfortable, strong and durable. They are made of high quality metal with but very few working parts to get out of order. The wood lining is a very important feature, as it is a protection against the cold iron. Price, \$3.85 each.

MILK CANS.

Made of special heavy cold rolled milk can material. One of these cans will outlast two or three of the common light weight cans. Sold at very attractive prices. 5 gal. size only. No. 205. Umbrella Cover, 13 lbs. empty, each.....\$3.50

RYDE'S CREAM CALF MEAL.

Quality is of more importance in Calf Meal than in any other feed; it pays to buy the best. The advantages in feeding it are many. 1. It saves milk. 2. It costs less to feed. 3. It makes better veals. 4. You can raise your own dairy cows on it cheaper than they can be bought. 5. It leaves more milk to sell, and more profit to you. Satisfaction guaranteed. Price on request.

LETZ GRINDERS.

No. 6 Letz Junior. Has 6 inch diameter plates, 1¼ inch diameter drive shaft, Pulley either 6, 8 10 or 12 inch diameter and 4 inch face. Fly wheel 14 inches in diameter, weighing 25 lbs Complete weight of mill, 175 lbs. It will operate on 1 h. p. to 3 h. p., at 200 r. p. m. to 800 r. p. m., grinding 3 to 15 bu. (of 70 lbs.) of ear corn, according to power and speed. Price, \$30.00.

KELLY DUPLEX GRINDING MILLS.

The only mill manufactured which has double or duplex grinders. It has a grinding surface of just double that of any other mill of equal size, and therefore can do twice as much work; or as much, work as any other mill twice its size. Grinds any kind of grain cotton seed, corn and cob, and corn, cob and shucks equally well, and produces a grit of any desired quality—coarse, medium or fine. Its shifting device for regulating the grinding is the most perfect known. A positive force feed, no choking; no end thrust on the main shaft under any conditions. Simple in construction, easily operated, strong, durable and efficient.

No. 1. 3½ to 6 h. p. Three feet, 4 inches high, shaft 3 feet, 6 inches long; capacity, 8 to 18 bu. ear corn, according to power and speed. Price, \$57.00.

No. 11, Junior, 3 to 6 h. p. Height, 3 feet, 2 inches, length of shaft, 3 feet, 2 inches; capacity, 6 to 12 bu. ear corn, according to power and speed. Price, \$38.00.

TORNADO ENSILAGE CUTTER AND SILO FILLER.

Made strong and durable in every respect; repairs are seldom necessary. Cuts 100 per cent. finer and puts 25 to 30 per cent. more feed into your silo than any other machine on the market. This firm packing of the feed keeps it in better condition and saves space, giving much greater storage capacity. The feed is cut so fine that the cattle will eat it all.

No. 13 Cutter, with blower, 30 feet of pipe, flat feed table, mounted on steel truck, \$163.20.

Same, with traveling feed table, \$181.00. Requires 6 to 8 h. p.

CONKEY'S FLY KNOCKER.

The best preparation on the market for keeping flies off cattle and horses. Easily sprayed on and retains its strength all day, allowing the cows to pasture without annoyance, and therefore assists in the production of milk. Qt., 60c; gallon, \$1.50.

CYLINDER CHURN—Illustrated.

CYLINDER CHURN.

Made of selected white cedar and well put up.

Full churning capacity.

No.....1	2	3	4
Gals.....1½	2	3½	6

Price, \$4.25; 5.00; 6.00; 7.25.

BARREL CHURN.

Oak stave; steel top. It works by concussion and will not break the grain of the butter nor make it of a salvy consistency.

No.....	0	1	2	3	4	5	6
Gallons churned.....	3	5	7	10	13	18	30
Price.....	\$6.00	6.75	7.50	8.25	10.50	12.00	16.50

BUTTER SHIPPING BOXES.

20 lb. prints.....	\$13.75	40 lb. prints.....	\$19.7
30 lb. prints.....	16.00	50 lb. prints.....	23.7

Meyers Electric Fresh Water System Direct From the Well NO STORAGE TANK

Capacity, 500 Gallons per Hr.

Just think of it; fresh water direct from the well, day or night, summer or winter, anywhere in the house or outbuildings, supplied automatically by merely turning the faucet.

The No. C-922AM. system illustrated is used for shallow wells or cisterns up to 22 feet in depth, while outfit No.C-2955AM., somewhat similar is used for deep wells. Both systems are equipped with one-half horsepower motors, either 32 or 110 volts, and the pumps are the self-oiling or splash system type. Chain Drive.

The Myers Direct Water System is of sufficient capacity to pump directly against the faucets supplying an ordinary residence. The opening of any faucet starts the pump by releasing the air pressure against the electric switch. The expense of the current in operating an outfit of this class is no greater than is required for operating a pump of one-half the capacity when connected with a large storage tank as they are obliged to work under a pressure of from 40 to 50 pounds, whereas the Myers Direct Water System works under a pressure of 10 to 30 pounds only. List \$173.00; Belt Drive, \$155.00.

MEYERS JUNIOR FRESH WATER SYSTEM \$90.00.

LIBERAL CASH DISCOUNT

MYERS' PUMP JACKS.

Well built of best materials for perfect service. No. 422 for gasoline engine power and No. 422M for electric motor. Both are self-lubricating, and have machine cut gears. This construction, not only insures perfect and continuous lubrication, but protects the moving parts from dust and dirt, greatly increasing the life of the jack. Can be used in connection with any make pump stand. Price, \$18.00.

No. 425. Steel shafts, \$15.00. No. 366. Angle iron shafts, \$12.00.

MYERS SELF-OILING BULLDOZER POWER PUMP—FOR PNEUMATIC PRESSURE SERVICE.

No. 610A. This pump has a capacity of 450 gallons per hour and is capable of producing 100 lbs. pressure. It has a cog gear handle attachment which makes hand operation very easy. Also equipped with tight and loose pulleys for power operation. The self oiling feature is very favorable.

Price, \$50.00. For use with electric motor, \$54.00.

No. 612A. Self-oiling, for power only. Capacity 500 gallons at 70 r. p. m. Quite similar to No. 610A but has vacuum chamber additional. Price, \$47.00.

HYDRAULIC RAMS.

For elevating water by its own pressure; a very economical means of supplying water to a storage tank, in cases where a natural water fall can be made available. These rams are constructed of iron and bronze and have always given entire satisfaction. No. 2, \$18.00; No. 3, \$21.00.

RED JACKET IRON EASY-TO-FIX PUMPS.

Prices quoted below are Pumps ready to set in the well. Subject to Cash Discount.

Fig. 28. Fig. 51.

Depth of Well.	No. 1. 3-inch Cylinder, Double Act.	Depth of Well.	2 1/4-inch Cylinder, With 3-way.
10 ft.	\$28.50	28 ft.	\$33.50
12 ft.	29.50	30 ft.	55.75
14 ft.	30.50	32 ft.	58.25
16 ft.	31.25	34 ft.	60.50
18 ft.	32.25	36 ft.	63.00
20 ft.	33.00	38 ft.	65.25
22 ft.	34.00	40 ft.	67.75
24 ft.	35.00	42 ft.	70.00
26 ft.	36.00	44 ft.	72.00

If over 44 feet, add \$1.25 per foot to the above prices.

If 3-way is not wanted for Fig. 51, deduct \$5.00.

If 3-way is wanted for Fig. 28, add \$5.00.

MYERS COG - GEAR SINGLE - ACTING FORCE PUMPS

No. R. 1072. This has adjustable base and reversible spout. Has patent glass valve seat, poppet valve and brass lined cylinder. Capacity, 440 gallons per hour. The extra leverage adapts the Pump for deep wells. Price, \$13.00

Add 20c per foot for wells up to 26 feet deep.

28 ft. depth of well. Price, \$22.50.

Add 30c per foot for wells up to 60 feet.

MYERS COG-GEAR BRANCH-PIPE DOUBLE-ACTING FORCE PUMP FOR WELLS FROM 10 to 150 FEET.

No. R5. Will go in a 5 3/8-inch cased well. Capacity, 440 gallons per hour; has a 3-in. brass-lined lower cylinder with glass valve seat; tapped for 1 1/4-inch pipe. Price, for 10 foot deep well, \$18.50. \$6.00 extra for 3-way and windmill head.

Add 20c per foot up to 26 feet.

Price for deep-well Pumps, 28 feet, \$30.00.

Add 30c per foot for wells up to 100 feet.

KANAWHA WOOD PUMPS.

Porcelain Lined—Ready to Set in the Well.

Subject to Cash Discount.

Depth of Well	No. 2 6x6	No. 5 7x7	Depth of Well	No. 6 6x6	No. 4 7x7
8 ft....	\$13.20	\$15.80	31 ft..	\$28.50	\$32.50
9 ft....	13.60	16.20	32 ft..	28.90	32.90
10 ft....	14.00	16.60	33 ft..	29.30	33.30
11 ft....	14.40	17.00	34 ft..	32.10	36.10
12 ft....	14.80	17.40	35 ft..	32.50	36.50
13 ft....	15.20	17.80	36 ft..	32.90	36.90
14 ft....	15.60	18.20	37 ft..	35.70	39.70
15 ft....	16.00	18.60	38 ft..	36.10	40.10
16 ft....	16.40	19.00	39 ft..	36.50	40.50
17 ft....	16.80	19.40	40 ft..	36.90	40.90
18 ft....	17.20	19.80	41 ft..	40.90	44.90
19 ft....	17.60	20.20	42 ft..	41.30	45.30
20 ft....	18.00	20.60	43 ft..	41.70	45.70
21 ft....	19.20	22.00	44 ft..	42.10	46.10
22 ft....	19.60	22.40	45 ft..	44.90	48.90
23 ft....	20.00	22.80	46 ft..	45.30	49.30
24 ft....	20.40	23.20	47 ft..	45.70	49.70
25 ft....	20.80	23.60	48 ft..	47.30	51.30
26 ft....	22.00	25.00			
27 ft....	22.40	25.40			
28 ft....	22.80	25.80			
29 ft....	24.80	28.20			
30 ft....	25.20	28.60			

We shall be pleased to quote attractive prices on Galvanized Pipe.

Miscellaneous Farm Supplies

GUARANTEED

Rubber Hose

**"U.S." MOLDED
GARDEN HOSE**

Molded Hose made of the very best materials—first class cotton fibre and brand new live rubber, giving entirely satisfactory service to many of our florist customers who need high quality material to withstand the hard usage of the greenhouse. Furnished in any length $\frac{1}{8}$ in. Price, 10c per foot, \$9.00 per hundred.

MOUNTED GRINDSTONES

Climax. Frame is a combination of wood and steel, well finished.

No. 1.....	\$6.50
No. 2.....	7.00
No. 3.....	7.50
Invader.....	8.00
Victor.....	7.25

King. The frame is constructed of tubular steel, very rigid, ball bearing, adjustable seat, and equipped with treadles. Stone is 20-22 inches in diameter by 2-inch face..... \$8.00

Cycle. Of angular steel, well braced, with sliding seat, ball bearing bicycle treadles. Stone is 20-22 inches in diameter by 2-in. face of the best Berea grit..... \$6.00

Loose Grindstones, 5c per pound. (40 to 200 lb. stones).

Wheel Barrows

Buch's No. 1

Substantially made of seasoned wood, firmly bolted and braced. **Buch's No. 1.** Size of body 30 inches long, 24 inches wide in front and 25 inches in back. Side-boards 12 inches high. \$8.75.

Buch's No. 2. Size of body 28 inches long and 20 to 24 inches wide. Side-boards 12 inches high. \$7.00.

Buch's No. 3. 26 inches long, 19 to 22 inches wide. Side-boards 12 inches high. \$6.65.

No. 4. Boys Barrow, body 22 in. long by 15x18 in. wide, side boards 9 in. high. \$4.75.

No. 67. Greenhouse size. \$9.00.

No. 20. Steel wheel, wooden body. \$5.75

No. 8

No. 8 Canal Barrow. With steel spoke wheel, full-sized bent tray, planed, cleated and strapped together, well finished. \$4.75.

No. 6 $\frac{1}{2}$. Wooden Frame, steel wheel. Bed length 27 in., width 22 in and 17 in.; 20 in. wheel. \$4.85.

No. 21

No. 21. Light steel tray cement and dirt barrow. \$5.00.

No. 2-B. Steel Pan, 4 cu. ft. Capacity. Wooden Handles. \$5.50.

No. 5. Steel Pan, 5 cu. ft. Capacity. Wooden Handles. \$6.00.

No. 17-B

No. 17B. Size of tray 32x27 inches; capacity 4 cu. ft. \$7.00.

No. 25. All steel, tubular handles, riveted tray, high front to prevent spilling. Specially built for heavy work and rough usage. \$8.00.

No. 37

No. 37. 3 cu. ft. Capacity; weight 70 lbs. Handles shaped from 1 in. wrought pipe. \$8.00.

Miscellaneous Farm Supplies

Barrett Roofing Material

The Barrett Company makes roofing materials of the very highest quality, in a variety of styles and weights. These products carry the Barrett Guarantee and are moderately priced.

MINERAL SURFACED. A good grade of rubber and felt covered with a coating of granulated slate, furnished in Red, Green or Blue-Black. Everlastic \$2.70 per roll; Vitex \$2.35 per roll. (100 sq. ft.).

SMOOTH SURFACED. Combination of a little felt and plenty of rubber. One of the most popular roofing materials.

Everlastic—Heavy or '3-ply' \$3.00 per roll of 100 sq. ft.

Vitex—Medium or '2-ply' \$2.00 per roll of 100 sq. ft.

Tomahawk—Light or '1-ply' \$1.40 per roll of 100 sq. ft.

MULTI-SHINGLES. (4-in-1). Mineral-Surfaced \$6.50 per square.

BLACK DIAMOND TARRED FELT. 432 sq. ft. 55 lbs. \$2.55 per roll.

5-X SHEATHING PAPER. 500 sq. ft., roll, \$1.10.

ONE-PLY TARRED FELT. 216 sq. ft., 28 lbs., \$1.30.

Asbestos Liquid Roofing

Guaranteed for 10 years. This roofing is a heavy liquid which thoroughly seals every hole and makes a leak impossible for at least ten years. It is made of asbestos fibre and contains no coal tar products and therefore is not injurious to metal. Not affected by summer heat, is absolutely fire proof and may be used on any roof.

1 gal., \$1.25; 5 or 10 gal. at \$1.15; 15 gal. at \$1.00; f.o.b. Baltimore.

KURE-A-LEAK

A semi-liquid mastic or cement-like composition, not affected by extreme heat or cold; absolutely water tight and fireproof. It 'kures' the leaks in worn-out tin, galvanized iron or composition roofings. 1 gal., \$1.15; 5 gals. \$5.00.

Corrugated Iron Roofing

Heavy galvanized iron corrugated roofing is always carried in stock in all the standard sizes. Prices subject to change. \$4.75 per square (100 sq. ft.).

CHANNELDRAIN ROOFING

Made of
COP-R-LOY

The Copper-Alloyed Steel That Resists
Rust and Corrosion

Channeldrain has a barrier to leaks—a vertical wall running the entire length of the lap—and no water gets by this wall. The channel formed by the patented design of Channeldrain roofing carries off the water before it can mount the ridge. This means that Channeldrain roofing goes farther than other metal roofing in doing what roofing is intended to do—IT DRAINS OFF ALL THE WATER THAT FALLS ON THE ROOF, permitting the surface to dry quickly and prevents rust under the laps and around nail holes.

It is easy to understand the economy in roofing that has these advantages—and only Channeldrain has them.

You can apply Channeldrain yourself and enjoy the superior benefits of this modern patented roofing, with freedom from repairs through long years to come. It will save money for you.

28 ga., 6c per square foot

SAW FRAMES.

Built of hard wood, mortised and tenoned, and full bolted; with Cold Rolled Steel mandrel; heavy balance wheel, and the table firmly hinged to frame—thoroughly braced and reinforced. The blades are made of genuine saw steel and have given universal satisfaction.

No. 3, with 24 in. blade.....\$34.25
No. 5, with 24 in. blade.....33.75
No. 4 'Pony Saw' 18 in. blade.....21.00

LADDERS

Made of the very highest quality lumber and assembled to give the safest, most durable and most rigid construction. Side rails made of the best selected Norway, Southern Pine or Spruce and the rungs are Hickory. Equipped with sturdy gravity catches rope and pulley.

Automatic Extension Ladders.

24, 26, 28, 30, 32, 34, 36 ft.....per ft. 40c
40 ft.....per ft. 44c

STRAIGHT Ladders, 14, 16 and 18 ft.....per ft. 27c

Red Cross Cider Mills and Wine Presses

	Plain	Hinged Cages
SINGLE CAGE CIDER MILL.....	\$18.25	\$19.25
JUNIOR 2-CAGE CIDER MILL.....	24.00	26.00
MEDIUM 2-CAGE CIDER MILL.....	29.50	31.50
SENIOR 2-CAGE CIDER MILL.....	45.00	47.00
No. 1 FRUIT PRESS.....	11.75	11.00
No. 2 FRUIT PRESS.....	15.15	15.00
No. 3 FRUIT PRESS.....	20.30	20.00
No. 5 FRUIT PRESS.....	31.50	32.50

Miscellaneous Farm Supplies

CENTURY

Electric Motors

Century

Repulsion Start Induction Single Phase Motors fill the demand for motors where high starting torque, low starting current, quiet and automatic operation are desirable.

The $\frac{3}{4}$ H.P. and smaller are equipped with the Century Wool Yarn System of Lubrication, which insures proper lubrication for at least one year of continuous operation. The larger sizes are equipped with ring oilers. The brushes are in service and touch the commutator only while starting.

All prices listed below are for 110/220 volts, 60 cycle ratings, and they include pulley and belt tightening base with $\frac{1}{8}$ H. P. and smaller, and rails with larger sizes.

Horse Power	Syn. Speed	Standard Pulley			Prices
		Dia.	Face	Bore	
$\frac{1}{8}$	1800	2	2	$\frac{1}{2}$	\$22.30
$\frac{1}{4}$	1800	2 $\frac{1}{2}$	2 $\frac{1}{2}$	$\frac{5}{8}$	26.10
$\frac{1}{2}$	1800	3	2 $\frac{1}{2}$	$\frac{3}{4}$	41.00
$\frac{3}{4}$	1800	3	2 $\frac{1}{2}$	$\frac{3}{4}$	51.00
1	1800	3	2 $\frac{1}{2}$	$\frac{3}{4}$	62.00
$1\frac{1}{2}$	1800	4	3 $\frac{1}{2}$	1	80.00
2	1800	4	3 $\frac{1}{2}$	1	90.00

No. 82—TOOL GRINDER

This very useful grinder is especially suited to farm work and can be easily clamped to a mower wheel or bench; compact, simple and serviceable.

82 C —With Bevel Tool Wheel only..... \$6.50
82 CW—With both Flat and Bevel Tool Wheels..... 7.50

GASOLINE ENGINES

John Deere—Type E

The result of improvements made on the old reliable Waterloo Boy engine; perfect lubrication, highest quality bearings; all working parts enclosed, easy to start, delivers full rated power; equipped with magneto.

1 $\frac{1}{2}$ H.P.—4 $\frac{1}{2}$ x4 in. pulley.....\$60.00
3 H.P.—6 x5 in. pulley..... 95.00
6 H.P.—12x6 in. pulley..... 150.00
Hand Truck for 1 $\frac{1}{2}$ or 3 H.P..... 7.50
Hand Truck for 6 H.P..... 20.00

New Way—Air Cooled

Slightly shop-worn; Mechanically perfect, a rare opportunity for anyone requiring powerful stationary equipment of this type. The merits of the air cooled motor are known to all, and hundreds of our customers are using New Way engines with entire satisfaction.

Sizes available: 3 $\frac{1}{2}$ H.P.; 4 H.P.; 6 H.P.; 7 H.P.
Priced to sell—Let us quote.

Myers' Double Lock Unloaders.

No. 209. Has extra long truck, wheel base 16 inches, large steel bearings, 7 inch sheaves, reversible and swivel, for double steel track, designed for heavy work. Price, \$12.50.

MYERS' CLOVER LEAF UNLOADER.

No. 114. This is the well-known reversible car for double steel track. The locking device grasps the fork pulley on either side and permits it to swing free. Price, \$10.25.

Double Steel Track. Price per foot, 25c.

Hanging Hooks. For double steel track. Price, each, 18c.

Rafter Brackets. Steel. Price, each, 6c.

Pulleys, 6-inch; wood sheave; malleable iron frame. Price, each, 75c.

Pulleys. Knot-passing swivel; 6 inch malleable iron sheave.

Price, each, 80c.

Double Harpoon Forks. All steel. Price, each, \$2.50 to \$6.00.

Floor Hooks, $\frac{3}{4}$ -inch wrought iron. Price, each, 18c.

WAGNER BARNDOOR HANGER.

Extra Heavy All Steel and Self-cleaning.

Tandem Ball-bearing Rollers, per set.....\$2.00
No. 15 Tubular Steel Track, per foot......25
No. 100 Evertight Steel Track, per foot......32
Steel Brackets, each......20

Space does not permit a full description of our entire line of IMPLEMENTS. We are headquarters however, for standard, high grade equipment as follows:—

Grain Drills

Row Markers

Corn Planters

Potato Diggers

Potato Planters

Tractor Implements

Manure Spreaders, Etc.

We shall be pleased to give detailed information on machinery which has found by experience to be dependable, economical and efficient.

Let us mail illustrated literature and quote attractive prices.

A definite plan of soil improvement, based on sound judgment and employing the use of High Quality Materials can only result in profitable production. The condition of the soil determines the Quality and Quantity of the crop. : : : : : : : : :

FERTILIZERS

Highest Quality - - Animal Base - - Guaranteed Analysis

The commercial fertilizers which we offer are made by one of Baltimore's largest, oldest and most reliable manufacturers. Animal base products are consistently used, making a plant food which in its chemical action in the soil is best suited for continuous growth of the crops.

These fertilizers can be supplied in a number of combinations, each having a guaranteed analysis which will prove most helpful to the crop for which it is intended. Our volume of business in vegetable fertilizers is rapidly increasing, because our customers have found our stock to be strictly first-class, dependable, low-priced, and productive of the best crops in competition with other brands.

THE BEST GRADES ARE THE CHEAPEST

Why pay manufacturing and handling costs on fillers? The

2-12-2.....	\$2.80 per 167 lb. bag.....	\$28.00 per ton
4-8-4.....	3.30 per 167 lb. bag.....	33.00 per ton

BONE MEAL (Extra Fine)

An excellent fertilizer especially recommended for lawns, rose bushes, grape vines, and deep rooted shrubbery, where it is desired to furnish the plants with a perfectly safe, slow acting but continuous supply of nourishment. Florists and nurserymen use large quantities of our bone meal very successfully. 2 lbs. 15c; 10 lbs. 45c; 50 lbs. \$2.00; 100-lb. bag, \$3.25. (Add transportation charges.) Special price on large quantities.

Mulford Cultures

FOR LEGUMES

Increase your crops Improve your soil

Legume crops, properly inoculated with nitrogen-fixing bacteria, add humus and nitrogen to the soil and should be included in every crop-rotation program.

Inoculate all your legume crops with Mulford Cultures. Especially recommended because they contain enormous numbers of active, vigorous nitrogen-fixing bacteria, grown from pure, tested strains.

Mulford Cultures are prepared with the utmost scientific care and skill. Economical. Easy to use. The sealed bottle insures purity.

They offer you the most economical and satisfactory method of adding nitrogen to your soil.

Always specify on your order what crop you want to inoculate.

Small Seeds:	Large Seeds:
5 bushel size.. \$4.00	10 bushel size.. \$4.00
2½ bushel size.. 2.25	5 bushel size.. 2.25
1 bushel size.. 1.00	2 bushel size.. 1.00
½ bushel size.. .60	1 bushel size.. .60

Garden Size (Composite Culture) 25c.

overhead expense of manufacturing, storing, handling and distributing on your fields is the same for the actual plant food as it is for the other materials which simply make up bulk. These figures tell why. Consider our 7-12-7 at \$48.00 per ton. This high-grade fertilizer has a total number of 26 available units. Dividing 26 into \$48.00 equals \$1.87 cost per unit.

With 4-8-4, however, which is still a high-grade fertilizer, the total of 16 units at \$33.00 per ton will cost \$2.06 per unit. These figures, however, do not take into account your cost of distributing, which would make the highest grade still more economical to use because it would require over 50% more 4-8-4 to equal the results obtained from 7-12-7.

PRICES

2-8-10.....	\$3.30 per 167 lb. bag.....	\$33.00 per ton
7-12-7.....	4.80 per 167 lb. bag.....	50.00 per ton

PULVERIZED SHEEP MANURE

One of the most popular fertilizers for lawns, garden crops and potted plants; of high analysis, thoroughly dried and pulverized, giving lasting results. For top dressing of lawn, use 1 ton per acre, applying in fall or early spring. For garden crops use 1 to 2 tons per acre, turning half the quantity under and top dressing the remainder. Clean to handle and very effective. 5 lbs. 25c; 10 lbs. 45c; 25 lbs. \$1.00; 100 lb. bag. \$2.50; 1000 lbs. \$20.00; ton, \$38.00.

NITRATE OF SODA

Highly soluble, quick in action and hastens the maturity of crops fully two weeks. Will not take the place of other fertilizer but supplies the growing crop with an abundance of nitrogen which greatly assists the plants to make use of other nourishment already in the soil. Lb. 8c; 10 lb. 55c; 100 lbs. \$3.50; 167-lb. bag. \$4.75. Special price on quantities. Add transportation charges.

Aluminum Sulphate

For rhododendrons and azaleas. 15c lb.; 10 lbs. \$1.00; 100 lbs. \$6.00.

Blood Meal One of the best plant foods for forcing flowers and vegetables. Excellent for Rose Bushes during blooming season. 10c per lb., 3 lbs., 25c; 100 lbs., \$4.50.

Land Plaster Useful as a medium for retaining moisture and the fluids and ammoniacs of manure. Also used for dipping potatoes after they have been cut for seed, sealing the cuts as a protection and also supplying nourishment. 100 lb. bag, \$1.20. Special price in quantities.

Hydrated Lime Especially useful for correcting acid condition of soils in gardens and lawns. 50 lb. bag, 55c; \$16.00 per ton.

Fairmount The Original Weed Killer — The Standard since 1892. Positively destroys any kind of weed and vegetation wherever applied. One gallon Fairmount Weed Killer makes 50 gallons of treating liquid, sufficient to effectively cover 100 to 150 square yards. Just the thing for driveways, tennis courts, baseball diamonds and walks where weeds are not wanted. Will not injure or discolor marble, gravel or stone—but makes them clean and bright. Fairmount Weed Killer acts by destroying seeds, germs and roots of plants.

Ot. 70c.; ½ gal. can \$1.00; 1 gal. can \$1.75; 5 gal. can \$7.25; 30 gal. drum \$33.00.

Adco Don't waste garden rubbish. Turn it into manure with Adco.

ADCO is a powder which almost any non-woody vegetable waste, and kept wet, gradually converts it into manure. 501 bs of Adco make a ton of manure.

Equal to stable manure—Odorless. Price: 150 lbs., \$10.50; 25 lbs., \$2.00. Literature on request.

SMARTT'S NITRATE OF SODA AND FERTILIZER CRUSHER

Will thoroughly pulverize nitrate of soda and fertilizers, no matter how hard or lumpy they may be. Every lump that goes into your field means money lost. Finely crushing fertilizer materials adds 10% to their yielding power. With this simple, well-

made handy machine a ton of the hardest soda can be thoroughly pulverized in an hour. Soon pays for itself. (Weight 75 pounds.) Price, \$13.95.

A Velvety Lawn, Colorful Flowers Delicious Vegetables--with Vigoro

Beautify your home
with a velvety lawn

Flowers of rare beauty

For a better lawn, more beautiful flowers, and fine vegetables, you can rely on VIGORO.

Scientifically balanced and complete, VIGORO is a specially prepared plant-food. It contains all of the elements necessary to grow richly colored flowers, velvety lawns, succulent vegetables, luxuriant shrubbery and healthy trees.

VIGORO is odorless and clean. It can be applied by hand just like grass seed. Complete directions in every bag.

100-lb. bag \$5.00	50-lb. bag \$3.00
25-lb. bag 1.75	5-lb. bag .50

Order Your Supply Today

Delicious vegetables
from your own garden

VIGORO

Specially prepared plant food

Wherever Cultivating Is Done GRAVELY DOES IT BEST

Successful Market Gardeners, Nurserymen, Florists, Home Gardeners, and Farmers in every part of the country are discarding obsolete methods of cultivation and reducing the cost of production by using

Gravelly Motor Cultivators

A Few Gravelly Features

- Does better and faster work than hand tools.
- Operates at lower cost than any other cultivator.
- Constructed of very best material and built for long, hard usage.
- Designed to meet the requirements of the nation's largest vegetable growers.
- A profitable investment for any grower cultivating one acre or more.
- Patented single wheel, giving positive traction, easy control and accurate work.
- Easily operated by inexperienced help.
- Releases employees for other important work.
- Cultivates one, two or three rows at a time.
- Will work in rows from 8 inches to 3 feet apart.
- Turns in three foot space.
- Does excellent work even on hilly land.
- Tools can be attached either on front or rear of machine.
- Working tools and attachments are standard Planet Jr. products, costing approximately \$5.00 per set.
- All working parts protected from dust and dirt.
- Powerful 2 h.p. Air Cooled Motor.

\$256 Delivered

*Investigate at once by
sending for illustrated literature*

J. MANNS & CO.

BALTIMORE

:::

MARYLAND

INDEX

Vegetable Seeds

Artichoke.....	3
Asparagus.....	3
Asparagus Roots.....	3
Beets.....	8
Borecole.....	9
Broccoli.....	8
Brussels Sprouts.....	9
Bush Beans.....	4-5
Bush Limas.....	7
Cabbage.....	10-11
Carrots.....	13
Cantaloupe.....	20
Cauliflower.....	12
Celeraic.....	12
Celery.....	14
Chinese Cabbage.....	12
Chives.....	9
Collards.....	9
Corn.....	15, 54
Corn Salad.....	14
Cress.....	12
Cos Lettuce.....	19
Cucumber.....	16
Egg Plant.....	17
Endive.....	17
Gumbo.....	21
Herbs.....	32
Kale.....	17
Kohl Rabi.....	17
Leek.....	17
Lettuce.....	18-19
Lima Beans.....	7
Mangel Beets.....	8
Melons.....	20-21
Mushroom Spawn.....	21
Muskmelon.....	20
Mustard.....	21
Okra.....	21
Onion.....	22
Onion Sets.....	22
Parsley.....	23
Parsnips.....	23
Peas.....	24-25
Pepper.....	26
Plants.....	36
Pole Beans.....	6, 7
Popcorn.....	14
Potatoes.....	27
Pumpkins.....	23
Radishes.....	28-29
Rhubarb.....	32
Rhubarb Roots.....	36
Roots.....	36
Rutabagas.....	35
Salsify.....	32
Shell Beans.....	6
Sorrel.....	32
Spinach.....	30, 31
Spinach Beet.....	9
Squash.....	32
Strawberry Plants.....	36
Sugar Corn.....	15
Sweet Potatoes.....	27
Swiss Chard.....	9
Tomatoes.....	33-34-35
Turnips.....	35
Vegetable Plants.....	36

Watermelon.....	21
Wax Beans.....	5

Field Seeds

Alfalfa.....	52
Alsike Clover.....	52
Bokhara.....	52
Buckwheat.....	53
Canada Field Peas.....	53
Clover.....	52
Creeping Bent Grass.....	52
Crimson Clover.....	52
Cow Peas.....	53
Dwarf Essex Rape.....	53
Field Corn.....	54
Hard Fescue.....	52
Hungarian Millet.....	52
Japan Clover.....	52
Kaffir Corn.....	53
Kentucky Blue Grass.....	52
Mammoth Clover.....	52
Meadow Fescue.....	52
Millet.....	52
Oats.....	53
Orchard Grass.....	52
Perennial Rye Grass.....	52
Rape.....	53
Red Clover.....	52
Red Top.....	52
Rhode Island Bent Grass.....	52
Sheep's Fescue.....	52
Sorghum.....	53
Soy Beans.....	53
Sudan Grass.....	53
Sweet Vernal.....	52
Tall Meadow Oat Grass.....	52
Timothy.....	52
Vetch.....	53
White Dutch Clover.....	52
Wood Meadow.....	52

FLOWER SEEDS

Alphabetically Arranged
pages 37-44

Bulbs and Roots
pages 45-48

Flower Plants
page 37

Nursery Stock... 49-51

Supplies, Im- plements, Etc.

Adco.....	78
Arsenate of Lead.....	55
Arsenate of Zinc.....	55
Asbestos Liquid Roofing.....	76
Asparagus Bunchers.....	61
Asparagus Knives.....	61
Atomic Sulphur.....	55
Baby Chicks.....	67
Barbed Wire.....	72
Barley Forks.....	60

Barn Door Hangers.....	77
Black Leaf Forty.....	55
Blood Meal.....	78
Bone Cutters.....	70
Bone Meal.....	78
Bordeaux mixture.....	55
Brooders.....	71
Brush Hooks.....	60
Bug Death.....	55
Butter Coloring.....	73
Butter Paper.....	73
Butter Prints.....	73
Butter Shippers.....	73
Butter Workers.....	73
California Sprinklers.....	66
Carbola.....	55
Carts.....	73
Cel-o-glass.....	62
Chicks.....	67
Churns.....	73
Cider Mills.....	76
Corn Grinders.....	73
Corn Shellers.....	70
Corona Coppercarb.....	55
Corrugated Iron Roofing.....	76
Cultivators.....	64, 65, 80
Cut Worm Killer.....	55
Dairy Supplies.....	73
Day-Old Chicks.....	67
Dibbles.....	61
Disc Harrows.....	63
Don Sung.....	68
Drag Scoop.....	63
Dry Lime and Sulphur.....	55
Dusters.....	56
Earth Augurs.....	60
Egg Carriers.....	68
Electric Motors.....	77
Electric Water Systems.....	74
Emerson Standard Mowers.....	65
Engines.....	77
Ensilage Cutters.....	73
Feeds.....	68
Fence Posts.....	72
Fencing.....	72
Fertilizer.....	78
Fertilizer Distributors.....	65
Flower of Sulphur.....	56
Flower Boxes.....	59
Flower Pots.....	59
Forks.....	60
Formaldehyde.....	55
Fruit Pickers.....	61
Fruit Presses.....	76
Garden Trowels.....	61
Garden Barrows.....	75
Gasoline Engines.....	77
Grass Hooks.....	60
Glass.....	59
Glass Cloth.....	62
Gravelly Motor Cultivator.....	80
Glazing Points.....	59
Glazing Putty.....	59
Grafting Wax.....	61
Grape Dust.....	55
Grass Collectors.....	66

Grain Cradles.....	60
Grinding Mills.....	73
Grindstones.....	75
Hand Cultivators.....	64
Hand Plows.....	64
Hand Weeders.....	61
Harrows.....	63, 64
Hay Forks.....	60
Hay Knives.....	60
Hay Rakes.....	60
Haying Tools.....	77
Hedge Shears.....	61
Hellebore.....	55
Hose.....	75
Hoes.....	60
Horse Hoes.....	59
Hot Bed Glass.....	59
Hot Bed Mats.....	59
Hot Bed Sash.....	59
Hydrated Lime.....	78
Incubators.....	71
Insecticides.....	55, 56
Kaylox.....	56
Knives.....	61
Kura Leak.....	76
Ladders.....	76
Land Plaster.....	78
Land Rollers.....	65
Lawn Mowers.....	66
Lawn Rakes.....	60
Lawn Rollers.....	66
Lawn Sprinklers.....	66
Lawn Swings.....	62
Leaf Rakes.....	60
Leg Bands.....	70
Lemon Oil.....	56
Lime and Sulphur.....	56
Mag-o-tite.....	56
Manure Forks.....	60
Marline.....	59
Mastica.....	59
Metal Egg Crates.....	68
Milk Cans.....	73
Mole Traps.....	61
Motors.....	77
Motor Cultivator.....	80
Mowers.....	65
Mulford's Culture.....	78
Neponset Pots.....	59
Nico Fume.....	56
Nitrate of Soda.....	78
Norcross Cultivators.....	61
Nozzles.....	59
Paradichlorabenzene.....	56
Paris Green.....	56
Peat Moss.....	62
Peerless Glazing Points.....	59
Pincers.....	59
Planet Junior Imple-ments.....	64
Plant Setters.....	76
Plant Stakes.....	59
Plantabbs.....	62
Plant Bands.....	59
Plows.....	63
Pot Labels.....	59
Post Hole Diggers.....	60
Potato Hooks.....	60

Poultry Feeds.....	68
Poultry Fencing.....	72
Poultry Supplies.....	67-71
Pruners.....	61
Pulverizers.....	65
Pumps.....	74
Putty Bulbs.....	59
Pyrox.....	56
Raffia.....	59
Rakes.....	60
Rams.....	74
Red Chief Mills.....	73
Roofing Materials.....	76
Rubber Hose.....	75
Sash.....	59
Saw Frames.....	76
Sealecide.....	56
Scuffle Hoes.....	61
Scythes.....	60
Seeders.....	54-64
Separators.....	73
Semesan.....	56
Shears.....	61
Sheep Manure.....	78
Shovels.....	60
Slug Shot.....	56
Snaths.....	60
Soda Crushers.....	78
Spades.....	60
Spading Forks.....	60
Sprayers.....	57, 58
Spraying Materials.....	55, 56
Spring Tooth Harrows.....	63
Sprinklers.....	66
Sulphur Flour.....	56
Sulfocide.....	56
Thermometers.....	61
Tobacco Dust.....	56
Tool Grinders.....	77
Traps.....	61
Tree Labels.....	61
Tree Pruners.....	61
Tree Tanglefoot.....	56
Trellis.....	61
Trowels.....	61
Turf Edgers.....	61
Vegetable Tying Machines.....	62
Vigoro.....	79
Vioaray.....	62
Volk.....	55
Warren Hoes.....	60
Washing Machines.....	76
Watering Pots.....	61
Water Systems.....	74
Weeders.....	61
Weed Killer.....	78
Wheel Barrows.....	75
Wheel Hoes.....	64
Window Boxes.....	59
Wire Fencing.....	72
Wire Splicers.....	72
Wire Stretchers.....	72
Whale Oil Soap.....	56
Wine Presses.....	76
Y-O.....	68

MANNS SUPERIOR LAWN GRASS

OUR SUPERIOR LAWN GRASS is a correctly proportioned mixture of the very best varieties of grasses, blended according to a formula which has resulted from many years of study and experience.

Every variety included has its special duty to perform in the quick production and steady maintenance of a beautiful and permanent lawn. Soil and climatic conditions are provided for by including each of the grasses which flourish during the various seasons.

1 lb., 50c; 10 lbs., \$4.75; 25 lbs, \$11.25; 100 lbs, \$42.50.

MANNS' SHADY PLACE LAWN GRASS SEED

This mixture contains only those grasses which are best adapted for growing under trees and in shaded spots. It quickly produces an abundant and even growth of beautiful grass, harmonizing in color and general appearance with our regular Superior mixture. **Lb. 60c; 10 lbs. \$5.50; 25 lbs. \$12.50; 100 lbs. \$47.50.**

MANNS' EVERGREEN LAWN GRASS

A good, clean mixture of high germinating stock, strictly pure and of low weed content. Not as permanent as our Superior mixture, but well worth the price. **Lb. 35c; 10 lbs. \$3.40; 25 lbs. \$8.00; 100 lbs. \$30.00.**