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6237
SEASON OF 1927

WISEMAN-DOWNS CO. INC.

FARM MACHINERY AND
SEEDS

ORIGINATORS & GROWERS
OF THE
"WISDOM" TOMATO

34 EAST PRATT STREET
BALTIMORE, MD.

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PLANTING, MATURITY AND WEIGHT TABLE

This is for field planting, and where plants and roots are stated, it is necessary to have them ready before-hand. The third column indicates the distance that the plants should stand in the rows, and where seed is sown they should be thinned out to this distance. The fifth column indicates maturity from the time plants are planted in the field or seed is sown in the field. Also note that the last column is the approximate weight of seeds and not products. Time of planting and maturity is for latitude of Baltimore, Md.

*Indicates that the crop can either be planted in the Spring or Fall; if in the Spring, February to April; in the Fall, August and September.

	Time to Sow or Plant	Distance of Rows Apart	Distance of Plants in Rows	Quantity per Acre	Ready to Use	Approximate Weight of Seeds per bu. in lbs.
Alfalfa	*May to Sept.	Broadcast.	Broadcast.	20 lbs.	Next Year.	60
Artichoke—Tubers	April to May.	2½ ft.	2 ft.	6 to 8 bu.	Sept. to Oct.	50
Asparagus—Seeds	April to May.	15 in.	4 to 6 in.	8 to 10 lbs.	3 years.	60
Asparagus—Roots	March to April.	6 to 8 ft.	12 to 18 in.	4,000 to 7,000	2 years.	60
Beans—Dwarf	April to Aug.	2½ ft.	4 to 6 in.	90 lbs.	8 weeks.	60
Beans—Navy	May to June.	2½ ft.	6 in.	45 to 60 bus.	Winter.	60
Beans—Soja.	May to June.	Broadcast.	Broadcast.	1 to 1½ bu.	Fall and Winter.	60
Beans—Pole.	May to June.	4 ft.	2 ft.	40 lbs.	10 weeks.	60
Beets—Table.	March to July.	12 to 18 in.	4 in.	6 to 8 lbs.	1½ to 3 mo.	19½
Beets—Sugar.	April to June.	2½ to 3 ft.	6 to 8 in.	5 to 6 lbs.	Fall and Winter.	19½
Buckwheat.	June to Aug.	Broadcast.	Broadcast.	1 bu. or 50 lbs.	Fall.	50
Cabbage—Plants (early)	March to April.	30 in.	15 to 20 in.	10,000 to 14,000.	June and July.	54
Cabbage—Plants (late)	July to Aug.	3 ft.	2 ft.	7,260.	Fall and Winter.	54
Carrot.	April to June.	1 to 2 ft.	3 to 4 in.	3 to 4 lbs.	45 to 70 days.	26
Cauliflower—Plants	March to April.	2½ ft.	2 ft.	8,000 to 10,000.	3 months.	54
Celery—Plants	June to Aug.	3 to 4 ft.	6 to 9 in.	15,000 to 30,000.	4 to 5 months.	37
Clover—Red and Sapling.	*Feb. to Sept.	Broadcast.	Broadcast.	8 to 10 lbs.	Next Year.	60
Clover—Alsike	*Feb. to Sept.	Broadcast.	Broadcast.	5 to 8 lbs.	Next Year.	60
Clover—Crimson.	July to Sept.	Broadcast.	Broadcast.	12 to 15 lbs.	May 1.	60
Corn—Garden.	April to July.	3 to 3½ ft.	9 to 15 in.	8 lbs.	2 to 3 months.	44 to 50
Corn—Field (drills).	April to July.	3½ to 4 ft.	10 to 18 in.	7 to 8 lbs.	3 to 4 months.	56
Corn—Field (checked)	April to July.	3½ to 4 ft.	3½ to 4 ft.	6 lbs.	3 to 4 months.	56
Cucumber	April to July.	4 ft.	2 lbs.	2 lbs.	2 to 2½ months.	39
Egg Plant—Plants	May to June.	3 ft.	2½ to 3 ft.	5,000 to 6,000.	60 days.	39
Endive.	August.	18 in.	12 in.	4 to 5 lbs.	2 to 2½ months.	26
Grass Seeds—(Light)	*Feb. to Oct.	Broadcast.	Broadcast.	1½ to 2 bu.	Next Year.	14
Grass Seeds—(Lawn)	*Feb. to Oct.	Broadcast.	Broadcast.	80 to 100 lbs.	8 to 10 weeks.	20
Horseradish—Roots.	Feb. to March.	2½ ft.	12 to 18 in.	12,000 to 15,000.	6 to 8 months.	56
Kale—Spring.	*Feb. to Sept.	Broadcast.	Broadcast.	6 to 8 lbs.	5 to 6 weeks.	56
Kale—Winter.	July to Sept.	Broadcast.	Broadcast.	3 to 4 lbs.	Fall to Spring.	54
Kohl Rabi—Plants	April to May.	1½ to 2 ft.	10 to 12 in.	21,000 to 34,000.	2 1-3 to 3 months.	56
Lettuce—Plants	April to Sept.	12 to 15 in.	6 to 8 in.	40,000 to 80,000.	1½ to 2 months.	35
Melon—Musk	May to July.	4 to 6 ft.	4 to 6 ft.	2 lbs.	2½ to 3 months.	32
Melon—Water	May to June.	8 to 10 ft.	8 to 10 ft.	3 lbs.	3 months.	35
Millet—German.	May to July.	Broadcast.	Broadcast.	1 bu.	6 to 7 weeks.	50
Mustard	*March to Sept.	Broadcast.	Broadcast.	4 to 5 lbs.	6 to 8 weeks.	56
Oats—Spring.	March to April.	Broadcast.	Broadcast.	1½ to 2 bu.	July 1.	32
Oats—Winter.	*Feb. to Sept.	Broadcast.	Broadcast.	1½ to 2 bu.	June 20 to July 10.	32
Okra	April to May.	2½ to 3 ft.	8 to 10 in.	8 to 10 lbs.	60 to 70 days.	48
Onions—For large bulbs.	April to May.	12 to 14 in.	4 to 5 lbs.	4 to 5 lbs.	Aug. to Sept.	39
Onions—For sets.	April to May.	10 to 12 in.	40 to 50 lbs.	40 to 50 lbs.	Aug. to Sept.	39
Onion Sets	March to May.	12 in.	15 to 16 bu.	15 to 16 bu.	July.	32
Parsley	March to April.	12 in.	4 in.	15 lbs.	July.	42
Parsnips	March to April.	18 in.	5 to 7 lbs.	5 to 7 lbs.	Fall and Winter.	18
Peas—Smooth	Feb. to March.	2½ to 3 ft.	4 to 6 in.	84 to 112 lbs.	7 weeks.	60
Peas—Wrinkled.	April to May.	2½ to 3 ft.	84 to 112 lbs.	84 to 112 lbs.	7 to 9 weeks.	56
Peas—Canada Field.	Feb. to April.	Broadcast.	Broadcast.	90 lbs.	June 15.	60
Peas—Cow.	May to July.	Broadcast.	Broadcast.	1½ bu.	3 months.	60
Pepper—Plants	May 15.	30 in.	15 to 18 in.	11,000 to 14,000.	2 to 2½ months.	28
Potatoes—(Early)	March to April.	27 in.	10 to 12 in.	8 to 12 bu.	June to July.	60
Potatoes—(Late)	July to August.	30 in.	15 to 18 in.	8 to 10 bu.	Oct. to Nov.	60
Sweet Potatoes—Plants.	May 15.	3 ft.	20 to 24 in.	7,000 to 8,000.	Sept. to Winter.	45
Pumpkin.	May.	8 to 10 ft.	8 to 10 ft.	2 lbs.	Fall.	24
Radish.	March to Aug.	10 to 15 in.	3 in.	8 to 10 lbs.	24 to 40 days.	56
Rape.	*Feb. to Sept.	Broadcast.	Broadcast.	6 to 8 lbs.	6 to 8 weeks.	56
Rhubarb—Roots	March to April.	4 ft.	2 to 3 ft.	5,000 to 7,000.	New Year.	56
Rye	Aug. to Nov.	Broadcast.	Broadcast.	1 to 2 bu.	April 20.	16
Salsify	March to April.	1½ to 2 ft.	3 to 4 in.	6 to 8 lbs.	Fall and Winter.	58
Spinach—Early	*Feb. to Sept.	Broadcast.	Broadcast.	15 to 20 lbs.	8 Weeks.	48
Squash—Spring.	May.	4 ft.	3 ft.	3 lbs.	July.	26
Squash—Winter.	May to June.	6 to 8 ft.	6 to 8 ft.	2 lbs.	Fall and Winter.	22
Teosinte	May to June.	3 to 3½ ft.	8 to 10 in.	3 to 5 lbs.	Aug. to Oct.	46
Tobacco—Plants	May to June.	3 to 3½ ft.	2½ to 3 ft.	4,800 to 5,000.	Sept. to Oct.	35
Tomato—Plants	May to July.	4 ft.	3 to 4 ft.	2,700 to 3,600.	July until frost.	20
Turnip.	March to Sept.	Broadcast.	Broadcast.	1½ to 2 lbs.	1½ to 2 months.	56
Vetch	Aug. to Oct.	Broadcast.	Broadcast.	50 lbs.	May.	50
Wheat	Sept. to Oct.	Broadcast.	Broadcast.	1 to 1½ bu.	July 1.	60

AFTER THE EARLY CROP IS OVER, PLANT A LATE CROP FOR WINTER USE
INSURE YOUR GARDEN WITH WISEMAN-DOWNS SEEDS

BEST
BY
TEST**WISEMAN-DOWNS CO., Inc.****Farm and Garden Annual****1927**BEST
BY
TEST**ARTICHOKES**

GREEN GLOBE—Plant vigorous and hardy, leaves silver gray, ribs reddish at the base and without spines; buds large, nearly round; scales pale green, shading to violet at the base. No other variety has such a broad, thick and fleshy receptacle or bottom. Height at stem about 2½ feet. **Pkt. 10c; oz. 50c.**

ARTICHOKE ROOTS

JERUSALEM—Sometimes called the American Artichoke. Used for table and stock feeding. Ready in April. **Pk. 75c; bu. \$3.00.**

BROCOLI**(German, Spargel Kohl)**

The heads resemble somewhat a coarse cauliflower, and the culture is the same in all essentials as for that vegetable. Brocoli is well adapted only to those sections where the season is long, cool and rather moist. One of the most valuable features is that it withstands greater extremes of temperatures than cauliflower.

EARLY PURPLE CAPE—Pkt. 10c; oz. 60c.**LARGE EARLY WHITE**—Pkt. 10c; oz. 60c.**BORECOLE, or KALE**

Sometimes called broccoli by the market gardeners. This is one of the most delicious of all Winter Kales. Sown in May and transplanted to stand over Winter. **Pkt. 10c; oz. 15c; ¼ lb. 30c; lb. \$1.00.**

BRUSSELS SPROUTS

This vegetable is used in the Fall and early Winter and by some considered more tender and delicious than any cabbage. The plant resembles the cabbage, the edible part being the numerous very small heads or sprouts, an inch or two in diameter, formed on the stalk at each leaf joint. Culture is the same in all essentials as the cabbage, except the leaves should be broken down in the Fall to give the little heads more room to grow. **Pkt. 10c; oz. 20c; ¼ lb. 60c; lb. \$2.00.**

ASPARAGUS ROOTS

4,000 to 6,000 roots are required for an acre.
We offer only two-year roots.

We make a specialty of growing Asparagus Roots, taking care to have each variety true to name. Can supply any quantity in Spring and Fall.

	Per 100.	Per 1,000.
PEDIGREED WASHINGTON	\$1.90	\$15.00
PALMETTO	1.00	8.00
GIANT ARGENTEUIL	1.00	8.00
BONVALLET'S GIANT	1.00	8.00

ASPARAGUS

This can be grown from seeds or roots, the latter preferred. It is one of the earliest and most delicious of Spring vegetables. Seeds should be sown thinly in early Spring in rows 1 foot apart. Thin out the weakest plants so the remainder will be 4 inches apart. When 1 year old transplant in the permanent bed, from where it can be cut 3 years later. One ounce of seed will sow about 60 feet of drill. About 400 plants to the ounce. Asparagus may be grown in almost any soil or situation, but special success is attained in thoroughly enriched, deeply dug sandy loam. Beds cared for improve with age, lasting for many years.

PEDIGREED WASHINGTON (Rust Proof)

—This variety was recently introduced by the U. S. Dept. of Agriculture and has grown into

favor so rapidly that we take great pleasure in offering it to our most critical trade. Our stocks of this variety come from carefully selected roots from the original fields as introduced by the Dept. of Agriculture, and is the best stock available for seed purposes. The main feature of this variety is its rust resisting qualities. It is also a large variety and very prolific, of a good greenish color. **Pkt. 10c; oz. 25c; ¼ lb. 75c; lb. \$2.50.**

PALMETTO ASPARAGUS—This is considered one of the best sorts. A large, dark green variety, of vigorous growth, having pointed tips. Very early and prolific. **Pkt. 10c; ¼ lb. 30c; lb. \$1.00.**

BONVALLET'S GIANT ASPARAGUS—In 1898, when nearly every plantation of Asparagus in the country was destroyed by rust, there was found by a Chicago gardener one perfectly healthy plant in a field of celebrated Giant Argenteuil variety. This plant was carefully saved, and was the progenitor of what is now called Bonvallet's Giant. As will be inferred, this sort is practically rust-proof. Besides this, it has no superior for color, size, rapid growth, etc. **Pkt. 10c; ¼ lb. 30c; lb. \$1.00.**

GIANT ARGENTEUIL—A French white sort; very prolific; large white shoots. We consider its superior to Conover's Colossal. **Pkt. 10c; ¼ lb. 30c; lb. \$1.00.**

Asparagus Buncher, \$4.00.**Asparagus Knives, 40c.****PRICES ON CORD**

3-Ply Fine Cotton Cord.....	45c lb.
2-Ply Coarse Cotton Cord.....	40c lb.
2-Ply Jute Twine.....	25c lb.
Raffia.....	20c lb.

Prices on larger quantities on application.

GREEN POD BEANS--Dwarf

CULTURE—Sow in rows 2 feet apart, using about 1 quart to every 100 feet of drill. Keep the soil well stirred between the rows. Plant when all danger of frost is past, in succession, once every week until 8 weeks before frost. Sow 1 to 1½ bu. to an acre.

The "Wisdom" Stringless Bean

GROWN FOR QUALITY AND QUANTITY

Absolutely Stringless

Tremendously Prolific

The plant is strictly dwarf, very erect while young, spreading when laden with fruit, 14 to 16 inches high, very vigorous and hardy, will withstand slight frost, branches green throughout, flowers light pink, pods large somewhat variable, 5¼ to 6 inches long, dark green, making it exceedingly attractive, tremendously prolific and absolutely stringless. In this we have at last produced an absolutely round pod stringless bean. One that has become a favorite with the trucker, packer, shipper, market gardener and the kitchen gardener. We feel that in putting this bean on the market, we are putting money in the pockets of the trucker and market gardener, as it will readily command a higher price in the market than any other variety known. During the season of 1925 although, very dry, it stood the test and produced wonderful crops. It certainly has proved a money maker for those who planted it, in fact we cannot emphasize its good qualities too highly. **Pt. 30c; qt. 50c; pk. \$3.25.**

BURPEE'S STRINGLESS GREEN POD is fast becoming one of the most popular beans in America. In earliness it is in the lead; in quality it is unexcelled, and as a cropper it is unrivaled. It is stringless in reality as well as in name. It is an abundant cropper, and the pods are full, round, fleshy and nearly straight. In length of pod it averages a little longer than Valentine: light green in color, and extremely handsome on the market bench. Quality is all that can be desired, so that for home use it is the just thing, and as it is a great cropper, market gardeners everywhere are finding it very profitable. We earnestly recommend it both for market and home use. **Pt. 25c; qt. 40c; pk. \$3.00.**

DWARF HORTICULTURAL, or CHERRY—Vines very productive, compact, upright, with large leaves; pods medium length, cylindrical, curved, with splashes of bright red on a yellowish ground. **Pt. 25c; qt. 40c; pk. \$3.00.**

The "Wisdom" Stringless

BLACK VALENTINE—A splendid green string bean, with extra long, well-formed pods; tender, early and delicious; very prolific and profitable to grow. **Pt. 25c; qt. 40c; pk. \$2.75.**

FULL MEASURE—This new green-podded bush bean is a heavy cropper and very early, of fine shape, stringless and good quality. Its hardness and great productiveness make it one of the very best bush beans. **Pt. 25c; qt. 40c; pk. \$3.00.**

NAVY, or PEA BEAN—The standard shell bean; very prolific. **Pt. 25c; qt. 40c; pk. \$3.00.**

GIANT STRINGLESS GREEN POD—An exceedingly productive and very handsome sort. Vines vigorous and spreading. The pods mature a few days later than those of Stringless Green Pod, average about ¼ inch longer and more nearly straight. The quality is very good for home use; suitable also for the market. **Pt. 25c; qt. 40c; pk. \$3.00.**

MAY QUEEN—Each season this sort is becoming more extensively planted by growers for the earliest market. Will stand more frost than any other bean, is earlier than the Valentine, enormously productive; makes round, straight, tender pods of an attractive appearance. **Pt. 25c; qt. 40c; pk. \$2.75.**

WISEMAN-DOWNS CO.'S NEW PROLIFIC—A new prolific long-podded variety. Pods brittle and entirely stringless, produced on heavy vines throughout a long season. For all purposes. **Pt. 25c; qt. 40c; pk. \$3.00.**

NITRAGIN increases the yield and at the same time inoculates the soil for other crops to follow. **Price 20c per pkg; Postpaid.**

Our Seed Beans are grown especially for seed purposes, and are carefully selected for purity and yielding qualities. The growing crops are carefully rogued each season, and are consequently free from disease or other faults often found in seed offered at a low price. Seed that is not bred for yielding qualities is productive of a heavy loss by reason of the vines throwing few pods and few beans in the pod.

Burpee's Stringless Green Pod

BEANS--Wax-Podded

DAVIS WAX—The most productive wax bean in cultivation. The vine is rustless and very vigorous, bearing its pods near the center in clusters. **Pt. 30c; qt. 50c; pk. \$2.75.**

CURRIE'S RUSTPROOF BLACK WAX—The earliest. Habit upright and robust, holding their pods well from the ground. Foliage remarkably vigorous and healthy. Pods long, flat and straight; beautiful golden color; unequalled for productiveness. **Pt. 25c; qt. 40c; pk. \$2.50.**

WARDWELL'S KIDNEY WAX—Strong, upright bush; growth 15 inches in height; very productive; pods straight, fleshy, 5 inches in length and ½ inch broad. A rich golden yellow; brittle and quite stringless even when fully developed; of rich, luscious flavor, and are exceedingly brittle. A great favorite with market gardeners. **Pt. 25c; qt. 40c; pk. \$2.50.**

Burpee's Improved Bush Lima

RUST-PROOF GOLDEN WAX—Very vigorous in growth and extremely early. One of the hardest of all wax sorts. Pods are straight, long and much thicker than the ordinary Golden Wax. A favorite with the home gardener. **Pt. 25c; qt. 40c; pk. \$2.50.**

SURE CROP WAX—A selection from Currie's Rust Proof Wax, having black seed and differing from that sort in that it is stringless, more hardy, rust-resistant and a little later. Pods flat, and average an inch longer and somewhat thicker than Currie's and with a stronger plant growth. Very desirable. **Pt. 25c; qt. 40c; pk. \$2.50.**

BEANS--Bush Lima

CULTURE—Soil should be of a rich loam. Plant in rows 2 feet apart and 6 inches in the row. Plant after all danger of frost has passed. A top dressing of well-rotted stable manure or some good fertilizer will help wonderfully.

DREER'S BUSH LIMA—Dwarf variety of Dreer's Improved Lima, which has been fixed in its character of a bush bean; very prolific, single plants often producing 50 to 200 pods. Equal in quality and tenderness to Dreer's Pole Lima. **Pt. 30c; qt. 50c; pk. \$3.00.**

THE "BURPEE IMPROVED" BUSH LIMA—Will outyield Burpee's Bush Lima by fully on third. This greater yield is due to the increased size of both pod and beans. The dried beans are very handsome and generally show a greenish-white coloring, while dried beans of the Burpee Bush Lima, like those of the large Pole Lima, are pure white. **Pt. 30c; qt. 50c; pk. \$3.00.**

FORDHOOK BUSH LIMA—An improved dwarf lima of the Kumerle type. The plant is vigorous and erect growing, bearing well above the ground. The pods are produced in large clusters, each containing 3 to 5 large beans of exceptionally fine quality. Much more productive than Kumerle and matures earlier. We consider this a decided acquisition to the dwarf Lima, possibly the best of the class. **Pt. 30c; qt. 50c; pk. \$3.50.**

HENDERSON'S DWARF LIMA—These are very valuable because they do not need poles, and being so dwarf, can be planted close together. They are very early and prolific, continuing to bear until frost. **Pt. 30c; qt. 50c; pk. \$3.25.**

BEANS--Pole Lima

CULTURE—Plant when all danger of frost or cold nights are over. Don't be afraid to put a liberal number in a hill, as this is cheaper than replanting. Set poles 4 feet apart each way. Thin out to 3 plants to a pole. One acre will plant 100 hills; 12 to 15 quarts per acre.

CARPENTERIA—This new bean, of recent introduction, is rapidly coming to the front as a favorite with market gardeners and truckers generally. While it has all the good qualities of the King of the Garden, it is even better, as the beans have a better appearance. Color is a bright green. It is early, yet keeps bearing until frost. Pods are filled with 4 to 5 large mealy beans, of the very finest flavor. Vines are vigorous and strong in growth, producing a number of pods, well filled. **Pt. 25c; qt. 40c; pk. \$2.75.**

ENORMOUS POLE LIMA—Wonderfully prolific. The big, broad, thick, meaty Beans, holding their fresh greenish color, even when dried, are crowded tightly in the pods. The vines are so tremendously prolific that the handsome pods seem literally crammed on to every inch of the branches. Plant this variety and you will be pleased with the results. Pt. 30c; qt. 50c; pk. \$3.00.

KING OF THE GARDEN LIMA—Vines very vigorous and productive. Pods 5 to 6 inches long, filled with 4 or 5 immense white beans of the finest quality. On account of its large pods, it is a favorite with market gardeners. It will come into bearing sooner and will make larger pods if not more than 2 vines are left to grow on a pole. Seed very large, ovoid, flat, with slight greenish tinge. Pt. 30c; qt. 50c; pk. \$3.00.

DREER'S IMPROVED, or CHALLENGE—Vines stout, vigorous and productive. Pods about 4 inches long, shorter and comparatively thicker than those of the other pole limas, and contains 4 to 5 beans, which are large, thick, white and of the best quality. Pt. 30c; qt. 50c; pk. \$3.00.

EXTRA-EARLY JERSEY—This is an extremely early variety, ripening 2 weeks earlier than any other sort. Pods are thin and very easily opened. The vine is very productive and exceptionally hardy and vigorous. The quality of the bean, its size and beauty make it one of the best. Pt. 30c; qt. 50c; pk. \$3.00.

BEANS—Pole

LAZY WHITE POLE BEANS—As this can be used as a shell or green bean, makes it very valuable for every home gardener as well as the market gardener. Pods are large and meaty; ripens early and very prolific. Pt. 25c; qt. 40c; pk. \$2.75.

KENTUCKY WONDER—Vine vigorous, climbing well and very productive; dry beans, long, oval, dun-colored; green pod, 9 and 10 inches long. Pt. 25c; qt. 40c; pk. \$2.75.

BEETS

CULTURE—The soil best suited for Beet culture is that which is rather light and well enriched. Sow in drills 1 foot apart and 1 inch deep, as early as the ground can be worked. When the plants are large enough thin out to 4 inches apart in rows. One ounce of seed will sow 100 feet of drill. 6 to 8 lbs. to an acre.

LEXINGTON MARKET BEAUTY—The best of the larger sorts. It succeeds equally well at all seasons; the tops make an upright growth, thus allowing of planting in close rows, which is a valuable feature where space in the garden is limited. The quality is excellent tender, sweet and quite free from tough fibre. The color is most attractive, being a deep blood red. The root is somewhat globe shape. For the trucker or market gardener it cannot be beaten. It is also the best for canning on account of its excellent flavor. Pkt. 10c; oz. 20c; ¼ lb. 40c; lb. \$1.25.

Lexington Market Beauty

the most attractive varieties grown, and is especially desirable for hotbeds on account of its small top and close-growing habit. Pkt. 10c; oz. 20c; ¼ lb. 40c; lb. \$1.00.

SWISS CHARD, or SPINACH BEET—This variety does not produce an edible root, but its top growth, which is silver-leaved, can be separated, the rib and the leaf, while the former is cooked and served like asparagus, the latter is prepared like spinach, and has altogether a decidedly splendid flavor. Pkt. 10c; oz. 15c; ¼ lb. 35c; lb. \$1.00.

CROSBY'S EGYPTIAN—A carefully selected strain of Egyptian, as early as the original, but larger, thicker, smoother and of better quality. Flesh deep blood red. It is a rapid grower, attaining a usable size quicker than any other variety, and does not become woody with age. Pkt. 10c; oz. 15c; ¼ lb. 35c; lb. \$1.00.

EXTRA-EARLY BLOOD TURNIP—Fine for forcing and for first early crop out of doors. Roots rich, dark crimson with very small tap roots; flesh dark blood red, zoned with lighter shade; crisp, sweet and tender when young. Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. 90c.

Detroit Dark Red Beet

DETROIT DARK RED—The uniformity of size, shape and fine appearance puts this variety at once among the leaders of this most desirable of all vegetables. Tops small and upright, admitting of close planting. Roots medium in size, globular or oval and very smooth; skin a dark blood red; flesh deep bright red, zoned with a lighter shade, fine-grained, crisp, tender and sweet, remaining so long after many sorts become woody. This is certainly a market gardener's beet. Pkt. 10c; oz. 15c; ¼ lb. 35c; lb. \$1.00.

EARLY WONDER—Its qualities are extra early, dark red color, fineness of shape and small top. One of

CATTLE BEETS

(German, Mangel Wurzel)

CULTURE—Sow 5 pounds per acre in April and May in thoroughly plowed, well-manured soil, in drills 2 inches deep, about 24 inches apart. Thin out to 12 inches and keep the weeds down by frequent hoeing and cultivating. Low ground is best adapted for Mangel Wurzel.

MAMMOTH LONG RED—This is an enormously productive variety, yielding from 50 to 70 tons to the acre, a single root often weighing from 20 to 40 pounds. It is the best long red Mangel. Pkt. 10c; oz. 15c; $\frac{1}{4}$ lb. 20c; lb. 60c; 5 lbs. \$2.50.

GOLDEN TANKARD—The best long yellow Mangel in cultivation. Relished by milch cows and sheep. Maturing earlier than other larger sorts. Pkt. 10c; oz. 15c; $\frac{1}{4}$ lb. 20c; lb. 60c; 5 lbs. \$2.50.

CABBAGE

(German, Kohl; French, Chou; Spanish, Berza)

The requisites for complete success with Cabbage are: First, good seed. (In this crop the quality of the seed used is of the greatest importance; no satisfactory results can possibly be obtained when poor seed is planted.) Second, rich, well-prepared ground. (A heavy, moist and rich loam is most suitable.) Third, frequent and thorough cultivation. The ground should be highly manured and worked deep. Our Cabbage Seeds are American-grown, and we are certain that better seed could not be obtained, as they are grown from specially selected seed stock, and are not simply strains of other varieties, but true and distinct varieties. One ounce of seed to 100 yards of row.

Early Jersey Wakefield

DANISH BALL HEAD—A good main-crop variety; popular with many of the gardeners. Large, solid, round head; medium early, having few outer leaves, consequently can be planted very close together. Pkt. 10c; oz. 25c; $\frac{1}{4}$ lb. 80c; lb. \$3.00.

CHARLESTON, or Large Wakefield—A strain in which the plant is larger and a little later than Early Jersey Wakefield, the head being fully as solid, but less pointed and considerably larger. Leaves rather large, smooth and comparatively thick. Exceedingly hardy, and on account of its earliness and size of head, with market gardeners and shippers it is deservedly a very popular sort to follow Jersey Wakefield. The seed we offer can be depended on to produce uniformly fine, marketable heads. Pkt. 10c; oz. 25c; $\frac{1}{4}$ lb. 75c; lb. \$2.50.

COPENHAGEN MARKET—Very fine, nearly as early as Jersey Wakefield; stem short, heads large, round and solid, with few outer leaves of an upright growth. Our stock of this popular variety is very early uniform and dependable. Pkt. 10c; oz. 25c; $\frac{1}{4}$ lb. 80c; lb. \$3.00.

SUCCESSION—Very popular with the market gardener, producing enormous, uniform heads, and matures a few days later than Early Summer. Pkt. 10c; oz. 25c; $\frac{1}{4}$ lb. 80c; lb. \$2.75.

EARLY FLAT DUTCH—Very compact grower, with a medium-size, roundish, flat head, which is always solid. Pkt. 10c; oz. 25c; $\frac{1}{4}$ lb. 75c; lb. \$2.50.

EARLY JERSEY WAKEFIELD—The earliest and surest heading of first early Cabbage. Most gardeners depend upon it for the bulk of their extra-early crop. Its exceeding hardiness, not only to resist cold, but other unfavorable conditions, insures the greatest likelihood of profitable and satisfactory results. Our stock is grown and selected with the greatest care; there is none better and there are few as good. Plant compact, with few outer leaves, which are smooth and thick. Heads of medium size, solid, uniformly pointed and of excellent quality. The habit of growth and hardiness make it most desirable for early planting. Pkt. 10c; oz. 25c; $\frac{1}{4}$ lb. 75c; lb. \$2.50.

W. D. Co.'s GOLDEN ACRE—This variety is of recent introduction, extremely early flat head. It matures much earlier than Copenhagen Market and heads much larger and more compact. Does not crack as easily. Few outer leaves, allowing closer planting. Matures in 82 days, making very solid heads, has done splendidly under dry weather conditions. Our strains of this variety are very uniform and can highly recommend it to the market gardeners. Pkt. 25c; oz. 50c; $\frac{1}{4}$ lb. \$1.50; lb. \$5.00.

PREMIUM FLAT DUTCH—This variety of late Cabbage is a standard in all sections for Winter use. It makes a large, solid head, which keeps long without bursting, and is adapted to a more varied climate than probably any other variety. Pkt. 10c; oz. 25c; $\frac{1}{4}$ lb. 75c; lb. \$2.50.

ALL SEASONS—American grown. This forms a fine large head, of superior quality, nearly as early as the Early Summer. Suitable for planting at any season. Pkt. 10c; oz. 25c; $\frac{1}{4}$ lb. 75c; lb. \$2.50.

Premium Flat Dutch

All Prices Subject to Change Without Notice

Charleston, or Large Wakefield Cabbage

PERFECTION DRUMHEAD SAVOY—This is the hardest heading and best all-round Savoy. Heads beautifully blanched and of the finest flavor. Pkt. 10c; oz. 25c; $\frac{1}{4}$ lb. 90c; lb. \$3.00.

ALL HEAD—The largest of the early Cabbages, being roundish flat and very solid. Pkt. 10c; oz. 25c; $\frac{1}{4}$ lb. 75c; lb. \$2.50.

RED ROCK—While late in maturing, this is the largest heading of all deep red varieties. Pkt. 10c; oz. 30c; $\frac{1}{4}$ lb. \$1.00.

CHINESE CABBAGE (Pe Tsai)—Sometimes called Celery Cabbage; resembles Cos Lettuce as much as cabbage, though with a decided cabbage-flavor. Pkt. 10c; oz. 40c.

CHINESE CABBAGE (Wong Bok)—The heads of this variety are shorter and broader than Pe Tsai, and leaves fold tighter, making a more compact plant. Pkt. 10c; oz. 40c.

GEORGIA COLLARDS—Called the Cabbage Collard on account of its close bunching growth. The plant produces center leaves generally perfectly white, though sometimes dashed with pink. It is a very delicate vegetable and of the finest quality. Pkt. 10c; oz. 15c; $\frac{1}{4}$ lb. 20c; lb. 65c.

CARROT

CULTURE—While a sandy loam, made rich by manuring the previous year, is the best soil for the Carrot, any good land, if thoroughly and deeply worked, will produce satisfactory crops. It is advisable to sow as early in the Spring as the ground is fit to work, though good crops may be grown from sowings as late as June 15. For table use, sow the smaller kinds early in rows 16 to 18 inches apart. For field culture, sow the drills 18 to 24 inches apart, using from $1\frac{1}{2}$ to 3 pounds of seed to the acre. Cover $\frac{1}{2}$ to 1 inch deep. One ounce of seed to 100 feet of row.

Danvers Half Long

DANVERS—A half-long orange carrot, grown largely on account of its great productiveness and adaptability to all classes of soil. Tops of medium size. Roots of medium length, 6 to 8 inches long, tapering uniformly to a blunt point. Flesh deep orange, crisp and tender. Although the roots of this variety are comparatively short, they produce as large a bulk as the longer field sorts and are more easily harvested. Pkt. 10c; oz. 15c; $\frac{1}{4}$ lb. 35c; lb. \$1.00.

W. D. CO.'S CORELESS—Tops of medium size; roots cylindrical, smooth, bright orange; flesh orange, becoming yellow in center, but with no distinct core. One of the handsomest of the medium size sorts; excellent for the market gardener or home garden. Pkt. 10c; oz. 15c; $\frac{1}{4}$ lb. 35c; lb. \$1.00.

CHANTENAY, or PRIDE OF THE MARKET—Very productive, medium early and of excellent quality. Tops medium-sized; necks small. Roots thick, $5\frac{1}{4}$ to 6 inches in length, uniformly half-long or stump-rooted, but tapering slightly; smooth, deep orange color. Flesh very crisp and tender. Although a medium-early sort, the roots are suitable for use nearly as early as any. One of the best in quality for the market and home garden, while its great productiveness and the ease with which it can be harvested make it very desirable as a field sort. Pkt. 10c; oz. 15c; $\frac{1}{4}$ lb. 35c; lb. \$1.00.

IMPROVED LONG ORANGE—The roots of the strain we offer are very deep orange, long and comparatively thick, often 12 inches in length and 3 inches in diameter at the crown, tapering regularly to a point. Tops small for the size of the root. Suitable for table use as well as stock feeding, combining great productiveness with uniform shape and fine-grained, sweet flesh. Pkt. 10c; oz. 15c; $\frac{1}{4}$ lb. 25c; lb. 75c.

GUERANDE, or OX HEART—Especially desirable for soil so hard and stiff that long-rooted sorts would not thrive in it. Tops comparatively small. Roots 4 to 5 inches long, very thick, ending abruptly in a small tap root. Flesh bright orange, fine-grained and sweet. When young the roots are excellent for table use, and when matured are equally good for stock feeding. Pkt. 10c; oz. 15c; $\frac{1}{4}$ lb. 35c; lb. \$1.00.

Guerande, or Ox Heart

CAULIFLOWER

CULTURE—For Spring and early Summer crop, sow in March or early in April in hotbed and transplant in cold frame when sufficiently large to handle. As soon as danger of hard freezing is over set in open ground in rows 2½ feet apart and 18 inches apart in the row. The plants will endure a light frost. The soil for Cauliflower should be like that for cabbage, but it is better if made richer. One ounce will produce 1,500 plants.

EXTRA-EARLY SNOWBALL—Unquestionably the earliest maturing strain of the true short-leaved Snowball type of Cauliflower. Admirably adapted for forcing or Wintering over for early crop, and the most popular sort for these purposes, also one of the best sorts for late Summer and Fall crop. The plants are compact, with few short outside leaves, and are well suited for close planting. The heads are of medium to large size, solid, compact, round, very white and curdlike, and are developed earlier than those of any other sort. **Pkts. 25c and 50c; oz. \$2.50; Postpaid.**

DROUGHT-RESISTING—Large, white solid heads, maturing a little later than the Snowball. The best for hot, dry weather. **Pkts. 25c and 50c; oz. \$2.50; Postpaid.**

EARLY PARIS—An excellent sort for early or late use. **Pkt. 25c; oz. \$1.75; Postpaid.**

EXTRA-EARLY DWARF ERFURT—A remarkably sure-heading early Cauliflower. It is of dwarf habit with short outside leaves. **Pkts. 25c and 50c; oz. \$2.00; Postpaid.**

PLANTS--Vegetable

We grow each year thousands of vegetable plants of all kinds, we furnishing the seed stock, thereby knowing the true varieties of each. These are looked after with the utmost care, and in shipping are packed in moss, in strong cases, so we can guarantee safe delivery to our customers. Our list includes the following:

BEEF—Eclipse, Detroit Dark Red, Crosby Egyptian Blood Turnip and Egyptian Flat. **50c per 100; \$4.00 per 1,000.** Special price on larger quantities.

CABBAGE—Early Jersey Wakefield, Charleston Wakefield, Plain Flat Dutch, Early York, Succession, All Seasons, Drumhead Savoy and All-Head Early. **50c per 100; \$4.00 per 1,000.**

CELERY—Golden Heart, Winter Queen, Giant Pascal, Pink Plume, Boston Market and Golden Self-Blanching. **\$1.00 per 100; \$6.00 per 1,000.**

EGGPLANT—New York Improved, Black Beauty and Baltimore. Pot grown, **5c each; 50c per dozen; \$4.50 per 100.**

KOHL-RABI—**75c per 100; \$6.00 per 1,000.**

LETTUCE—All varieties. **50c per 100; \$4.00 per 1,000.**

BRUSSELS SPROUTS—**75c per 100; \$6.00 per 1,000.**
CAULIFLOWER—**\$1.50 per 100.**

SAGE—For flavoring (potted plants only). **10c each; \$1.00 per dozen.**

PARSLEY—For Fall or Spring planting. Strong, healthy roots. **\$1.00 per 100; \$5.00 per 1,000.**

CRESS

CURLED, or PEPPER GRASS—This small salad is much used with lettuce, to the flavor of which its warm, pungent taste makes a most agreeable addition. **Pkt. 10c; oz. 15c; ¼ lb. 35c; Postpaid.**

WATER CRESS—Highly esteemed as a salad during the Spring and Fall, and as a garnish for meats during the Winter. Seed may be started readily in pans or boxes of very moist earth, and the young plants transplanted to shallow water. **Pkt. 10c; oz. 40c; ¼ lb. \$1.25; Postpaid.**

CHIVES

(German, Schnittlauch)

This popular kitchen garden plant is indispensable for flavoring certain dishes. It imparts a mild onion taste, not, however, to such an extent as to render it objectionable. The plants are hardy and will last for years. Don't cut the plant too close when gathering. If desired for Winter use, lift the plant in a pot or box and place in a sunny window in the kitchen. **Pkt. 10c; oz. 25c; Postpaid.**

CHICKORY

WITLOOF OR FRENCH ENDIVE—Grown for its use as a salad, the blanched head resembling cos lettuce in appearance. Eaten raw or as a salad, also sometimes cooked like Endive. **Pkt. 10c; oz. 15c; ¼ lb. 35c; lb. \$1.00.**

CORN SALAD

A favorite salad plant and very hardy. Sow in August or September, and protect with leaves during Winter. It can be gathered in the Spring very early. Sown in April, it is soon ready for use. The leaves are sometimes boiled and served as spinach. Three ounces of seed to 100 feet of row. **Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. 75c.**

CHERVIL

An aromatic plant, used extensively in Europe as a salad seasoner. It adds a flavor that is entirely its own. When chopped fine and scattered on buttered potatoes it is a rare treat. American gardeners should become familiar with this, as they are missing one of the best things that grow. Sow it in a row like parsley, which it somewhat resembles. For a continuous crop, sow every 2 weeks. If one has heated frames or a greenhouse, it can be cut 4 or 5 weeks after sowing. One ounce will sow a row 25 feet long. **Pkt. 10c; oz. 35c; ¼ lb. \$1.00; Postpaid.**

PEPPERS—Bull Nose, Sweet, Mountain, Ruby King and other varieties. **\$1.50 per 100.**

SWEET POTATOES—All varieties. **60c per 100; \$4.00 per 1,000.**

TOMATO—Seed bed plants, **50c per 100; \$4.50 per 1,000.** Field grown, **40c per 100; \$3.00 per 1,000.** Special price quoted on larger quantities.

Prices above include such varieties as Bonnie Best, Red Rock, Greater Baltimore, New Stone, Brinton's Best, My Maryland, Paragon, Matchless, Chalk's Jewel, Beauty, and New Queen.

"WISDOM" and KELLY RED POTTED PLANTS, **5c each; 50c per dozen.** Hot-bed plants, **75c per 100; \$5.00 per 1,000.** Field grown, **60c per 100; \$4.00 per 1,000.**

NOTICE—Plants will not be forwarded C. O. D. Plants are not quoted by express prepaid; the customer pays express charges, and unless otherwise instructed, plants will be forwarded by express. Cash must accompany all orders for plants.

CELERY

(German, Sellerie; French, Celeri; Spanish, Apio)

CULTURE—Sow in hotbeds in March or in open ground in April. See that no weeds infest the seed bed. When 3 inches high transplant in a bed outdoors in rows 3 inches apart each way; let them remain here until July, when they should be planted where they are to mature, in rows 3 feet apart, 6 inches apart in the row. One ounce of seed will produce 2,000 plants.

GOLDEN PLUME—

This variety comes in for use at Christmas, and keeps well into the Spring. Large heavy stalks and very nutty. The heart or inner stalks are a rich golden yellow. Easy to blanch a good keeper and always of the crisp, brittle and nutty quality so much desired. **Pkt. 25c; ½ oz. \$1.50; 1 oz. \$2.75.**

WHITE PLUME—It is the earliest Celery in cultivation. It is distinct from Golden Self-Blanching in being taller in growth, more slender in stalk, and branches to a pure snowy whiteness. It is a valuable market sort on account of its extreme earliness, but is not as good a keeper nor has it so fine a flavor as the Golden Self-Blanching. **Pkt. 10c; oz. 25c; ¼ lb. 75c; lb. \$2.50.**

WINTER QUEEN—A medium-tall, solid variety; will retain its qualities long through the Winter. The heart is very full and large. **Pkt. 10c; oz. 20c; ¼ lb. 75c; lb. \$2.50.**

COLUMBIA—An exceptionally fine, early variety, is of medium height, but very stocky. Stalks are thick, almost round, are of a rich yellow color, and its fine flavor and crispness will please the most critical. **Pkt. 10c; oz. 25c; ¼ lb. 75c; lb. \$2.50.**

GOLDEN SELF-BLANCHING—One of the earliest and most productive sorts. The beautiful golden-colored stalks attain a height of 18 inches, which during the growing period are never pithy; of excellent flavor, requiring no artificial blanching process. Ready for use in October, but may be kept for early Winter use. **Pkt. 10c; oz. 25c; ¼ lb. 90c; lb. \$3.00.**

HENDERSON'S EASY BLANCHING—Excels in the qualities that give self-blanching celeries their value. It bleaches earlier and quicker than any of this class; it is the longest keeping variety grown (if put away green), excelling in this respect every other sort. **Pkt. 10c; oz. 25c; ¼ lb. 75c; lb. \$2.50.**

EMPEROR—A very special strain of late keeping Celery for winter use. Of dwarf type averaging 18 inches in height, with thick white stalks and large, solid, pale yellow heart. Very crisp, with no stringiness, and of splendid flavor. **Pkt. 10c; oz. 25c; ¼ lb. 75c; lb. \$2.50.**

EXTRA-SELECT FRENCH GOLDEN SELF-BLANCHING

Our seed of this variety comes to us every season direct from the originator in France, it is unexcelled and absolutely reliable and our rapidly increasing trade is abundant evidence of its high quality. It is now the leading sort on all markets as an early Celery. For market use it is preferred to White Plume, because it does not wilt so soon, and its rich yellow color is very attractive. The stalks are heavier, of a fine nutty flavor, attains a good size, and it comes into market almost as soon as any other sort. It is of dwarf, compact habit and blanches readily. **Pkt. 25c; oz. \$1.00; ¼ lb. \$3.25; lb. \$12.00.**

CELERIAC

Grown extensively for the roots, which are turnip-shaped, very smooth, tender and marrowlike.

LARGE SMOOTH PRAGUE—This is unquestionably the largest and best Celeriac in existence. **Pkt. 10c; oz. 25c; ¼ lb. 75c; lb. \$2.50.**

CELERY PLANTS—(See page 8.)

SWEET or SUGAR CORN

CULTURE—Sugar Corn can be raised on any good, ordinary soil if it is deeply and well worked before planting. Give frequent and thorough but shallow cultivation until the tassels appear. Plant in rows about 3 or 4 feet apart and about 3 feet apart in the row. Leave not more than 3 plants to the hill. It can be planted from first of May to last of July for a succession of crop. Sow about 8 qts. to an acre.

ADAM'S EXTRA EARLY—Pure white, medium-sized ears. Not a sugar corn. Planted extensively by market gardeners, as it matures in about 65 days after germination. **Pt. 15c; qt. 25c; pk. \$1.25; bu. \$4.50.**

ADAM'S EARLY—Pure white, ears a trifle larger than Adam's Extra Early. Matures about 10 days later. **Pt. 15c; qt. 25c; pk. \$1.25; bu. \$4.50.**

EARLY SHEFFIELD—This is one of the standard old varieties that has become wonderfully popular, both in quality and yield it is sure to delight all lovers of choice early Sweet Corn. **Pt. 20c; qt. 30c; pk. \$1.75; bu. \$6.00.**

PREMO—Ears from 5 to 7 inches long and of fine shape for a first sort. We confidently recommend it to all gardeners as its earliness and table quality will speedily bring it into favor. **Pt. 20c; qt. 30c; pk. \$1.75; bu. \$6.25.**

EARLY EVERGREEN—A fine new sort; identical in flavor, shape and size of grain with Stowell's Evergreen, but about 10 days earlier. The ears grow about 9 inches long, are mostly 12-rowed, and remain tender a remarkably long time. It is a splendid sort for truckers and private gardeners, as it furnishes a succession to the second early sorts. **Pt. 20c; qt. 30c; pk. \$1.75; bu. \$6.00.**

All Prices Subject to Change Without Notice

GOLDEN CREAM—A cross of Country Gentleman and Golden Bantam, taking on the character of the former variety, except in color. The ears are ready for use within 85 to 90 days after seeds were sown. Grains are long and pointed, rich cream color when ready, but turn to light golden-yellow when cooked. Stalks make a healthy, rapid growth, producing an average of three ears each. **Pt. 25c; qt. 40c; pk. \$2.25.**

GOLDEN GIANT—As its name implies this is the largest of the yellow sugar varieties, the ears measuring up to 8 inches long. The cob is of small diameter, and contains twelve to eighteen rows of long, thick grains which cover the entire surface and are deep orange in color, extremely juicy and sweet. **Pt. 25c; qt. 40c; pk. \$2.25.**

GOLDEN BANTAM—This is a Sweet Corn of most exquisite quality, which, when ready to use, is of a bright golden yellow color. It looks rich, and it is rich, and no mistake. It can be planted very early, as it is hardy as the Extra-Early Adam's. The small stalks can grow very closely together in the row and will produce 2 to 3 ears each. **Pt. 25c; qt. 40c; pk. \$2.00.**

BLACK MEXICAN—Very sweet, sugary flavor Ears about 7 inches long. Color black. **Pt. 25c; qt. 40c;**

NINETY-DAY RED COB—This sort, while not a sugar corn, is planted almost exclusively as a table corn. It matures in 90 days, and if weather conditions are just right, will often be ready to cut in 80 to 85 days. Cob red, ears large, grain large, white. **Pt. 15c; qt. 25c; pk. \$1.25; bu. \$4.50.**

COUNTRY GENTLEMAN—The ears are somewhat smaller and less showy than the coarser varieties, but for private family use, where quality is preferred to size, it has no equal. The cob is very small, giving great depth to the grain. Matures about the same time as Stowell's Evergreen. **Pt. 20c; qt. 30c; pk. \$1.75; bu. \$6.00.**

STOWELL'S EVERGREEN—The most popular of all. If planted at the same time with earlier kinds will keep the table supplied until October. It is hardy and productive, very tender and sugary, remaining a long time in a fresh condition for cooking. In fact, it is so well known that it needs no further description. **Pt. 20c; qt. 30c; pk. \$1.75; bu. \$6.00.**

EARLY CHAMPION—An excellent second-early sort, as sweet as any variety, Golden Bantam and Country Gentleman not excepted. Yields more than any other early variety; ready for use in 70 days after planting. The ears are 6 to 8 inches long, 12-rowed, and kernels pure white. Very large and deep for an early corn; grows about 5 to 6 feet high, usually with two ears to the stalk. It is superior to most other corns in quality and is a few days earlier than Minnesota. More prolific, larger ear, deeper kernels. For home use and when dried it is remarkably sweet and tender. **Pt. 20c; qt. 30c; pk. \$1.75; bu. \$6.50.**

ZIG-ZAG EVERGREEN—This fine new strain possesses the distinct characteristics which have made Stowell's Evergreen so deservedly the favorite for main crop, but produces ears fit to use from 1 week to 10 days earlier. **Pt. 20c; qt. 30c; pk. \$1.75; bu. \$6.00.**

HOWLING MOB—A big-eared early corn with the sweet flavor of the late varieties; ears 7 to 9 inches long; usually two pearly white ears to the stalk; the shuck extends well over the tip and protects it from the green worm so destructive to early sweet corns. **Pt. 20c; qt. 30c; pk. \$1.75; bu. \$6.00.**

WHITE EVERGREEN—This is a high-bred white-type Stowell's Evergreen. It has been developed by careful work, only the finest white-eared product being saved and selected each season. The stalks are of strong vigorous growth, 6 to 7 feet high. **Pt. 20c; qt. 30c; pk. \$1.75; bu. \$6.00.**

GOLDEN QUEEN POP CORN—For planting or popping. **Lb. 15c; 10 lbs. \$1.00.**

Stowell's Evergreen

We make every effort to procure, and have grown for us, the very best Sugar Corn Seed Stock, paying the strictest attention to the types of the different varieties, time and maturity, length of ears, color of grain, sweetness, etc., and can assure the buyer corn that is absolutely true to name and of excellent germinating quality. However, no matter how well sugar corn has been selected and cured, if left in bulk will gather moisture and spoil. In order to prevent this we would advise our customers to take it out of bag or package as soon as received and spread in a warm dry place.

CUCUMBER

(German, Gurken; French, Coucombre; Spanish, Pepino)

CULTURE—Cucumbers succeed best in rich loamy soil. As soon as the weather becomes warm and settled, plant in hills 4 to 6 feet apart each way, with 10 to 12 seeds in a hill; cover $\frac{1}{2}$ inch deep. Air-slaked lime sprinkled on the plants every few days as soon as they are up will protect them from the striped beetle. When 3 or 4 inches high, thin out plants, leaving 3 or 4 of the strongest to each hill. The fruit should be picked when large enough otherwise it destroys the productiveness. One ounce to 50 hills; 2 pounds per acre.

W. D. Co.'s O. K. Cucumber

W. D. CO.'S O. K.—In this variety we have secured the finest strain (even exceeding the Klondike, or White Spines) that has ever been grown. Our grower in Colorado, whose specialties are Cucumbers and Cantaloupes, says: "It is the Cucumber par excellence." Early, producing a very abundant crop of fruit, 9 to 10 inches long. The flesh is thick; seed cavity relatively small, with few seeds; color rich dark green, which does not fade nor turn yellow when shipped a long distance. It is tender and crisp, making it fine for slicing. The fruit is slightly longer than either the "Klondike, or White Spine," more cylindrical in shape. A remarkable feature of this variety is the strong growth of vines which enables it to withstand blight and bring the fruits to their full size and perfection, a very important quality, which will appeal to both trucker and home gardener. **Pkt. 10c; oz. 15c; $\frac{1}{4}$ lb. 40c; lb. \$1.25.**

KLONDIKE—This is a true and distinct sort, not to be compared with the White Spine. It is entirely different, in that it holds its greenish color longer, is earlier and has a much better appearance. It is the best for truckers as well as for the home garden. One trucker in Anne Arundel County, Md., says: "The best crop of Cucumbers I ever had," and we can say that this is the sentiment of all who have tried this wonderful sort. **Pkt. 10c; oz. 15c; $\frac{1}{4}$ lb. 30c; lb. \$1.00.**

IMPROVED LONG GREEN—Of excellent quality, dark green, firm and crisp. Very popular with the market gardeners. A standard pickling sort. **Pkt. 10c; oz. 15c; $\frac{1}{4}$ lb. 25c; lb. 90c.**

SURE GREEN—This is one of the most productive sorts. Fruit can be picked throughout the entire season. The vine is hardy and will continue to flower and bear fruit until killed by frost. Very early. **Pkt. 10c; oz. 15c; $\frac{1}{4}$ lb. 30c; lb. \$1.00.**

ARLINGTON WHITE SPINE—This strain of White Spine has been improved by careful selection. Rich green color, and a very prolific bearer. **Pkt. 10c; oz. 15c; $\frac{1}{4}$ lb. 25c; lb. 90c.**

EARLY GREEN PROLIFIC—A very productive variety, having fruits of good length and handsome form. Desirable for producing pickles of medium size and of fine quality when sliced for the table. **Pkt. 10c; oz. 15c; $\frac{1}{4}$ lb. 25c; lb. 90c.**

EARLY FORTUNE—The finest type of White Spine yet produced. Early, very productive and disease-resistant; fruits nine inches long, slightly tapering; flesh white, very firm and crisp, with very few seeds; color rich, dark green, which does not fade when shipped a long distance. **Pkt. 10c; oz. 15c; $\frac{1}{4}$ lb. 30c; lb. \$1.00.**

SMALL GHERKIN (for Pickles)—A very small, oval, prickly fruited sort, quite distinct from all others and grown exclusively for pickles. It is the smallest of all the varieties, and should always be picked when young and tender. Seed distinctly smaller than other Cucumbers, and is slow to germinate, requiring usually from 2 to 3 weeks. **Pkt. 10c; oz. 25c.**

EGGPLANT

(German, Fierpflauze; French, Aubergino; Spanish, Bereugena)

CULTURE—Eggplant seed germinates slowly and should be started in hotbed, for in this, as in all sub-tropical plants, it is of importance to secure a rapid and continuous growth from the first, the plants never recovering from a check received when young. When the plants have formed 2 rough leaves, transplant to 3 or 4 inches apart. When all danger, not only of frost, but from cold nights is past, harden off the plants by gradual exposure to the sun and air, and decreasing the supply of water; then transplant to the open ground, setting the plants 2 $\frac{1}{2}$ feet apart. One ounce will produce about 1,000 plants.

BLACK BEAUTY—Fruits large, symmetrical in shape and uniformly of a rich dark purple color, which it holds an exceptionally long time, making the variety very desirable for the market. Fruit matures a little earlier than our Improved Large Purple, but are usually not quite as large. **Pkt. 10c; oz. 40c; $\frac{1}{4}$ lb. \$1.25.**

NEW YORK IMPROVED LARGE PURPLE EGGPLANT (Spineless)

Black Beauty

This variety is a general favorite both for market and home garden. Plants spineless, large and spreading, with light green foliage. Usually produces 4 to 6 large, oval fruits of a splendid dark purple color. Early, productive and of excellent quality. The vigor and productiveness of the plant and the large size and fine quality of its fruit make it most profitable for market gardeners. **Pkt. 10c; oz. 40c; $\frac{1}{4}$ lb. \$1.25.**

ENDIVE

(German, Endive; French, Chicoree;
Spanish, Enoiula o Escarold)

CULTURE—Endive is an excellent Autumn and Winter salad. Sow seed late in the Spring, or even as late as July, in shallow drills, 15 inches apart, and when plants are strong thin out to about a foot apart. To blanch, gather up the outer leaves over the center of the plant and tie them together at their tips. Sow 1 ounce to 100 feet of drill.

GREEN CURLED—The hardest variety. Leaves dark green, finely cut; easily blanched to a fine white. Pkt. 10c; oz. 15c; $\frac{1}{4}$ lb. 35c; lb. \$1.25.

BROAD-LEAVED BATAVIAN—Leaves large, broad, slightly curled. Tie up for blanching. Pkt. 10c; oz. 15c; $\frac{1}{4}$ lb. 35c; lb. \$1.25.

KALE

(German, Blaetter-Kohn; French Chou Vert;
Spanish, Breton)

Extensively grown in this locality and also in the South during the Fall, Winter and Spring. The plant is more hardy than cabbage, and makes excellent greens for Winter and Spring use. The quality is improved rather than injured by frost. One ounce of seed will sow a drill of about 150 feet.

SIBERIAN CURLED KALE—A finely curled, spreading, low-growing variety. The leaves, when properly cooked, make a very palatable dish of greens. The plant is very hardy. The leaves are long and of an attractive, bright green color. Pkt. 10c; $\frac{1}{4}$ lb. 15c; lb. 50c.

SLOW-SEEDING SIBERIAN CURLED KALE—Two years ago we secured a small quantity of a very slow-seeding and extremely curly variety of Siberian Kale from a local market gardener who had been guarding it very closely for a good many years and never failed to supply the Baltimore markets with kale long after the ordinary varieties were gone and for which he received a handsome price. From this small stock we have grown a sufficient quantity to supply the demand and we feel sure that the trucker or gardener who plants it will be greatly rewarded. Pkt. 10c; oz. 15c; $\frac{1}{4}$ lb. 30c; lb. \$1.00.

TALL GREEN CURLED SCOTCH—Grows 3 or 4 feet high, bearing long, plumelike light green leaves, deeply cut, finely curled at edges. Very ornamental and so hardy that a moderately heavy frost improves rather than injures its quality. Pkt. 10c; oz. 15c; $\frac{1}{4}$ lb. 30c; lb. \$1.00.

Siberian Curled Kale

DWARF CURLED SCOTCH OR NORFOLK—Plant low and compact, but with large, bright, deep green leaves, curled, cut and crimped until the whole plant resembles a bunch of moss. One of the best sorts for use, when well grown and cooked is one of the most palatable of vegetables. Pkt. 10c; oz. 15c; $\frac{1}{4}$ lb. 30c; lb. \$1.00.

KOHL-RABI

(German, Kohl-Rabi; French, Chou Rave;
Spanish, Colde Nabo o Nabilcol)

CULTURE—This is a favorite vegetable in Europe, where it is extensively grown for feeding cattle as well as for table use. The bulb is formed above the ground, and if used when young and tender, makes a most delicate dish for the table. One ounce will sow 150 feet of drill.

EARLIEST WHITE VIENNA—Greenish-white outside, with clear white flesh within. Smooth short leaf; good for forcing fine quality. Pkt. 10c; oz. 15c; $\frac{1}{4}$ lb. 50c; lb. \$1.50.

LEEK

(German, Lauch, French, Poireau;
Spanish, Puerro)

CULTURE—Sow the seed and care for the young plants same as for onions, but they need a little more room in order to develop fully. When the young plants are about the size of a goose quill transplant into a prepared bed in rows 1 foot apart and 4 to 5 inches in the rows. Set the roots deep and draw the earth to them when cultivating, so that they may be well blanched by the time they are fit for use. One ounce to 150 feet of row.

LARGE AMERICAN—Produces a large, thick stem and of mild flavor. Pkt. 10c; oz. 20c; $\frac{1}{4}$ lb. 60c; lb. \$2.00.

LONDON FLAG—One of the hardest and best for Winter use. Pkt. 10c; oz. 20c; $\frac{1}{4}$ lb. 60c; lb. \$2.00.

MUSTARD

(German, Snef; French, Moutarde;
Spanish, Mustazo)

WHITE MUSTARD—For salads and culinary purposes. Pkt. 10c; $\frac{1}{4}$ lb. 15c; lb. 50c.

BROWN MUSTARD—Stronger than above. Price same as white

LETTUCE

(German, Lattich; French, Laitue; Spanish, Lechua)

CULTURE—Lettuce, to be at its best, should be grown as rapidly as possible; hence the soil should be made as rich and friable as possible by liberal manuring and thorough preparation. For Winter, sow under glass from November to February and thin out as necessary to prevent crowding. Keep a moderate heat and give all the light and air possible. For general crop, sow outdoors as early in the Spring as the ground can be worked, in drills 18 inches apart, and thin the young plants to 4 inches apart in the row. As the plants begin to crowd thin them out and use as required. In this way a much longer succession of cuttings may be had from the same ground. One ounce of seed for 2,000 plants.

WISEMAN-DOWNS CO.'S NEW IDEAL

HEAD LETTUCE—After experimenting with this wonderful variety for several years we feel that we have at last a head lettuce which is truly the best for truckers as well as for the home garden. Those who were fortunate enough to get some of the seed the past season say, "It is the best they have ever grown." The plants are of quick growth, practically all head and extremely handsome. From early Spring plantings in the open ground they grow quickly to a diameter of 8 to 9 inches, with the broad, light green outer leaves folding closely about the round solid head. It is one of the best heat-resisting lettuces on the market, remaining in head without running to seed. We can highly recommend this sort for Spring or Fall planting. **Pkt. 10c; oz. 25c; ¼ lb. 75c; lb. \$2.50.**

ALL SEASONS—One of the best year round lettuces, suitable for planting in Spring, Summer, or Fall. Stand the heat well. Heads green, with inner leaves of golden yellow. **Pkt. 10c; oz. 20c; ¼ lb. 50c; lb. \$1.50.**

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. 20c; ¼ lb. 50c; lb. \$1.75.**

SIMPSON'S EARLY CURLED (Seed White)—Leaves light green, slightly frilled and much blistered, crisp, sweet and tender. Especially adapted for sowing thickly and cutting when the plants are young. **Pkts. 10c; oz. 20c; ¼ lb. 50c; lb. \$1.50.**

PARIS WHITE COS (Romaine)—Cos Lettuce is distinct in having long, narrow, spoon-shaped leaves, folding into loose, sugar loaf-shaped heads, which blanch better by having the outer leaves drawn about them and tied. **Pkt. 10c; oz. 20c; ¼ lb. 60c; lb. \$2.00.**

WAYAHEAD—May be grown either in the cold frame, or in open ground early in the spring, and produces good hard heads. The outer leaves fold tightly and are light green in color, while the inner leaves or heart blanch yellow. **Pkt. 10c; oz. 20c; ¼ lb. 50c; lb. \$1.50.**

BIG BOSTON (Seed White)—Popular for outdoor culture; also much in demand as a compact, large-heading, forcing sort. Plants large, very hardy and vigorous. Leaves broad, comparatively smooth, but wavy at edge, thin, very hard and crisp. Color bright light green, the head slightly tinged with reddish-brown. **Pkt. 10c; oz. 20c; ¼ lb. 60c; lb. \$2.00.**

MIGNONETTE—Heads small, compact; leaves slightly curled; edges tinted brown. Though of unattractive appearance, this is one of the surest "headers" and of particularly sweet quality. **Pkt. 10c; oz. 20c; ¼ lb. 60c; lb. \$2.00.**

MAY KING (Seed White)—A handsome, 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. 20c; ¼ lb. 50c; lb. \$1.50.**

NEW YORK or WONDERFUL—A very large, late, globular heading variety; leaves broad of thick texture, fairly blistered and crumpled, and the borders frilled; color clear dark green; quality good. Known in California and the west as "Iceberg." **Pkt. 10c; oz. 20c; ¼ lb. 75c; lb. \$2.50.**

UNRIVALED—Forms large, compact, butter heads, and is slow going to seed. Similar in character to Big Boston except greener and the leaves are not tinged with brown. **Pkt. 10c; oz. 20c; ¼ lb. 60c; lb. \$2.00.**

New Ideal Lettuce

Big Boston Lettuce

WATERMELON

(German, Wasser Melone; French, Melone d'Eau; Spanish, Zandia)

CULTURE—Watermelons require a rich sandy loam, which should be well worked. Put 10 to 12 seeds in a hill. When the plants have formed the first pair of rough leaves they should be thinned so as to leave 2 or 3 of the strongest and best to each hill. Make hills about 10 feet apart. One ounce of seed to 30 hills.

TOM WATSON—This new melon has surprised everybody by its sudden rise in popularity. Although very new, it already occupies a very prominent place in all markets and is everywhere called for. It is a long green variety, covered with a fine netting, giving it a most attractive appearance. The flesh is of most superb quality and intensely red color. The rind is thin, but hard and tough, making it an excellent market and shipping sort. **Pkt. 10c; oz. 15c; ¼ lb. 30c; lb. \$1.00.**

FLORIDA FAVORITE—A standard sort. Long and of uniform size. Color a beautiful green. Flesh very red, with a taste that lingers. It has long been a favorite with the truckers and market gardeners. **Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. 75c.**

KLECKLY SWEETS—Well does it deserve its name. It has a sweetness peculiarly all its own. The skin is a rich dark green; the flesh bright scarlet, ripening close to the rind. The melons average about 20 inches long and ripen quite early. Our strain is from the original stock, and we can recommend it very highly. **Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. 75c.**

DIXIE—A popular market sort; vine vigorous, large growing and hardy; fruit medium-sized to large, about ¼ longer than thick. Color of skin dark green striped with a lighter shade rind, thin but tough; flesh bright scarlet, ripens close to the rind, is of best quality and free from the hard, coarse center which is so objectionable a feature of many shipping melons. **Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. 75c.**

PRESERVING CITRON, or MELON—A large-fruited variety, pure white flesh and thin rind. This is expensive when bought, yet can be grown and preserved by any energetic housewife, who will then also know it to be absolutely pure and good. It is planted like Watermelon. Red-seeded. **Pkt. 10c; oz. 15c; ¼ lb. 30c; lb. \$1.00.**

TRIUMPH—Very early, very prolific and of uniform size. Cross between the Duke Jones and the Kolb Gem, and has the good qualities of both. **Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. 75c.**

W. D. Co.'s EXCEL—We have the best strain of this new variety obtainable. It is a very great improvement over the Tom Watson, both as to size and color. One market dealer says, "It is the largest melon he ever saw." Some weighing as much as eighty pounds. The best shipping and the best market melon. **Pkt. 10c; oz. 15c; ¼ lb. 50c; lb. \$1.50.**

LIGHT ICING—Flesh bright red, outside color very light green; round in shape, similar to Dark Icing, except the color of the rind. **Pkt. 10c; oz. 15c; ¼ lb. 30c; lb. \$1.00.**

SWEET HEART—Fruit large, oval, mottled light and dark green. Flesh bright red, solid, tender and sweet. **Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. 75c.**

MUSKMELON

(German, Melone; French, Melone Muscade; Spanish, Melone Almizcleon)

Rocky Ford Melon

CULTURE—Plant the seeds in hills 6 feet apart each way, dropping 10 to 12 seeds in a hill. After the plants begin to crowd and the striped beetles are pretty well gone, thin to 4 of the most vigorous plants in a hill. Give frequent but shallow cultivation until the plants make runners so long that this is impracticable. Rich earth for the young plants is far better than manure, but if the latter must be used, see that it is well rotted and thoroughly mixed with the soil. If the plants grow very rank, more and finer fruit will be secured by allowing the main branch to continue growing but pinch off the end of each side branch after it has one fruit set. One ounce of seed to 50 hills.

ROCKY FORD—One of the earliest and best melons grown. The vines are exceedingly healthy and vigorous, comparatively short and branching producing an enormous quantity of fruits during the season. The melons are very uniform in size and shape, being nearly round or slightly oval. Skin a rich greenish gold when fully ripe; the netting is fine and prominent. In appearance the melon is very attractive. The flesh is light green in color, very deep, ripening clear to the rind, which is very thin. In flavor it is peculiarly rich, luscious and free from stringiness. **Pkt. 10c; oz. 15c; ¼ lb. 30c; lb. \$1.00.**

MUSKMELON--Continued

EXTRA-EARLY KNIGHT—Slightly larger than the "Rocky Ford," but more heavily netted. The seed cavity is small and flesh, which is green, thick and sweet, containing a high percentage of sugar. An important feature of this melon is its ability to withstand rust and blight, as it is nearly proof against either. **Pkt. 10c; oz. 15c; ¼ lb. 35c; lb. \$1.25.**

ANN EAR UNDEL—Large, green-fleshed, deeply netted. A good shipping melon. **Pkt. 10c; oz. 15c; ¼ lb. 35c; lb. \$1.25.**

HONEY DEW—The melon with an appropriate name. This new melon is unlike the ordinary Muskmelon or Cantaloupe, both in appearance and flavor, the outer skin being smooth, hard and nearly white. The melons are large, round to oval in shape, extremely thick-meated and have a very small seed cavity; flesh is light green, very solid and of a rich honey-like flavor, luscious and juicy. Of good keeping qualities and a good shipper. **Pkts. 10c; oz. 20c; ¼ lb. 50c; lb. \$1.50.**

THE BOTTOMLEY—This is without a doubt the best yet. We can safely say it will produce more and better fruit than any Cantaloupe on the market today. In fact, every grower of melons who has tried this sort will unhesitatingly say, "There is none better." The seed we offer is from the true stock, and must not be confounded with seeds sold at a less price by unscrupulous dealers. Grown by us under our own supervision, where it can be carefully watched, and in one of the best sections of the country for the growing of Cantaloupes, there is no reason why this should not rank as the best on the market. In quality it has no rival. From 7 to 8 days later than the Knight. The vine makes a very heavy growth, which makes it blight-resisting. Fruit very uniform in size, averaging about 7 inches in length from stem to blossom end. Very thick-meated, of a greenish color. Small seed cavity; thin rind, beautifully netted. Slightly pointed at the stem end and rather blunted at the blossom end. A prominent commission merchant who sells tons of melons each year says: "It is the best that comes to the Baltimore wholesale market, and never fails to command a higher price than any other variety." For shipping it is unexcelled. **Pkt. 10c; oz. 20c; ¼ lb. 75c; lb. \$2.50.**

OSAGE, or MILLER'S CREAM—A medium to large-sized melon of excellent quality. Vines vigorous and productive. The fruits are oval, dark green in color, slightly ribbed and partly covered with shallow gray netting. The flesh is salmon-colored, thick, fine-grained and highly flavored. **Pkt. 10c; oz. 15c; ¼ lb. 35c; lb. \$1.25.**

EMERALD GEM—Among the standard varieties this has long been a leader. The flesh, which is thicker

W. D. Co.'s Bottomley

than any other melon of the same shape, is a rich salmon shade, and ripens extremely close to the rind. It is exceedingly sweet and one of the melons when you once eat of it you will remember it for a long while. **Pkt. 10c; oz. 15c; ¼ lb. 53c; lb. \$1.25.**

NETTED GEM—Grows remarkably uniform; thick-meated, flesh light green in color and of fine, luscious flavor; skin green, regularly ribbed and thickly netted; very productive and extra early in ripening; will keep for nearly a week after picking, and is especially suited for shipping in baskets or crates. **Pkt. 10c; oz. 15c; ¼ lb. 35c; lb. \$1.25.**

BALTIMORE NUTMEG—Fruit uniform in size and of attractive appearance. Green flesh and very sweet flavor. An excellent shipper. **Pkt. 10c; oz. 15c; ¼ lb. 35c; lb. \$1.25.**

EARLY HACKENSACK—It is well netted, deeply ribbed, making it ideal for cutting in slices on account of its large size. The flesh is light green, very thick and ripens well to the rind. The shape is even more flat than the Emerald Gem. **Pkt. 10c; oz. 15c; ¼ lb. 35c; lb. \$1.25.**

JENNY LIND—A small, flat, very early sort, heavily netted and ribbed with green flesh, an altogether good variety to plant with others, using this for the first picking. **Pkt. 10c; oz. 15c; ¼ lb. 35c; lb. \$1.25.**

ONION SEEDS

(German, Zwibbel; French Oignon; Spanish, Cebolla)

White Silverskin

CULTURE—A strong, deep, rich and loamy soil is most suitable for this crop. Muck beds well drained to the depth of 2 feet give large yields. A black sandy loam is also excellent. The ground should be heavily dressed with well-rotted manure and plowed a moderate depth, taking a narrow furrow in order to more thoroughly mix the manure with the soil; if possible, the plowing should be done in the Fall. As early in the Spring as the ground is in working order harrow it thoroughly and make as fine and level as possible; sow thinly in drills ¼ inch deep and 14 inches apart.

WHITE SILVERSKIN—This is the most popular of all white Onions. The skin and flesh is a very white, mild flavor and flat shape. **Pkt. 10c; oz. 30c; ¼ lb. 90c; lb. \$3.00.**

WHITE PEARL—A very popular variety for medium-early crop. Very mild in flavor; color pearly white; very large, especially if planted on good rich soil. A splendid variety for the market gardeners. Good keeping qualities and heavy yielder. **Pkt. 10c; oz. 30c; ¼ lb. 90c; lb. \$3.00.**

PRIZETAKER—Flavor very mild and delicate. A very handsome Onion, of the largest size, and nearly globular in form. Skin is yellowish-brown; flesh white. If started very early in hotbeds it will produce a mammoth Onion the first season. **Pkt. 10c; oz. 25c; ¼ lb. 75c; lb. \$2.50.**

YELLOW GLOBE DANVERS—One of the most popular sorts for home or market gardens. Handsome, round, yellow Onion. A splendid keeper, and one that yields well. Can highly recommend this for growing either large or small Onions. **Pkt. 10c; oz. 25c; ¼ lb. 75c; lb. \$2.50.**

LARGE RED WETHERSFIELD—This is a well-known sort. A good yielder and an excellent keeper, and where red Onions are wanted there's none better. **Pkt. 10c; oz. 25c; ¼ lb. 75c; lb. \$2.50.**

ONION SETS

To raise Onion Sets from seed, use good ground, prepared as for large Onions, and sow the seed very thick in broad drills, using 40 to 60 pounds per acre. If the seed is sown thin, the bulbs will not only be too large for sets, but will not be of the right shape, and if sown thick on poor land they will be necky and bottle-shaped. Onion seed sown for Sets may be sown somewhat later than if a crop of large bulb is desired.

WHITE SILVERSKIN—Qt. 30c.

YELLOW DANVERS—Qt. 25c.

Owing to market changes, we cannot quote prices on larger quantities except on application.

PARSLEY

(German, Petersilie; French, Persil;
Spanish, Perejil)

Parsley succeeds best on rich, mellow soil. The seed is very slow in germinating, and should be sown as early as possible in the Spring, in drills 1 to 2 feet apart, covering not more than ¼ inch with fine soil, firmly pressed down. When plants are well up thin to 4 inches apart in the row. When the plants of the curled varieties are about 3 inches high cut off all the leaves. The plant will then start a new growth of leaves, which will be brighter and better curled. Every cutting will result in improvement.

DWARF CURLED—Handsomely crimped and curled; bright green color. **Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. 75c.**

MOSS CURLED—Vigorous, compact-growing variety. Excellent for garnishing and flavoring. **Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. 75c.**

HAMBURG or ROOTED—The fleshy root resembles a parsnip and is used for flavoring soups, etc. **Pkt. 10c; oz. 15c; ¼ lb. 30c; lb. 75c.**

OKRA, or GUMBO

(German, Essbarer; Eibisch; French, Gombaud,
Spanish, Quimbombo)

Cultivated for its young seed pods, which are used in soups, stews, catsups, etc. After danger of frost is past, the ground being warm and in good condition, plant in rows about 2½ feet apart, covering with about an inch of fine soil, firmly pressed down. When about 3 inches high thin to about 1 foot apart in the row.

DWARF PROLIFIC—The pods are from 4 to 5 inches long and are very tender, slim and of a beautiful deep green color. **Pkt. 10c; oz. 15c; ¼ lb. 20c; lb. 75c.**

WHITE VELVET—Pods free from ridges and very tender. **Pkt. 10c; oz. 15c; ¼ lb. 20; lb. 75c.**

MUSHROOM SPAWN

CULTURE—Mushrooms may be grown in cellars, under benches in greenhouses or in sheds wherever the temperature of 50 degrees can be kept up during the

Winter. The beds should be made from November to February, according to the time the Mushrooms are wanted, and it requires about two months for them to begin bearing. Secure fresh horse dung, free from straw and litter, and mix an equal bulk of loam from an old pasture with it. Keep this under cover taking care to turn it every day to prevent it from heating, until the pile is large enough to make a bed of the required size. Three or 4 feet wide, 8 inches deep and any length desired, are the proper proportions for a bed, but this may be varied. Prepare the mixture of loam and manure, making the bed in layers and pounding down each with the back of a spade. Leave this to heat through for a few days and as soon as the heat subsides to 90 degrees make holes in the bed about a foot apart each way, into which put pieces of spawn 2 or 3 inches in diameter; fill up the hole with compost, and at the expiration of a week or 10 days the spawn will have thoroughly diffused itself through the bed. Spread layer of soil over the heap to the depth of 2 inches, and cover with 3 or 4 inches of hay, straw or litter. Examine bed often to see that it does not get dry. Take special care, however, when water is given that it be at a temperature of 100. One brick to a bed 6 feet square.

BEST ENGLISH MILLTRACK SPAWN—Brick,
1 lb., 25c; 10 lbs. \$2.50.

NASTURTIUMS

The Nasturtium is one of the popular flowers of the present time, and is continually growing in favor for the table. The leaves are used for salad and the seed for pickles.

TALL—Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. 75c.

DWARF—Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. 75c.

PEAS

(German, Erbsen; French, Pois; Spanish, Chicaros o Ginsantes)

CULTURE—For early Peas the soil should be light and warm, but for general crop a moderately heavy soil is better. Fresh manure and very rich or wet, mucky soil should be avoided, as they cause a rank growth of vine at the cost of the quality of the Peas; such soil is often the cause of early sorts maturing unevenly. Sow as early as possible a few of some early variety on warm, quick soil, prepared the fall before. The general crop can be delayed until later, but we have met with better success from sowing all the varieties comparatively early, depending for succession upon selecting sorts that follow each other in maturity. The Peas will give quicker returns if covered only 1 inch deep, and where earliness is most important they may be treated in that way. Larger pods and more of them will be produced if the seed be planted in trenches 3 to 6 inches deep and covered with only 1 or 2 inches of soil. When the plants are 5 or 6 inches high fill the trench level with the surface; this will secure deep rooting, prevent mildew and prolong the bearing season. If the Peas be covered to the full depth at first, or if water be allowed to stand in trenches, they will not germinate or grow well.

EXTRA-EARLY VARIETIES

LARGE-PODDED ALASKA—Vines 2½ feet. The pods are well shaped and well filled, containing 6 to 8 Peas of a beautiful green color, both Peas and pods retaining their fresh green color longer after being picked than other kinds, this being a point of particular value when they are grown for shipping purposes. Pt. 25c; qt. 40c; pk. \$2.50.

ALASKA—Vines 2½ ft. Seed small, smooth and bluish green in color. Unequaled evenness in growth of vine and early maturity of pods, which are filled with medium-sized, bright green Peas of good flavor. Pt. 25c; qt. 40c; pk. \$2.50.

BOUNTIFUL—Of recent introduction. Early and very prolific; vines of even growth and bearing any number of well-filled pods, which are of a light green color, containing 6 to 8 Peas to the pod. Pt. 25c; qt. 40c; pk. \$2.50.

PEDIGREE EXTRA EARLY Introduced several years ago; has steadily increased in favor until now the truckers all want it. Early as Alaska; large pods, white seeded, very prolific. All mature at one time and can be gathered in one picking. Pt. 25c; qt. 40c; pk. \$2.50.

PROLIFIC EARLY MARKET, or NEW LATER—The new Pea, just recently introduced, has proven to be the finest, largest and most prolific extra-early variety on the market. It is larger than the Alaska, a few days later and more prolific than any of the other sorts. Will always command a higher price in the markets because

W. D. Co.'s Early Bird

of its handsome and showy pods. It is just the Pea for the trucker and also the home garden. Pt. 25c; qt. 40c; pk. \$2.50.

EARLY BIRD—A very early, large podded variety. Semi-wrinkled. Vines grow about 22 inches. Pods from 4 to 4½ inches long and pointed, with from 9 to 10 peas in the pod. Robust growth and a very heavy yielder. Can be sown with safety as soon as the ground can be worked. This is one of the best varieties for the market gardener and trucker. Pt. 30c; qt. 50c; pk. \$3.25.

LARGE-PODDED SUGAR VARIETIES

THOMAS LAXTON—Closely resembling Gradus in habit, rapidity of growth, earliness of foliage; 26 to 30 inches high, and much hardier in every respect than the Gradus. Pods 4 to 4½ inches long, round and well filled. Ready to pick 52 days from planting. Pt. 25c; qt. 40c; pk. \$2.75.

AMERICAN WONDER—Vigorous, productive vines, with a luxuriant foliage, producing the leaves on one side of the stalk, and growing from 9 to 12 inches high. On account of its dwarf habit of growth it is very desirable for private garden use. Pods are light-colored, straight, round, about 2½ inches long and blunt at the end. Fit for picking 55 days from planting. Seed is wrinkled green, medium in size and square at the ends. Pt. 25c; qt. 40c; pk. \$2.75.

NOTE'S EXCELSIOR—Resembling Gems in habit, but more dwarf and uniform in growth. Height 12 to 17 inches, with rather light foliage. Pods are light in

color, round, about 2½ inches long, blunt at the ends. Fit for picking 56 days from planting. Seed green, wrinkled, medium in size and square at the ends. Pt. 25c; qt. 40c; pk. \$2.75.

GRADUS, or PROSPERITY—A large, wrinkled, early Pea, with a pod nearly as long as the Telephone; tender and of good quality and flavor. Very quick to germinate and mature with the other sorts. This Pea will not stand adverse conditions, however, as well as some of the other sorts, and seed must be planted after all danger of frost has passed. Pt. 30c; qt. 50c; pk. \$3.00.

PREMIUM GEMS—Strong and vigorous in growth. Height about 15 inches; dark foliage, bearing pods on both sides of the stalk, beginning near the ground. Pods light in color and blunt at the ends. Seed is green wrinkled and medium in size. Pt. 25c; qt. 40c; pk. \$2.75.

LONG ISLAND MAMMOTH—Very popular with market gardeners who want a large, handsome pod of a dark green color. Pt. 25c; qt. 40c; pk. \$2.75.

DWARF TELEPHONE—Vines 18 to 26 inches high, with rather coarse foliage; medium light green, bearing pods broad, straight and about 4 inches long. Pale green in color and well filled with peas of excellent flavor. Ready for picking from 62 to 65 days from planting. Seed pale green, large, much wrinkled. Pt. 25c; qt. 40c; pk. \$2.75.

SUTTON'S PIONEER—One of the latest achievements in the perfection of early Peas, and we cannot speak too highly of it. Sutton's Pioneer was introduced to the gardening public several years ago, and since then the demand has grown far ahead of the supply. It is a first-early sort and very prolific. One gardener says: "I never before grew such Peas; the large, handsome pods were packed with plump, tender, rich-flavored peas." This variety presents a rich appearance while growing on account of the large number of pods on each vine. Vines reach a height of 2 feet, are very strong and do not need support unless the soil is very rich. Pt. 25c; qt. 40c; pk. \$2.75.

STRATAGEM—A vigorous, hardy and luxuriant vine, bearing large pods, containing Peas of excellent quality. A heavy cropper, but it has a tendency to sport. Vines 20 inches. Foliage dark green. Pods 3½ inches long, straight, broad-pointed, gray-green in color. Fit for table use 56 days from planting. Seed very large, green wrinkled. Pt. 25c; qt. 40c; pk. \$2.75.

EVERBEARING—Vigorous and bracing in habit of growth. Height 2½ to 3 feet. Pods 2¾ to 3 inches long, broad, light-colored and blunt. Fit to pick 70 days from planting. Seed green, wrinkled and large in size. Pt. 25c; qt. 40c; pk. \$2.75.

Pride of the Market Peas

excellent quality and comes in late, after other varieties are too old. Pt. 25c; qt. 40c; pk. \$2.75.

CHAMPION OF ENGLAND—Strong and vigorous in growth, 42 to 50 inches in height. Foliage medium green. Pods 2½ to 3 inches long, blunt, medium dark green in color. Fit to pick 68 to 73 days from planting. Seed large, green and very much wrinkled. Pt. 25c; qt. 40c; pk. \$2.75.

THE ORIGINAL SOIL INOCULATOR—The simplest and most profitable system of soil inoculation for all legumes. Enriches the soil, increases yield, hastens maturity, and saves fertilizer bills. Granular in substance; easy to mix with seed. Packed in tins and sold on convenient bushel basis; one bushel size will inoculate one bushel of any legume seed.

Important: When ordering always name the seed you wish to inoculate.

Prices below cover all legumes except Soy Beans and Cow Peas.

¼ bu. size inoculates	15 lbs seed (ship. wt. 4 oz.)	\$.40
½ bu. size inoculates	30 lbs seed (ship. wt. 6 oz.)	.60
1 bu. size inoculates	60 lbs seed (ship. wt. 10 oz.)	1.00
5 bu. size inoculates	300 lbs seed (ship. wt. 3 lbs.)	4.75
Garden size, peas, beans, lime beans.		.20

POSTPAID

When ordering always name the crop you want it for

PRIDE OF THE MARKET—Of fine growth and general appearance, both vine and pod, and closely resembles the Stratagem, except that the vine is not quite so long and the pods are deeper green in color. The vine is 20 inches high. Foliage dark green color. Pods are 3½ inches long, broad and dark in color. Fit for table use 61 days from planting. Seed blue, slightly dented and large. Pt. 25c; qt. 40c; pk. \$2.75.

TELEPHONE—Vines and leaves large and coarse. Foliage light green in color. Height 40 to 50 inches. Pods 4½ inches long, broad, pointed and medium in color. Fit to pick 62 to 65 days from planting. Seed large, green and wrinkled. Pt. 25c; qt. 40c; pk. \$2.75.

LAXTONIAN—Vine 1½ feet in height, with dark green foliage. Large, curved, dark green pods, pointed at the ends. Seed green, wrinkled, large-sized. Pt. 25c; qt. 40c; pk. \$2.75.

TELEGRAPH—Closely resembling Telephone in all respects, except that the pods are a deeper shade of green and the Peas are of only fair quality, although the pods are of very fine appearance. Pods 4 to 4½ inches long, medium dark green, pointed. Fit to pick 65 days from planting. Seed large, blue and round, dented. Pt. 25c; qt. 40c; pk. \$2.75.

LITTLE MARVEL—Height of vine 18 inches, with dark green foliage. Small, blunt, dark green pods. Fit for table use 53 to 55 days from planting. Seed blue-green, small-sized and wrinkled. Pt. 25c; qt. 40c; pk. \$2.75.

It was invented by Nobbe & Hiltner, world famous soil experts, who discovered the science of legume inoculation with nitrogen-fixing bacteria in 1896—Twenty-eight Years Ago.

PRINCE EDWARD—This variety produces enormous pods 7 inches long and upwards, containing from 11 to 13 large dark green Peas and are mostly produced in pairs. This makes them much less tedious to pick. The plant is of strong growing habit, requiring stakes, but produces enormous crops. The pods are of unusually attractive appearance when placed on market, and are always saleable. We take great pleasure in recommending this new variety to our customers, as it is one of the most excellent quality and comes in late, after other varieties are too old. Pt. 25c; qt. 40c; pk. \$2.75.

EDIBLE POD PEAS **MELTING SUGAR**—One of the best varieties. Can be used in a green state like string beans. Pt. 25c; qt. 40c; pk. \$2.75.

PARSNIP

(German, Pastinake; French, Panais;
Spanish, Chirivia)

Improved Hollow Crown or Guernsey

CULTURE—Parsnips are usually grown on deep, rich, sandy soil, but will make good roots on any soil which is deep, mellow and moderately rich. Fresh manure is apt to make the roots coarse and ill-shaped. As the seed is sometimes slow and uneven in growth, it should be sown as early as possible in drills $2\frac{1}{2}$ feet apart; cover $\frac{1}{2}$ inch deep and press the soil firmly over the seed. Give frequent cultivation, and thin the plants to 6 inches apart in the row.

IMPROVED HOLLOW CROWN, or GUERNSEY—An excellent variety for the table. Roots long, with smooth white skin, uniform in shape, tender and of the best quality. The variety is easily distinguished by the leaves growing from the depression on top or crown of the root. **Pkt. 10c; oz. 15c; $\frac{1}{4}$ lb. 25c; lb. 75c.**

PEANUTS

NEW MAMMOTH BUSH PEANUT—This Peanut does exceedingly well in the North, making compact bushes 18 inches high, with heavy, erect stalks and large leaves. They are good producers, and do best on light sandy soil. Easily grown and always sure to make a good crop. **Lb. 40c; 2 lbs. 75c.**

PEPPER

(German, Pfeffer; French, Piment;
Spanish, Pimiento)

CULTURE—Peppers are most largely used for seasoning meat and vegetable dishes, also for making chowchow and Chili sauce. The culture is the same as for Eggplant and the plants need quite as much heat to perfect them. Sow seed early in hotbed, or about middle of Spring in open seed bed, the soil being light and warm. When 3 inches high transplant in rows about $2\frac{1}{2}$ feet apart and 2 feet apart in the row. Cultivate and keep free from weeds. Guano, hen dung or any other bird manure hoed into the surface soil when the plants are about 6 inches high will undoubtedly increase the product.

LARGE BELL, or BULL NOSE—Our stock of this well-known variety, sometimes called Sweet Mountain, is very superior. Plant vigorous, about 2 feet high, compact and very productive, ripening its crop uniformly and early. The fruits are large, with thick, mild flesh, of excellent quality for use in salads and mangoes or stuffed peppers. The color is deep green when fruit is young, bright crimson when ripe. **Pkt. 10c; oz. 50c; $\frac{1}{4}$ lb. \$1.50.**

RUBY KING—An improved American variety, very large and attractive. The plant is about $2\frac{1}{2}$ feet high, vigorous, compact and productive. The fruits are often 4 to $4\frac{1}{2}$ inches long, and of deep green color when young bright red when ripe. The flesh is thick and milk-flavored. One of the best varieties for mangoes or stuffed peppers. **Pkt. 10c; oz. 40c; $\frac{1}{4}$ lb. \$1.50.**

NEW CHINESE GIANT—The fruits of this variety are of monstrous size, even when put alongside such a large kind as Ruby King. The shape is more blocky than Ruby King, being almost square, or about the same diameter both ways. Color brilliant glossy scarlet. It is so immensely productive that frequently a half dozen peppers will touch one another. The habit of growth is strong and stocky, about 18 to 24 inches high. Usually 3 or 4 fruits are set first near the base, and while these are ripening a second setting is growing higher up. Flesh is thick and meaty and entirely free from any fiery flavor. **Pkt. 10c; oz. 50c; $\frac{1}{4}$ lb. \$1.50.**

RED CHERRY—A second-early sort. Plant tall, bearing a profusion of round, bright red fruits, which are very pungent when ripe. A very ornamental plant when in fruit. **Pkt. 10c; oz. 30c; $\frac{1}{4}$ lb. \$1.25. \$4.50; Postpaid.**

RED CHILI—A late variety. Pods bright, rich red, about 2 inches long, $\frac{3}{8}$ to $\frac{1}{2}$ inch in diameter at the base, tapering to a sharp point, and exceedingly pungent when ripe. **Pkt. 10c; oz. 30c; $\frac{1}{4}$ lb. \$1.25.**

LONG RED CAYENNE—A well-known medium-early variety, having a slender, twisted and pointed pod about 4 inches long; color deep green when fruit is young, bright red when ripe. **Pkt. 10c; oz. 35c; $\frac{1}{4}$ lb. \$1.00.**

PUMPKIN

(German, Grosse-Kurbis; French, Potiron; Spanish, Calabazo)

CULTURE—Pumpkins are not so particular in regard to soil as Melons or Cucumbers, but are cultivated much the same. Plant seed about 10 feet apart, in hills, dropping about 10 seed to a hill. When plants are well started, thin to 3 plants to each hill. To plant in corn place seed about every third or fourth hill after the last working.

MARYLAND SWEET POTATO—This is without doubt the best for table use, resembling somewhat the Cushaw, but much prettier in color. A handsome green and white striped. Flesh yellow, solid, fine-grained and a delicious flavor. **Pkt. 10c; oz. 15c; ¼ lb. 30c; lb. \$1.00.**

CUSHAW, or WINTER CROOKNECK—An old standard variety, which is very popular. It is also used for feeding stock. Long yellow crookneck, fine-grained, yellow flesh, very solid. **Pkt. 10c; oz. 15c; ¼ lb. 30c; lb. \$1.00.**

Maryland Sweet Potato Pumpkin

WINTER LUXURY—This is one of the best pie Pumpkins in existence, and its Winter-keeping qualities are almost unequalled. Is slightly oval in shape and of medium size. Evenly and finely netted, and is a yellowish russet color. The flesh is very tender, sweet and rich golden in color. A great producer. **Pkt. 10c; oz. 15c; ¼ lb. 30c; lb. \$1.00.**

CONNECTICUT FIELD PUMPKIN—Usually planted for feeding stock. So well known that it needs no description. **Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. 75c.**

RADISH

(German, Radischen; French, Radis, Rave, Petite Rave; Spanish, Rabana)

CULTURE—For forcing sow in hotbeds or under glass in rich sandy soil, made perfectly level. Scatter evenly over the surface from 50 to 100 seeds to the square foot and cover with ¼ inch of soil sifted on. Careful watering to keep soil moist, even, moderate temperature, and good ventilation are required for rapid and best root development. If the bed is a good one, the whole crop can be marketed in 21 to 40 days after planting. For open-ground culture sow on rich sandy soil as soon in the Spring as it is fit to work, in drills 12 to 18 inches apart, and thin out the plants to prevent crowding. A good dressing of nitrate of soda will greatly stimulate growth and insure tender, brittle roots. Successional sowing from 1 week to 10 days apart will keep up a supply. After the hot weather of Summer begins, it is better to sow the Summer and Winter varieties, as they do not become tough and stringy not pithy so quickly as the earlier sorts. One ounce of seed to 100 feet of drill.

EARLY LONG SCARLET

SHORT TOP—This is a standard, most excellent sort either for the home garden or the market. Tops short and comparatively small. Roots smooth, slender, uniform in shape and a very attractive bright red in color. They continue crisp until fully matured, when they are about 6 inches long. **Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. 75c.**

WHITE-TIPPED SCARLET

—A good forcing variety; small size and very attractive, being a handsome bright scarlet with white tip. Very early and of good quality. **Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. 75c.**

ICICLE—A very attractive, pure white Radish; the earliest of the long white Summer sorts and of most excellent quality. The roots are somewhat shorter, with small

Early Scarlet Globe

ler tops than the long White Vienna, and matures a little earlier. One of the most desirable varieties for outdoor Summer planting. It is also adapted for forcing. **Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. 75c.**

FRENCH BREAKFAST—Very rapid grower; mild and tender; beautiful scarlet color, white-tipped; oblong shape. **Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. 75c.**

EARLY SCARLET GLOBE—(See cut.)—A desirable sort for hotbed forcing and outdoors; very early; flavor mild, 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. **Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. 75c.**

MODEL WHITE BOX (Short Top)—of quick growth; roots round, pure white; tails very thin, leaves short; flavor excellent. Fine for forcing and open ground. **Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. 75c.**

Golden Globe

GIANT STUTT-GART — A Summer variety. Grows to an immense size; white flesh, very crisp and tender; of good flavor and a good keeper. **Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. 75c.**

GOLDEN GLOBE — This variety is of quick growth, affording crisp and tender Radishes even in the hottest climate, and is extensively grown in the South. Root uniformly globe-shaped, with skin golden yellow in color; about 2 inches long by 2 ¼ inches in diameter when matured. **Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. 75c.**

WHITE STRASBURG—Even when comparatively small this variety is in good condition for use, and continues crisp until matured, when the roots are 4 to 6 inches long by 1½ to 2 inches in diameter. This is considered one of the best large white Summer sorts. The roots remain in condition for use much longer than the early varieties. **Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. 75c.**

WINTER VARIETIES

WHITE CHINESE WINTER, or CELESTIAL—Roots long, cylindrical, with beautiful white skin and flesh; the whitest and usually the least pungent of the Winter varieties. Flesh compact and crisp. **Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. 75c.**

LARGE WHITE SPANISH—Long and tapering, and when full grown measuring 6 to 9 inches long. Skin white; flesh white. **Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. 75c.**

ROUND BLACK SPANISH—Round, sometimes slightly top-shaped. Skin black; flesh white. Keeps well through the Winter. **Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. 75c.**

ROUND WHITE SPANISH—A good Winter-keeping variety. **Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. 75c.**

LONG BLACK SPANISH—One of the latest and hardest long Radishes, especially adapted for Winter variety. **Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. 75c.**

SPINACH

(German, Spinat; French, Espinard; Spanish, Espinaca)

Special Prices in Quantities.

CULTURE—For Summer use, sow early in Spring, in drills 8 to 10 inches apart, covering the seed 1 inch deep. Soil should be very rich, the richer the better. For early Spring use, sow in August and protect with a light covering of straw.

RESELECTED BLOONISDALE CURLED SAVOY—A very early variety and one of the best to plant for early Spring use. Thick, glossy, dark green leaves, of medium size, pointed but quite broad and crumpled and blistered; seed round. A rapid grower but running to seed quickly in warm use. **Pkt. 10c; ¼ lb. 15c; lb. 30c.**

NEW ZEALAND—Unlike true Spinach in type and in that it thrives during hot weather and in any soil rich or poor. The tender shoots may be cut throughout the weather. **Pkt. 10c; ¼ lb. 25c; lb. 75c.**

JULIANA (A recent introduction)—A very dark green, crumpled variety, in general appearance similar to Savoy, but considerably larger and broader in leaf, less crumpled and very much longer standing. **Pkt. 10c; ¼ lb. 15c; lb. 30c.**

TRIUMPH—An excellent sort, forming a large, exceedingly thick, very dark green leaf, slightly crumpled in the center. Leaves unusually rounded or blunt. Remains in condition long after all the other sorts have gone to seed. **Pkt. 10c; ¼ lb. 15c; lb. 30c.**

SALSIFY Better Known as Oyster Plant

(German, Hafer-Wurzel; French, Salsifs; Spanish, Ostian Vegetal)

CULTURE—Seed should be sown in early Spring in light, rich soil, in drills 14 inches apart, and thin to 6 inches in the row. The roots are perfectly hardy, and many remain out all Winter.

MAMMOTH SANDWICH ISLAND—This variety is large and strong, growing with long, smooth, white, tapering roots, and is less liable to branch than the other sorts. Tops grassy. It is invaluable for market gardeners' use. **Pkts. 10c; oz. 20c; ¼ lb. 60c; lb. \$2.00.**

RHUBARB Also Known as Pie Plant

(German, Ehabarber; French, Rhubarb; Spanish, Ruibarbo)

Is the earliest Spring vegetable and is grown for its leaf stalks, which are extensively used for pies and sauce. One ounce of seed to 125 feet of drill.

SEED—**Pkt. 10c; oz. 20c; ¼ lb. 60c.**

ROOTS—Each, 10c; dozen \$1.00.

AROMATIC, MEDICINAL and POT HERBS

	Pkts.	Oz.
Anise.....	10c	15c
Balm.....	10c	30c
Borage.....	10c	15c
Basil.....	10c	15c
Caraway.....	10c	15c
Chervil.....	10c	25c
Chicory.....	10c	15c
Coriander.....	10c	15c
Dill.....	10c	15c
Fennel (Sweet).....	10c	15c
Lavender.....	10c	15c
Rosemary (Aromatic).....	10c	35c
Sage.....	10c	25c
Savory (Summer).....	10c	15c
Thyme.....	10c	25c

SQUASH

(German, Spiese-Kurbis; French, Courge;
Spanish, Calabaza)

CULTURE—One of the most nutritious and valuable of garden vegetables. The Summer varieties come to the table early in the season, while the Fall and Winter sorts can be had from August until the following Spring. The Winter varieties are very well adapted for stock feeding, and we heartily recommend them for that purpose.

Squash plants are very tender and sensitive to cold, and so planting must be delayed until settled warm weather. General methods of culture are same as for Cucumbers and Melons, but Squash is less particular as to soil. Summer varieties should be planted 4 to 6 feet apart each way, and Winter sorts 8 to 10. Three plants are sufficient for a hill. In gathering the Winter sorts care should be taken not to bruise or break the stem from the Squash, as the slightest injury will increase the liability to decay. Winter Squashes should be stored in a moderately warm, dry place and the temperature kept as even as possible. For those who desire very early Squashes seed can be planted in boxes and transplanted.

EARLY WHITE BUSH SCALLOP—This is the well-known very early, somewhat flattened, scalloped Bush Squash, of medium size. The color is creamy white with comparatively smooth surface. The vines are vigorous and very productive. This variety is also known as Patty Pan, or Cymbaling. Pkt. 10c; oz. 15c; $\frac{1}{4}$ lb. 30c; lb. \$1.00.

SUMMER CROOKNECK—An old standard sort, early and productive. Fruits, when fully grown, are about 1 foot long, with uniformly crooked neck and surface densely warted. Color yellow. Pkt. 10c; oz. 15c; $\frac{1}{4}$ lb. 30c; lb. \$1.00.

Boston
Marrow
Squash

BOSTON MARROW—A very productive Fall and Winter variety of medium to large size, oval shape, skin thin. Orange color; flesh fine-grained and of excellent flavor. Pkt. 10c; oz. 15c; $\frac{1}{4}$ lb. 25c; lb. 90c.

HUBBARD—One of the best of the Winter Squashes. Vines vigorous and very productive. Fruit heavy, moderately warted, with very hard shell. Skin a dark bronze-green. Flesh a bright orange-yellow, fine-grained, thick, dry and richly flavored. Pkt. 10c; oz. 15c; $\frac{1}{4}$ lb. 25c; lb. \$1.00.

BLUE HUBBARD—This excellent Squash of the Hubbard type is light blue in color, with hard shell and thick, fine grained flesh, which is very tender and by far the best flavored of the Winter Squash. Pkt. 10c; oz. 15c; $\frac{1}{4}$ lb. 30c; lb. \$1.00.

TURNIP

(German, Streckruebe; French, Navet;
Spanish, Nabo)

CULTURE—For Summer use sow early in Spring in light, rich soil, in drills $1\frac{1}{2}$ feet apart, according to the size of the variety, and cover $\frac{1}{2}$ inch deep, or sow broadcast, but in either case be sure to have the ground rich and freshly stirred. Thin early and keep free from weeds, so that the young plants will not be checked in growth. For Fall and seed from mid of August and for Spring sow nips are often the rate of $1\frac{1}{2}$ Winter use sow the dle of June to the first in the manner given ing. In the field Tur-sown broadcast at pounds to the acre.

Purple Top

White Globe

PURPLE-TOP (See cut.) — This excellent shape, of good size and ance. The roots are above ground, white be grained and tender. early a variety and is use. Pkt. 10c; $\frac{1}{4}$ lb. 15c; lb. 50c.

WHITE GLOBE—(See table variety is globular in very attractive in appear-large, purple, or dark red low. The flesh is fine- This sort keeps well for so one of the best for market

EXTRA-EARLY PURPLE-TOP MILAN — Very early, fine-grained white flesh. Flat and of good size. Pkt. 10c; $\frac{1}{4}$ lb. 15c; lb. 50c.

PURPLE-TOP WHITE FLAT—This sort is very much similar to the Purple-Top White Globe in habit of growth, except it is flat rather than globular. Pkt. 10c; $\frac{1}{4}$ lb. 15c; lb. 50c.

COW HORN or LONG WHITE—This variety is clear white, except a little shade of green at the top of the root, which is long and carrot-like in form, slightly crooked and grows nearly half out of the ground. The flesh is fine-grained and well flavored, and for table use is in best condition when the roots are about 2 inches in diameter. Pkt. 10c; $\frac{1}{4}$ lb. 15c; lb. 40c.

YELLOW or AMBER GLOBE—Very large, yellow-fleshed, fine-grained variety. Excellent for table use or feeding stock. Pkt. 10c; $\frac{1}{4}$ lb. 15c; lb. 50c.

SEVEN-TOP—Cultivated extensively for the tops, which are used for greens. In many sections it is a favorite feed for stock. Pkt. 10c; $\frac{1}{4}$ lb. 15c; lb. 40c.

YELLOW ABERDEEN—Very hardy and productive, a good keeper; globe-shaped; color pale yellow, with purple top. Very firm in texture, and closely resembling the Ruta-Bagas in good keeping qualities. Good either for table or stock. Pkt. 10c; $\frac{1}{4}$ lb. 15c; lb. 50c.

RUTA-BAGAS, or SWEDES

AMERICAN IMPROVED PURPLE-TOP—Yellow-fleshed. An improvement over the ordinary Purple-Top in that it has a smaller and much shorter top. Splendid for family use or feeding stock. Pkt. 10c; oz. 15c; $\frac{1}{4}$ lb. 20c; lb. 60c.

THE "WISDOM" TOMATO

THIRTEEN YEARS IN THE FIELD, PLANTED UNDER ALL KINDS OF CLIMATIC
AND SOIL CONDITIONS AND STILL IN THE LEAD

**For Quality and Productiveness
IT IS UNEXCELLED**

THE "WISDOM" TOMATO

Introduced and Grown Exclusively
by WISEMAN-DOWNS CO.

UNQUESTIONABLY the best medium-early, deep red, coreless tomato on the market, extremely prolific, bearing; as testimonial will show; from 600 to 700 bushels of good solid fruit per acre. The fruit is perfectly solid and meaty, with but very few seeds; so very few that it takes about ten bushels of well selected, perfect fruit to produce one pound of seed. One outstanding feature of this variety is the fact that it puts forth such a heavy, healthy green foliage, which protects the fruit from the sun rays and thereby prevents sun scald. Our field tests have shown it to be blight resistant and wilt proof. The best for canning. The best for shipping. The best for market. In fact the best for all purposes. For a bumper crop, plant the "Wisdom."

We are the Originators and Growers.

Accept No Substitute.

See That Each Sealed Package Bears Our Labels.

Pkt. 25c; oz. 50c; ¼ lb. \$1.75; 1b. \$6.00.

UNIVERSITY OF MISSOURI,
Columbia, Mo.
College of Agriculture,
Agricultural Experiment Station,
Department of Horticulture.

October 9, 1919.

Wiseman-Downs Seed Co., Baltimore, Md.:
Gentlemen—I have been informed by Prof. Gardner, of Pennsylvania State College, that two of your varieties of Tomatoes have shown up favorably this year, namely, the Wisdom and Kelly's Red. Since we are carrying on a rather extensive investigation with the Tomato crop in this State, I would like to have seed for testing next year. Also I would like to have as complete a description of these two varieties as possible. Undoubtedly you can supply this from your catalog or records.

Yours very truly,

J. T. ROSA,
Instructor in Horticulture.

Montague, Fla.

The heaviest yielding and best quality Tomato ever planted.

Yours

J. T. BRIGGS.

Meredith, Pa.

The "Wisdom" Tomato is all you have claimed for it.

G. S. TRUITT.

"The 'Wisdom' Tomato again produced a splendid crop for me this season, though we did have too much cold weather and rain the early part of season. Am well pleased with the Wisdom."—ANDREW WEST, Sparrow's Point, Md.

Joppa, Md., Feb. 1st, 1923.

Wiseman-Downs Co., Inc., Baltimore, Md.,
Gentlemen: No doubt seedmen often hear from growers when seed do not produce a good crop, but I have been so well pleased with the results of your Wisdom Tomato seed that I voluntarily write to let you know that the Wisdom beats anything I have ever grown.

I never got less than 400 bushels per acre. Two years ago I averaged 605 bushels per acre, and the last season I had in 2½ acres and got 1690 bushels.

Exact count 8556 plants which makes about 700 bushels per acre.

I consider the Wisdom the Champion Tomato.

Yours truly,

CHAS. A. MIDDENDORF.

Bluffton, Ohio

Have been growing Tomatoes a good many years, but must say the "Wisdom" is the best I have ever grown.

C. S. CROSSMORE.

TOMATO

(German, Liebesapfel; French, Tomate; Spanish, Tomate)

CULTURE—Tomatoes do best on light, warm, not overrich soil; and success depends largely upon securing a rapid, vigorous and unchecked growth during the early part of the season. Sow in hotbeds from 6 to 8 weeks before they can be set out of doors, which is when danger from frost is past. When the plants have 4 leaves transplant into shallow boxes or cold frames, setting them 4 to 5 inches apart. Give plenty of air and endeavor to secure a vigorous but steady and healthy growth, so that at the time of setting in the open ground they will be strong and stocky. Even a slight check while the plants are small will materially diminish their productiveness. Set out of doors as soon as danger from frost is over, but before doing so harden off the plants by gradually exposing them to the night air and by the withdrawal of water until the wood becomes hard and the leaves thick and of a dark green color. Transplant carefully and cultivate well as long as the vines will permit.

Kelly's Red Tomato

This wonderful Red Tomato originated in Anne Arundel County, Md., a few years ago, and because of its good qualities has grown into favor with all who have tried it

Deep red, very solid and meaty making a good shipping variety uniform in size and very prolific. **Pkt. 10c; oz. 40c; ¼ lb. \$1.25; lb. \$4.00.**

IMPROVED NEW STONE—One of the largest and most solid late, bright red varieties. Vine large, vigorous and very productive. Fruits deep scarlet, nearly round or slightly flat. Smooth and uniform in size. **Pkt. 10c; oz. 25c; ¼ lb. 75c; lb. \$2.75.**

BONNIE BEST—Of recent introduction. Has proved to be, as its name signifies, the best early Tomato grown. About 10 days earlier than Chalk's Jewel, and nearly as early as Earliana. It is a strong, vigorous grower, very prolific, heavy foliage, which acts as a protection from the hot sun. The fruit is round, red, with delicious flavor, very uniform in size and shape. Does not have the green surface like the Earliana. **Pkt. 10c; oz. 30c; ¼ lb. \$1.25; lb. \$4.00.**

MASCOT—This new variety has taken its place with the extra-early varieties, maturing a week later than Earliana and far superior in quality; color ruby red; globe-shaped, solid and an excellent flavor; very prolific. **Pkt. 10c; oz. 30c; ¼ lb. \$1.25; lb. \$4.00.**

Improved New Stone Tomato

CHALK'S EARLY JEWEL—Very large, smooth, red and especially fine-flavored variety. Within 10 days as early as Earliana. Very prolific. **Pkt. 10c; oz. 30c; ¼ lb. \$1.25; lb. \$4.00.**

JOHN BAER—Of recent introduction, it has grown into favor so rapidly until now it has taken its place along with the very earliest and best varieties. Color red, of medium size and excellent quality. **Pkt. 10c; oz. 30c; ¼ lb. \$1.25; lb. \$4.00.**

SUNNYBROOK—This is an extremely early variety, coming into maturity as early as the Earliana, and of a far better quality, of good size and a bright red color. Will stand shipping long distances much better than any of the very early varieties. **Pkt. 10c; oz. 30c; ¼ lb. \$1.25; lb. \$4.00.**

IMPROVED PONDEROSA—This variety as grown by us is quite smooth, of immense size, very solid and luscious. For family gardens it is deserving of universal use. Unsurpassed in size and of fine quality for slicing. The vines are of strong growth. The deep purple fruits are oblong in form and very fleshy, with small seed-cells; of extra-sweet flavor. We offer a selected strain of our own growing that produces Tomatoes smoother than usual and very meaty. **Pkt. 10c; oz. 40c; ¼ lb. \$1.25.**

Kelly Red Tomato

All Prices Subject to Change Without Notice

SPARK'S EARLIANA—The earliest of all Tomatoes. Especially valuable for this reason, being 10 days to 2 weeks earlier than any other sort. A bright red color; solid and very prolific. Pkt. 10c; oz. 35c; $\frac{1}{4}$ lb. \$1.25; lb. \$4.00.

EARLY I. X. L.—Very early and very prolific. Fruit large and of a bright red color. Firm and solid. Fine flavor. A favorite with the truckers. Pkt. 10c; oz. 35c; $\frac{1}{4}$ lb. \$1.25; lb. \$4.00.

MONUMENTAL—Of recent introduction. Very large, solid, beautiful red, very prolific, very little core. Growing into popularity with the market gardeners. Pkt. 10c; oz. 50c; $\frac{1}{4}$ lb. \$1.75; lb. \$6.00.

Spark's Earliana

MY MARYLAND—A good medium-early sort and a heavy bearer. Excellent for truckers and market gardeners generally. A good packing variety. Pkt. 10c; oz. 25c; $\frac{1}{4}$ lb. 90c; lb. \$3.00.

RED ROCK—One of the finest for canning, being very solid, smooth and red. Of fine flavor, very meaty and wonderfully free from acid. A heavy producer and good shipper. Pkt. 10c; oz. 25c; $\frac{1}{4}$ lb. 90c; lb. \$3.00.

GREATER BALTIMORE—Brilliant red color. Vines sturdy and vigorous. Very solid and firm. A good shipper. Pkt. 10c; oz. 25c; $\frac{1}{4}$ lb. 90c; lb. \$3.00.

FLORIDA SPECIAL—A splendid cropper, color, red. Rated among the earlier varieties, almost as early as the Earliana, but of much better quality; excellent shipper. Pkt. 10c; oz. 50c; $\frac{1}{4}$ lb. \$1.50; lb. \$5.00.

Red Rock Tomato

PARAGON—Bright red, firm and smooth. So well known it needs no further description. Pkt. 10c; oz. 25c; $\frac{1}{4}$ lb. 75c; lb. \$2.50.

NEW QUEEN—This sort is well known among canners, resembling somewhat the Paragon. Pkt. 10c; oz. 25c; $\frac{1}{4}$ lb. 75c; lb. \$2.50.

SMALL-FRUITED VARIETIES

PEAR-SHAPED YELLOW—Used for preserving and pickles. Pkt. 10c; oz. 45c; $\frac{1}{4}$ lb. \$1.50.

YELLOW PLUM—Color bright yellow; excellent for preserving. Pkt. 10c; oz. 40c; $\frac{1}{4}$ lb. \$1.50.

PEAR-SHAPED RED—Pkt. 10c; oz. 40c; $\frac{1}{4}$ lb. \$1.50.

We make a specialty of growing Tomato Seed. We mean **ACTUAL GROWING**. Some who claim to be extensive growers in this line, we find, raise a large portion of their output at the back door of some canning factory—simply saving the seed from the refuse. Such seed may be a mixture of a half-dozen or more varieties. We grow our Tomatoes only for Seed. We select our seed from the choicest Tomatoes which are most perfect in form and true to type.

SEED POTATOES

NORTHERN GROWN

CULTURE—Potatoes thrive better on light sandy soil, yet under favorable conditions a good crop may be obtained on heavier soil. If stable manure is to be used, see that it is well rotted and not allowed to come in contact with the tuber. Make rows 3 feet apart and plant about 8 or 10 inches apart in the rows. Cover seed about 4 inches if ground is warm and dry; if cold and wet, cover 3 inches. Cultivate frequently to keep down the weeds. As the vines increase draw the earth around them, forming a slight ridge. When the bugs appear Spray with Paris Green. Plant from 8 to 10 bushels to the acre.

EARLY OHIO—Very early and productive; shape oblong; fine quality, being dry and mealy. A splendid keeper.

BLISS TRIUMPH—One of the very early sorts; very productive; handsome color; a favorite with the Potato grower.

BEAUTY OF HEBRON—Vine vigorous and a rapid grower. Early and prolific. Resembles somewhat the Early Rose, but is more productive. An excellent Potato for the table either boiled or baked.

CROWN JEWEL—Very early and prolific; skin pinkish-white. One of the best for early market. Planted extensively in this section and also the South.

EARLY NORTHER—Resembles the Early Rose in shape and color; matures a few days earlier, and is a favorite with those who have tried it.

NEW YORK EARLY ROSE—A leading variety for earliness, quality and productiveness.

RURAL NEW YORKER—A valuable variety, of large size, very smooth and a great cropper; in quality unexcelled. This variety is yearly becoming more popular as the best late long keeper, and we recommend it highly.

PROSPERITY—An extra large cropper; medium early; flesh white; cooks white and mealy.

MAGGIE MURPHY—Very productive, oblong, somewhat flattened.

TWENTIETH CENTURY—A very late and heavy cropper; one of the best for Winter keeping.

MAINE, or HOULTON EARLY ROSE—An old standard variety, so well known that it needs no description. Our stock of this variety is the very best.

BURBANK—An old and well-known sort; oblong; white skin and flesh. A very heavy yielder and a splendid Potato for cooking. Late and a good keeper.

IRISH COBBLER—One of the most popular sorts on the market; a favorite with the trucker; very productive; matures early; shape is chunky, almost round; very strong and deeply set; skin is netted; flesh white.

GREEN MOUNTAIN—A splendid late-crop variety; an excellent keeper; very prolific.

DAKOTA RED—A very late variety and yields even better than the McCormick. Oblong in shape; color red; flesh white and will cook dry and mealy; keeping qualities unexcelled; will yield from 25 to 35 bushels to one planted. Not to be confounded with the McCormick, as it is a true and distinct variety and of much better quality.

SWEET POTATOES

We make a specialty of Sweet Potatoes for seed, and a season can supply all the leading varieties.

Write for Prices.

*Price Subject to Market Changes
Phone, Write or Wire For Prices*

FIELD CORN

BOONE COUNTY

WHITE—This is the prize winner. It is a medium-late Corn, requiring about 110 to 120 days to mature the grain. Grows a large, heavy, well-bladed fodder, and is an excellent Corn both for the crib or silo. The ears are from 9 to 12 inches long and well proportioned, running about 20 to 22 rows of deep grain on a medium-sized, pure white cob, with deep, well-filled medium shank. The tips are also well filled, often completely covered. The kernels are of the Dent variety, moderately rough, very deep and wedge-shaped and form straight, compact rows. It will produce 20 to 25 tons ensilage per acre, and the cured fodder makes excellent dry provender. On good ground it will average 18 to 20 tons per acre. **Pk. \$1.00; bu. \$3.50.**

NINETY-DAY RED COB

—Can be used either as a roasting ear or, when fully matured, makes an excellent Corn for feeding stock. Matures in about 90 days. **Qt. 15c; pk. \$1.00; bu. \$3.50.**

"HICKORY KING" WHITE CORN—So large are the grains and so small the cob that on an ear broken in half a single grain will almost cover the cob section. Of a strong growth, the stalks take a firm hold in the ground and stand upright, resisting severe storms. It yields splendid crops on light soils and is undoubtedly the best and most productive White Field Corn for the South. **Pk. \$1.00; bu. \$3.50.**

CUBAN GIANT ENSILAGE CORN—Grains are pure white, very large, broad and long. Of stronger vitality than any other variety. It is the best milk producer of all Ensilage Corns, being as sweet as Sugar Corn. Outyields the Red-Cob Ensilage and is 10 to 12 days earlier. **Pk. 90c; bu. \$3.00.**

FUNK'S YELLOW DENT—A standard variety of Yellow Dent Corn. Slender grains, of a beautiful golden yellow. The kernels grow very close together. Small cob; good yielder. **Qt. 15c; pk. \$1.00; bu. \$3.50.**

GOLDEN BEAUTY—Very large, broad grains, arranged very evenly on gigantic cobs. The fodder is enormous, often growing 12 feet high. Matures late, but yields wonderful crops. Desirable for silo and ensilage purposes. **Qt. 15c; pk. \$1.00; bu. \$3.50.**

EARLY LEAMING—Its extreme earliness has made it a favorite with the farmer, and especially with those in the localities where the seasons are short. Ears and grains are of medium size. **Qt. 15c; pk. \$1.00; bu. \$3.50.**

WHITE KAFFIR CORN—This variety belongs to the Sugar Cane family, and has great drought-resisting qualities. The grain is used for feeding poultry and the fodder for cattle. It is ideal for planting where the Corn seed has failed to germinate, and it is too late to replant. Grows from 4 to 6 feet high, the grain being produced on the top of a stalk in the shape of a brush. Plant at the rate of 10 pounds to the acre, in drills. **Lb. 10c.**

EVERGREEN BROOM CORN—The chief value of this plant lies in the top, or brush, as it may be called, which is used in making brooms. The stalk is used for bedding, and grows to a height of about 9 feet. Sow in May, about 10 pounds to the acre, in drills 3 feet apart. **Lb. 15c.**

CLOVER SEEDS

ALSIKE, or SWEDISH (Trifolium Hybridum)—The most hardy of all Clovers; perennial. On rich, moist soil it yields an enormous quantity of hay or pasture, but its greatest value is for sowing with other Clovers and Grasses, as it forms a thick bottom and greatly increases the yield of hay. Sow the seed in Spring or Fall, at the rate of 10 to 15 pounds per acre, when sown alone. Write for prices.

ALFALFA, or LUCERNE (Medicago Sativa)—The most valuable forage crop on the farm today. It is sown during May, August and September, these being the best months for success, although it can be sown at other times with a possible chance of doing well. It should not be planted on land having a stiff clay or hard pan subsoil, as the roots naturally penetrate to a great depth, and must do so if the plants live any time. Sow on rich, moist loam or sandy soil having a deep,

porous subsoil. Prepare the land thoroughly and sow seed at the rate of 15 to 25 pounds per acre. The young plants are very tender, and should be kept free from weeds. The seed we offer is grown on Montana high land and seems to do better than that grown on low or irrigated land. Write for prices.

RECLEANED RED (Trifolium Pratense)—This is by far the most important of all the varieties for practical purposes. Sow in Spring or Fall, and if no other grasses are used, at the rate of 15 pounds per acre. Write for prices.

WHITE DUTCH (Trifolium Repens)—A small, creeping perennial variety, valuable for pasture and for lawns. It accommodates itself to a variety of soils, but prefers moist ground. **¼ lb. 15c; lb. 50c.**

GRASS SEEDS

TIMOTHY (*Phleum Pratense*)—The most valuable of all the grasses for hay; thrives best on moist, loamy soils of medium tenacity. It should be cut just when the blossom falls. Sow early in the Spring or Fall, at the rate of 15 pounds per acre if alone, but less if with other grasses. Write for prices.

KENTUCKY BLUE GRASS (*Poa Pratensis*)—It is the most nutritious, hardy and valuable of all Northern grasses. Sown with White Clover, it forms a splendid lawn. If sown by itself for meadow or pasture, use about 28 pounds per acre. Write for prices.

ORCHARD GRASS (*Dactylus Glomerata*)—Desirable for its quick growth and valuable aftermath. It is ready for grazing 2 weeks earlier than any other grasses, and when fed off is again ready for grazing in a week, and will continue green after all other grasses are withered by dry weather. It is palatable and nutritious, and stock eat it greedily when green. If sown alone, about 28 pounds per acre are required. Write for prices.

AWNLESS BROME GRASS (*Bromus Inermis*)—A perennial, valuable for binding the soil of embankments and for resisting both drough and cold. Sow 40 pounds per acre. Write for prices.

PERENNIAL RYE GRASS (*Lolium Perenne*)—A very valuable variety for permanent pasture. Succeeds well on almost any soil, but is particularly adapted to moderately moist or irrigated lands. Sow 30 to 40 pounds per acre in Spring. Write for prices.

RED TOP (*Agrostis Vulgaris*)—This is known as Herd's Grass. It is a good, permanent grass, standing our climate well, and makes good pasture when fed close; is valuable for low, wet meadows, producing a large return in hay. When sown alone, use about 28 pounds of the chaff seed per acre. Sow in Spring or Fall. Write for prices.

RED-TOP FANCY (Cleaned from Chaff)—Sow 8 to 10 pounds per acre. Write for prices.

RED-TOP UNHULLED (Free from Light Chaff)—Write for prices.

SHEEP PESCUE (*Festuca Ovina*)—A small, tufted, hardy Grass, forming a cluster of narrow, cylindrical leaves. It is of value in mixture for lawns on dry soils and in shady locations. Sow about 35 pounds per acre. Write for prices.

RHODE ISLAND BENT GRASS (*Agrostis Canina*)—A valuable perennial for lawns and pasturage. Much like Red-Top, only smaller. Thrives on light, dry soils as well as on rich, moist ones. Write for prices.

WOOD MEADOW GRASS (*Poa Nemoralis*)—Grows from 1½ to 2 feet high; has a perennial, creeping root, and an erect, slender, smooth stem. Well adapted to shaded places, such as orchards and parks, for either hay or pasturage. Sow about 30 pounds per acre. Write for prices.

CREEPING BENT GRASS (*Agrostis Stolonifera*)—Particularly valuable for lawns that are to be used as croquet and tennis grounds. Makes a low, velvety growth. Write for prices.

MEADOW FESCUE, or ENGLISH BLUE GRASS (*Festuca Pratensis*)—A perennial from 2 to 4 feet high, with flat, broad leaves. One of the standard European Grasses. It succeeds well on nearly all soils, but does best on upland, loamy or moderately stiff soils. An excellent pasture Grass to take the place of the wild grasses, as it yields a large amount of early and late feed. Sow about 40 pounds per acre. Write for prices.

TALL MEADOW OAT GRASS (*Avena Elatior*)—A hardy perennial, much used in the South and West. Roots penetrate deep. It yields a heavy crop on any good soil, and is valuable both for meadow and pasture. Write for prices.

Wiseman-Downs Co.'s "Wisdom" Evergreen Lawn Grass

PREPARATION AND CARE OF LAWNS

The essentials for a fine lawn are: first, a well drained soil; second, careful preparation of the ground, making it as fine and smooth and mellow as possible; third, a wise selection of seeds; fourth, sowing at such a time as to give the young plants a chance to become well established before being subjected to very dry or cold weather or to the direct rays of the hot Summer sun. However much care is bestowed on the soil and seed, no lawn will be beautiful without frequent mowing and rolling. Too much care cannot be bestowed upon the selection of Grasses, as some varieties are the most luxuriant in Spring, others in Summer, others in Autumn, and a combination of the proper sorts is required for a perfect carpet-like lawn. It may be planted early in Spring or Fall, and should be sown at the rate of 60 to 100 pounds per acre; much more is required than for hay or pasturage. If sown in the Spring, sow as early as possible, making the surface very fine and smooth, then raking it over and sowing the seed just before a rain, which, if the surface has just been raked, will cover the seed sufficiently. If the expected rain does not come cover by rolling with a light roller. For Fall seeding, sow before the Autumn rains and early enough to enable the young Grass to become well established before very cold weather, when a light dressing of manure should be given.

"WISDOM" EVERGREEN LAWN GRASS—Our "Wisdom" Evergreen Lawn Grass is prepared with the utmost care. Nothing but the very best and choicest seeds are allowed to enter into it, and only those which are best suited for lawns. We feel that we are offering a thoroughly first-class mixture, made of the best and cleanest grades of those varieties used and best adapted to general lawn purposes, and should not be confounded with the cheap, chaffy grasses offered at a lower price. 1 lb. 40c; 2 lbs. 75c; 5 lbs. \$1.60; 1 bu. 20 lbs. \$6.00.

PARK LAWN GRASS—For those desiring a cheaper grade of Lawn Grass, this will be found a very excellent mixture, though, of course, it does not contain all the high-grade seeds which are used in the "Wisdom" Grass. 1 lb. 35c; 5 lbs. \$1.50; 1 bu. 20 lbs. \$5.00.

TERRACE SOD MIXTURE—1 lb. 40c; 5 lbs. \$1.60; 20 lbs. \$6.00.

SHADY NOOK LAWN GRASS—1 lb. 40c; 5 lbs. \$1.60; 20 lbs. \$6.00.

MISCELLANEOUS FARM SEEDS

We exercise the same care in the selection of stocks of all lines of Farm Seeds as we do the critical Vegetable and Flower Seed part of the business, and to this fact we attribute our success in this particular line.

DWARF ESSEX RAPE—This makes an indispensable green food for sheep and hogs. It can be pastured 8 weeks after sowing. The growth is enormous. If one has the available land, it is good to sow in succession, as the stock eat it close to the ground, and it will not stand pasturing any great length of time. This, of course, depends upon the number of head turned on an acre. Sow 6 pounds per acre broadcast from April 1st to October 1st. It produces enormous crops and is an ideal green manure. Write for prices.

VETCHES, or TARES—This has been used in Europe for many years as a stock food and green manuring of cover crop. It does best if sown with Rye, the latter giving it support, and thus insuring enormous crops. It makes an ideal hay, and it is a pity that every American farmer does not use it. It fertilizes the ground without further trouble or cost, on account of the free nitrogen it gathers from the air. It produces a peculiar vine plant, with very narrow foliage and elongated flowers of pinkish-white in clusters. Write for prices.

WINTER, or HAIRY VETCHES (Vicia Villosa)—Sow from August 1st to October 1st, 1 to 2 bushels per acre, to which we suggest adding a bushel of Winter Rye or Wheat. Write for prices.

COW PEAS—These are the best, largest yielding and most nutritious of the farm crops. They provide the most inexpensive methods of bringing soil back to a state of fertility. In the South it is the staple forage crop for Winter feeding. They grow in the poorest kind of soil, taking the free nitrogen from the air, which it deposits in the ground through the roots, leaving it very rich in ammonia. Sow from May 1st to July 1st, 2 bushels per acre broadcast, or 1 bushel per acre in drills. Write for prices.

WHIPPOORWILL—Seed is reddish-brown speckled. Some claim that this variety is capable of gathering more nitrogen than others. Write for prices.

BLACK COW PEAS—This is a quick-growing variety, desirable for turning under. Write for prices.

WONDERFUL, or UNKNOWN—An enormous producer, very late in maturing. Write for prices.

NEW ERA—An early upright-growing variety; smaller seed.

SOJA BEANS—The great drought-resisting forage crop. A soil enricher, because of its nitrogen-gathering qualities. The fodder is relished in either green or dry form by cattle or dairy cows. Write for prices.

CHOICE SEED OATS—In these we offer only the very best varieties. Write for prices.

GERMAN MILLET—Excellent for planting when other hay crops are short, as it is a very rapid grower and produces a very fine crop of hay. Write for prices.

HUNGARIAN MILLET—The seed is a mixture of brown and yellow; the quality of the hay is not quite as good as the German; it can, however, be sown 2 weeks later. Write for prices.

WINTER WHEAT—In season we carry a large stock of the best varieties.

RYE—We carry both Winter and Spring Rye of the best quality. Write for prices.

SUNFLOWER, MAMMOTH RUSSIAN—This makes an excellent poultry food especially for Winter use, on account of its fattening and heating qualities. Will yield sometimes as high as 60 bushels per acre. Lb. 10c.

Inoculate

Alfalfa, Sweet Clover, all Clovers, Soy Beans, Cow Peas, Vetch, Peas, Beans, all Legumes with

The Improved Soil Inoculator, Nobbe-Hiltner Process

Registered in United States, Dec. 6, 1898
Over 26 Years Ago

Restores and Maintains Soil Fertility

The Original Soil Inoculator

Awarded Gold Medal
World's Fair —
St. Louis, 1904
Over 20 Years Ago

Grow legumes—alfalfa, clovers, soys, vetch, peas and beans—for valuable feed crops, soil improvers, cover crops; **BUT BE SURE TO INOCULATE THEM WITH NITRAGIN.** Agricultural Colleges advise inoculation. Inoculated legumes draw valuable nitrogen from the air—not the soil—increasing yield and quality of the crop and leave a rich store of nitrogen in the soil for future crops. Inoculated legume seed develops heavy clusters of nodules, where nitrogen is stored, on the roots of the legume plant and without which the legume is valueless as a soil builder. A Nitragin inoculated legume crop bears heavy nodules and pays big in increased soil fertility.

Protect yourself by insisting on **NITRAGIN**, the original Soil Inoculator. All Inoculators are perishable; every package of Nitragin is dated as to the life of contents, for your protection. Look for the dated label when buying; agricultural colleges recommend this protection.

Prices for Field Nitragin

1/4 bu. size for 15 lbs. seed	\$0.40
1/2 bu. size for 30 lbs. seed	.60
3/4 bu. size for Soy Beans and Cow Beans	.40*
1 bu. size for 60 lbs. seed	1.00
1 bu. size for Soy Beans and Cow Peas	.70*
5 bu. size for 300 lbs. seed	4.75
5 bu. size for Soy Beans and Cow Peas	2.50*

* These prices on Nitragin for Soy Beans and Cow Peas have been greatly reduced from former prices. Buy the economical 5 bu. size for 50c per bushel of seed, treated.

When ordering, always state kind of seed you want to inoculate.

Nitragin for Garden Use

Every garden needs Nitragin; garden size is for Peas, Sweet Peas, and Beans including Lima (3 in one Inoculant) Price.....20c

Sold in tins—not glass—packed in rich, soil like granular medium, easy to mix with seed. Contents always fresh and bacteria active and vigorous.

Best by Every Test

WISEMAN-DOWNS CO.

FLOWER SEEDS

(A) **ANNUALS** are those flowers that bloom and ripen their seed the first year, then die. Among these will be found Asters, Balsam, Mignonette, Sweet Peas, Nasturtiums, Morning Glories, and many other very brilliant and fragrant flowers. In fact, if you want flowers early in the season, and all the time until frost, a good selection of Annuals will not disappoint you.

(P) **PERENNIALS** are those flowers that endure our Winters with little or no protection, and live and bloom several years in succession. A large majority of the Perennials will bloom the first year if started early in the Spring. Hollyhocks, Larkspurs, Foxglove, Poppies, etc., are in this popular class.

ORDER BY NUMBER

104-P—**ACHILLEA**. **PTARMICA** "The Pearl."—Hardy White Perennial grows about two feet high. Pure white flowers. Pkt. 25c.

105-P—**ACONITUM NAPELLUS** (Monk's Hood)—Blue. Pkt. 15c.

108-A—**ACROCLINIUM**—An "Everlasting"; can be dried and used in winter bouquets. Also fine for borders. Fifteen inches high. Mixed colors. Pkt. 10c.

109-P—**ADLUMIA CIRRHOSA** (Allegheny Vine)—Hardy climber; flowers first year from seed. Pkt. 10c; ¼ oz. 75c.

109-A—**AGERATUM** (Floss Flower)—Excellent for bedding or borders; blooms from early Summer till frost. Height about 2 feet. Beautiful feathery flowers.

112—Blue Mexicanum—Pkt. 10c; ¼ oz. 20c.

113—White Album—Pkt. 10c; ¼ oz. 25c.

119—Mixed Colors—Pkt. 10c; ¼ oz. 20c.

120-P—**AGROSTEMMA**—An attractive free-flowering hardy perennial. Fine for cutting. Mixed colors. Pkt. 10c; ¼ oz. 20c.

A—**ALYSSUM** (Mad Wort)—Very popular for baskets, edgings, rockwork or beds. Blooms all Summer; very fragrant.

123—Sweet Alyssum (Maritimum)—Pkt. 10c; oz. 50c.

124—Little Gem (Compactum)—Pkt. 10c; oz. 75c.

A—**AMARANTHUS**—Very showy plants, some remarkable for their panicles of showy flowers and others for the brilliant range of colors in the leaves.

128—**CAUDATUS** (Love Lies Bleeding)—Long red panicles. Pkt. 10c; oz. 25c.

131—**CRUENTUS** (Prince's Feather)—Dark red feathery flowers. Pkt. 10c; oz. 25c.

133—**TRICOLOR** (Joseph's Coat)—Red, yellow and green leaves. Pkt. 10c; oz. 25c.

135-A—**AMMOBIUM** (White Everlasting)—Pretty annual everlasting; flowers silver white with yellow discs. Pkt. 10c; ¼ oz. 20c.

136-P—**ANPELOPSIS** (Boston or Japanese Ivy)—A perennial climber, olive green leaves which turn to scarlet in the Fall. Pkt. 10c; oz. 50c.

137-B—**ANCHUSA, CAPENSIS** (Cape Forget-Me-Not)—Dwarf, light blue; good for cutting. Pkt. 10c; ¼ oz. 20c.

139-A—**ITALICA**—Dropmore variety; lovely gentian blue; grows three to five feet high. Pkt. 10c; ¼ oz. 30c.

140-P—**ANEMONE** (Windflower)—A very pleasing perennial; producing large flowers; fine for bouquets. Mixed colors. Pkt. 10c.

143-B—**ANTIRRHINUM** (Snap Dragon)—One of the most charming of old-fashioned flowers. Mixed colors. Pkt. 10c; ¼ oz. 25c.

P—**AQUILEGIA** (Columbine)—Very popular, and easily grown, from seed. Blooming freely during late Spring and early Summer.

166—Double Mixed—Pkt. 10c.

167—Single Mixed—Pkt. 10c.

168-P—**ARABIS ALPINA** (Snow on the Mountains)—One of the earliest and prettiest Spring flowers. Pure white flowers; excellent for rockeries or edging. Pkt. 10c; ¼ oz. 20c.

170-A—**ARCTOTIS GRANDIS** (African Daisy)—Produces beautiful white flowers with bluish centre; especially valuable as a cut flower, blooms lasting a week or ten days. Pkt. 10c; ¼ oz. 25c.

171-P—**ARMERIA** (Giant Sea Thrift)—Fine for rockeries, or edging; rosy-pink flowers. Pkt. 10c; ¼ oz. 50c.

ASPARAGUS SPRENGERI—Excellent for window boxes, hanging baskets, vases, etc. Pkt. 10c; 50c per 100 seeds.

A—**ASTERS**—W. D. CO.'S SELECT STRAINS—One of the handsomest and most important of Summer and Autumn flowers. The varieties offered here are of the very best selection.

179—**CHINA MIXED** (All Sorts)—A beautiful range of colors. Pkt. 10c.

182—**COMET SEMI-DWARF**—Extra large flowering variety. Mixed all colors. Pkt. 10c.

189—**GIANT COMET**—This is the finest and largest of all the Comet Asters, bearing immense fluffy flowers. Pkt. 10c.

199—**OSTRICH FEATHER**—Magnificent flowers of immense size; blooms in August. Pkt. 10c.

202—**QUEEN OF THE MARKET**—Early flowering of good size and branching habits; blooms in July. Pkt. 10c.

213—**VICK'S BRANCHING**—Very large flowering of branching habits and an exceedingly good variety. Pkt. 10c.

220-P—**AUBRETIA** (Rainbow Rock Cress)—Dwarf purple perennial; very attractive in rockwork. Pkt. 10c.

224-P—**AURICULA**—Hardy perennial with flowers of many beautiful colors. Pkt. 25c.

227-A—**BALSAM CAMELIA FLOWERED** (Lady Slipper)—An old and favorite flower, producing masses of beautiful brilliant colored double flowers in the greatest profusion. Pkt. 10c; ¼ oz. 30c.

238-P—**BELLIS** (English Daisy)—A low growing Spring flowering plant. Loves a shady place and will reward the gardener with a mass of blossoms for succeeding years, if left undisturbed. Pkt. 10c; ¼ oz. 75c.

245-A—**BRACHYCOMIE** (Swan River Daisy)—Beautiful blue or white flowers, suitable for edgings, small beds or pot culture; 9 inches. Pkt. 10c; ¼ oz. 35c.

249-A—**BROWALLIA** (Amethyst)—Grows freely in any rich soil; blooms finely in Winter if plants are lifted in Autumn and cut back. Pkt. 10c; ¼ oz. 30c.

250-A—**CACALIA** (Tassel Flower)—Fine for borders, blooms freely from June to September; yellow and scarlet tassel-shaped flowers. Pkt. 10c; ¼ oz. 20c.

259-A—**CALENDULA** (Pot Marigold)—Showy free flowering hardy annuals, producing a fine effect in beds or mixed borders. Pkt. 10c; oz. 25c.

265-A—**CALLIOPSIS**—Showy and beautiful free-flowering annuals. Pkt. 10c; oz. 30c.

266-P—**CALLIOPSIS COREOPSIS PERENNIAL**—This is one of the finest of hardy plants, with large, showy bright yellow flowers; blooms from June till Frost. Pkt. 10c; ¼ oz. 25c.

B—**CAMPANULA** (Canterbury Bells)—Hardy biennial, flowering the second season from seed producing large bell-shaped flowers of exquisite color.

269—**MEDIUM**—White blue and rose. Pkt. 10c.

275—**CALYCANTHEMA** (Cup and Saucer)—Blue. Pkt. 10c.

280—**PYRAMIDALIS** (Chimney Bell Flower)—Pkt. 10c.

A—**CANDYTUFT** (Iberis Umbrellata)—Very popular and universally known; considered indispensable for cutting.

294—Finest Mixed—Pkt. 10c.

295—Tom Thumb—Mixed hybrids. Pkt. 10c.

Alyssum

Aster

298-P—CANNA (Indian Shot)—One of the finest bedding plants for the American climate. Crozy's New Hybrids, mixed. **Pkt. 10c; oz. 30c.**

308-B—CARNATION (Marguerite)—Most popular and valued highly for their delicious fragrance and richness of colors. Mixed. **Pkt. 10c.**

311-A—CELOSIA PYRAMIDALLIS PLUMOSA (Cockcomb)—Finest mixed, plume feathered. **Pkt. 10c; ¼ oz. 25c.**

312—CHIOSII (Wool Flower)—Crimson. **Pkt. 10c; ¼ oz. 25c.**

316-A—CENTAUREA CYANUS (Batchelor Button or Corn Flower)—Well-known to every flower grower and always included in old-fashioned gardens. **Pkt. 10c; ¼ oz. 20c.**

330-P—CENTAUREA (White Leaved Dusty Miller)—Fine for baskets, pots, bedding, vases, etc.; also for edging.

332-A—CHRYSANTHEMUM—Showy and effective garden favorites. **Pkt. 10c; ¼ oz. 25c.**

349-P—CHRYSANTHEMUM, LEUCANTHEMUM (Shasta Daisy)—Very early, free flowering; pure white. **Pkt. 10c; ¼ oz. 40c.**

356-P—CINERARIA MARITIMA CANDIDISSIMA (Dusty Miller)—White leaves, fine for bedding. Half-hardy perennials, but should be treated as annuals. **Pkt. 10c; ¼ oz. 25c.**

370-A—CLARKIA, ELEGANS—A mixture containing all the colors. Double Flowering. **Pkt. 10c; ¼ oz. 25c.**

372-P—CLEMATIS—Feathery, fragrant flowers in clusters, perfectly covering the vines. Height 25 to 30 feet. **Pkt. 10c; ¼ oz. 30c.**

A—COBEA (Cup and Saucer Vine or Cathedral Bells)—Elegant, rapid growing climbers, attaining a height of 20 to 30 feet. Desirable for covering walls, trellis, arbors, etc.

373—SCANDENS—Purple flowers. **Pkt. 10c; ¼ oz. 25c.**

374—SCANDENS ALBA—Pure white. **Pkt. 10c; ¼ oz. 40c.**

380-P—COLEUS—Very popular and novel foliage plants for house or garden culture. **Pkt. 25c.**

383-A—CONVOLVULUS MAJOR (Morning Glory)—Finest mixed colors. **Pkt. 10c; oz. 20c.**

386-A—COSMOS—A Summer and Autumn flowering; a charming, profuse bloomer. Giant rainbow variety. All colors mixed. **Pkt. 10c; ½ oz. 20c.**

398-A—CYPRESS VINE—Popular vine, fernlike foliage and masses of beautiful small star-shaped flowers. Mixed colors. **Pkt. 10c; ¼ oz. 25c.**

400-P—DAHLIAS—One of the most popular Summer and Autumn flowering plants. Very easily grown from seed. We offer the best in single, cactus and show varieties. **Pkt. 15c.**

410-P—DELPHINIUM (Hardy Larkspur)—These beautiful flowers, so well known, are very large and of various colors, shades and markings. **Pkt. 10c; ¼ oz. 60c.**

A—DIANTHUS or PINKS—Most beautiful and satisfactory Summer flowering plants, unrivalled for brilliancy and rich variety of colors.

417—CHINENSIS—China pink. Double mixed. **Pkt. 10c; ¼ oz. 25c.**

420—CHINENSIS, IMPERIALIS—Double mixed in choicest colors. **Pkt. 10c; ¼ oz. 30c.**

421—HEDDEWIGII—Large flowered, single mixed. **Pkt. 10c; ¼ oz. 20c.**

440-P—DIGITALIS (Foxglove)—Very showy, hardy plants. They are easily grown and produce freely; spikes 4 to 5 feet high, well furnished with Gloxinia-like floors of various colors. **Pkt. 10c; ¼ oz. 30c.**

445-A—DIMORPHOTHECA (Orange Daisy)—An extremely showy annual Daisy from South Africa, which suits our climatic conditions perfectly. **Pkt. 10c; ¼ oz. 35c.**

448-A—DOLICHOS (Hyacinth Bean)—A rapid growing annual climber, flowering freely in erect racemes, followed by ornamental seed-pods. **Pkt. 10c; oz. 20c.**

457-A—ESCHSCHOLTZIA (California Poppy)—Very beautiful and brilliant annual. They will grow nicely and bloom profusely over a long season in any sunny position. **Pkt. 10c; ¼ oz. 20c.**

466-P—EUPHORBIA, VARIEGATA—Attractive foliage, veined and margined with white. **Pkt. 10c; oz. 50c.**

476-A—GAILLARDIA—Very showy garden annuals, 1 to 2 feet high. Grown in masses. They are especially effective. Unrivalled as cut flowers. **Pkt. 10c; ¼ oz. 25c.**

477-P—PERENNIAL VARIETIES—Mixed colors. **Pkt. 10c; ¼ oz. 40c.**

482-P—GEUM—Beautiful semi-double flowers, dark crimson; blooms all Summer. **Pkt. 10c; ¼ oz. 50c.**

485-A—GILLIA—Very graceful annual, growing about 2 feet high with fine feathery foliage. Rich lavender blue flowers. **Pkt. 10c; ¼ oz. 25c.**

490-A—GODETIA—Very showy, of compact growth. Exquisite colors and shades that glisten in the sunlight like satin. **Pkt. 10c; ¼ oz. 20c.**

499-A—GOMPHRENA (Globe Amaranth)—Flowers resemble clover heads and can be dried and used in Winter bouquets. Sometimes called Batchelor's Button. **Pkt. 10c; ¼ oz. 25c.**

501-A—GOURDS, ORNAMENTAL—Rapid growing, interesting annual climbers, with ornamental foliage and singular shaped fruit. We offer, ornamental mixed, Dish Cloth, Pipe or Calabash, Dipper, Nest Egg and Hercules Club. **Pkt. 10c; oz. 25c.**

507-P—GREVILLEA (Silk Oak)—Very beautiful and graceful plant with fern-like foliage; easily raised from seed. **Pkt. 10c.**

508-A—GYPSOPHILA (Baby's Breath)—Yields graceful sprays of pure white flowers. Fine cut flowers. **Pkt. 10c; ¼ oz. 25c.**

Dianthus, or China Pinks

Nasturtium

528-A—HELICHRYSUM (Straw Flower)—Rich in glittering colors, generally grown to dry for use in winter bouquets. Pkt. 10c; $\frac{1}{4}$ oz. 25c.

532-P—HELIOTROPE—Always popular on account of its delightful fragrance. A half-hardy perennial flowering the whole season. Pkt. 10c; $\frac{1}{4}$ oz. 40c.

537-P—HIBISCUS—Showy ornamental plants for mixed beds or shrubby borders, having large beautifully colored flowers.

538-P—HOLLYHOCK—Very popular hardy perennial; grown everywhere and valuable for a back ground. Pkt. 10c; $\frac{1}{4}$ oz. 50c.

546-A—HUNNEMANNIA (Giant Yellow Tulp Poppy)—By far the best of the Poppy family, producing large buttercup, yellow poppy-like blossoms. Blooms till frost. Pkt. 10c; $\frac{1}{4}$ oz. 25c.

A—IPOMEA—Climbers of rapid growth, with beautiful and varied flowers; for covering walls, arbors, trellises, or stumps of trees they are invaluable.

552—IMPERIALIS (Japanese Morning Glory)—Pkt. 10c; oz. 25c.

553—GRANDIFLORA (Moon Flower)—Bloom^s open only at night. Pkt. 10c; $\frac{1}{2}$ oz. 25c.

561-A—KOCHIA (Summer Cypress)—Forms a cypress-like hedge of beautiful green and of perfect symmetry about 3 feet high. The entire plants turn to a deep red in the Autumn. Pkt. 10c; $\frac{1}{4}$ oz. 15c.

562-P—LANTANA—Rapid-growing, tender perennial plants for pot culture in the Winter or garden decorations in the Summer. Pkt. 10c; $\frac{1}{4}$ oz. 20c.

563-A—LARKSPUR—The splendid flowers are very large and of various beautiful colors, shades and markings. Height 15 to 18 inches. Pkt. 10c; $\frac{1}{4}$ oz. 20c.

573-P—LATHYRUS (Everlasting Sweet Pea)—Showy, free-flowering hardy perennial climbers for covering old stumps, fences, etc.; continually in bloom; fine for cutting mixed. Pkt. 10c; oz. 75c.

578-A—LAVATERA (Tree Mallow)—A beautiful showy annual, growing about 2 feet high, with large cup-shaped flowers. Pkt. 10c; $\frac{1}{4}$ oz. 25c.

587-A—LINUM (Flax)—Very effective and showy bedding plants, of long duration; brilliant scarlet flowers; hardy annual. Pkt. 10c; oz. 30c.

589-A—LOBELIA—Very desirable for pot culture, edgings, hanging baskets, etc.; blooming profusely from June to November. Pkt. 10c; $\frac{1}{4}$ oz. 25c.

611-A—LUPINUS (Lupine)—Free-flowering, easily-grown annuals, with luma graceful spikes of rich and various colored pea-shaped flowers, 2 feet; mixed colors. Pkt. 10c; $\frac{1}{4}$ oz. 25c.

624-A—MARIGOLD (Double African)—Immense flowers, densely double. One of the easiest grown annuals. Pkt. 10c; $\frac{1}{4}$ oz. 20c.

626-A—MARIGOLD (Double French)—Unequaled for beds or borders. Pkt. 10c; $\frac{1}{4}$ oz. 20c.

632-A—MARVEL OF PERU or FOUR O'CLOCKS—Grows freely from seed. Blooms from the late afternoon on through the night, 2 feet; mixed colors. Pkt. 10c; oz. 20c.

634-P—MATRICARIA—Free-flowering, producing fine double white flowers all season; 18 inches. Pkt. 10c; $\frac{1}{4}$ oz. 25c.

635-A—MAURANDIA—Rapid growing slender vine, blooming profusely throughout the season; 10 feet; mixed colors. Pkt. 10c.

636-P—MEDEOLA ASPARAGOIDEA (Smilax)—Very useful and desirable climber, for greenhouse and conservatory; excellent for bouquets and floral decorations. Pkt. 10c; $\frac{1}{4}$ oz. 25c.

A—MIGNONETTE—A well-known favorite, very fragrant, and no garden is complete without it.

643—GOLDEN QUEEN—Compact golden yellow. Pkt. 10c; $\frac{1}{4}$ oz. 40c.

644—GOLIATH—Large trusses of double red flowers. Pkt. 10c; $\frac{1}{4}$ oz. 30c.

645—MACHET—Large spikes, red tinted. Pkt. 10c; $\frac{1}{4}$ oz. 20c.

649-A—MIMOSA (Sensitive Plant)—Curious and interesting annuals, with pinkish-white flowers. The leaves close and droop when touched or shaken. Pkt. 10c $\frac{1}{4}$ oz. 20c.

654-A—MOMORDICA (Balsam Apple)—Very curious climbing vine; ornamental foliage; fruit golden-yellow; warted; 10 feet. Pkt. 10c; $\frac{1}{4}$ oz. 20c.

659-P—MYOSOTIS (Forget-Me-Not)—Popular perennials, flowering the first season, from early spring sown seed, or they may be sown in Summer or early Fall, and if bedded out and given protection, like pansies, they will Winter over and commence flowering in early Spring. Pkt. 10c; oz. 40c.

A—NASTURTIIUM—One of the most popular of all annuals. Easily grown, as they will grow most anywhere except in the shade. Blooming profusely throughout the Summer, they may be used to cover unsightly railings and to trail over rough ground with fine effect. Excellent for cut flowers.

665—DWARF MIXED COLORS—For massing in beds. Pkt. 10c; oz. 15c; $\frac{1}{4}$ lb. 30c.

670—TALL MIXED COLORS—For climbing on trellises, verandas, etc. Pkt. 10c; oz. 15c; $\frac{1}{4}$ lb. 25c.

674-A—NIGELLA (Love in a Mist, or Devil in the Bush)—Handsome flower, requiring but little care. Flowers bright and showy, very curious seed pods. Pkt. 10c; oz. 25c.

W. D. Co.'s Giant Flowering Pansies

Verbennas

680-P—PANSIES (W. D. Co's Giant Flowering)—For size of bloom, heavy texture and varied shades and colors, with their distinct markings; this strain cannot be excelled. With slight protection, such as meadow hay, leaves or similar material, full-grown plants Winter over in the open ground and commence flowering in early Spring with the Snowdrops and Crocus. **Pkt. 25c; ½ oz. \$1.00.**

689-A—PETUNIA—These are almost indispensable for garden decoration. They flower in a few weeks' time from seed and continue to grow, bud and bloom in luxuriance until frost. The seed we offer include all the Petunia colors. Mixed. **Pkt. 10c; ¼ oz. 30c.**

700-A—PHLOX DRUMMONDI—For beds and massing nothing can surpass these beautiful annuals. They produce immense trusses of large brilliant flowers of numberless hues throughout the Summer; succeeds well in all sunny positions. Mixed colors. **Pkt. 10c; ¼ oz. 25c.**

701-P—PHLOX DECUSSATA (Hardy Perennial)—Hardy Herbaceous Perennial and quite distinct from the varieties of Phlox Drummondii, which are annuals. Mixed all colors. **Pkt. 15c; ¼ oz. 75c.**

POPPIES—The flaming brilliancy of color make these real garden assets. Sow the annual sorts thinly in early Spring and do not transplant; start the perennial varieties indoors in February and transplant when safe.

HARDY ANNUALS:

705—Shirley mixed. Silk or ghost poppy. **Pkt. 10c; ¼ oz. 20c.**

710—Paeony flowered. Double mixed, all colors. **Pkt. 10c; ¼ oz. 20c.**

HARDY PERENNIALS:

715—Iceland. Yellow. **Pkt. 10c; ¼ oz. 25c.**

720—Orientale. Large deep crimson flowers. **Pkt. 10c; ¼ oz. 35c.**

723-P—PHYSALIS FRANCHETII (Chinese Lantern)—An ornamental plant, forming dense bushes about 2 feet high producing orange-scarlet lantern-like fruits, which can be cut and dried for Winter bouquets. **Pkt. 10c.**

A—PORTULACA—Brilliant garden annual, 6 inches high, luxuriating in warm dry sunny situations and blooming profusely from early Summer to Autumn. Colors range through innumerable shades of red, yellow, pink, striped, white, etc.

728—Extra double mixed large flowering. **Pkt. 10c; ¼ oz. 60c.**

729—Single mixed. **Pkt. 10c; ¼ oz. 25c.**

P—PRIMULA (Primrose)—These charming and beautiful flowers are indispensable for Winter or Spring decorations in the home or conservatory.

731—Sutton's fancy, choicest mixed. **Pkt. 25c.**

737—JAPONICA (Queen of Primrose)—Mixed. **Pkt. 25c.**

740-P—PUERARIA THUNBERGIANA (Kudzu Vine)—A very strong-growing climber. The leaves overlap each other so as to form a dense screen. **Pkt. 10c; ¼ oz. 20c.**

742-P—PYRETHRUM—Few plants are more popular for borders. The bright yellow foliage makes it especially effective. **Pkt. 10c; ¼ oz. 25c.**

744-A—RHODANTHE—A charming everlasting; valuable for pot culture; mixed colors; 1 foot. **Pkt. 10c.**

A—RICINUS (Castor Oil Beans)—Ornamental plants of stately growth and picturesque foliage, with brilliant colored fruit, producing subtropical effect. Fine for lawns, massing or centre plants for bed.

746—SANGUINEUS—Blood red stalks, red fruit. **Pkt. 10c; oz. 20c.**

747—BORBONENSIS—Very tall. **Pkt. 10c; oz. 20c.**

748—ZANZIBARIENSIS—Large dark green leaves. **Pkt. 10c; oz. 20c.**

749—CAMBODGENSIS—Stems and leaf stalks are ebony colored. **Pkt. 10c; oz. 20c.**

752-A—SALPIGLOSSIS (Painted Tongue)—Produce attractive gloxinia-like flowers from mid-Summer until Frost; splendid for cut flowers; 30 inches high. **Pkt. 10c; ¼ oz. 35c.**

756-A—SALVIA SPLENDENS (Scarlet Sage)—The standard sort; an easy, continuous and persistent bloomer; beautiful bright scarlet; 3 feet. **Pkt. 10c; ¼ oz. 75c.**

763-A—SCABIOSA (Mourning Bride)—Perfectly double flowers; useful for cutting; gracefully borne upon long slender stems; range of color white to rich pink, crimson to deep red, lilac and black. Mixed. **Pkt. 10c; ¼ oz. 25c.**

768-A—SCHIZANTHUS (Butterfly or Fringe Flower)—Adapted for bordering beds of taller flowers and those of a heavier growth. They make admirable pot plants for the house in late Winter and early Spring. **Pkt. 10c; ¼ oz. 25c.**

780-A—STOCKS (Gilliflower)—All the varieties are desirable as pot plants as well as in the open garden. They are greatly prized for cut flowers on account of their fragrance and colors. **Pkt. 10c; ¼ oz. 50c.**

788-P—SWEET WILLIAM—There is perhaps no flower more favorably known than the Sweet William. No garden is complete without it. They are easily grown from seed and produce a wonderful array of colors. Perfectly hardy. **Pkt. 10c; ¼ oz. 30c.**

790-A—TAGETES SIGNATA PUMILA—A dwarf, compact, bushy annual Marigold, with beautiful fern-like leaves, densely covered with flowers of bright yellow. **Pkt. 10c; ¼ oz. 30c.**

794-A—THUNBERGIA (Black-Eyed Susan)—Beautiful rapid growing annual climbers, preferring a warm, sunny situation; used extensively in hanging-baskets, vases, low fences, etc., very pretty flowers in buff, white, orange, etc., with dark eyes. 4 feet. Mixed colors. **Pkt. 10c; ¼ oz. 30c.**

798-A—VERBENA (Mammoth)—Splendid for beds or massing; the trusses and individual flowers of the largest size; of brilliant colors, free blooming and of vigorous habit, for best and quickest results seed should be sown early in the house or hot bed and transplanted to flowering quarters in May. **Pkt. 10c; ¼ oz. 30c.**

P—VINCA (Madagascar Periwinkle)—Ornamental free-blooming plants and one of the most satisfactory flowering plants we have; fine for cut flowers; every bud opening when placed in water.

800—ROSEA—Rose, darkeye. **Pkt. 10c; ¼ oz. 40c.**

801—ALBA—White, crimson eye. **Pkt. 10c; ¼ oz. 40c.**

802—Mixed colors. **Pkt. 10c; ¼ oz. 30c.**

P—WALLFLOWER—Deliciously fragrant and combine many shades of color—the orange, purple and chocolate predominating. Half-hardy perennials. 1½ feet.

803—Single; mixed all colors. **Pkt. 10c; ¼ oz. 20c.**

804—Double; mixed all colors. **Pkt. 10c; ¼ oz. 50c.**

805-A—ZINNIAS (Youth and Old Age)—The Zinnia is one of the most brilliant, showy and satisfactory annuals, and has long been a general favorite. **Pkt. 10c; ¼ oz. 25c.**

Zinnias

WISEMAN-DOWNS CO.'S SELECT SWEET PEAS

SPENCER OR ORCHID VARIETIES

HOW TO GROW SWEET PEAS

The soil for Sweet Peas should be rich and deep. A good rich loam, with plenty of well-rotted manure in it, is the ideal soil for raising good plants that will produce plenty of blooms. Seed should be sown as early in the season as the ground can be worked, which is usually between the middle of March and the middle of April in the latitude of Baltimore. It is best to dig a trench about 6 inches deep, in the bottom of which sow the seed. Cover with about an inch of soil, pressing it down firmly. As soon as they are above the ground thin out to 2 to 4 inches apart. They should be staked up with brush or wire about 4 feet high. During dry weather water frequently.

AGRICOLA—Fine large white slightly flushed lilac.

ALEXANDER MALCOLM—Fine cerise toned orange scarlet.

AMERICA—Large size, open form. Very bright and effective and holds its color well. It is the brightest striped variety we have.

APPLE BLOSSOM—Standard rose, showing veins of deeper rose, wings light carmine, the whole color overspreads on primrose.

AURORA—Orange rose, striped on white. Extremely attractive.

BLUE MONARCH—Dark blue

BLUE PICOTEE—White edged violet blue.

BOLTON'S ORANGE—Rich orange salmon self.

BLANCHE FERRY—Pink and white; medium size, open form.

CAPTAIN OF THE BLUES—Almost true blue. It changes after opening to a bluish purple.

DAINTY—Large white flower edged with clear rose pink.

DOBBIE'S CREAM—The flowers are deep cream, are of unusual size, very much waved or crimped, the standards sometimes being double.

HERCULES—A large pink waved flower, often 2 inches across.

JEAN IRELAND—Beautiful cream color edged with pink.

KING EDWARD VII—The very best rich, dark red sort.

LOYALTY—Blue striped waved.

MARGARET ATLEE—Apricot pink on cream ground.

MERIAM BEAVER—Soft shell pink or cream pink.

NUBIAN—Fine chocolate self waved.

ROSABELLE—Very large bright waved rose.

WARRIOR—Rich maroon flushed with bronze.

WEDGEWOOD—A wonderfully beautiful shade of light blue. The long stout stems rarely bare fewer than four blossoms.

ANY OF THE ABOVE—PRICE: Pkts. 10c; oz. 35c; ¼ lb. \$1.25.

SPENCER MIXTURE—All colors. Pkt. 10c; oz. 20c; ¼ lb. 60c; lb. \$2.00.

GRANDIFLORA VARIETIES—Mixed.

WISEMAN-DOWNS CO.'S SPECIAL MIXTURE—This unsurpassable mixture of Sweet Peas is a studied formula, containing correct proportions of various bright colors and shades, supplying a harmony of brilliancy. Pkts. 10c; oz. 15c; ¼ lb. 30c; lb. \$1.00.

Best by Every Test

BEGONIAS (Tuberous Rooted)

We offer a very good strain in both, single and double, in colors as follows, scarlet yellow, white, crimson and salmon. 25c each; \$2.50 per dozen.

FANCY LEAVED CALADIUMS—The choicest Brazilian introductions as well as a number of fine new varieties. 25c each; \$2.50 per doz.

CINNAMON VINE ROOTS (Hardy)—Dark green, dense foliage with small, cinnamon scented blossoms. Extra large tubers. 10c each; \$1.00 per doz.

MADEIRA OR MEXICAN VINE—One of the most popular climbers. Makes a thick shade, grows rapidly. Strong Roots. 10c each; 60c per doz.

BUDDLEIA, VARIABILIS MAGNIFICA—As a summer outdoor cut flower there are few plants that can be produced at anything like the low cost of Buddleia; a 3-inch pot plant will bloom profusely the first year and develop into a large bush. The long flower spikes

are made up of numerous small florets; the color is a beautiful lilac, slightly on the shade of lavender; the cut blooms keep well in water, while the plant is a mass of bloom from late June until frost. It is perfectly hardy and increases in size and vigor each season. 3-inch pots, 30c each.

CLEMATIS, PANICULATA (Japanese Virgin's Bower)—A strong, luxuriant grower, with light green foliage. At the close of August innumerable star-like flowers cover the vine in a sheet of fragrant white. 4-inch pots, 40c each.

HARDY ENGLISH IVY—This is an invaluable plant for covering brick and stone walls and buildings. It rarely ever dies out and needs no attention. 4-inch pot-plants, 40c each.

CANNAS—Large Flowering

For a brilliant show all Summer there is no plant excelling the Canna. It even surpasses the Geranium in its gorgeous display of brilliant colors, blooming continuously from the time of planting until cut down by frost. As Cannas are good pot plants either for Summer or Winter flowering, they may be lifted and potted in the Fall before the approach of frost. Grown in this way, they are ready to continue their good work without disturbing the plants.

AUSTRIA—Enormous flowers, beautiful canary yellow with a silvery hue inside slightly dotted with red. Both in foliage and flower this Canna surpasses all others. 2 for 25c; \$1.50 dozen.

FLORENCE VAUGHAN—It still remains the highest type of new French Canna flowers. The flowers are a rich golden yellow, thickly dotted with brightest red. Height 5 feet. No Canna bed is complete without this perfect ever bloomer. 2 for 25c; \$1.50 doz.

EUREKA—The best white variety; free bloomer; green foliage, 4 feet.

FLORENCE VAUGHAN—This is the best yellow Canna spotted with red dots. The yellow is intense, and the dots, not too pronounced, add to the beauty of the flowers without detracting from the golden mass. 4 feet. 2 for 25c; \$1.50 dozen.

KING HUMBERT—In this grand Canna we have a combination of the highest type of flowers with the finest bronze foliage. Its

flowers measure 6 inches in diameter, produced in gigantic trusses; a brilliant orange-scarlet with bright red markings; foliage broad and massive, of a rich coppery bronze. Height 5 feet. 25c each; \$2.25 dozen.

METEOR—Magnificent bedding variety with massive erect trusses of deep blood-red flowers, produced with a freedom that leaves nothing to be desired. 5 feet. 2 for 25c; \$1.50 doz.

THE PRESIDENT—A great Canna. Immense bright red flowers in fine clusters; unquestionably the most sensational introduction in recent years. 4 feet.

SOUVENIR DE MME. CROZY—Five feet; green foliage; extra-strong grower. The flower spikes, of which there are 5 to 6 on a stalk, are very large and full. Garnet-red flowers, with broad border and large center of a brilliant yellow. 2 for 25c; \$1.50 dozen.

ALPHONSE BOUVIER—Its every shoot is topped by enormous trusses of vivid crimson-scarlet flowers a single plant sometimes showing 30 or 40 at one time. 2 for 25c; \$1.50 dozen.

The above are all started plants. Ready in April and May.

DRY ROOTS—75c dozen.

DAHLIA ROOTS—Field Grown

All of the Dahlias offered in this list are supplied in dormant field roots, or strong divisions of proper planting sizes. Order Dahlia Roots early. Some customers wait too long before ordering and are apt to be disappointed, owing to stocks of some varieties being exhausted.

A. D. LIVONI (Show)—A handsome clear pink, beautifully quilled, or perfect form and very free flowering. 25c each; \$2.25 dozen.

ARABELLA (Show)—Soft primrose-yellow, shaded peach blossom on edges. 20c each; \$1.75 dozen.

DELICE (Decorative)—The most popular pink variety. Its beautiful soft yet lively color, a glowing rose-pink, together with its perfect shape, makes this one of the best for cutting or decorative sorts in the garden. 25c each; \$2.25 dozen.

GENERAL BULLER (Cactus)—A bright scarlet, clear and intense. 25c each; \$2.25 dozen.

QUEEN WILHELMINA (Peony Flowered)—Pure white, golden centre. 25c each; \$2.25 dozen.

WM. AGNEW (Decorative)—Rich, dazzling carmine-red. 15c each; \$1.50 dozen.

RENE CAYEUX (Cactus)—One of the best free blooming Dahlias. Begins to flower early and continues in such profusion that at times the foliage is almost hidden with flowers. Color a soft Germanium red shaded crimson. 20c each; \$1.75 dozen.

KRIEMHILDE (Cactus)—The color is a delicate shell pink. The broad center petals are white forming a beautiful rosette of that color above the pink. 20c each; \$1.75 dozen.

C. W. BRUTON (Decorative)—Rich canary yellow. A magnificent flower for either cut or decorative purposes. 20c each; \$1.75 dozen.

JACK ROSE (Decorative)—A brilliant crimson-red with fiery tones in the center of the flower, the whole overlaid with a soft violet-maroon. 15c each; \$1.50 dozen.

GRAND DUKE ALEXIS (Show)—Color pure soft white, the tips of the petals edged and suffused with delicate pink. The finest of the type. 25c each; \$2.25 dozen.

MISS BROWNING (Snow)—A perfectly formed flower, canary yellow, sometimes showing a white tip. 25c each; \$2.25 dozen.

VOLKER (Cactus)—Clear lemon yellow. The best in its color. 25c each; \$2.25 dozen.

PERLE DE LYON (Decorative)—A most valuable white decorative Dahlia, and one of the best whites of any class for cut-flower purposes. Its flowers are of good size and held erect on long, stiff, wiry stems. 25c each; \$2.25 dozen.

MONT BLANC (Decorative)—An early free flowering creamy white, on good stiff stems. A most important cut-flower variety. 25c each; \$2.25 dozen.

AMBER QUEEN (Pompon)—Rich, clear amber, shaded apricot. 20c each; \$1.75 dozen.

SNOWCLAD (Pompon)—A fine pure white. 20c each; \$1.75 dozen.

PRINCESS VICTORIA (Show)—Primrose yellow; never produces an imperfect flower; in bloom early and late. 20c each; \$1.75 dozen.

GOLDEN GATE (Cactus)—A unique and charming variety of the true Cactus type. The color is pure golden yellow shading to old gold. 40c each.

QUEEN OF THE YELLOW (Show)—A beautiful profuse, clear yellow. 25c each; \$2.25 dozen.

WARE'S MARS (Pompon)—Beautiful deep red, of fine form. 10c each; \$1.00 dozen.

GERMANIA (Peony Flowered)—The color is an extremely soft rich strawberry red. The flower is large and graceful, with full, loose petals. 15c each; \$1.50 dozen.

ORANGE KING (Decorative)—Very rich, glowing orange-scarlet. 20c each; \$1.75 dozen.

DOROTHY PEACOCK (Show)—A beautiful soft pink, shading slightly darker on the outer petals as the flower expands. Strong, vigorous, without any indication of weakness or disease, each plant being sturdy and vigorous. 20c each; \$1.75 dozen.

ELSE (Cactus)—Buttercup yellow at the base, gradually shading to amber, the edges of the petals finished with bright rose. 20c each; \$1.75 dozen.

CANDEUR (Cactus)—A wonderful pure white, which in the fully developed flower more closely resembles an incurved Chrysanthemum than any other sort; a valuable cut flower. 25c each; \$2.25 dozen.

Dahlia

Double Pompon Dahlias

While the Pompon varieties are not as extensively grown as the other double types they still have many admirers; their dainty little flowers are produced very freely.

ANNIE DONCASTER—Light yellow, base suffused with pearly pink.

ARTHUR KERLEY—Purplish crimson, very free.

BOBBY—Plum color. One of the best.

CATHERINE—Well-formed primrose yellow.

DARKNESS—Deep velvety-maroon.

FASCINATION—Pink and lavender blotched white.

HELENE LAMBERT—A splendid free-flowering yellow of perfect shape.

INDIAN CHIEF—Crimson, very free.

KLEINE DOMITEA—Orange buff, always in flower.

LITTLE BESSIE—Creamy-white, closely quilled.

PRINCE CHARMING—Cream, heavily tipped purple.

SALAMANDER—Gold yellow, tipped orange red.

SUNBEAM—A fine crimson.

Price: Any of the above, 20 cts. each; \$2.00 per doz.

DOUBLE PEARL TUBEROSES

One of the most fragrant and beautiful of the Summer flowering bulbs. By skillful management a succession of flowers may be obtained all the year round. For early flowers they can be started in February or March in the greenhouse or hotbed, and for a succession they can be planted at intervals as late as July. For flowering in the open border plant about the middle of May, or as soon as the ground becomes warm. Each, 5c; dozen, 50c.

GLADIOLUS

AMERICA—One of the best for cutting or bedding; color a beautiful shell pink; orchid-like in its colorings and textures. Each, 7c; dozen, 75c.

AUGUSTA—A lovely and useful variety; pure white with blue anthers. Each, 7c; dozen, 75c.

BRILLIANT—Glowing orange-scarlet with carmine and white throat. Each, 10c; dozen, \$1.00.

FIRE KING—Large flowers of vivid scarlet with garnet throat blotch on lower petals. Each, 10c; dozen, \$1.00.

FLAMBEAU—Immense flowers of vivid orange-scarlet with throat blotch of white, shaded and marked with Tyrian Lake on the lower petals. Each, 15c; dozen, \$1.50.

GLORY—Large round flowers, the edges of the petals being daintily frilled or ruffled. The coloring is creamy blush, lightly tinted carmine-rose; throat yellowish overlaid with purplish-carmine blotches on lower petals. Each, 5c; dozen, 50c.

NIAGARA—A splendid variety for cut flowers; color a delicate creamy yellow, lightly marked and splashed with rosy carmine in the throat. Each, 10c; dozen, \$1.00.

KLONDIKE—Clear yellow with crimson-maroon blotch in the throat. Each, 7c; dozen, 75c.

PEACE—Beautiful large flowers, white with claret blotch on lower petals and pale featherings. Each, 10c; dozen, \$1.00.

SCRIBE—A giant-flowering, soft rose blazed with carmine; very large, open flowers and enormous spike. Each, 10c; dozen, \$1.00.

SHAKESPEARE—White, suffused with carmine-rose; large rose blotch. Each, 10c; dozen, \$1.00.

SULPHUR KING—A beautiful clear yellow, with long spikes. Each, 20c; dozen, \$2.00.

MIXTURES OF GLADIOLI

	Dozen.	100
Chilsoit—All colors mixed	\$0.50	\$4.00
Lemoine's Mixture	.40	3.00
W. D. Co.'s Choice Mixed	.50	4.00

CALADIUM ESCULENTUM (Elephant's Ear)

Mammoth Bulbs—10 to 12 inches in circum.	25c each;	\$2.50 dozen
First Size Bulbs—8 to 11 inches in circum.	20c each;	\$2.00 dozen
Second Size Bulbs—7 to 9 inches in circum.	15c each;	\$1.75 dozen
Third Size Bulbs—5 to 7 inches in circum.	10c each;	\$1.00 dozen

Gladiolus

Caladium Esculentum (Elephant Ears)

We can supply, in season, other roots and plants as follows: Hydrangea, Palms, Petunias, Roses, including all sorts such as Hybrid-Tea, Hybrid-Perpetual, Memorial, or Evergreen, Ramblers, etc., Alyssum, Bellis Perennis, Campanulas, Carnations, Centaurea, Chrysanthemums, Coreopsis, Delphiniums, Digitalis, Ferns, Geraniums, Hollyhocks, Peonies, Phlox, Salvia, Sweet William, Tritoma, Clematis, Honeysuckles. Hardy English Ivy, Hardy Jasmine, Wistarias, etc.

Will be pleased to quote prices on any of the above on application.

NURSERY DEPARTMENT

APPLES

SUMMER

WILLIAM'S EARLY RED—Early summer. Rapidly gaining in popularity. Red, with more or less deep yellow. Early and profuse.

EARLY HARVEST—Medium; pale yellow; tender, juicy.

GOLDEN SWEET—Large; pale yellow; very sweet.

DELICIOUS—Red, with more or less deep yellow. Early and profuse bearer. Of good size and of the finest quality.

RED ASTRACHAN—Large; beautiful deep crimson

WINTER

BALDWIN—Large; bright red; juicy, crisp, sub-acid. One of the most popular Winter Apples. January to April.

STAYMAN'S WINESAP—Winter; deep purple red; high quality; very prolific.

FALLAWATER—Very large, globular; yellowish-green, dull red cheek; juicy, crisp, pleasant sub-acid flavor. December.

GOLDEN RUSSET—Vigorous growth; medium; russet; crisp, juicy, mild sub-acid; hardy; very good; long keeper. Ripening November to April.

GRIMES' GOLDEN—Medium to large, cylindrical; golden yellow, sprinkled with gray dots; flesh crisp, tender, juicy, sprightly. Very good to best. Tree hardy, vigorous, productive, bears early. January to April.

JONATHAN—Late winter; fruit very round, of medium size, skin yellow, nearly covered with a lively red; fine grained and of a fine flavor, but quite acid.

AUTUMN

DUTCHESS OF OLDENBURG—Good size; yellow, streaked red; juicy, rich, sub-acid, productive.

FALL PIPPIN—Large; yellow; rich, aromatic.

GRAVENSTEIN—Large; striped; fine quality; one of the best Fall sorts.

YORK IMPERIAL—Medium to large; greenish yellow, nearly covered with bright red; flesh firm and juicy

PRICES—Two year old trees. Each \$1.25; dozen \$12.00; hundred \$80.00.

CRAB APPLES

EXCELSIOR—Tree a strong grower, hardy and healthy. Fruit large for a Crab Apple and very attractive; flavor agreeable.

HYSLOP—Almost as large as Early Strawberry; apple deep crimson; very popular on account of its large size, beauty and hardness. Vigorous. October to January.

MARTHA—A new variety; a seedling of the Dutchess of Oldenburg. Resembles the Transcendent, but larger; beautiful showy fruit and bears enormously. All things considered, we doubt if it has an equal among the Crabs. Vigorous. September and October.

TRANSCENDENT—Skin yellow, striped with red; flesh crisp and juicy. An early and heavy bearer. One of the best known varieties. Vigorous. September and October.

WHITNEY—Large; glossy green, striped, splashed with carmine; flesh firm, juicy, and flavor very pleasant; ripe latter part of August. Tree a great bearer and very hardy; a vigorous grower, with a dark green, glossy foliage. Vigorous. August.

Price.....Each, \$1.25 Dozen, \$12.00

PEARS

Our Pear Trees are grown on heavy clay soil, especially well adapted to the production of strong, vigorous stock. No better trees can be grown.

BARTLETT—Large; buttery, juicy, high flavored; great bearer; very popular. August and September.

CLAPP'S FAVORITE—Early summer. Green with red cheek; large, juicy, melting, prolific; decays quickly when ripe.

WORDEN SECKEL—A seedling of Seckel. Fruit medium size, borne in clusters; juicy, buttery, fine-grained, with a flavor and aroma fully equal to that of its parent, which it surpasses in size, beauty and keeping qualities. Ripens in October, but will keep in good condition till December.

KOONCE—Medium to large, handsome; yellow; flesh juicy, sweet, spicy, good. Ripens with the earliest. Tree a strong grower, hardy and productive. August

KEIFFER—Its large size, handsome appearance and remarkable keeping and shipping qualities make it exceedingly profitable for market. October and November.

Price Pear Trees:	Each.	Doz.
4 to 5 feet.....	1.50	15.00

PEACHES

Trees are all grown free from insects, perfectly healthy, well-ripened wood, with splendid roots, all stored in frost-proof cellars beyond injury during the Winter.

Owing to a magnificent growing season, our Peach Trees have made up largely to the 4 to 6 feet grade; fine well-developed trees. The smaller grades and mail size will be scarce stock in many varieties.

Will be pleased to quote prices on large lots on receipt of list. Those desiring trees for orchard planting should place orders early.

Ad. Dewey, Alexander, Banner, Barnards, Beer's Smock, Belle, Capt. Ede, Carman, Chas. Choice, Champion, Crawford's Early, Crawford's Late, Crosby, Elberts, Engles' Mammoth, Fitzgerald, Foster, Globe, Gold Drop, Greensboro, Heath Cling, Hills' Chill, Kalamazoo, Lemon Free, Lewis, Marshall, Matthew's Beauty, Mayflower, Mountain Rose, Niagara, Old Mixon Free, Prolific, Reeve's, Salway, Sneed, Stephen's, Stump, Triumph, Wheatland, William's Favorite, Wonderful and Yellow St. John—\$1.00 each; \$10.00 per dozen.

PLUMS

BURBANK—The best and most profitable among growers for market; ripens 10 to 14 days after Abundance. Tree hardy, sprawling, vigorous grower, unequaled in productiveness; bears young. Fruit large, excellent quality; cherry red with lilac bloom. August. Each \$1.50; dozen \$15.00.

ABUNDANCE—(Botan.)—One of the oldest and best known Japanese varieties; hardy and productive. Fruit large, lemon yellow, with heavy bloom; good quality. August. Each \$1.50; dozen \$15.00.

BRADSHAW—Early. Purple with bloom; very large; reliable, but of only fair quality.

GRAND DUKE—A large purple variety that does not rot upon the tree. Ripens late.

LOMBARD—Midseason. A very reliable and popular variety; it is very prolific.

Prices—Two year old trees: Each \$1.50; dozen \$15.00.

QUINCES

CHAMPION—Late. Greenish yellow; large.

ORANGE (Apple)—Early. Deep yellow, large.

First Class Trees: Each \$1.50; dozen \$12.50.

RASPBERRIES

CUTHBERT—Berries of large size, deep crimson, moderately firm and of high quality. \$1.25 dozen; \$6.00 per hundred.

GOLDEN QUEEN—Of luscious quality and a valuable variety for the home garden, though not red, we class this with the red varieties, as it is of the same habit and requires the same culture. \$1.25 dozen; \$5.00 hundred.

CUMBERLAND—Very large, jet-black berries, o superb quality. \$1.50 dozen; \$8.00 hundred.

ST. REGIS—The bright red berries, though not as large as some, are of fine quality and are produced in tremendous quantities not only in early summer, but also throughout the fall and right up to freezing weather. \$1.25 dozen; \$6.00 hundred.

CHERRIES

HEART and BIGARREAU

BLACK TARTARIAN—Very large; bright purplish black; half-tender, juicy, very rich, excellent flavor; productive. First to middle of July.

GOV. WOOD—One of the best Cherries; very large; light yellow, marbled with red; juicy, rich and delicious. Tree healthy and a large bearer. Hangs well on the tree. Vigorous. Last of June.

NAPOLEON BIGARREAU—Very large; pale yellow or red; very firm, juicy and sweet; very productive; one of the best. Vigorous. First of July.

WINDSOR—Fruit large; liver colored, resembling the Elkhorn, ripening a few days after that variety; flesh remarkably firm, of fine quality. Tree hardy and prolific. Vigorous. Middle of July.

YELLOW SPANISH—Large; pale yellow, with red cheek; firm, juicy and excellent; one of the best light-colored cherries; productive. Last of June.

DUKE and MORELLO

EARLY RICHMOND—Medium size; dark red; melting, juicy, sprightly, acid flavor. This is one of the most valuable and popular of the acid cherries; is unsurpassed for cooking purposes, and is exceedingly productive. June.

ENGLISH MORELLO—Medium to large; blackish red; rich, acid, juicy and good; very productive. Moderate. August.

MAY DUKE—Large; dark red; juicy and rich; an old, excellent variety; productive. Middle of June.

MONTMORENCY—A large red, acid cherry, larger than early Richmond and fully 10 days later. Very profitable. Early Richmond hangs in clusters and is more liable to rot. Last of June.

Price Cherries Each, \$1.75. Dozen, \$17.50

STRAWBERRIES

Strawberries will succeed in any soil that is adapted to ordinary farm or garden crops. Soil should be thoroughly prepared to a good depth, well drained and enriched. Vegetable manure (muck, rotten turf, wood soil, ashes, etc.) is the best. For field culture, set in rows 3 to 3½ feet apart, 15 to 18 inches in rows; for garden, 15 inches apart each way, leaving pathway every third row. To produce fine, large fruit, keep in hills, pinching runners off as soon as they appear. Ground should always be kept clean and well cultivated. In Winter a covering of leaves, straw or some kind of litter will protect the plants. Do not cover them until ground is frozen or so deep as to smother the plants, and remove covering before growth starts in Spring. Mulching will keep the fruit clean and the soil in good condition through the fruiting season.

NICK OHMER—Very large and stocky, sending out plenty of very strong runners, probably not surpassed in healthy, vigorous growth and productiveness by any variety. The fruit is of the largest size, never misshapen. Its only departure from the regular roundish conical form is when, under high culture, it is somewhat triangular. It is dark, glossy red, firm and of excellent flavor.

BRANDYWINE—A fine, large, late, handsome, productive berry of excellent quality; regular conical form; dark, glossy red, extending to the center. Plant healthy and vigorous; abundant producer. An extra-good sort for all purposes.

Brandywine Strawberry.

WM. BELT—A large, handsome, productive berry for market or home use. Vigorous, thrifty, heavy plant, producing large crops under good common matted row culture. Berries extra large, conical, quite uniform in shape, brilliant glossy red; ripens all over without green tips; good quality; carries well to market and brings highest price. One of the best varieties.

HAVERLAND—(P.)—A fine grower, very productive. One of the leading early market sorts. Berries bright red, large, long, uniform; medium size and quality.

GANDY—A reliable late variety; berries bright crimson, very uniform in size and shape, large and firm; plants vigorous and healthy.

SENATOR DUNLAP—Very productive; large, bright, or slightly dark red. Quality the very best.

GLEN MARY—A fine, large, late berry of excellent quality.

STEVENS' LATE CHAMPION—Large, light red berries, pointed globular; regular and perfect in form; very firm and of extra-high quality. An ideal plant to produce large berries and yield an enormous crop.

Price any above layer plants:

Per 100.....\$1.50 Per 1,000.....\$12.00

BLACKBERRIES

We handle no suckers, offering only strong, vigorous, heavily rooted plants, grown from root cuttings.

Prices of Blackberries: Per Doz. Per 100

Blowers.....	\$1.50	\$7.50
Early Harvest.....	1.50	7.50
Eldorado.....	1.50	7.50
Rathburn.....	1.50	7.50
Snyder.....	1.50	7.50
Wydon.....	1.50	7.50

GRAPES--2 year

Price of Grape Vines: Each Per Doz.

Concord.....	.50	\$4.50
Catawba.....	.50	4.50
Delaware.....	.50	4.50
Moore's Early.....	.50	4.50
Niagara.....	.50	4.50

PLUMS

Plant 20 feet apart each way. First-class trees: Each \$1.50; dozen \$15.00.

ABUNDANCE (Japanese)—Early. Amber, much covered with carmine. Very juicy and of excellent quality; heavy annual bearer. Best and most reliable Plum for New Jersey.

BRADSHAW—Early. Purple with bloom. Very large; reliable, but of only fair quality.

BURBANK (Japanese)—Ripens late in August. Inclined to overbear, but when properly thinned produces fruit of immense size. Cherry-red with deep yellow flesh, sweet, meaty.

GRAND DUKE—A large purple variety that does not rot upon the tree. Reliable, valuable. Ripens late.

LOMBARD—Midseason. A very reliable and popular variety. It is very prolific.

GOOSEBERRIES

DOWNING—Large, handsome, pale green and of splendid quality for both cooking and table use; bush a vigorous grower, and usually free from mildew. 50c each; \$5.00 dozen.

HOUGHTON'S—Small to medium, roundish, oval; pale red; sweet, tender; very good; plants spreading; shoots slender, enormously productive. 50c each; \$5.00 dozen.

INDUSTRY—Berries of largest size, excellent flavor, pleasant and rich; dark red color when fully ripe. Strong upright grower; an immense cropper, less subject to mildew than most of the foreign varieties. The best known and most successful English sort. 50c Each; \$5.00 dozen

CURRANTS

FAY'S PROLIFIC—The leading market variety. Extra-large stems and berries, uniform in size; easily picked; exceedingly productive. No variety ever made as quick a jump into popular favor, the demand most seasons being in excess of the supply. 50c each; \$5.00 dozen.

CHERRY—Berries sometimes more than half an inch in diameter; bunches short; vigorous and productive when grown on good soils and well cultivated. 50c each; \$5.00 dozen.

COMET—The bunches are almost approaching grapes in size, being frequently 8 inches in length, with from 20 to 26 berries of enormous size and of the most brilliant crimson color. The growth is abnormally vigorous. It will hang a long time in good condition. The first picking has been made as soon as the 10th of June and the last as late as the 22d of August during 3 seasons from the same bushes. 50c each; \$5.00 dozen.

NUT-BEARING TREES

	Each.
English Walnut.....	\$0.75
American Chestnut, 5 to 6 feet.....	.75
Japan Chestnut, 2 to 3 feet.....	1.50
Spanish Chestnut, 3 to 4 feet.....	1.50
Black Walnut, 4 to 6 feet.....	.75
Japan Walnut, 4 to 5 feet.....	.75
Pecans, 1½ to 2 feet.....	.75
Hickory, 1½ to 2 feet.....	1.50

HEDGE PLANTS AND EVERGREENS

Evergreen must be handled with care; the roots should not be allowed to dry out. Plants for hedges should be placed about 12 inches apart, more space being allowed for larger plants. California Privet, Honey Locust and Osage Orange are generally planted in double rows about 9 inches apart. Other deciduous shrubs for hedges should be planted about 12 inches apart.

Arbor Vitae (American), Pine (Austrian), Arbor Vitae (Siberian), Pine (Scotch), Mahonia Aquifolia, Norway Spruce, Tree Box (in variety), Dwarf Box.

Berberis Thunbergii, Buckthorn, Honey Locust, Japan Quince, Osage Orange, Privet (California), Rosa Rugosa, Spiraea, Tamarix, Thorn (Coccinea), Thorn (Crus Galli).

Price on Hedge Plants and Evergreens on application

SPRAY CALENDAR

WHAT TO SPRAY	FOR WHAT TO SPRAY	WITH WHAT TO SPRAY	When to Spray			REMARKS AND CAUTION
			First Spraying	Second Spraying	Third Spraying	
Apple.....	Codling Moth	Arsenate of lead 3 lbs. to 50 gals.	As soon as blossoms fall	7 to 10 days later	30 days later	Later spraying if made should be made with diluted solutions
	San Jose Scale	Lime-Sulphur	Late in fall, late in winter or early in spring			Use Lime-Sulphur only when trees are dormant
	Scab	Lime-Sulphur	Just before blossoms open	Within a week after blossoms have dropped	Same 7 to 10 days later	The spray just before blossoms open is very essential for scab
	Woolly Aphis	Kerosene Emulsion Black Leaf 40	When trees are in full leaf	In fall		Don't use strong emulsion when trees are in full leaf
Asparagus.....	Asparagus rust	Bordeaux or Pyrox	After cutting crop	10 days later	10 days later	Repeat 3 to 4 times. Burn rusted brush in the fall
Bean.....	Anthracoise	Bordeaux or Pyrox	On 2 or 3-inch plants	10 days later	After blossoms	
Cabbage and Cauliflower...	Cabbage Worm	Pyrethrum or Pyrox	With first appearance of worms	Whenever worms are observed	Same	1 oz. to 30 gals. of water
Cherry.....	Rot	Bordeaux or Pyrox	Before blossoming	After blossoming drop on fruit	Two weeks later on fruit	When fruit is large
	Curculio	Arsenate of lead	Before blossoming	As blossoms dry up	One week later	Avoid strong solutions. Do not use other arsenicals than arsenate of lead
Cucumber.....	Cucumber Beetle	Arsenate of lead in Bordeaux	Soon as plants appear	Week later	Week after second	Week after fourth
Currant.....	San Jose Scale	Lime-Sulphur	As with apple	In spring as with apple		
	Worm	Pyrox	When worms first appear	Repeat in 3 or 4 days	Repeat as second	Look for worms on under side of leaves first
Gooseberry.....	Mildew	Bordeaux	Before blossoms open	After blossoming	Two weeks later	
	Worm	Pyrox or Bordeaux	As on Currants			
Grape.....	Anthracoise Downy and Powdery		Just before buds open	Just before blossoming	Just after fruit has set	
	Mildew and Rot	Bordeaux	Just before blossoming	Just after fruit has set	7 to 10 days after	Follow by two or three sprayings
Peach.....	Leaf Curl	Bordeaux	In fall or spring	As buds are opening	Just after calyx drops	
	Rot and Scab	Bordeaux	As buds are swelling	Just after calyxes drop	2 to 3 weeks later	Destroy all mummies
	Bud Moth	Arsenates in Bordeaux	With opening of buds			Use only half usual amount of poison
	San Jose Scale	Lime-Sulphur	In late fall or early spring			
Pear.....	Scab	Pyrox, Bordeaux	When leaves are half grown	After blossoms drop		
	Codling Moth	Arsenates in Bordeaux	As with Apple	Same as first		See Apple
	San Jose Scale	Lime-Sulphur	In fall or early spring			
Plum.....	Rot	Pyrox, Bordeaux	As buds are swelling	Just after calyx drops	3 or 4 weeks later	Repeat every 7 or 10 days
	Curculio	Arsenate of lead in Bordeaux	With starting of buds	Just after calyx drops	5 days later	Destroy all mummies
	San Jose Scale	Lime-Sulphur	In late fall or early spring			Jar, gather and destroy curculios and stung plums
Potato.....	Early Blight	Pyrox, Bordeaux	When plants are 6 inches high	Two weeks later	Two weeks later	
	Scab					Soak seed 90 minute in solution of corrosive sublimate 2 oz. to 16 gallons of water
Quince.....	Colo. Beetle	Bordeaux or Pyrox	When beetles or young appear	As for first		
	Fruit and Leaf Spot	Bordeaux, Pyrox	Just before blossoms open	After blossoms drop	Two weeks later	
Raspberry and Blackberry...	San Jose Scale	Lime-Sulphur	In late fall or early spring			
	Anthracoise	Bordeaux	Before leaves open	Bord. on canes 6 inches high	Repeat second 1 week later	Keep spray from leaves on bearing cane
Rose.....	Leaf Spot	Bordeaux	With first appearance of fungus	2 or 3 weeks later	Repeat if necessary	
	Slug	Arsenites in Bordeaux or Hellebore	On appearance of slugs	Repeat if necessary		
Strawberry.....	Leaf Spot	Bordeaux, Pyrox	On new growth after crop	2 or 3 weeks later		
Tomato.....	Anthracoise	Bordeaux, Pyrox	Soon after fruit begins to set	3 weeks later	3 weeks later	

Spraying acts as a preventive rather than a cure. Best protection is obtained by spraying early and often. Don't wait until insects and diseases have become serious. Remember: "An ounce of prevention is worth a pound of cure."

INSECTICIDES

B T S

(Patented April 23, 1918)

THE BARIUM-SULPHUR

Dry Insecticide and Fungicide for

SPRAYING

FRUIT TREES

in the Dormant and Growing Periods

B T S may be substituted for lime-sulphur solution in any spraying operation where it is safe to use the solution. This means that it can be used in both dormant and growing-period applications in the place of the solution.

By the elimination of water necessary in the solution and reducing to dryness the weight in shipping is reduced about 80 1/2 as compared with lime-sulphur solution, and loss from leakage is eliminated.

Before being offered in the market B T S was subjected to exhaustive tests, in both dormant period and growing period sprayings by Prof W M Scott. These tests proved conclusively that the same results were obtainable with it as with lime-sulphur solution. Based upon these tests B T S has been offered generally in the market for the past several years with the same satisfactory results. Growers who have used B T S have found it in all respects equal to the solution and owing to the greater convenience in handling prefer it to the more bulky and inconvenient liquid.

PRICE

5 lbs.	\$1.00	10 lbs.	\$1.75
100 lbs.			\$12.00

LIME-SULPHUR SOLUTION

This material combines the great fungicidal properties of Sulphur with the scale remedy, and is specially recommended for Peach and Plum Trees, which need the combined treatment in the Fall and Spring. In spraying this material care should be exercised to avoid getting it in the eyes, and gloves should be worn to protect the hands.

12 gal drum per gal.	.25
Bbls. about 50 gals per gal.	.19
50 gal drums charged at \$3.00 each.	
50 gal bbls charged at \$2.00 each.	
12 gal drums charged at \$1.50 each.	

All returnable for credit.

ARSENATE OF LEAD (Powder)

Kills Codling Moth, Worms, Curculio, Caterpillars, Potato Bugs, Rose Bugs, and all chewing insects without injury to foliage or buds.

Directions—For all chewing insects, use 2 to 4 ounces to 1 gallon of water. Add water slowly till rubbed to a thin paste before adding to the volume of water.

PRICE

1-lb pkg.	.30	4-lb. pkg.	\$1.00
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BORDEAUX MIXTURE (Powder)

For blight on Potato, Tomato, Celery Plants, Trees, etc., also for fungous diseases.

PRICE

1-lb. pkg.	.25	4-lb. pkg.	.80
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ARSENITE of ZINC (Powder)

The great advantages of ARSENITE OF ZINC are:

FIRST: It kills the bugs so quickly they do not have a chance to cause serious injury to vines.

It is not necessary to add Paris Green in order to obtain quick killing of the bugs, as is necessary where Arsenate of Lead is used.

SECOND: It sticks to the vines so that it is not necessary to respray after every rain.

THIRD: It can be used at sufficient strength to insure results without burning or injuring the vines.

PRICE

1-lb. pkg.	\$.35	4-lb. pkg.	\$1.25
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CALCIUM ARSENATE POWDER

For use on hardy plants, such as cotton, tobacco, potatoes, tomatoes and grapes, there is a distinct advantage in an arsenical insecticide containing a higher percentage of arsenic oxide than is contained in arsenate of lead.

PRICE

4-lb. pkg.	\$.75	100-lb. drums.	\$12.50
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ATOMIC SULPHUR (Paste)

Atomic Sulphur is a yellowish paste containing 45 per cent of pure sulphur. A remedy for scab and brown rot on peaches.

PRICE

25-lb. kegs.	\$3.75	100-lb. drums.	\$12.00
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PARA DI-CHLOR BENZENE

This product is now coming into general use as a remedy for the peach tree borer.

We are pleased to announce to our customers that we have added this product to the Orchard Brand line of high quality, dependable insecticides.

Para di-chlor benzene is a white crystalline product that gives off a gas that is especially deadly to insects. It has been found especially effective in the control of the peach tree borer when properly applied in the soil around the base of the tree.

It is considered perfectly safe on peach trees that are six years of age and over. On trees from four to six years of age it should be used with caution and at a reduced dosage—on trees less than four years of age not only a reduced dosage but a shorter period of time during which the crown of the tree is subjected to the effects of the gas is advisable. Newly set trees should not be subjected to this treatment.

PRICE

1-lb. pkg.	\$.40	50-lb. pkg.	\$13.00
5-lb. pkg.	1.75	100-lb. pkg.	25.00
10-lb. pkg.	3.00	150-lb. pkg., per lb.	.24
25-lb. pkg.	7.00		

INSECTICIDES

INSECTICIDES CONTAINING POISON CANNOT BE SENT BY PARCEL POST.

HAMMOND'S SLUG SHOT

A non-poisonous powder. It requires no further mixing or preparation; easily applied; not injurious or dangerous to animals, the person applying it, or fruits and vegetables treated; destroys potato bugs and beetles, green and black flies, slugs, worms, caterpillars, etc. 10 to 40 pounds is sufficient for an acre.

1-lb. pkg.\$.15 5-lb. pkg.\$.45

PARIS GREEN

1/4 lb.\$.15 2 lbs.\$.90
1/2 lb.\$.30 5 lbs.\$ 2.00
1 lb.\$.50

BLUE STONE, or COPPER SULPHATE

Prices on application.

FLOUR OF SULPHUR

1 lb.\$0.15 25 lbs.\$2.00
5 lbs.\$.60 50 lbs.\$ 3.50
10 lbs.\$ 1.00 100 lbs.\$ 6.50

Special prices in barrel lots.

Pyrox
REG. U. S. PAT. OFF.
TRADE MARK REGISTERED

A Combined Insecticide and Fungicide

WHY PYROX IS BETTER

It is a better fungicide because it controls serious fungous diseases that other materials do not control. It is a better insecticide because it kills insects such as the hardshell potato beetle and the rose bug which are not killed by other insecticides.

It is made of the purest available raw materials. It is chemically tested at every stage of its manufacture to make it safe for you to use.

Pyrox is all ready to use by simply mixing with cold water. It is so smooth and fine that it goes through the finest spray nozzles without clogging. It can be sprayed as fine as a fog. It goes farther and does better work.

It sticks like paint. It stays on for weeks. Re-spraying is necessary only to cover new growth. It gives thorough protection during rainy weather when insects and disease do their deadliest work.

1-lb. pkg.\$0.50 25-lb. pkg.\$ 6.25
5-lb. pkg.\$ 1.75 50-lb. pkg.\$ 10.75
10-lb. pkg.\$ 3.00 100-lb. pkg.\$ 17.00
300-lb. pkg.\$48.00

FISH OIL SOAP

A combination of Fish Oil Soap and Tobacco, so compounded that it combines with the valuable properties of this soap the insecticide values of tobacco and nicotine. For Oyster Shell or San Jose Scale, Red Spider, Plant Lice and all sucking insects.

1 lb.\$0.30 5 lbs.\$1.15

CARBOLA--Disinfecting Germ-Killing White Paint

Recommended for use instead of whitewash and disinfectants in stables, cellars, poultry houses, hog pens, creameries, dog kennels, etc., to kill lice, mites, etc.

Trial package. 30 cents
(Paints and disinfects 200 square feet)
10 pounds (10 gallons)\$ 1.25
50 pounds (50 gallons)\$ 5.00
200 pounds (about 200 gallons)\$ 18.00

NIAGARA DUSTING MIXTURES

NIAGARA 85-15 DUST—This combination consists of 85 per cent Sulphur and 15 per cent Arsenate of Lead. This is especially adapted to Strawberries for controlling Strawberry Weevil and infestations of Cooling Moth. **100-lb. bags. Price on application.**

NIAGARA A-1 DUST contains a high percentage of quickly volatile nicotine. It is highly recommended for use against sucking insects. There is no poison or fungicide in this dust. When dusted upon plants rapidly liberates nicotine fumes which are extremely effective against Aphis on the Potato, Cucumber, Melon, Spinach, Pepper, Cabbage and other truck crops. It is effective also in the control of the striped Cucumber Beetle and Onion Thrips. **1 lb. pkg. 50c; 5 lb. pkg. \$1.50.**

NIAGARA D-20 DUST contains both Monohydrated Copper Sulphate and Calcium Arsenate. This formula is designed for use on such crops as the Melon, Cucumber, Pepper, Eggplant, etc., in the control of both blight or rust and chewing insects. **5 lb. pkg. \$1.25; 10-lb. pkg. \$2.25.**

NIAGARA D-6 DUST contains Monohydrated Copper Sulphate, but no poison. It is the most generally used—Copper Lime Dust on the Cucumber, Melon, Pepper, Eggplant, Strawberry, Lima Bean, Tomato, Celery, Potato, etc., for the control of those blights or rusts for which Bordeaux Spray is adapted. It is also widely used for the control of Tobacco Wildfire. **10-lb. pkg. \$1.50.**

NIAGARA POMODUST (The Rose Special)—This is the generally used control measure for the mildew which affects Ramblers and other varieties of Roses and also for the Black Spot, which is generally present in home gardens as well as in commercial plantings of roses. This material contains Lead Arsenate as well as Sulphur so that it is effective in the control of the ordinary chewing insects of Roses as well as Black Spot and Mildew diseases. Weekly applications of this are extremely effective in the control of Rose pests and is a product which can be recommended unqualifiedly in this connection. **1 lb. pkg. 35c; 5-lb. pkg. \$1.00.**

Prices in larger quantities on application

NICO-FUME

Nico-Fume is a Tobacco Paper Insecticide for fumigating greenhouses. Extensively used by prominent florists.

24 sheets.\$1.25 144 sheets.\$5.50
288 sheets.\$10.00

FORMALDEHYDE

It is of pronounced efficiency in destroying disease germs affecting both animal and plant life, and is successfully employed as a preventive of such fungoid diseases as potato scab, onion and grain smuts. The dilution for most purposes is 1 pound (1 pint) to 15 or 20 gallons of water.

1-pt. bottle.\$0.60 1-qt. bottle.\$1.00
1-gal. can.\$3.50

"BLACK LEAF 40"

A Concentrated Solution of Nicotine Sulphate

For spraying against sucking insects, such as Green and Woolly Aphis, Pear Psylla, Grape Leaf Hopper, Pear Thrip, etc., use 1 part Black Leaf 40 to about 900 to 1,000 parts water.

Against more resistant plant lice, such as Black Aphis and Rosy Apple Aphis, 1 part Black Leaf 40 to 500 parts water.

Full directions on every package.

Prices:

1 oz.\$0.35 2-lb. can.\$3.50
1/2-lb. can.\$ 1.25 10-lb. can.\$13.50

ORIOLE WEED KILLER

1 gal.\$1.50 10 gals.\$12.00
5 gals.\$ 6.50 Bbl., per gal.\$ 1.00

Spray Your "Wisdom" Tomato Plants Early (See Page 23)

THERMOMETERS

- 8-in. Wood-Back Thermometer (Fig. 53).....\$9.50
Incubator Thermometer......60
Brooder Thermometer......60

LAWN SPRINKLERS

Rain King—Can be adjusted to throw fine or coarse spray, to revolve, or straight away. Made of the best material. Price \$3.50.

Ring Sprinkler—Made of heavy brass. Makes a mist-like spray. Each, \$1.00.

GARDEN HOSE and REQUISITES

(Fig. 55)

We carry in stock a full line of Garden Hose, 3 and 4-ply. Prices range from 8c to 20c per foot. We invite your inspection.

- Iron Hose Reel (Fig. 56).....\$4.00
Wood Hose Reel (Fig. 59).....1.00
Hose Couplings, pair, 30c; each......15
Hose Clamps, ¼ inch and ½ inch, dozen......40
Combination ¾-inch Hose Nozzle.....1.00
¾-inch Brass Nozzle.....1.00

HAMES and STRAPS

- Iron-Bound Hames (Fig. 51), pair.....\$2.25
Hame Strings, ¾-inch Rawhide, each......20

GALVANIZED WATER POTS (Fig. 61)

(With Adjustable Nozzles)

- 4 quart.....\$0.75
6 quart......90
8 quart.....1.00
10 quart.....1.15
12 quart.....1.25
16 quart.....1.50
20 quart.....2.25

WOTHERSPOON WATERING POTS

Equipped with two nozzles for fine or coarse spraying. Very strong galvanized iron. Useful for greenhouse or hot bed work.

- 8 qt.....\$4.75
10 qt.....5.25
12 qt.....5.75

GARDEN TROWELS

- English Wrought Shank, 6 inch (Fig. 50).....\$0.40
8 inch......50
Florist Trowels, Stamped Steel, 6 inch......25
Cheaper grade......10
Plaintain Trowels, No. 2, 5-inch Blade......15
No. 1, 8-inch Blade......25
Wood-Handle Dibble (Fig. 58), Steel Point......75

MOLE TRAPS

Little Giant—The best on the market; made entirely of steel and iron; very compact. \$1.25.

STABLE ACCESSORIES

Canvas Back Bands—Heavy and full length, with patent snap. \$1.00

Trace Chains—Extra long, strong and durable. Per pair, \$1.25.

Cow Chains—For tying out in fields. 20 feet long \$1.25; 30 feet long, \$1.50.

Breast Chains—Double, pair, \$1.25; Single, pair, \$1.00.

Plow Lines—Cotton, pair, 80c; Sisal or Hemp, pair, 60c.

Curry Combs—Eight bars; steel, 25c.

Horse Brushes—Leather back, \$2.50.

Stable Push Brooms—Rattan and Bass, \$1.00.

HEAVY DAHLIA STAKES

	EACH	DOZ.	PER 100
3 ft.....	.12	\$1.15	\$9.00
4 ft.....	.15	1.55	11.50
5 ft.....	.20	2.25	15.00
6 ft.....	.25	2.50	17.90

LIGHT PLANT STAKES

	EACH	DOZ.	PER 100
1 ½ ft.....	.03	.25	\$1.75
2 ft.....	.04	.40	3.00
2 ½ ft.....	.06	.60	4.25
3 ft.....	.08	.75	5.75

POT AND TREE LABELS

	100	500	1000
4 in.....	.30	\$1.00	\$1.75
5 in.....	.35	1.25	2.10
6 in.....	.40	1.50	2.50
10 in.....	.75	3.50	5.75
12 in.....	.90	3.75	6.75
3 ½ in. Copper wired...	.35	1.40	2.30

GRASS HOOKS

"Blue Ribbon" Grass Hook—(Fig. 43). 75c.

Grass Hooks—(Fig. 42), English, 75c and 85c.

HAY KNIFE, CORN KNIVES and HOOKS

Lightning Hay Knife—(Fig. 45). \$1.50.

Corn Knives—Straight, concave or convex edge, 25c to 75c.

Corn Hooks—35c each.

SCYTHES, SNATHS and SCYTHE STONES

English Waldron Scythes—36 inch, \$3.00; 38 inch, \$3.50; 40 inch, \$3.75.

Silver Steel Waldron Scythes—Imported. Very keen cutter, 32 to 36 inches, \$1.50.

38-40-inch Clipper Grass Scythe—\$1.50.

American Weed Scythes—(Fig. 44), \$1.25; Bramble, \$1.25.

Scythe Stones—English, 30c; Darby Creek, 20c.

Snaths—(Fig. 41), Patent Grass, \$1.50; Heavy Two-Ring Bush Snaths, \$1.50.

HEDGE SHEARS (Fig 5)

8-inch English with notch.....	\$2.75
9-inch English with notch.....	3.00
10-inch English with notch.....	3.50
7-inch American with notch.....	1.75
8-inch American with notch.....	2.00
9-inch American with notch.....	2.25
10-inch American with notch.....	2.50
12-inch American with notch.....	3.00

CRONK LOPPING SHEARS (Fig. 9)

24-inch handles. Knife tapered off to point, to permit cutting in close places. Made of best tool steel. \$2.75.

PRUNING SAWS and BUSH HOOKS

Double Pruning Saw—(Fig. 39), 18-inch, \$1.30; 16-inch, \$1.25.

Bush Hooks (Axe Handle)—(Fig. 40), \$1.75.

PRUNING SHEARS

8½-inch full-polished Pruner, \$1.50; 8½-inch half-polished Pruner (Fig. 1), \$1.00; 8½-inch japanned Pruner, 85c; 8½-inch French Pruner (very good), \$2.25; 6-inch Ladies' Pruner, full polished, 75c and \$1.00; 7-inch Grape Picker (Fig. 6), \$1.00.

TREE PRUNERS and KNIVES

Waters—(Fig. 4). The best known. 6-foot, \$1.80; 8-foot, \$2.00; 10-foot, \$2.20; 12-foot, \$2.40.

Budding Knives—Ivory handle (Fig. 11), \$1.50; Horn and Ivory (Fig. 10), \$1.25.

Pruning Knives—The best made (Fig. 12), \$1.50.

Telegraph Tree Pruner—Without pole, \$1.75.

GRAFTING WAX

¼ lb.....	15c	½ lb.....	25c	Lb.....	40c
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THE RHODES DOUBLE CUT PRUNING SHEAR

Made of the highest grade tool steel, carefully tempered and ground. Both edges cut, making a smooth clean surface. Does not bruise or twist the limb off. 30-inch handles. Price \$5.00.

GARDEN, LAWN and HAY RAKES

Self-Cleaning Lawn Rake—(Fig. 29). Readily cleaned by a back motion of the rake. Will not tear grass. 22-tooth, \$5c; 26-tooth, \$1.00.

Lawn Queen Rake—(Fig. 26). Steel head, with heavy steel wire teeth. Strong and durable. Reversible for leaves. 21 inches wide, 24 teeth, \$1.00.

Superior Hand-Made Wood Lawn Rakes—The best of its kind; very substantial. 20-tooth, 50c.

Superior Hand-Made Hay Rake—20-tooth, 35c.

Steel Garden Rakes—(Fig. 32). 14-tooth, 90c.

Malleable Garden Rakes—12-tooth, 60c.

Ole Olsen Rake—Very strong, durable wood. This rake head is slightly curved from the center to each end, which does not allow any material that has been caught by the teeth to slip around the edges. 26-tooth, 75c.

MANURE, HAY and SPADING FORKS

No. 64 Manure Fork—(Fig. 34). \$2.50.

Long-Handle Manure Fork—(Fig. 35). 4½-foot handle, 4 prongs, strapped, \$1.25.

Long-Handle Hay Forks—(Fig. 30). 2 prongs, \$1.25; 3 prongs, \$1.50.

D-Handle Spading Fork—(Fig. 38). \$1.50.

We have a full line of Handles in stock for Hatchets, Axes, Picks, Shovels, Forks, Saws, etc.

Kelly Axes—Excellent quality, \$1.75.

Kelly Axes—Complete, with handle, \$2.00.

Axe Handles—35c and 50c.

DISSTON PRUNING SAW

This is the most practical pruning saw made. Owing to its peculiar shape, being tapered off to a point permits cutting in between the limbs. The blade is adjustable and will cut at any angle desired and can be removed to replace a new one. Made of the best quality steel. Price.....\$2.50

PICKS, MATTOCKS and HANDLES

Picks—Best steel, \$1.50.

Mattocks—(Fig. 37). Best, \$1.50; Good, \$1.25.

Pick and Mattock Handles—50c.

Ladies' and Children's Garden Tool Set—Consisting of Rake, Shovel, Hoe and Spading Fork. Made of first-class material. Not toys, but tools that will do and stand the work. Price, \$1.75.

SHOVELS and SPADES

D handle, square point. (Fig. 38). Best, No. 3, \$1.50; No. 4, \$1.75; second-grade No. 4, \$1.25; No. 5, \$1.35.

Long handle, round point. (Fig. 30). Solid back, \$1.50.

Coal Scoops—D handle. No. 4, \$2.00; No. 5, \$2.25.

Spade—D handle. (Fig. 31). \$1.50.

GARDEN, PLANTERS and SCUFFLE HOES

Solid Socket—(Fig. 33), 8-inch, \$1.00.

Riveted Shank—8-inch, 75c.

1-Pt. Weed—(Fig. 27), 6-inch, 45c.

2-Pt. Weed—6-inch, 45c.

Handled Planters—7½-inch 90c.

Scuffle Hoes—English. 8-inch, \$1.25; 6-inch, \$1.50.

Handled American Scuffle Hoe—\$1.00.

Potato Hooks—Oval, 4-tine, \$1.15.

POST-HOLE DIGGER

(Fig. 50)

Strong and durable, easily operated, \$2.50.

New Champion—Post-Hole Digger, \$2.00.

Gibbs—\$2.25.

SLIDING KRAUT CUTTER

Sliding Kraut Cutter With 2, 3 or 4 Knives

No. 50—2 knives, 8x26 inches.....	\$2.50
No. 55—3 knives, 8x26 inches.....	2.75
No. 65—3 knives, 9x30 inches.....	4.50
No. 70—3 knives 12x36 inches.....	6.75
No. 75—4 knives. 12x36 inches.....	7.50

REID'S BUTTER WORKER

(Fig. 1)

This machine acts on the butter on precisely the same principle as a ladle in the hands of a person, but with perfect uniformity and without injuring the grain. Made of the best material; iron parts galvanized, preventing rust.

No. 1—Capacity, 50 lbs. or less.....	\$15.50
No. 2—Capacity, 30 lbs. or less.....	13.50
No. 3—Capacity, 20 lbs. or less.....	12.75
No. 4—Capacity, 10 lbs. or less.....	11.50

MILK CANS**Baltimore Pattern Railroad Milk Cans**

Our regular stock Can. Made of strong, very best material; straight neck, drop handle. Sizes:

20 qt.....	\$4.25
30 qt.....	\$5.00
40 qt.....	\$5.25
Name Plates put on 40c each	
Permit Tags 15c each.	

MILK PAILS

Made of the best bright charcoal tin; strong and durable, with special bottom, which is a good feature.

12-qt.....	\$1.00
14-qt.....	1.25

BUTTER SHIPPING BOXES

(Fig. 7)

Made of well-seasoned lumber, iron-bound edges and capped corners. The strongest package ever offered to shippers, and very convenient.

Capacity.	Price.
24 ¼-pound prints.....	\$12.25
36 ¼-pound prints.....	13.95
64 ¼-pound prints.....	16.00
80 ¼-pound prints.....	16.90
100 ¼-pound prints.....	21.10
120 ¼-pound prints.....	24.10
140 ¼-pound prints.....	26.70
12 1-pound prints.....	9.65
20 1-pound prints.....	11.10
30 1-pound prints.....	12.60
40 1-pound prints.....	14.05
56 1-pound prints.....	15.30
80 1-pound prints.....	18.00
96 1-pound prints.....	19.60

WELLS, RICHARDSON & CO.'S BUTTER COLOR

The best Butter Color on the market. Small bottle, colors 500 lbs., 35c; large bottles, 65c and \$1.00.

THE BABCOCK TESTER

No. 4-2 bottle size, for milk only.....	\$6.50
No. 5-2 bottle size, for milk and cream.....	7.50
No. 6-4 bottle size, for milk only.....	7.50
No. 7-4 bottle size, for milk and cream.....	8.00

Shipping weight, about 17 pounds.

All Testers are equipped with full set of glassware for testing milk or milk and cream; also furnished with brush and bottle of acid.

MISCELLANEOUS DAIRY SUPPLIES

Parchment Butter Paper—6x9 for ¼ lb. prints; 9x12 for 1 lb. prints. 30c per lb. Special price on quantities.

Lafayette Butter Printer—(Fig. 4). Either 1-lb. or ½-lb. size. With table, \$27.00; without table, \$15.00. \$1.50 for monogram or initials.

Philadelphia Print—(Fig. 3). 1-lb. \$1.75; ½-lb. \$1.75.

Floating Dairy Thermometer—(Fig. 2). \$1.00.

Maple Print—Seeley—(Fig. 5). ¼-lb. size, 60c; 1-lb. size, 75c.

Handmade Print—½-lb. \$1.25; 1-lb. \$1.50.

Butter Paddles—(Fig. 6). 10c to 40c.

Polished Maple Bowls—15-in., 90c; 17-in., \$1.50.

Freeman's Brick Butter Mold—Made with lock corners, from thoroughly seasoned timber. Perfect fitting. Hand carved, assorted designs. 75c each.

RICE'S CALF WEANER

Very effective for weaning calves and preventing cows sucking themselves.

No. 1, for calves, 50c; No. 2, for heifers, 75c; No. 3, for cows, \$1.00.

SHAW'S CALF AND COW WEANER

The only successful Weaner in the world. Over 100,000 now in use. The animal this Weaner is put on can positively not suck, but at the same time it is no inconvenience to it to feed. Stop at our store and see it demonstrated. Price, No. 1, 65c; No. 2, 55c; No. 3, \$1.25.

STAR COOLER CREAM SEPARATOR

Made in the very best manner. The inner can is for milk and the outer can for water. The single Separator has 1 milk can and the double Separator has 2 milk cans. Inner cans can be readily taken out for cleansing. There is nothing better on the market. The outer cans are painted and decorated.

No. 000—Capacity, 1 cow, 14 quarts milk, \$5.25.

No. 00—Capacity, 1 to 2 cows 2 quarts milk, \$6.50.

O X BALLS—Made of brass. Per pair, 75c.

BULL RINGS—Copper, 2½-inch, 45c; 3-inch 50c.

HOG RINGERS—Each, 20c.

HOG RINGS—Hundred.....15c

PIG RINGS—Hundred.....15c

DAIRY SUPPLIES

PRIMROSE CREAM SEPARATORS

How many men of average means in your neighborhood have built up a high producing herd of dairy cows by buying full grown stock? Not very many unless they were wealthy and kept fancy stock for pleasure. The man who keeps cows for profit breeds to pure blooded sires and raises his best heifer calves. In this way he improves his herd, keeps it free from disease, and saves money. Just as good a calf can be raised on skim-milk as whole milk, so why feed butter fat at a thousand dollars a ton to a calf when you can replace it with equally good feed for thirty dollars a ton?

Separate the milk immediately after milking, sell the cream and feed the skim-milk, warm and sweet, to the calves. If there is more milk than the calves can use, it makes the best feed in the world for pigs, for corn and skim-milk will bring a pig to market weight quicker than any other ration.

A Primrose cream separator will provide ample skim-milk in the best possible condition for feeding, always the same temperature, always the same degree of acidity. It saves all the butter fat and delivers cream that brings the highest market prices, in the best condition for butter making. Let us send you a catalogue telling all about the Primrose.

The Primrose Is Sold in Four Sizes

No. 1—Guaranteed separating capacity, 350 pounds; 40.6 gallons of milk per hour.	Price.....	\$75.00
No. 2—Guaranteed separating capacity, 450 pounds; 52.2 gallons of milk per hour.	Price.....	\$90.00
No. 3—Guaranteed separating capacity, 650 pounds; 75.4 gallons of milk per hour.	Price.....	\$100.00
No. 4—Guaranteed separating capacity, 850 pounds; 98.6 gallons of milk per hour.	Price.....	\$115.00

SEPARATOR OIL

½ gals. 60c. 1 gals. \$1.00

Sanitary Milking Pails, extra heavy, all seams soldered inside and outside.

The hood keeps impurities from dropping in the pail during milking. Approved by leading milk dealers and approved and strongly recommended by dairy inspectors.

12 qt. \$1.90 14 qt. \$2.00

SANITARY MILK STRAINER

Heavy charcoal plate. With removable strainer. Price \$2.00.

ASEPTIC MILKING TUBES

For Cows With Sore Teats

Insert one in the teat and the milk will flow.

Self Retaining Tube 40c Postpaid

Plain Tube 30c Postpaid

THE FAVORITE CHURN

This Churn is made of good, hard material, well varnished smooth on inside, making it easy to clean and perfectly sanitary. Well braced throughout. Will make butter quickly. One of the most popular Churns offered.

No.	Size, Gallons.	To Churn.	Price.
0	6	3	\$ 6.00
1	10	5	7.00
2	15	7	8.00
3	20	10	9.00
4	25	13	11.00
5	35	18	13.00
6	60	30	21.00
7	75	37	24.50
8	90	45	28.00

Pulleys for Large Sizes from \$2.50 to \$5.00.

DAVIS SWING CHURN

The finest Churn on the market. Has no floats or dashers; easy to clean; very easy to operate. Makes fine butter.

No. 1—Churns 4 gallons	.....	\$15.50
No. 2—Churns 5 gallons	.....	16.00
No. 3—Churns 8 gallons	.....	17.50
No. 4—Churns 10 gallons	.....	19.50
No. 5—Churns 13 gallons	.....	22.50
No. 6—Churns 17 gallons	.....	30.00

IMPROVED CEDAR CYLINDER CHURN

Made of selected cedar free of knots.

No. 1—2½ gals....	\$4.00
No. 2—4 gals....	4.50
No. 3—7 gals....	5.25
No. 4—10½ gals....	6.00

HOTBED SUPPLIES

Best White Pine Sash—Made to hold either 24 or 28 8x10 panes. These Sashes are grooved so that the panes slide in and butt one against the other. Price of either size, \$2.00 each.

Hotbed Glass—8x10. Per box of 90 panes, \$3.00.

Hotbed Mats—(Fig. 23). Interlined with wool. 40x76 size, covers 1 sash, \$2.00; 76x76, covers 2 sash, \$3.25. Special prices by dozen.

Putty Bulbs—(Fig. 21). Scollay's, \$1.75.

Van Reyper's Glazing Points—(Fig. 19). Simple and positive, no rights or lefts. Per 1,000, 60c; by mail, 75c. Pincers, 50c per pair; by mail, 60c.

Asparagus Buncher—(Fig. 14). \$4.00.

Asparagus Knife—Solid steel blade, 40c.

BASKETS

Picking Baskets—Half-bushel size. Price per dozen, without handles, \$3.50; with handles, \$4.50; drop handles, \$5.00.

White Oak Baskets—Side handles, 1 bushel, \$1.25 each.

Corn Barrels—With handles, \$8.50.

Fruit Picker—(Fig. 16). The best style, 75c.

Edging Knives—(Fig. 24). 8-inch, English, \$1.50; 9-inch, Handled American Edger, \$1.00.

Fodder Yarn—Price on application.

Garden Reels—(Fig. 18). \$1.00 and \$1.50.

Excelsior Hand Weeder—(Fig. 17). 20c.

Raffia—For tying plants. Per lb., 25c.

Tree Tubs—(Fig. 22). Cypress, painted green, iron-bound and iron feet. No. 1, 12-inch, \$2.50; No. 2, 13-inch, \$3.00; No. 3, 14½-inch, \$3.25; No. 4, 19½-inch \$5.25; No. 5, 22-inch, \$6.50.

EARTHENWARE FLOWER POTS

	EACH	PER 100
2-inch.....	\$0.02	\$1.50
2 ½-inch.....	.02 ½	1.75
3-inch.....	.03	2.00
3 ½-inch.....	.03 ½	2.25
4-inch.....	.04	2.75
5-inch.....	.06	5.00
6-inch.....	.09	8.00
8-inch.....	.25	20.00
10-inch.....	.40	35.00

HAND SPRAYER (Continuous)

Made of the best material in galvanized and brass. 1 quart capacity, has two sprays, one straight and one 45° angle, to allow spraying under leaves. Hand soldered. No leak.

Galvanized..... \$1.50
Brass..... \$1.75

"LITTLE WONDER" HEDGE TRIMMER

This little machine is really a wonder. It does the work very much more rapidly and much neater than with the old style hedge shears. Makes hedge trimming a pleasure. Made in three sizes. 30 in. 40 in. 60 in.

PRICE

30 in. \$19.75 40 in. \$25.00
60 in. \$30.00

MAGIC "E-Z" WEEDER

Light in weight, strong in construction. An excellent tool. Three-tine. Made of No. 8½ steel wire. Nicely trimmed. Black enameled handle.

Prices:

Small.....20c
Large.....35c

"ENTERPRISE" MEAT AND FOOD CHOPPERS, (Tinned)

The meat is fed into the Hopper, and by the Feed Screw carried forward and forced into the small holes of the Plate, where it is cut off by the revolving Knife, which makes four cuts for each hole, with every revolution of the Crank. The pieces thus cut are ejected by the meat following. All our Choppers Cut the meat as with a pair of scissors, and do not grind or tear it. It is impossible for any Strings, Sinews or Gristle to pass through without being chopped. The small quantity of uncut meat remaining in the machine can be cut by running through some of the already cut meat a second time. All parts are interchangeable and can be replaced at small cost. The Knives and Plates being Steel, they are vastly superior to the Cast-iron cutting parts of other makes of Chopper.

No. 5 Family size. Chops exactly as shown. Chops $1\frac{1}{2}$ lbs. per minute. Weight $4\frac{3}{4}$ lbs. Price **\$3.25.**

No. 10 Restaurant size. Chops 3 lbs. per minute. Weight $8\frac{3}{4}$ lbs. Price **\$5.50.**

No. 20 Butcher size. Chops 4 lbs. per minute. Weight $16\frac{1}{2}$ lbs. Price **\$11.00.**

No. 12 Chops 3 lbs. per minute. Weight 9 lbs. Price **\$5.00.**
No. 22 Chops 4 lbs. per minute. Weight 14 lbs. Price **\$8.75.**
No. 32 Chops 5 lbs. per minute. Weight 22 lbs. Price **\$10.50.**

The Acme Rotary Automatic Hand Corn Planter

Full rotary drop pressed steel hopper. Adjustable cast disk or seed plates. Malleable ratchet lever. Brass spring cut off. Double coil main spring. Extreme accuracy of drop due to novel exclusive and common sense design of seed plates, and brass spring cut-off or stripper. Double coil spring automatically rotates disk and closes jaws. Used in one hand like a walking stick. Disk is set for correct number of kernels by loosening thumb nut, moving star till pockets are of right size, then tightening thumb nut again. Plunge planter in ground, rock forward to trip seed, and withdraw. Price **\$2.50.**

"Enterprise" Sausage, Lard & Fruit Press With New Patented Corrugated Spout

POINTS OF MERIT

The Iron Cylinder is bored True.

The Tin Cylinder has Lips to enable the Operator to remove the Hot Cracklings with little or no inconvenience.

No Hot Iron Cylinder to handle when pressing Lard.

The Patent Latch prevents breakage of Plates.

The New Patented Corrugated Spout furnished with each Machine prevents air entering the Casing, thus assuring the preservation of Sausage. This spout has a $\frac{3}{4}$ -in. outlet. Other sizes, which are $\frac{1}{2}$ in., $\frac{1}{4}$ in. and $\frac{3}{8}$ in., can also be supplied at small cost.

Japanned

No. 5—2 qt., Rack... \$ 8.00
No. 15—2 qt., Screw... 9.00
No. 25—4 qt., Screw... 10.50
No. 31—6 qt., Screw... 11.50
No. 35—8 qt., Screw... 12.50

Support Tomato Vines with "ADJUSTO" Plant Supports

A PRACTICAL and cheap plant support that will last a life time. Contains no hooks or screws. The stake is of oak painted green and the hoop is of the strongest wire also painted green to prevent rust. It is easily put up and is adjustable to any height.

PRICE

	Each	Hundred
3 ft.	25c	\$20.00
4 ft.	30c	25.00
4 ft.	35c	30.00

Will be pleased to quote prices on Enterprise Power Meat and Food Choppers on request. Can install same equipped for electricity or gasoline engine.

SEND FOR SPECIAL CATALOGUE AND PRICES

Columbia Fly Killer

For Horses, Cows, etc.

Will not stain. Will not blister. Will not remove the hair or injure the animal when properly applied. Will kill the flies. Will kill lice. Will keep stock healthy. Use as a disinfectant. Every drop guaranteed to give satisfaction. Money back if you are not satisfied. Price **\$1.50** per gallon.

The Acme Powder Gun

Price **\$1.50**

elbow for placing the spray on the underside of the leaves. Handles of convenient length and bellows of fine russet leather. A very practical and convenient way of applying Paris Green, Lice killers, Insect Powder, etc. Parcel post weight 2 pounds.

Consists of a tight valveless bellows equipped with a distributing tube or nozzle, a funnel, a spreader for diffusing the spray and an

THE SAVO STEEL ALL-YEAR-ROUND FLOWER AND PLANT BOX

Self-watering and Sub-irrigating. For windows, porches, sun parlors, etc. Leak proof and rust proof. Fill with water once a week. No surface watering.

Price List of Savo Flower and Plant Boxes and Stands

	High-inches	Wide-inches	Long-inches	Each
Model A	8	9 1/2	23	\$3.00
Model B	8	9 1/2	29	4.00
Model C	8	9 1/2	35	4.50
Model D	8	9 1/2	41	5.00
Model E	8	12	15	3.00
Model F	12	12	12	3.50

Aluminum or Dark Pullman Green Finish

Model B with Portable Stand 29 inches long, 30 1/2 inches high, complete 12.00

Model G Fernery complete, 12 inches diameter, 29 inches high. 6.00

Dark Pullman Green Finish

Rain King Lawn Sprinkler

The Best Sprinkler Made

Waters a greater area. Fine or coarse spray. Revolving or stationary. Requires less pressure. Made entirely of brass except base. Cannot rust or stick. Has heavy bronze bearings, will last for years. Price, \$3.50.

BAMBOO LAWN RAKE

The demand for a lawn rake that is light and durable, that will not dig up the grass like a steel rake is met in the Bamboo Lawn Rake. It is strongly made, easy to handle and because of its breadth quickly rakes up leaves and scraps from the lawn without harm to the grass.

33 Bamboo strips are spread fan shape and reinforced with wire and rattan, bent ends of bamboo strips form the teeth.

Securely bolted and clamped to handle. Bamboo handle 53 inches long; length over all 65 inches weight about 1 lb. Price.....\$1.25

Flower Guard and Trellis Wire

16 inches high..... 8 1/2c per foot 22 inches high..... 10c per foot

Rural Mail Box No. 1

Made of galvanized steel, body 22 gauge, door 20 gauge; finished in aluminum bronze; letters in door are heavily embossed.

U. S.
MAIL
APPROVED BY THE
POSTMASTER-GENERAL

Door is hinged at bottom; opens and closes with ease; can't blow open door catch holds door tight when closed; signal is easily operated, and has a large flag bent in middle to a right angle which makes it visible from all directions.

Each box is equipped with a small coin holder.
Size—18 1/2 in. long 6 1/4 in. wide, 7 1/2 in. high, inside measurements.
Price.....\$1.25

Made to conform with the latest specifications of Post Office Department, issued July 25, 1917, providing for Letter Slot in Door.

Plant The "Wisdom" Tomato (See Page 23)

BUCKEYE "STANDARD" INCUBATORS

FOOLPROOF AND FIREPROOF

GUARANTEED To Hatch More Chicks and Stronger Chicks in the Hands of Any Beginner

So Simple They Can't Go Wrong—The Most Successful Hatching Device In The World

MADE IN FIVE SIZES—120 EGGS TO 600 EGGS

INCUBATORS

No. 14—Style E, Capacity 65 Eggs.....	\$ 16.50
No. 16—Style E, Capacity 110 Eggs.....	27.50
No. 17—Style E, Capacity 210 Eggs.....	36.75
No. 1—Standard, Capacity 110 Eggs.....	37.50
No. 2—Standard, Capacity 175 Eggs.....	44.50
No. 3—Standard, Capacity 250 Eggs.....	57.75
No. 4—Standard, Capacity 350 Eggs.....	68.00
No. 5—Standard, Capacity 600 Eggs.....	107.00

The case is made of California redwood and beautifully finished like a piece of fine furniture. It has perfectly insulated double top, and the walls are so constructed that the necessary temperature can easily be maintained in any location, even if it be freezing, or up to 100 degrees.

A Standard Buckeye Metal Thermostat regulates the temperature to a fraction of a degree. With this device it is only necessary to regulate the temperature when the hatch is started—then you forget it, because the regulator stays where you put it and the temperature of the egg chamber cannot change.

The tank is an improved design that absolutely insures a uniform temperature throughout the egg chamber. This means that the temperature of each and every egg will be exactly right, and if there's a chick in the egg,

you'll get it. The tank is equipped with an extra large boiler of new design, that insures the necessary heat, in any temperature, with an extremely small consumption of fuel. Both tank and boiler are made of a heavy, patented, rust-resisting metal that will last for years.

The complete lamp consists of a seamless, galvanized-steel bowl, a wide base "Miller" burner (the best burner made), and a one-piece galvanized-steel chimney. This lamp outfit is the best that money can buy—it's a lamp that won't smoke or get out of order. The lamp is self-adjusting, too! It sits on a portable support that always brings it to its correct position.

A Standard Buckeye Thermometer is included with each incubator, also a standard thermometer holder. With this equipment the correct temperature is always shown and the thermometer is always in its proper position. (Every Buckeye Standard Thermometer is guaranteed correct within one-fifth of one degree.)

The Improved Egg Tray is built to stay and will wear like iron.

A Standard Buckeye Egg Tester goes with every incubator. This enables the operator to follow the development of the chicks while they are hatching, also to remove the unfertile and unhatchable eggs.

The successful poultry breeder is the man or woman who has learned BY EXPERIENCE, and when you find hundreds of such breeders using a certain article year after year, you must be convinced that they have found that article to be ABSOLUTELY SATISFACTORY or they would not be using it. And when the article in question happens to be an incubator—the machine on which they must depend for the production of all the chickens they raise—it is a foregone conclusion that they could not be successful unless the incubators they are using are producing the highest percentage of

the highest grade chicks—the kind of chicks that enables them to perpetuate their stock and turn their product into profit.

THE STANDARD BROODER

Is Without Doubt the Most Successful Brooding Device Ever Invented

The Standard Brooder has actually revolutionized the whole poultry industry by helping the breeders to raise a much larger percentage of their young stock with just about one-fourth of the labor.

For the big breeder it has been a veritable God-send, and in a large number of cases has turned money losing propositions into highly profitable plants, while for the smaller breeder it has been just

but their additional weight and complicated appliances only make them less desirable.

It is the very simplicity of the Standard that makes it the best brooder on earth. With only a few simple parts the Standard accomplishes with never-failing certainty those things in which the more complicated devices fail.

BROODERS

No. 20—Metal Brooder, Capacity 60 Chicks....	\$11.75
No. 21—Metal Brooder, Capacity 100 Chicks....	15.50
No. 22—Metal Brooder, Capacity 150 Chicks....	19.00
No. 117—Standard Brooder, Capacity 350 Chicks	16.50
No. 118—Standard Brooder, Capacity 500 Chicks	21.50
No. 119—Standard Brooder, Capacity 1000 Chicks	26.50
No. 27A—Blue Flame Brooder, Capacity 200 Chicks	17.50
No. 80—Blue Flame Brooder, Capacity 350 Chicks	19.00
No. 81—Blue Flame Brooder Capacity 500 Chicks	21.50

as valuable through its ability to bring the young stock to quicker maturity and saving many valuable fowl that, under ordinary conditions, never would have survived.

Regardless of what they cost, there is no other brooder that compares with the Standard—that is the verdict of breeders who have tried them all.

Some brooders cost twice as much as the Standard because of their heavy complicated design,

Moe's Mammoth Dry Mash Hopper

A large capacity hopper built on correct principles. Made of galvanized iron, strong and substantial in every detail. Has many excellent features; for instance it will accommodate a full 100 lb. bag of mash, doing away with the annoyance and of having a partly empty bag of mash on the premises. The feed is within easy reach of the chickens, and

is protected from ravages of rats and mice. The taper shape and interior construction provides a uniform automatic feed, and the wire grid and cross wires prevent any waste. The stand is of heavy angle iron, painted, and has wooden bars for the poultry to rest on when feeding. Length of hopper 35 in. Width 21 in. Height 18 1/2 in. Capacity 100 lbs. Height of stand 15 1/2 in. Total height, 34 1/2 in. Price each, \$12.00.

Moe's Dry Mash Hopper

A dry mash hopper of great merit, made of heavy galvanized iron. All parts accurately stamped with dies. The curved bottom keeps the feed within easy reach of the birds, and the taper shape of the hopper—Larger at the bottom—prevents the feed from clogging. The wire grid and the wires running from the flange through the wire grid prevents fowls from throwing out or wasting the feed. The sloping top prevents them from roosting on the hopper. When both covers are closed it is rat, mouse and weather proof. Made in four sizes.

No.	Height	Width	Capacity	Price
35	19 in.	8 1/2 in.	10 qts.	\$1.50
36	19 in.	12 in.	14 qts.	2.00
13	19 in.	18 in.	22 qts.	2.40
37	19 in.	24 in.	32 qts.	2.80

Moe's Drop Bottom Wall Fountain

A practical, durable fountain, easy to fill and easy to clean. Made of best quality galvanized iron. May be hung on the wall out of the litter and dirt. Suitable for chicks, fowls or pigeons. Fitted with wire handle, so that two or more fountains, back to back, can be carried in one hand. Made in three sizes.

No. 40—Capacity 2 qts.	.....	.95
No. 41—Capacity 1 gal.	.....	1.20
No. 42—Capacity 2 gals.	.....	1.50

French Poultry Killing Knife

Made of finely tempered instrument steel, with nickel handle; will last a life-time. Price 50c postpaid.

Moe's Round Baby Chick Feeders

The most practical baby chick feeders on the market. Made of best quality galvanized iron, accurately stamped with dies, and well made in every detail. The top fits snugly, yet can be easily taken apart for cleaning and filling. A great feed saver, as the chicks cannot get into it and contaminate the feed. Can also be used for water or milk. Chickens cannot upset it. Made in two popular sizes.

No. 11—Diameter 6 in. with 8 holes. 15c each
No. 12—Diameter 8 1/4 in. with 12 holes. 25c each

Moe's Bottom Fill Fountains

This fountain fills the breeders requirements for a good inexpensive article. Made in two pieces accurately stamped and formed. Easily filled and cleaned. The Round taper shape prevents freezing and bursting. Made of best quality galvanized iron in three popular sizes

No.	Capacity	Height	Price
19	1 qt.	6 in.	35c
20	2 qts.	8 in.	45c
24	1 gal.	9 1/2 in.	60c

Moe's Sanitary Feeding Troughs For Grown Fowls

Suitable for dry feed, wet mash, or water. The top slides off, so the pan can be easily cleaned and filled. Made of galvanized iron. The edges of the slotted openings are all turned over and smoothly finished. No sharp or rough edges to injure the fowls. Made in three sizes.

No.	Length	Width	Price
21	12 in.	5 in.	40c
22	18 in.	5 1/2 in.	60c
23	24 in.	6 in.	75c

The Philadelphia Poultry Marker

Well made, with steel spring and cutter nickel-plated. Made in two sizes.

Price 25c Postpaid

Pilling Lansdowne Poultry Marker

Look at illustration and see how easy it is to use. Large or small size

25c Postpaid

Philadelphia Gape Worm Extractor

Price 25c Postpaid.

PLANET JR. HAND MACHINES Single-Wheel Hoes

SEE PRICE LIST BELOW

No. 12 PLANET JR. DOUBLE AND SINGLE-WHEEL HOE COMBINED

Packed weight, 33 lbs.
Equipment:

- 1 pair of 6-inch hoes.
- 4 steel cultivator teeth.
- 1 pair of plows.
- 2 leaf lifters.

All oil-tempered.

Steel Frame.
Steel Wheels.

The No. 12 is the most popular Double-Wheel Hoe we make. It can be used by man, woman or boy. It is identical with No. 11, except that the 4½-inch hoes and the rakes are omitted from the equipment, and it is sold at a correspondingly less price. The attachments with it are what gardeners use most, and the short hoes, rakes and any of the attachments can be added at any time. You'll be astonished how easy it is to save time, labor, money and get bigger crops if you use it.

No. 19 PLANET JR. GARDEN PLOW AND CULTIVATOR

Weight, 21 lbs.

- Equipment:
- 1 2-inch cultivating tooth.
 - 1 10-inch sweep.
 - 1 plow.
 - 1 5-prong cultivating attachment.

15-inch
steel wheel.

No. 19—This attractive implement is especially designed for the farmer's garden work, though it offers to every one with either field or garden a cheap and effective tool for wheel-hoe operations. The standard is slotted for depth regulation, and an adjustable piece carries any of the attachments that go with the machine. The cultivating tooth does deep work and marks out rows for onion sets, plants, etc. The sweep is fine for level shallow work. The five-prong cultivator attachment is bolted directly to the frame, first removing the S-37 standard. The plow marks out furrows, covers them and plows to or from the crop as wanted; opens furrows for fertilizer, peas, beans, etc. Use the five-prong attachment for deep and shallow cultivation. It will break up the ground and leave a mulch so necessary to preserve the moisture in the soil. The variety, shape and quality of the tools make the implement light-running and effective. It is strong, well made and quickly adjusted. The height of the handles can be changed to suit man or woman, boy or girl.

WHEEL HOES, GARDEN PLOWS, ETC.

No. 11....\$13.75	No. 16....\$ 9.00	No. 19....\$ 6.00
No. 12.... 10.75	No. 17.... 7.75	
No. 13.... 8.00	No. 17½.. 6.75	
	No. 18.... 5.75	

No. 17 PLANET JR. SINGLE-WHEEL HOE

Packed weight, 24 lbs.
Equipment:

- 1 pair of 6-inch hoes.
- 3 steel cultivator teeth.
- 1 large garden plow.

All oil-tempered.

Steel frame.
15-inch steel wheel.

No. 17 is identical with No. 16, except in equipment, and all that has been said previously regarding Planet Jr. Wheel Hoes is equally true of No. 17. The three sets of attachments which go with it are all the finest of their kind, and make an outfit sufficient for most garden work. You can do more and better work with it in one day than you can do in several days with the old-fashioned hand hoe. The hoes exchange sides to work to or from the row, and change of wheel regulated the depth. The hoes are constantly useful throughout the season. The cultivating teeth are oil-tempered and work admirably, are changeable for pitch and are useful for marking out rows.

No. 119 PLANET JR. GARDEN PLOW AND CULTIVATOR

This new member of the "Planet Jr." family will appeal to all those who prefer a high-wheel tool for their garden work. Where the soil has not been so thoroughly and carefully prepared, the high wheel undoubtedly makes an easy-running tool. The wheel is 24 inches in diameter, with a rim 1½ inches wide, insuring easy running in the lightest soil. The equipment is so complete that it will meet all the needs of the ordinary

garden where the adjustments and requirements of the higher-priced wheel hoes are not required. The plow is the same as has been used for a number of years on our No. 19

Garden Plow and has proven most satisfactory. It may be used for plowing the ground in the Spring, going twice in each furrow. Later it will open furrows for fertilizer or for planting, covers them and plows to or from the crop during the season. The wide cultivator tooth may also be used for opening furrows or for cultivating and hilling between the rows of plants. Price, \$4.75.

FIRE-FLY GARDEN PLOW

This tool is exceedingly useful to owners of small gardens. It will throw a furrow 4 to 6 inches deep, and deeper by going a second time in each furrow. It makes fine furrows for manure or seeds and covers them, and makes up rows for all kinds of plant setting. In cultivating, plow away, weed the row and plow back again; nothing more thorough than this. After the furrow is thrown away from the crop lightly, leave it a few days before throwing back. This tool will enable a busy man to do in his spare minutes nearly all the work in a family garden. Chicken raisers find it of great advantage in plowing up their scratching yards. Packed weight, 14 lbs. Price, \$4.25.

No. 25 PLANET JR. COMBINED HILL AND DRILL SEEDER, DOUBLE-WHEEL HOE, CULTIVATOR AND PLOW

This new combined machine is intended for gardeners who have sufficient acreage in crops for a double-wheel hoe to be used to good advantage and do not want to buy separate machines. It can be used as a drill and is almost identical with the "Planet Jr." No. 4. It is thoroughly substantial and accurate in sowing all kinds of garden seeds in hills or drills. It has 11¼-inch wheels, and the hopper holds 2½ quarts. As a wheel hoe it is identical with the "Planet Jr." No. 12 Double-Wheel Hoe, the very best machine on the market. It takes but a moment to change from drill to wheel hoe, and the whole combination is one that we can heartily recommend and guarantee to be satisfactory. Price, \$21.50.

PLANET JR. No. 3 HILL AND DRILL SEEDER

This Seeder is the latest and most perfect development of the hand seed drill. It sows evenly in drills and also drops in hills 4, 6, 8, 12 or 24 inches apart. It is thrown out of gear instantly by moving a convenient lever or the flow of seed is stopped by pushing down the feed rod. No time is lost, no seed is wasted; it is quickly set to sow the different kinds of seeds in the exact quantity required. We guarantee this drill to be accurate and to give satisfaction. The accuracy insures a regular stand of plants with the least seed, and the price of the drill is more than made up in the saving of seed. Holds 3 quarts. Price, \$17.50.

No. 5 PLANET JR. HILL AND DRILL SEEDER

This drill is identical in construction with the No. 3, but is larger. The hopper holds 5 quarts. It works very light and is intended for those having a great deal of planting to do. Price, \$20.00.

PLANET JR. No. 4 COMBINED SEED DRILL, SINGLE-WHEEL HOE, CULTIVATOR AND PLOW

This is the most popular combined tool made. It combines in a single implement a first-class hill-dropping seeder, a single-wheel hoe or weeder, a cultivator and a plow. The hopper holds 2 quarts of seed, which can be sown in continuous rows or dropped in hills at 4, 6, 8, 12 or 24 inches apart. Capacity of hopper, 2½ quarts. The drill is detached and the tool frame substituted by removing but one bolt. With this one implement the small farmer can do practically all the work in small crops. Price, complete, \$18.00.

The following are some of the seeds that may be planted with PLANET JR. SEEDERS:

Apple	Okra	Peas
Asparagus	Onions for	Pepper
Beans	Bulbs	Pickle
Beets	Onions for	Radish
Cabbage	Sets	Rape
Cantaloupe	Parsley	Rice
Carrot	Parsnip	Ruta-Baga
Cauliflower	Pear	Sage
Celery	Ginseng	Salsify
Chicory	Kale	Savoy
Cucumber	Leek	Spinach
Endive	Lettuce	Sugar Beet
Field Peas	Mangold	Tobacco
Flower Seeds	Marjoram	Tomato
	Melon	Turnip

PRICES OF SEEDERS

No. 3.....	17.50
No. 4.....	18.00
No. 4-D (plain).....	14.25
No. 5.....	20.00
No. 25.....	21.50

THOMPSON'S CLOVER AND GRASS SEEDER

Sows 14 to 16 Feet Wide, Any Amount Desired Per Acre. Will Sow 20 to 25 Acres Per Day.

This Grass Seeder is simple, without gearing, cams or intricate machinery. It cannot get out of order.

Perfection feed is attained in making it absolutely positive, yet a non-leaking carrier, when thrown out of connection. The quantity of seed to the acre is accurately shown by the index plate.

It is strong, yet weighs but 40 pounds.

No. 1—Complete Clover and Grass Seeder, the most popular style. 14-foot, \$13.60. 16-foot, \$14.55.

No. 5—Complete Seeder, with Double Hopper, sows Red Top, Orchard Grass, Blue Grass, Lawn Grass, as well as Clover.

MANILA ROPE FEEDER.

14-foot, \$16.50.

No. 8 PLANET JR. HORSE HOE AND CULTIVATOR

This is the best and most perfect tool of its kind ever offered. Frame is of stiff steel, extra long and 1 or 2 inches higher than other makes. Closes to 9 and opens to 25 inches. Provided with patent depth regulator, lever wheel and improved lever expanding device, which combines great strength with stiffness and simplicity. This tool is the result of thorough knowledge of both farming and manufacture.

No. 7 PLANET JR. HORSE HOE AND CULTIVATOR

This tool is the No. 8 without the depth regulator. It works the same as No. 8, but lacks the perfect steadiness and control of depth made possible by the depth regulator.

No. 9 PLANET JR. HORSE HOE AND CULTIVATOR

Identical with the No. 8, except that it has no depth regulator, and plain wheel instead of lever wheel.

No. 9 PLAIN CULTIVATOR

PLAIN CULTIVATORS

No. 4, with wheel.....	\$13.50
No. 4-D, no wheel.....	11.50
No. 9, with wheel.....	15.50
No. 9-D, no wheel.....	13.50
No. 83, with wheel.....	15.50
No. 83-D, no wheel.....	13.50
No. 100, with wheel.....	10.00
No. 100-D, no wheel.....	8.25
No. 101, with wheel.....	11.75
No. 101-D, no wheel.....	10.00
No. 107, with wheel.....	13.50
No. 107-D, no wheel.....	11.75

No. 4 PLAIN CULTIVATOR

This popular tool, as illustrated, has been stiffened and improved by new patent braces and expanders. Furnished either with or without wheel. This is an excellent Cultivator.

14-TOOTH COMBINED HARROW AND CULTIVATOR

This is a very useful tool, which can be made to do a variety of work. The teeth are set in different positions. Desirable for first cultivation. Price, plain, \$7.50; with ever, \$9.50.

No. 91 PLANET JR. 12-TOOTH HARROW, CULTIVATOR AND PULVERIZER

This tool has rapidly grown in favor among strawberry growers, market gardeners, truckers and farmers. This is because the 12 chisel-shaped teeth do such thorough work, and at the same time do not throw the earth on small plants, and because the tool is so convenient, durable and strong. With this tool you can do such a fine grade of work, and such a variety, that it is really a very valuable tool, and it will be to the interest of farmers to send for catalogue fully describing it. Price, complete, \$18.00; with wheel, \$13.75; plain, \$10.50.

No. 4 PLANET JR. HORSE HOE

This tool is low in price, strong and simple; provided with patent handle braces; firm, simple, strong, convenient. With these, the frame and handles seem almost like one solid piece. Changes in width are very quickly and easily made by the patent expanders, and one side may be opened wide and the other closed. Furnished with or without wheel.

HORSE HOES.

No. 4, with wheel.....	\$13.50
No. 4-D, no wheel.....	11.50
No. 7.....	17.00
No. 8.....	17.50
No. 9, with wheel.....	15.50
No. 9-D, no wheel.....	13.50
No. 80, with wheel.....	16.50
No. 82, with wheel.....	17.00
No. 82-D, no wheel.....	15.00

THE FOWLER CULTIVATOR

The most serious problem confronting the American farmer today is how to increase his production, in the face of a universal labor shortage, sufficiently to meet the unprecedented demand for every product of the farm.

The Fowler Cultivator is doing more to successfully solve this problem than any other one-horse implement. As a labor-saver alone, making possible the cultivation of eight or nine acres per day with one horse, the Fowler is worth many times the price asked for it; but its greatest value to the farmer is the increase in production which its use insures. This increase in production is obtained because the perfect dust mulch developed and maintained by the Fowler conserves all moisture and plant food and because where this Cultivator is used the roots of the growing crop are undisturbed.

The United States Department of Agriculture is urgently advocating the principle of shallow cultivation as a means of increasing production, and the work done by the Fowler Cultivator is in perfect accord with the recommendations of the department in this regard, while the wonderful results obtained by its use demon-

strate beyond question not only the soundness of this principle, but the great value of the tool itself.

The Fowler can be run as shallow as 1½ inches, and so is used much later in the season than other cultivators, because, like the hoe, it works above the crop roots. This late cultivation contributes very largely to the early and complete maturity of the crop, which is so much desired.

In wet weather the Fowler can be used very soon after a rain, because it can be run so close to the surface that it is possible to cultivate successfully with it just as soon as the ground has dried off a little. This circumstance, and the fact that it covers so much ground in one day, making only one trip to the row, makes it possible to keep grass and weeds under control much easier than with other tools.

The blades of the Fowler are made from the best grade of high carbon plow steel and are very hard and keen. They can be sharpened with a coarse file, on an emery wheel or can be drawn out by any good blacksmith. The blacksmith should have as a pattern or template an extra pair of blades which have the correct shape. Price, \$14.00.

IRON AGE

To those who desire a Cultivator a little lighter and lower-priced than the "Planet Jr.," we offer this one as a thoroughly reliable tool, from the standpoint of construction and material as well as working qualities. Price of Plain Cultivator.....\$6.00 Horse Hoe attachments..... 4.00

BENT FRAME CULTIVATOR

SUPERIOR CULTIVATOR

Similar to the above, but lighter; a good tool for light soil. Very popular with our trade.

Price.....\$7.00

IRON AGE CULTIVATOR POINTS AND EXTRAS

No. 0—1½ inches wide. Each.....	\$0.16
No. 1—2 inches wide. Each.....	.18
No. 82—3 inches wide. Each.....	.22
No. 68—Oval or Jersey. Each.....	.25
No. 10—Turn Shovels, either right or left-hand. Each.....	.50
No. 11—Turn Shovels, 6 inches wide. Each.....	.70
Horse Hoe Steels, right or left. Each.....	.85
Levelers for Cultivators.....	2.00
Wheels for Cultivators.....	2.00
Cultivator Plate Bolts.....	.05
Cultivator Frame Bolts.....	.05
Cultivator Handles. Per pair.....	2.00
Teeth for Combined Harrow.....	.28

GENUINE PLANET JR. EXTRAS

	Price.	Weight Lbs. Oz.
1¼ x 8-inch Steels.....	\$0.17	11
1½ x 8-inch Steels.....	.18	11
2¼ x 8-inch Steels.....	.20	12
3 x 8-inch Steels.....	.22	14
4 x 8-inch Steels.....	.27	1 2
10-inch Steels fit all Planet Jr. Two-Horse Cultivators, excepting No. 72.		
1¼ x 10-inch Steels.....	\$0.19	13
1½ x 10-inch Steels.....	.22	14
2¼ x 10-inch Steels.....	.24	1
3 x 10-inch Steels.....	.28	1 1
4 x 10-inch Steels.....	.32	1 8
1½ x 9-inch Alfalfa Teeth and Bolt.....	.40	1 2

Shovel Steels fit all Planet Jr. One and Two-Horse Cultivators.		
7-inch Shovel Steel.....	\$0.35	1 9
8-inch Shovel Steel.....	.40	1 12

Hillars and Plows fit all Planet Jr. One and Two-Horse Cultivators, excepting Twelve-Tooth Harrow.		
6-in. Hillars. Per pair.....	\$2.30	4 10
7-in. Plows. Per pair.....	2.60	5 2

Regular Sweeps fit all Planet Jr. One and Two-Horse Cultivators.

	Price.	Weight Lbs. Oz.
6-inch Sweep.....	\$0.40	14
8-inch Sweep.....	.43	1 4
10-inch Sweep.....	.46	1 6
12-inch Sweep.....	.52	1 9
15-inch Sweep.....	.70	1 14
18-inch Sweep.....	.85	2 2
24-inch Sweep.....	2.00	2 13

Per Pair.

8-inch 1-Sided Sweeps.....	\$1.00	2 4
9½-in. 1-Sided Sweeps.....	1.10	2 8
11-inch 1-Sided Sweeps.....	1.20	2 12
Irrigation Steels and Turning Shovels fit all Planet Jr. Cultivators.		
Irrigation Steel.....	\$1.50	4 2
Per Pair.		
6-inch Turning Shovels.....	\$0.85	3
5-inch Turning Shovels.....	.75	2
7-inch Turning Shovels.....	1.00	4

Hoe Steels fit Planet Jr. Horse Hoe Side Standards.

	Price.	Weight Lbs. Oz.
6-in. Hoe Steel & Bolt.....	\$1.30	2 10
10-in. Hoe Steel & Bolt.....	1.50	3 12
Beet Hoe Steels fit Planet Jr. Two and Four-Row Beet Cultivators and Twelve-Tooth Harrows.		
Per Pair.		

6-in. Beet Hoe Steels.....	1.40	3 4
7-in. Beet Hoe Steels.....	1.40	3

Improved Flat Sweeps fit all Planet Jr. One and Two-Horse Cultivators Standards, excepting Horse Hoe Side Standards.

3-in. Imp. Sweep & Bolt.....	\$0.42	
5-in. Imp. Sweep & Bolt.....	.50	
8-in. Imp. Sweep & Bolt.....	.60	1
10-in. Imp. Sweep & Bolt.....	.70	1
12-in. Imp. Sweep & Bolt.....	.85	1
15-in. Imp. Sweep & Bolt.....	1.00	2
18-in. Imp. Sweep & Bolt.....	1.30	2
24-in. Imp. Sweep & Bolt.....	2.75	3

No. 70 Planet Jr. Pivot Wheel Riding Cultivator

Strong though light; Not Complicated; Easily Handled

The No. 70 Planet Jr. Pivot Wheel Riding Cultivator made so many friends some years ago that they have convinced us that this light and easily handled riding cultivator should be made again.

Springs on the lever connecting pieces enable the driver to set the teeth any depth he may choose, while still on the headland, instead of having to wait until part way up the row; and the spring tension allows the teeth to adjust themselves to uneven surfaces.

The **Pivot Wheels** make steering easy; act quickly and enable the operator to follow uneven rows.

The **Gang Frames** are made of special stiff steel, are thoroughly braced, and are adjustable sideways on the arch to and from the row.

The No. 70 cultivates all rows from 28 in. to 48 in. apart. The Wheels close to 32 in. and open to 40 in.

The **Standards** are steel and carry eight 10 x 2 1/4 inch specially hardened Planet Jr. bevel steel cultivator teeth. The standards are rigidly held in any desired position by new steel clamps with heavy bolts, preventing the standards from twisting or working loose.

The **Tongue** is hinged to the frame and is operated by a lever, so as to regulate the depth of the gang in front perfectly, while two other convenient levers govern the depth of the gangs in the rear with the greatest accuracy.

The **Seat** is adjustable backward and forward to suit man or boy, and also in height; it can be dropped so low that the operator can uncover small plants from the seat.

The **Wheels** have broad concave tires, renewable boxes, renewable pivots and dust caps and are made of steel with welded spokes.

In **design, quality of material, and workmanship**, and general usefulness, the No. 70 Pivot Wheel Riding Cultivator is a typical Planet Jr. implement; and its **lightness** and **simplicity** in operation will convince you that it is a good tool for your work.

F. E. Gillett of Guatamala, Central America, writes: "I have five of your No. 70 Pivot Wheel Riding Cultivators which do splendid work."

Mr. W. F. McRee, Kinder Lou, Ga., says: "I am using your No. 70 Planet Jr. Riding Cultivators and they come nearer to being worth their weight in gold than any improved agricultural implement I ever tried. I would not let the same leave my farm for \$100 if I could not get another just like it."

Price \$79.00.

The New No. 77 Planet Jr. Pivot Wheel Cultivator

The No. 77 Pivot Wheel Riding Cultivator is new for 1924 and although not perfected until late last season field trials demonstrated its many improvements over any other similar cultivator. Briefly these consist of a clear view of the row in front of the Wheel Axle frame and a better view behind this frame between seat bars; gangs are raised without pulling back against the team. Gang lifting levers are in a more convenient position and the gang is lowered and spring compressed by one motion. Front end of gang is adjusted separately, a lever for each gang. Tongue is rigid with the frame at all times making the frame always practically level. There are a number of other minor improvements which make this the best all round one row riding cultivator. It is made almost entirely of steel and castings where absolutely necessary are malleable.

No. 77-D Plain, \$80.00.

International No. 4 Cultivator, Ball-Bearing Pivot Axle

International No. 4 Pivot-Axle Cultivator can be adjusted from deep to shallow, wide to narrow, cultivation without leaving the seat. It is equally good in corn, potatoes, beans, peas or beets. A boy who can handle a team can do clean cultivating work with International No. 4 because the axles pivot on steel balls and the gangs shift on rollers. The cut shows our Eight-Shovel Spring Hoe Cultivator, Price, \$80.00.

International No. 4 Pivot-Axle Cultivator equipped with 8 double-point trip-slotted shanks. This style is very practical in the Eastern States, or wherever beans, peas, beets and potatoes are raised. We can also furnish a Fertilizer Attachment for this cultivator.

All Prices Subject to Change Without Notice

McCORMICK PEG-TOOTH HARROW

Two-Section McCormick Peg-Tooth Harrow, Having 30 Teeth to a Section.

This harrow is built in sections with 25, 30 or 35 teeth to the section, either $\frac{1}{4}$ -inch square or $\frac{5}{8}$ -inch diamond-shaped teeth.

The McCormick Peg-Tooth Harrow is unusually strong for its weight. One reason for its great strength is that there are 2 stiffening bars in each section. The effect of these stiffening bars is to transmit any bending force which may come on a tooth beam to all of the other tooth beams in that section, making them all act together to resist bending. Thus it is practically impossible in ordinary work to bend a tooth beam on a McCormick Peg-Tooth Harrow. The tooth beams are very strong and are made of channel bar, thicker in the center than at the edges—a form which offers great resistance to twisting.

Three-Section McCormick Rigid Peg-Tooth Harrow—Teeth Are Securely Held.

The teeth are held to the tooth bars by special steel clips which fit closely around the teeth, holding them into small notches in the edges of the tooth bars. These tooth clips are then drawn up tightly by means of two nuts which prevent them from working loose and make it practically impossible for a tooth to twist around, drop out and become lost. Each of the steel teeth is complete in itself, well made, with a head formed at the top so that the tooth cannot drop through the clip. Four runner teeth are furnished with each section, and are used as transports when moving the harrow from one field to another, making it unnecessary to take the implement down and load it on a wagon.

50-Tooth $\frac{3}{8}$ Spikes Harrow.....\$21.00 60-Tooth $\frac{3}{8}$ Spikes Harrow.....\$23.00
90-Tooth $\frac{3}{8}$ Spikes Harrow.....\$40.00

McCORMICK SPRING-TOOTH HARROW

McCormick Spring-Tooth Harrows are valuable in any kind of soil. They are particularly useful when the Spring is late and cold and the ground refuses to warm up. The springy, lifting action of the teeth loosens the soil, distributes the air through it and permits the warm rays of the sun to permeate to a great depth, thereby giving the crop a much-needed boost. The construction of McCormick Spring-Tooth Harrows is light, but very strong for use under rough field conditions. The teeth are made of high-grade steel and will not straighten out. There are no holes in the teeth. They attach to the tooth bars by means of a clip and two nuts. Double-pointed teeth can be obtained on special order when the ground is hard or stony, or wherever there is extraordinary wear. We urge you to see and examine a McCormick before deciding on any particular make.

McCormick Spring-Tooth Harrows are built in 1, 2, 3 and 4-section sizes. One-section harrows can be had with 7, 9 and 12 teeth; 2-section 3-section with 23, 25 and with 15, 17 and 23 teeth; 35 teeth; 4-section with 31 and 33 teeth.

Prices of Spring-Tooth Harrows:

15-Tooth.....\$28.50
17-Tooth.....30.00
23-Tooth.....44.00
25-Tooth.....46.00

SYRACUSE LEVER SPRING TOOTH HARROW

The frame bars of angle steel, thoroughly protected by steel shoes, which double the life of the harrow. Inside frame bars raise at the end, giving free outlet to trash. Frame with small opening in front, absolutely preventing loading at this point, which is so common with other makes. The tooth bars are of channel steel, journaled in malleable brackets above the frame, which gives the teeth high support and great range of adjustment for depth of cultivation and clearance. Spring teeth of high carbon steel, without bolt holes, and held by malleable holders, allowing for separate adjustment when worn. By use of the levers the teeth can be readily set deep or shallow, or can be thrown out of the ground to clear off trash and for dragging harrow from one place to another. Central and direct draft without side motion; adjustable hitch, so that the teeth at the front and rear can be regulated to work at the same depth. No spring-tooth harrow made is giving such universal satisfaction.

Prices: 15-Tooth, \$29.00; 23-Tooth \$45.00; 17-Tooth, \$31.00; 25-Tooth, \$47.00.

McCORMICK TILLAGE IMPLEMENTS

**This Is the Regular McCormick 8-Foot Disk Harrow.
You Simply Can't Beat It for Good Field Work**

MADE IN ALL SIZES OF DISC, 16, 18 AND 20 INCH

The McCormick 8-Foot Disk Harrow With Sixteen 16-Inch Disk Blades

A McCormick Tandem Disk Harrow Leaves the Seed Bed in Ideal Condition to Receive and Nourish the Seed—It Almost Insures a Bumper Crop

If you have never used a Tandem Disk Harrow, by all means do so this year. It results in a much better job than can be obtained with a single harrow, even when you lap half. The McCormick Tandem Attachment can be ordered to fit any McCormick Disk Harrow and is equipped with solid disk blades. Two draft arms pull from the front corners of the Tandem Attachment at opposite angles. This holds the tandem rigidly in line while working and prevents the tandem blades from tracking the front harrow. At the end of the field, or

when making a turn these draft arms telescope backward, permitting both front and rear harrows to curve sharply without twisting the frame or sliding the gangs. A strong steel arch resists the effect of the soil against the blades and the bearings are specially constructed to offset end thrust. An angle steel weight box will be supplied on special order at slight cost, where it is necessary to use extra weight to get sufficient penetration. Ordinarily added weight is not necessary.

Prices Complete With Fore-Carriage

8-16	\$103.00
10-16	112.00
12-16	123.00

McCORMICK 2 OR 3 HORSE DISK HARROWS

MADE IN 16-IN., 18-IN. AND 20-IN. DISKS

The first thing you notice about the McCormick Disk Harrow is its simplicity. There are no bulky or cumbersome parts, no awkward toggle joints nor hinges. Its makers have worked hard for rigidity and durability because it is upon these two qualities that a good disk harrow depends for satisfactory work. In the illustration above observe the clean lines of construction. The one-piece angle steel frame extends from one end of the harrow to the other without a joint. The steel stub tongue is a backbone that holds the frame and gangs in rigid alignment. Angle steel weight box is built in and always ready when needed. Gray iron standards add rigidity to the gangs and do away with long hard oil pipes, because hard oil runs through the standards directly to the bearings. Oscillating scrapers clean the disk blades with a single motion of the feet.

PRICES:

McCormick Two-Lever Disk Harrow

8-16	\$46.00
10-16	52.00
12-16	56.00

McCormick Three Levers

8-16	\$50.00
10-16	54.00
12-16	58.00

INTERNATIONAL LEVERLESS TRACTOR DISK HARROW

Every man who owns a tractor wants to use it for every farm task. The tractor that is busy every day pays a bigger profit than one that stands idle half the time.

Because the tractor is stronger and will do a better job of disking than horses, it follows that the disk harrow must be built correspondingly heavier and stronger. Therefore, a demand has grown up for a strong, substantial disk harrow designed especially for use with light farm tractors. The International Leverless Tractor Disk Harrow is the answer.

The most striking feature of the International Leverless Disk Harrow is the fact that it is operated from the tractor entirely without the use of levers, yet it is just as closely controlled as any lever disk harrow. The operation is very simple.

To secure proper angle the operator backs his tractor, which automatically sets the gangs of both front and rear harrows. He then starts to work, and the gangs assume whatever angle has been given time.

Send for Special Catalogue and Prices.

"IRON AGE" (IMPROVED ROBBINS) POTATO PLANTER

No. 40LE POTATO PLANTER WITH NEW ADJUSTABLE ELEVATOR WHEEL

This planter is known as the 100 per cent planter because it puts one seed piece, and only one, in every hill—no misses or doubles. You do not plow, harrow, plant, spray, cultivate and dig over missed spaces which bring you no profits. It also avoids the waste of fertilizer and spray material on unplanted spaces.

The planter is constructed almost entirely of steel. This gives decided advantages of strength, lightness and compactness over planters with cast-iron or wood frames. It is perfectly balanced with less weight for the horse to pull. There are no heavy, bulky castings to replace because of breakage. The steel seed box is lighter, more durable than wood and holds more seed than a wooden box of the same size.

The construction is simple, allowing you to get at all parts easily.

We are now equipping this planter with our new patented adjustable feed wheel. This wheel is adjustable to an exact variation giving all sizes between those of the extra plates formerly used. Sometimes one plate was a little too large and the other a little too small, but the new feature gives any adjustment wanted.

With this new plate there is no trouble of losing or mislaying the extra plates formerly supplied. It also reduces the work of the boy on the rear.

Side Dressing, Ridging, Corn, Bean and Pea Attachments can be supplied. With these attachments trucks can find use for the machine throughout the season.

Making up rows, opening furrows and covering them can be done with the regular machine.

Price with Fertilizer Attachment \$140.00

INTERNATIONAL CORN PLANTER

You Can Use Edge-Drop, Flat-Drop and Full-Hill-Drop Plates in the Same Hopper Without Any Change in the Mechanism

This is a narrow planter for beans, peas, beets and other crops that frequently are planted in rows close together. Ensilage corn, popcorn, and the like, can be planted in narrow rows where the soil is fertile. I. H. C. is provided with adjustments for planting in rows 28 inches apart and from that up to 44 inches apart, with adjustments between every 2 inches. Thus you can see that it can be adapted to a greater variety of crops. In the bean section of this country I. H. C. is used largely with power drop attachment for planting full hills of beans or peas every 14 inches in rows 28 inches apart. This is only one of the great many combinations of hill distances that can be secured by changing sprockets and seed plates. The power drop attachment, which replaces check wire, is an extra, purchased at slight additional cost. It is extremely simple and fits any I. H. C. planter. It can be put on at any time. I. H. C. is provided with side bar marker of the adjustable type.

The merit of this corn planter is that it pleases experienced farmers who are satisfied with nothing short of accurate planting at even depth. Here are a few of its convenient features:

A floating runner frame that puts the seed in to the ground at the proper depth. Force feed valves prevent stringing and place the kernels in the bottom of the furrow. Can be equipped with seed plates to plant any kind of seed from Kafir corn to the biggest beans. There are six types of I. H. C. Planters—

one to meet every planting requirement.

One of the strongest features of the I. H. C. Planter is the combined variable drop and clutch. The clutch is built into the dropping mechanism in a way that is simple and effective. By means of the variable drop, 2, 3 or 4 kernels can be planted in each hill, and the change can be made from the seat without stopping the team. The clutch is positive and accurate. This is one of the strongest features on the I. H. C. Corn Planter.

Price, with 80 rods wire, \$85.00. Fertilizer Attachment extra, \$27.50.

SEED PLATES FOR I. H. C. PLANTER

Three types of plates, the edge drop, the flat drop and the full-hill drop, can be had for the I. H. C. Planter. There is a large assortment of each one of the three types of plates to fit various sizes and shapes of kernels.

Plates can also be furnished for the following grains: Indian corn of several varieties and sizes, popcorn, sweet corn, milo maize, Kafir corn, sorghum cane, beets, peas, cow peas and beans of various sizes.

PLANT YOUR CORN RIGHT

When the kernels of corn are planted at just the right depth in the soil for proper germination and growth, the bigger end of your work in getting a good crop is done.

Much depends upon the planter—the rest upon your knowledge of how to run it and upon the quality of the seed.

The I. H. C. Corn Planter will plant the corn as you want it planted because it is adjustable to your particular planting conditions. The tongue and runner frame are adjustable to suit the team used on the planter. The adjustment accomplishes two things: First, it keeps the seed plates level so that they operate in harmony and exactly on time with the valves in the boots, and secondly, the corn will be checked evenly regardless of the speed of the team or its height.

CHATTANOOGA CHILLED PLOWS

POINTS OF MERIT

FIRST—Low front, similar to Steel Pattern Plows; will not collect trash.
SECOND—Handle not bolted to mould, but to standard and brace that is attached to beam, thus preventing breakage of many moulds.

THIRD—Brace or rod between landside and mould, giving additional strength where it is most needed, making plow absolutely rigid.

FOURTH—Special bolts, which will not turn and can be readily taken out. All the base bolts are alike and interchangeable; only one kind necessary to keep on hand.

FIFTH—Points are fastened on with two bolts; never falls; gives satisfaction.

Steel
Beam.

Low
Front.

(Cut
represents
Two and
Three-Horse
Plow.)

CHATTANOOGA ONE-HORSE PLOW

The One-Horse Plows as priced below are a little different from design shown in cut. The No. 72 is the factory's latest pattern.

PRICES:

No. 62—Wood Beam.....\$10.25
 No. 62—Steel Beam.....10.25
 No. 72—Steel Beam.....10.25

Capacity and Weight Chattanooga Plows:

Nos.	Capac.	Wgt., Lbs.	Price.	Nos.	Capacity.	Wgt., Lbs.	Price.
45—Wood	10x12	124	\$20.00	72	5x 8	75	\$10.25
45—Steel	10x12	131	20.00	63	8x10	105	15.50
46—Wood	12x14	144	23.00	64	8x11	123	17.50
46—Steel	12x14	165	23.00	65	10x12	134	20.00
62—Wood	5x 9	60	10.25	66	12x14	165	23.00
62—Steel	5x 9	70	10.25				

GENUINE OLIVER PLOWS

and Genuine
Oliver Repairs

Note—A Clevis Wrench and an extra Share are included in prices for Plows fitted with Cast Shares, but Wheels and Jointers are not.

	Prices Steel Beam	Prices Wood Beam
A-1 and A-2	\$10.50	\$10.50
B-N	12.75	12.00
13-N	18.00	18.00
40-XX	.....	26.00
10-N	16.00	16.00
19-N	19.50	19.50
20-N	21.00	21.00
E-1-N	.....	24.00
40-N and 40-X-N	24.00	24.00

THE ORIGINAL BOSS PLOWS

Prices of Boss Plows and Repairs:

1-Rig.....	\$ 7.50
2-Rig.....	8.50
3-Rig.....	9.50
4-Rig.....	10.50

Repairs:

1½ and 2½ Shares.....	\$0.40
2½ and 3½ Shares.....	.45
20 Shares.....	.55
Landsides, No. 3.....	.60
Beams.....	1.00
Handles, per set.....	1.50
Handles, loose, etc..	.65
1½ and 2½ Moulds....	.70
2½ and 3½ Moulds....	.85
20 Moulds....	1.35

After Plowing the Ground be Sure to Plant The "Wisdom" Tomato, (See Page 23)

THE IMPROVED "PLANET JR." WHITE POTATO DIGGER

The "Planet Jr." White Potato Digger has been greatly improved recently. Instead of a digging head of tines it now consists of successive shares, which cut the furrow turned on edge by the front share and moldboard into horizontal slices, throwing the vines and weeds to one side and pushing the potatoes to the surface.

Doubtless you would like us to say how they compare with the various four-horse diggers on the market. To answer this, the "Planet Jr." White Potato Digger is equal to any for digging early, when the vines are green, the potatoes fast to them and the ground clean. A little later on, when the vines are dead and the ground fairly free from weeds, the four-horse diggers do better work in some cases, the crop being picked up more easily after them. At a later stage, when the potatoes are almost useless, while the "Planet Jr." even then does its work fairly well. If compelled to use but one digger the season through, the "Planet Jr." is the best. It costs but one-fourth or one-fifth as much, takes less than half the power to draw it; **DOES NOT SKIN THE POTATOES**, digs faster and costs about one-twentieth as much for repairs, and it will last almost a lifetime, with a few new shares and landsides. Packed weight, 143 pounds. Price.....\$42.50

No. 300 "HOOVER" POTATO DIGGER WITH AGITATING REAR RACK AND VINE SEPARATOR

To meet the various conditions under which potatoes are grown, it was necessary to build several styles and sizes of machines. In making the changes and improvements necessary to the universal use of the "Hoover" they were designed so that two general or main frames would be the basis to which could be added the different attachments that are necessary for the successful harvesting of the crop. The frames are 6 and 7 feet long and of two widths, 20 and 22-inch. The following general description of the construction of the "Hoover" should convince you that nothing but the best of material and workmanship is used in their construction, which in connection with the inventive genius, which is constantly used for their betterment, puts them in a class by themselves, and about five years ahead of all imitations.

SPECIFICATIONS:

Truck—Double-acting, with 14-inch steel wheels provided with removable hubs and bearings.

Frame—22 inches wide, 6 feet long (elevator 5 feet long). Sides made of special Tee steel rolled exclusively for the "Hoover." Malleable pieces for attaching shovel and axle are riveted solidly to the Tee steel sides.

Shovel—High carbon crucible steel.

Elevator—Rod type, made of ½-inch high carbon spring steel with every alternate link raised and lowered. (7-16-inch steel furnished when so ordered.)

Bearings—2½-inch roller bearings on main elevator shaft with compression grease cups, 2-inch roller bearings on elevator idlers and pitman shaft. All other idlers run on pipe bearings.

Wheels—30-inch diameter, 3-inch tire. Staggered spokes and removable hubs.

Tread—Main wheels, 37 inches; trucks, 31½ inches.

Drive Chains—Heavy Locke tempered steel running on forged and tempered steel sprockets on main elevator shaft.

Rear Rack—Agitating with vine separating rods and forks. Hangers supporting potato or rod rack swing on pipe bearings. Pitmans agitating potato or rod rack are oval steel with wood bearings. Pitman shaft ½-inch cold rolled steel with 2-inch roller bearings and dirt-proof pipe covering screwed in bearing castings. Vine forks revolve on high carbon steel crank provided with removable bearings.

Clearance—19 inches under truck; 15 inches under beams.

Weight—985 pounds.

Price—\$137.50. With Engine, \$337.50.

Four-Horsepower Cushman Engine on a Hoover Digger

SHAKER POTATO DIGGER

Steel beam. Natural temper steel blades. Provided with weed fender and gauge wheel. The Shaker Digger has a perfectly flat blade and will not cut the potatoes. The rod grating is hinged at the front and is given an up-and-down shaking motion by the sprocket wheel at the rear. This shakes the dirt off from the tubers and leaves them clean and whole on top of the ground. The weed fender is intended to clear away weeds and vines, preparing the way for the blade. The Digger is shipped with gauge wheel and fender, unless ordered without.

Price.....\$30.00

FARM WAGONS

The Value of These New Weber Features Can Be Counted In Dollars and Cents. The Difference Is So Great That You Cannot Afford to Buy Any Other Wagon.

You don't have to guess how much of a load a Weber Auto-Track Wagon will carry. Its capacity is stamped right on the bolster—and every Weber is guaranteed to carry its rated capacity. There is never a come-back on this guarantee because Weber wheels and gears are made of "A" grade material and are exceptionally well built. Both the front and rear gears are reinforced at every point of wear and strain by liberal ironing and bracing. And added to this there is the Weber fifth wheel, which keeps the bolster from rocking and does away with unsteady drawing of the front gear, thereby lightening the draft.

Let a standardized Auto-Track Weber carry capacity loads for you.

SPECIFICATIONS

No.	Size of Axles.	Size of	Width of	Length of	Carrying	Shipping	Prices on
	Solid Steel.	Steel Skein.	Tire.	Body.	Body.	Capacity.	
302	1½	2¼ x 8	2 in. x ½ in.	3 ft. 6 in.	9½ ft.	2,500	700
303	1½	3 x 9	3 in. x ½ in.	3 ft. 6 in.	10 ft.	3,500	900
304	1½	3¼ x 10	4 in. x ¾ in.	3 ft. 8 in.	10½ ft.	4,500	1,000
305	2	3½ x 11	4 in. x ¾ in.	3 ft. 8 in.	11 ft.	6,500	1,100

Application.

OUR HANDY STEEL-WHEEL FARM TRUCKS

All wood parts hardwood and well painted. Note the grooved tire, which protects the spokes of the wheel, and they last much longer than flat-tire wheels. Made in two sizes—No. 22 with 3x9 skeins, capacity 3,000 pounds; No. 24 with 3¼x10 skeins, capacity 4,000 pounds. Both Nos. 22 and 24 Trucks have 28-inch front and 30-inch rear wheels, 4x½ tires. Weights—No. 22, 475 pounds; No. 24, 510 pounds.

Above Truck can be furnished with wood wheels. Price, \$50.00.

Wood Hounds, Well Braced; Hickory Axles.

FARM AND CONTRACT CARTS

Our Carts are built of hardwood, good dry stock. Bodies have 6-inch top sides. Wood hub wheels. The sizes we mention are those most popular with our trade, but we can furnish any size desired. The Carts are nicely finished and handsomely painted. They have but to be seen in comparison with others to be appreciated.

No. 38 FARM CART—1½-inch axle, 2x½-inch tire; body, 3 feet wide, 5 feet 1 inch long, 11 inches deep, without top sides; capacity, 1,000 pounds. Price on application.

No. 41 FARM OR LAWN CART—1¼-inch axle, 4x½-inch tire; body, 3 feet wide, 5 feet 4 inches long, 12 inches deep. Price on application.

No. 42 CONTRACT CART—2-inch axle, 3x½-inch tire; body, 3 feet 1 inch wide, 5 feet 10 inches long, 13 inches deep, without top sides; capacity, 2,000 pounds. Price on application.

Fill Your Wagon With "Wisdom" Tomatoes (See Page 23)

TUBULAR STEEL PLOW DOUBLE TREES

Can furnish these in sets complete, as shown in cut, or can furnish Single Trees separate. They are extensively used, both for farm plowing and by contractors for heavy work. They last a lifetime.

Tubular Single Trees

26-inch.....\$1.25
28-inch..... 1.50

No. 0—Light, 33-in. Double Tree, 28-inch Single Trees; weight, 18 lbs. Per set.....\$4.25
No. 1—Regular, 36-in. Double Tree, 30-in. Single Trees; weight, 20 lbs. Per set.....\$6.00
No. 2—Heavy, 36-in. Double Tree, 32-in. Single Trees; weight, 25 lbs. Per set.....\$6.25

Tubular Single Trees

30-inch.....\$1.75
32-inch..... 2.00

WOOD PLOW DOUBLE AND SINGLE TREES

These Trees are made of selected stock, very strong and durable, and are heavily ironed. The cut shows style of Double Tree; the Single Trees have clips in the center and hooks at the ends.

Per set, 36-inch Double Tree and 30-inch Single Tree.....\$3.00
Per set, 40-inch Double and 32-inch Single Trees..... 3.50
Double Tree only, 36-inch, \$1.30; 40-inch..... 1.50
Single Tree only, 28-inch, 65c; 30-inch, 85c; 32-inch..... .90
Heavy Lap Links for connecting Double and Single Trees, each..... .25
Heavy Single Tree Clips, per set..... .90
Heavy Double Tree Clips, per set..... 1.15

Wood Neck Yokes

Ironed complete, each.....\$1.50

Extra-Heavy Plow Triple Trees

Each.....\$3.25

THE HALLOCK QUADRUPLE WEEDER AND CULTIVATOR

This is a tool which has rapidly grown in favor, and excellent results are obtained from its use. The frame is of angle iron. The teeth are 6 inches apart; on each frame and each tooth is bolted on separately. The handles and shafts are adjustable. The teeth are arranged so as to work the ground thoroughly, and also in a manner that permits trash to pass through. By removing 1 tooth, a space of 4 inches can be obtained over the row, and by removing 2 teeth a space of 6 inches can be obtained. On account of this feature the Weeder can be used for working narrow rows by taking out the proper number of teeth. This tool has been adopted and passed upon favorably by many of the most practical farmers.

Price.....\$15.00

"OUR BEST" SINGLE SHOVEL PLOW

The design of this Plow is readily understood from the cut. It has a heavy steel beam of good quality and a broad steel shovel. One of the most valuable tools around the farm

Price.....\$4.25

"OUR BEST" DOUBLE SHOVEL PLOW

Every farmer realizes the value of a Double Shovel Plow, with a good set. The Plow we illustrate is strong and runs nicely. It will give good service.

Price.....\$4.50

TRIPLE SHOVEL PLOW

The Triple Shovel Plow, or, as it is often called Three Shovel Drag, is one of the best known and most efficient tools for working corn. In some sections they are used almost exclusively. The beams of our Triple Shovel Plow are of a good grade of steel, and heavy enough to stand severe work. The shovels are of good quality, and on the whole, the tool will give great satisfaction and long service.

Price...\$6.25

STEELS
For
Single
and
Double
Shovel
Plows

Drag
Blades
4x7-in.,
4½x7-in.,
5x8-in.

D. S.
Blades

5, 5½, 6,
6½, 7-inch wide; 8, 10 and 11-
inch long.

S. S. Blades

All sizes, from 8 to 18-inch
wide by 11 to 16-inch long; in
1 and 2-hole.

Bull Tongues—1½, 2 and 3-inch wide by 11-inch long.
Calf Tongues—1½, 1¾ and 2-inch wide by 8-inch long.

Above can be furnished in 1 or 2-hole.

Full and complete line of Polished Steels for Single and Double Shovel Plows, made in both 1 and 2-hole styles.

WATER TRUCKS and COMBINATIONS

WITH STEEL WHEELS

Fig. 1 represents our Barrel Cart, to which can be attached any of our Barrel Spray Pumps. This is a convenient combination, and may be found useful in various ways, such as watering gardens, spraying fruit trees, etc.
Fig. 2 shows Truck with Leaf Rack Attachment.
Fig. 3 shows Truck and Box, with Barrel detached.

Dimensions:
Hgt. of Wheels, 2 ft. 9 in.; distance between Trunnions, 2 ft. 2½ in.;
width Tire, Steel, 1½ in., 2½ in., 3½ in.; Wood, 1½ in., 2½ in., 4 in.
Box Inside Measure:
Width, 22½ in.; Length, 24 in.; Height, 8½ in.
Box has Tall Door. Prices.

Water Truck, with Regular 1½-inch Tire, Steel Wheels.....\$13.75
Water Truck and Barrel.....18.00

Water Truck and Barrel, with ½-in. Tire.....	\$18.00
Water Truck, Barrel and Box.....	23.75
Sprinkling Attachment.....	6.00
Leaf Rack.....	10.50
Barrel.....	6.00
Box.....	5.50
Trunnions, per pair.....	1.00
Trucks with 2½-in. Tire Steel Wheels, add to Regular Tire Truck.....	1.10
Trucks with 3½-in. Tire Steel Wheels, add to Regular Tire Truck.....	2.80
Trucks with Regular 1½-in. Tire Wood Wheels.....	12.75
Trucks with 2½-in. Tire Wood Wheels, add to Regular Tire Truck.....	1.10
Trucks with 3½-in. Tire Wood Wheels, add to Regular Tire Truck.....	2.00

COULTER "MOON" ROLLING

The shoe presses down all weeds and trash and holds same firmly while being cut by the Coultter.

Prices:

No. 1— 8-inch disk.....	\$5.50
No. 2—10-inch disk.....	6.00
No. 3—12-inch disk.....	7.00

BENT TRAY WHEELBARROW

This is a "full bolted" Barrow and is set up for shipment.
Full-sized Bent Tray, well planed, cleated, braced and bolted. Legs and cross pieces gained, leg braces extending beyond handles, bracing tray, and bolted to it.
Diameter of Wheel, 17 inches; Tire 3-16x1½ inches; Spokes, ½x1 inch; ½-inch Axle Bolt.
Price.....\$5.00

BUCH'S Nos. 2 AND 3 WHEELBARROW

A durable, neat Garden Barrow. Size of body, 28 inches long, 20 inches wide in front, 24 inches wide at back; Sideboards, 27 inches long, 12 inches high; Handles, 5 feet long, 2x1½ inches; Wheel, 20 inches diameter, 6 Spokes.

Prices:

No. 2.....	\$7.50
No. 3.....	7.00

FELIN'S VEGETABLE TYING MACHINE

It is a well known fact, that any mechanical device designed to save labor and time on the farm, is a real money maker for the farmer. This machine for bunching and tying vegetables, such as beets, carrots, radish, parsnips, etc., will save both time and money. Well constructed of good material, easily operated by any twelve year old boy. Will tie bunches any size from one-quarter to five inches. Automatically adjusted to any size bunch. Special literature upon request.

Price.....\$75.00

"BUCH'S No. 7" DOUBLE SPOUT CORN SHELLER

While this sheller is used principally as a hand machine, still it is admirably adapted for light power and is provided with a pulley just for that purpose. We have

made a leader of this Sheller for several years, and recommend it to our customers as a Sheller excelling in the matter of convenience and up-to-date workmanship. The parts throughout are of selected materials, made extra heavy and very strong. Well put together and nicely finished. Cold rolled steel shafts and steel shaker pitman. Journal boxes are made in two parts and can be adjusted to take up wear. This Sheller

does rapid work, having a capacity of 500 to 600 bushels per day. Price, with shaker, \$32.00.

"RED CHIEF" GRINDING MILLS

Does rapid work. Will grind meal or crack the grain any desired size. Strong, durable and neatly made.

No. 1—Without flywheel.....	\$ 4.00
No. 2—With flywheel.....	5.50
No. 5—Without stand.....	7.00
No. 10—With stand.....	8.50
No. 20—Combined Hand and Power.....	20.00

"BUCH'S No. 2" SINGLE SPOUT CORN SHELLER

This very popular Sheller is well made, light running, and will give good service. It has large balance wheel, with heavy rim and wrought-iron spokes. The journal boxes are engine bored and bolted to hardwood frames. Handsomely finished. Separates corn from cob. With sieve, \$15.00

"RED CHIEF" CORN SHELLER

This is undoubtedly the best Sheller of its class. It has a suitable device for adjusting it to take either large or small ears, and do good work with either. It readily attaches to barrel or box, and is just the thing for persons who have but a small quantity of corn to shell.

Price.....\$2.75

DOUBLE-CAGE CIDER MILL

These mills are made in three sizes, Junior, Medium and Senior. Capacity of Junior, 2 to 4 barrels per day; Medium, 4 to 6 barrels per day.

SENIOR

They have adjustable rollers and feed regulator and double crank. In these Mills the lower rollers are cast with alternate rims and grooves interlocking to draw in the apples. Fruit is mashed between the smooth segments, thoroughly breaking all the cells so that cider is entirely extracted in press. Balance wheels are heavy, and mill can be run by power. The mills are very strong. They are made of best material, nicely finished, and are easy to operate. Capacity, 6 to 12 barrels of cider per day. Weight, 390 pounds.

Prices:

Junior (small) . . . \$27.50 Medium \$31.50
Senior (large) \$47.50

BERRY PRESSES

For pressing juice from grapes and berries for wine it is a very handy machine. It is well made, of good material, and will do satisfactory work. Made in three sizes

Prices:

No. 1 \$ 8.50
No. 2 10.60
No. 3 17.00

ENTERPRISE LARD AND FRUIT PRESS AND SAUSAGE STUFFER

Made entirely of steel, iron and tin. Thousands in use. Circular on application.
No. 15, 2-quart; No. 25, 4-quart; No. 35, 8-quart.
Prices on application.

"IAMIT" CIDER MILL

This is an improved pattern of the old Hutchinson Single-Cage Cider Mill. The enlarged hopper can be noticed by the illustration. This change is made to give a larger feed opening, as the small hopper and throat are the principal objections to the Hutchinson Mill. Equipped with a heavy fly wheel, which adds to the steadiness and ease with which it can be operated.

Price \$18.00

DOUBLE BARREL DUST GUN

Specifications

CONSTRUCTION—Heavy tin, nicely enameled red.
LENGTH—13 1/4 inches.
FILLING—Large opening, with heavy screw cap, cork lined.

The Double Barrel Dust Gun will handle all insecticides and is used for dusting vegetables, shrubbery, flowers and for dusting in poultry houses. Handles Arsenate of Lead, Paris Green, Carbolic, Arsenate of Calcium, Sulphur, etc. Provided with large dust chamber which is easily filled. With each stroke of the pump, the gun throws out a broad cloud blast of dust, thereby rapidly covering large areas. Easily operated. Efficient and wastes no dust.

Price 75c.

CAHOON'S BROADCAST SEED SOWER

For Sowing Clover, Timothy, Millet, Oats, Wheat, Hemp, Barley, Rye, Rice, Buckwheat, Etc.—Standard Seeder of the World—A Model for Accuracy and Durability—Malleable Iron Frame—Steel Hopper and Gate—Brass Discharger.

The breadth of the cast will be according to the weight of the seed. Wheat and rye, 30 to 36 feet; oats, 21 to 25 feet; barley, 27 to 33 feet; clover, millet, Hungarian seed, 20 to 24 feet; hemp, 27 to 30 feet; timothy, 15 to 18 feet.

Our Special Price, \$6.00.
Parcel Post weight, 8 pounds.
WISCONSIN SEEDER \$4.00

McCORMICK AND DEERING RAKE

McCormick and Deering Rakes Are Made in Four Sizes—8, 9, 10 and 12-Foot

A hay rake is naturally long and unwieldy to handle. For this reason it is necessary to have exceptionally strong wheels and a rake head and axle that are absolutely sag-proof. The Deering Hay Rake has unquestionably the strongest wheels of any hay rake made and the rake head and axle never sag, no matter how long the rake may have been in use. The reason for the exceptional strength of the wheels is in the large, round staggered spokes and the channel rim, which make it impossible for wear to loosen the spokes in the rim. The hubs are wide, giving an exceptionally wide stagger to the spokes. The wheels are interchangeable, giving the advantage of two wearing surfaces in one wheel. The channel rim, in addition to affording a protection to the rivet heads of the spokes, prevents the rims from picking up dirt and dropping it down on the axle. Self-dump.

8-foot.....\$42.00 9-foot.....\$44.00 10-foot.....\$46.00 12-foot.....\$48.00

Deering Self-Dump Rakes Leave a Clean Field

Steel Construction Throughout

The Deering New Ideal Self-Dump Rake is of steel construction throughout. It is built so strongly that it will stand up successfully under the roughest usage and the hardest work to which it may be subjected in the field. The best angle steel is used in the construction of the frame, the different parts being hot-riveted together, instead of being bolted, as in many other rakes. This eliminates the danger of the bolts becoming loose or the nuts being lost in the field.

The operation of the rake is simple. It can be dumped by hand if desired or can be made to dump automatically by pressing a foot lever.

McCORMICK DEERING HAY TEDDER

There is no haying machine a farmer can have that will return him as much profit, if judiciously used, as the Hay Tedder. This is particularly true in heavy hay crops and when the hay is cut early. There isn't any question but that hay, to be cured properly, must have light and air circulate through it. The leaves and blossoms cure much more quickly than the stems, and the hay that is on top cures quicker than that underneath. If the hay is left to dry in the swath the surface cures quicker. It has long been an established fact that hay curing on a cloudy day, with little dampness in the atmosphere, is of a much better quality than that cured when the sun is shining hot. The reason for this is that on a cloudy day the heat of the sun is eliminated to a large extent thus giving the hay a chance to cure more evenly. The Hay Tedder takes the place of the cloudy day

6-fork.....\$77.50

8-fork.....\$80.00

McCORMICK AND DEERING MOWERS

Every PART Readily
ACCESSIBLE.

RENEWAL of PARTS Can
Be QUICKLY MADE

on All
McCORMICK MOWERS.

QUICK-ACTING LEVER
a Decided
ADVANTAGE.

Most Any BOY Can
OPERATE a McCORMICK

MANY REASONS FOR LIGHT DRAFT

Other than convenience for the operator himself, the farmer nowadays is anxious to get machines that are also easy on the horses or tractor. There are many good reasons why the McCormick Mower is easy to pull. Among these reasons is the flexible gag arrangement; in other words, it is the mechanism that holds the cutter bar in its position. This mechanism on the McCormick Mower is so made that when the cutter bar is raised with the hand lever in the first notch, as shown in illustration, there is only a slight angle between the pitman and the knife. When the cutter bar is raised to the position, which is fully twice as high as with most mowers, the angle between the pitman and the cutter bar remains practically the same. A mechanism that makes possible such a wide range of cutter bar lift is in itself sufficient reason for buying a McCormick Mower.

DEERING MOWERS

DEERING NEW IDEAL MOWERS are made in the following sizes:

- 1-horse regular lift, 3½-foot.
- 2-horse regular lift, 4½ and 5-foot.
- 1-horse vertical lift, 3½ foot.
- 2-horse vertical lift, 4½ and 5-foot.

DEERING GIANT MOWERS are made in 4½, 5, 6 and 7-foot sizes, 2-horse regular lift only.

EVERY ADJUSTMENT WITHIN EASY REACH

Every adjustment that is necessary to make while cutting hay can be made by the driver without leaving his seat. The clutch can be thrown in and out with a foot lever near the seat spring. The large lever directly in front of the driver raises and lowers the cutter bar, as does also the foot lever shown in the accompanying illustration and already described. The small lever at the right of the driver tilts the var up and down so that the guards can be made to clear rough places. The tension on the spring that counterbalances the cutter bar is subject to adjustment. The levers also have devices to take up play, so that the mower can be kept in satisfactory working condition throughout its entire life. Any man who has cut hay on rough or stumpy ground knows what a tiresome thing it is to have to raise the cutter bar frequently in order to clear some obstacle. It is not always convenient to drive with one hand while the other handles the lever that raises and lowers the cutter bar. This inconvenience is overcome in the Deering by the foot lever that raises the outside end of the bar 19 inches, sufficient for all ordinary cutting, and still leaves both hands free. The weight of the cutter bar is counterbalanced by a heavy spring so that raising it is comparatively easy.

EITHER OF THE ABOVE MOWERS, \$85.00.
Send for Special Catalogue.

LINK CHAIN BELTING

No.	Links per ft.	Av. Ult. strength lbs.	List price per ft. all plain links	Retail per link	No.	Links per ft.	Av. Ult. strength lbs.	List price per ft. all plain links	Retail per link
25	13.3	700	15c	3c	52	8.	2300	20c	5c
32	10.4	1100	15c	3c	52½	7.9	2866	29c	6c
33	8.6	1190	15c	3c	55	7.4	2200	18c	5c
34	8.6	1300	15c	3c	62	7.25	3100	25c	6c
35	7.4	1500	15c	3c	65	7.66	2460	21c	6c
42	8.75	1500	17c	4c	72	5.9	4240	33c	8c
45	7.4	1600	15c	3c	72½	7.25	4590	43c	8c
48	6.	1660	17c	4c	76½	5.8	3890	31c	8c
50	8.7	1900	20c	5c	77	5.2	3600	33c	9c
51	10.4	1900	21c	6c					

Best by Every Test

McCORMICK AND DEERING RAKE

This Rake is Built Almost Entirely of Steel. Note the Truss Beam Running Over the Cylinder. It Adds Great Strength. Windrow while the stems are out. Therefore, by this method the hay would be air-cured thoroughly. Price.....\$117.00
Combined Side-Delivery Rake and Tedder, one castor wheel.....122.00
Extra castor wheel for either, \$6.00.

A Keystone combined Side-Delivery Rake and Tedder turns the hay over into loose, airy windrows, where it will air-cure thoroughly. This rake is built almost entirely of steel. Made in two widths, regular (raking 7 feet 3 inches wide) and beam special (raking 8 feet). The truss beam running over the cylinder gives great strength, yet leaves ample clearance for the hay.

You can rake the hay while the leaves are still active. By so doing, the leaves and heads which are left on top of the swath by the mower are kept from drying before the stems. They thus draw the moisture from the stems and insure even curing.

The rake works against the heads. This, together with close spacing of the teeth, insures clean raking.

The hay is placed upon clean stubble. The windrow is loose and airy, and the hay is so turned that a large part of the leaves are within the hay to be air-cured instead of sun-dried.

McCORMICK DEERING

DOES FINE WORK

This loader will handle the heaviest windrows in the gentlest possible manner and deliver the hay on the wagon without the threshing of the leaves and heads. This makes it especially valuable in handling alfalfa or clover, the leaves of which are easily broken off. When it is desired to harvest the crop with all possible speed the hay can be raked into extra-large windrows and the Keystone windrow loader will pick it up and deliver it on the wagon in good condition.

The Keystone is very easy to hitch. The forecarriage is equipped with a latch and arms which do away with the necessity of backing the wagon to one exact spot. It is easily unhitched, too—by simply pulling the latch release rope from the top of the load.

VERY EASY TO OPERATE

It would be impossible to design a more simple hay loader than the Keystone windrow. There are no gears or drive chains on it, the entire mechanism consisting of the gathering drum, which gathers the hay and at the same time operates the elevator carrier. There is no drag in turning the corners, for the drum is ratcheted to both wheels, also insuring uniform action when the wheels are passing over dead furrows and uneven ground. The drum is strongly constructed of steel, and has eight pipe steel tooth bars on which the spring steel tooth are securely fastened. The machine is thrown out of gear by means of pawls at each end of the axle.

HAY WILL NOT ROLL OFF

The sideboards slope towards each other. This insures the hay being dropped on to the center of the rear end of the wagon, where it will not roll off, and where the man on the load can handle it easily.

The carrier slats, securely fastened to the carrier chain, which takes the driving strain off the ropes, are kept from catching by guides. The compressor slats, which keep the hay pressed on the carrier, are held by a brace sufficiently high above the drum to prevent choking at that point.

IMPOSSIBLE FOR RAKING CYLINDER TO WIND

The hay will not be carried around in its revolution beyond the point where it is to be delivered to the carrier. The teeth are moved by cams, being thrown out in the revolution of the cylinder in time to pick up the hay and drawn back towards the cylinder in such a manner that the hay will not fall off the teeth, yet is positively delivered to the carrier.

A VERY POPULAR LOADER

The many features of the Keystone Windrow Hay Loader herein described, and especially its light draft and simple construction make it the most popular windrow loader on the market.

Keystone Windrow, 6-foot single cylinder with forecarriage.....	\$105.00
Keystone 6-foot double cylinder steel without forecarriage.....	115.00
Gearless 8-foot Loader.....	115.00
International 6-foot Windrow, single cylinder with forecarriage.....	105.00
International Rake-Type 8-foot Loader.....	115.00

EXTRA CASTER WHEEL

An extra caster wheel may be had on special order and at additional cost. It is used as an additional support on rough ground. When the regular wheel is in a dead furrow or depression, the extra wheel keeps the teeth from digging into the ground, thus protecting them.

It is connected through equalizer with the main caster wheel and both are connected through a rod to raising and lowering lever. Equalizer allows the two caster wheels to balance each other on rough ground. Adjustable spring on each caster wheel rod takes up shock.

McCORMICK AND DEERING SUPPORT

For Harvesting Machinery and Disk Harrows

This Tongue Support is simple and light in weight. The springs are made of best $\frac{3}{4}$ -inch spring steel. The coils are $\frac{4}{8}$ inches in diameter and have arms extending 12 inches. The wheel is $11\frac{1}{2}$ inches high, with $2\frac{3}{4}$ -inch tread, thus assuring a light draft. No holes need to be bored in the tongue to fasten this support, thus allowing the tongue all its strength.

Price, \$5.00.

Send for Special Catalogue.

BINDERS

Great Names—McCORMICK and DEERING
Made Famous by World-Wide Service

Four Things
Every Successful
Grain Binder
Must Do:

- 1—Cut.
- 2—Elevate.
- 3—Bind.
- 4—Bunch the Bundles.

McCormick
Improved Binders
Do All of
Them with a
Certainty
That Pleases
Their
Owners.

KNOWN TO
FOUR
GENERATIONS

For nearly a century the name "McCormick" has been known to men who farm along broad, progressive lines as an assurance of highest quality in farming implements.

The McCormick Improved Binder meets a wide range of conditions. The rigid frame combines strength and light weight. The binder is easy to

operate, its simple design making adjustments few and far between. - It saves the grain, whether short or tall, standing or lodged. A McCormick pulls light for horses or tractor.

Send for Special Catalogue and Prices.

McCORMICK AND DEERING CORN BINDERS

A McCormick Corn Binder goes into a field in the morning and cuts up to eight acres by nightfall, leaving the bundles firmly bound and laid off the ground without breaking off the ears. One man with a McCormick Corn Binder will keep two or three men busy shocking.

With the durability and convenience of the McCormick you will be money ahead on the whole job of harvesting your corn, whether it is cut for ensilage or shocked in the field.

Send for Special Catalogue
and Prices.

YOU CAN MAKE MORE MONEY

The farmer who makes the most money nowadays is the one who gets some extra service out of his machine besides that on his own farm. A thresher is one of the best money-making machines you can own, because it is a long-lived machine, requires few repairs and earns a generous profit for its owner.

Send for Special Catalogue of International Thresher.

MOWER SMOOTH SECTION, KNIVES AND GUARDS

Made to Fit the Following Machines.	Size of Section.	Retail Price of Section.	Number of Guard.	Retail Price of Guard.	Number of Knife Head.	Retail Price of Knife Head.	Knives Complete 4 1/2 Ft. 5 Ft.	Pitman Boxes. Number.	Retail Price of Pitman Boxes.
Deering.....	3x3 1/4	\$0.08	D698	\$0.40	D463	\$0.40	\$3.00	\$3.25	D711 \$0.65
Deering.....	3x3 1/4	.08	D698	.40	F123	.45	3.00	3.25	D334 1.00
Deering.....	3x3 1/4	.08	F1 1/2	.40	F174	1.00	3.00	3.25	.....
Deering.....	2 1/2 x 3 1/4	.08	F99 1/2	.40	F74	1.00	3.00	3.25	.....
McCormick.....	3x3 3/8	.08	M462	.40	M139	.40	3.00	3.25	M317 .65
McCormick.....	3x3 3/8	.08	M253	.40	M139	.40	3.00	3.25	.....
Champion.....	3x3 3/8	.08	A881	.40	A870	.40	3.00	3.25	B683 1/2 .30
Champion.....	3x3 3/8	.08	A41	.40	A415	.40	3.00	3.25	.....
Champion.....	3x3 3/8	.08	A42	.40	A415	.40	3.00	3.25	A747 .75
Champion.....	3x3 3/8	.08	A811	.40	A415	.40	3.00	3.25	.....
Osborne.....	3x3 3/8	.08	K514	.40	K774	.40	3.00	3.25	K826 .80
Osborne.....	3x3 High Punch	.08	K280	.40	K284	.40	3.00	3.25	K278 .65
Osborne.....	3x3 Low Punch	.08	K72	.40	K212	.40	3.00	3.25	.....
Johnston.....	3x3 3/4	.08	1811	.40	2211	.40	3.00	3.25	2207 .65
Johnston.....	3x3 3/4	.08	77	.40	124	.40	3.00	3.25	957 1.00
Plano.....	3x3 1/2	.08	J110	.40	J94	.40	3.00	3.25	J100-J99 .65
Millwaukee.....	3x3 1/2	.08	PK5	.40	PG6	.40	3.00	3.25	PJ50 .80
Adrian Buckeye.....	3x3 1/2	.08	3087	.40	557F	.45	3.00	3.25	.....
Akron Buckeye.....	3x3 3/4 Low Punch	.08	775	.40	301	1.00	3.00	3.25	.....
Akron Buckeye.....	3x3 3/4 High Punch	.08	775	.40	301	1.00	3.00	3.25	.....
Dain.....	3x3 3/4	.08	25	.40	Z4	.40	3.00	3.25	Z162 .65

In ordering Knives complete, always give number of old Knife Head; also give number of cutting sections

MCCORMICK-DEERING P & O DISK PLOWS Nos. 4 and 4½

ONE, TWO AND THREE DISK

A Simple Disk Gang Plow—The No. 4 and No. 4½ disk plows are built along simple lines. They are sturdy, efficient, and durable, and as light in draft as any other plows having the same capacity.

Levers—The levers are arranged to enable the plowman easily to change the depth and level the plow from the seat. The raising lever is assisted by a powerful spring which makes it easy to raise the disks. A hand control lever connected with an arm on the front furrow axle enables the plowman to guide the plow to or from the land. The wheel can be set to lead to the land as much as desired.

Chilled Disk Bearings—The disks revolve on chilled bearings with hard oil lubrication. Disks are set to cut: two furrow, 9 inches, three-furrow, 7 inches. They can be set to cut 7, 8, 9 or 10 inches, and on the two-furrow, 11 inches also.

The bearings are adjustable to change the angle of the disks to meet varying conditions. An extra adjustment is provided to give ample clearance when working in trashy ground.

Illust. 51. McCormick-Deering P & O No. 4½ Disk Gang Plow

Price on Application.

P. & O. SULKY AND GANG LIGHT DRAFT PLOWS

DIAMOND SULKY AND GANG PLOWS

Favorites for more than a quarter of a century. Double-bail. Powerful foot lift. Light draft. High lift. Any of the P. & O. types of bottoms can be furnished. Quick detachable shares. Automatic control—rear wheel follows readily when moving straight ahead, but is automatically released and allowed to caster in making a turn. Levers on right hand side of plow. Easy to reach and giving easy access to the seat from the left hand side. Cushion spring on land axle absorbs shock. 15-inch rolling coulter. Combined coulter and jointer on special order. Sulky plow in 10, 12, 14 and 16-inch. Gang plow in 20, 24 and 28-inch. An 18-inch rolling coulter can be furnished for stony soil.

Prices on application.

P. & O. No. 5 LITTLE GENIUS TRACTOR PLOWS

The speed with which the bottoms raise and the angle at which they come out of the ground are such that they leave almost perfectly straight headlands. Note in this connection that, in order to leave straight headlands, a three-bottom plow must travel, in entering or leaving the ground, a distance which is practically three times the distance between the bottoms, measured on a line parallel to the landside.

The lifting device operates on all three wheels, raising the whole plow high from the ground, giving ample clearance for trash. We wish to call particular attention to the lift on the rear wheel. It is absolutely positive. The power is transmitted from the land axle through a flexible link connection to a powerful compound toggle operating in connection with the rear axle. There are no sliding parts to bind or hinder its operation—it responds instantly to the action of the lifting device. When the bottoms are lowered the tension on the rear wheel lift is released, relieving it from the strain while the plow is at work.

One lever operates the front furrow wheel and the other lever the land wheel, both levers being used for regulating the depth and leveling the plow. When the plows are in the ground the levers set ahead and are within easy reach of the tractor, but when the bottoms are raised, the levers swing back and do not interfere with the engine when a turn is being made. The levers and bottoms are counterbalanced by springs, making them very easy to operate.

Send for Special Catalogue and Prices

P. & O. SULKY AND GANG PLOWS

We also carry a full line of P. & O. Sulky and Gang Plows. These plows have all the desirable and well-known features of the Tractor Plow shown above. Can be furnished with any style bottom suitable for all conditions. Send for special catalogue and prices.

MOLINE JR. 5 SULKY PLOW

DESIGN—Of low lift frameless design to supply a durable and thoroughly reliable plow at moderate cost.

REGULAR EQUIPMENT—Furnished with No. 20, 13-inch rolling coulter, No. 21 three-horse evenner, and weed hook. Can be equipped with the following bottoms at regular price—CY, MN, DW, or with chilled, chilled combination, chilled slat, steel slat or breaker with Acme steel moldboard. Can also be equipped with CY-141 and MN-141 left hand bottoms.

ATTACHMENTS OR EXTRA EQUIPMENT

Cast shares can be supplied in place of steel. No. 69 combination jointer and coulter can be supplied in place of No. 20 coulter, or jointer only can be supplied in place of No. 20 coulter, or No. 71 trash coulter can be supplied in place of No. 20 coulter or two-horse evenner in place of three-horse.

MECHANICAL FEATURES

The plain heavy steel beam, 2½ inches thick, with the plow bottom and rear furrow wheel attached is swung on a parallel steel bar frame by means of an adjustable saddle block.

The land and furrow wheel support the frame.

By sliding saddle block in the cross frame, different width of cut can be adjusted for.

Automatic Wheel Control—The front vertical clevis has an arm attached so that when team turns one way or the other a rod is moved which in turn moves the pivoted front furrow wheel so as to follow the team. A square turn can be made to the right or left without the operator raising the bottom. The clevis can be adjusted for any style of hitch.

Land and Front Furrow Wheel Levers—The height and level of the beam may be adjusted by these levers under separate control, either to regulate the depth of plowing or to raise the plow high for transporting.

The cushion spring in the land wheel enables the plow to work in rough ground and yet plow an even furrow.

Wheels—Furrow and land wheels are of steel, 24 inches in diameter, with dust proof boxes. Furrow wheel is mounted on an oblique axle which takes the thrust of bottom and reduces wear on bearing.

Rear wheel is cast, trash free, spokeless, and is set in an oblique position to take thrust of bottom. Has set scraper. It has a wide bearing lubricated by a grease cup.

The rear furrow wheel being so close to the bottom enables the Moline JR-5 to throw bottoms out of dead furrow in cross plowing or to plow a high back furrow the same depth as on the level as the rear wheel rises and falls with the bottom.

Bottom—The bottom is attached by three heavy bolts, through the frog, to the beam. Two of these bolts also

fasten the steel plate rear wheel bracket to the beam. The set of the beam, bottom and rear furrow wheel is such that an excellent quality of work is assured.

SIZES AND WEIGHTS

10-inch.....	350 lbs.	14-inch.....	360 lbs.
12-inch.....	355 lbs.	16-inch.....	365 lbs.

SYRACUSE WOOD BEAM CHILLED PLOWS

We show on this page an illustration of the leading series of the Syracuse Wood Beam Chilled Plows. This plow has chilled wearing parts, has sloping landside and leaves a clean, open furrow. It is excellently adapted for general-purpose work in all kinds of soil. This plow will do satisfactory work in hard ground when other makes fail. It is easily handled, and the style of the beam, clevis, wheel and jointer is such that the adjustment is easy and accurate. The wheel and jointer standards are wrought steel and will never break. Note that there is plenty of room between jointer standards and plow standard, so that there is no choking. Remember that Syracuse Plows are guaranteed to do work equal to any plow on the market.

The 500 and 600 Series

This is a later series of Plows, which have gained great popularity wherever introduced. It includes the numbers which are mentioned below. All the wearing parts are chilled, and they have sloping landside. The shin is one piece, with the share so that you have a new shin whenever you put on a new share. We believe that this series is destined to become the most popular of all.

Prices are for Plows Complete as Shown in Cut.

Right Hand.	Left Hand.	Size,	Furrow.	Weight.	Price
No. 601	No. 501—Large, Two or Three-Horse.....	5½-8	ins. deep, 12-16 ins. wide.....	127 lbs.....	\$30.75
No. 602	No. 502—Medium, Two-Horse.....	5-7	ins. deep, 11-14 ins. wide.....	99 lbs.....	29.75
No. 603	No. 503—Light, Two-Horse.....	4½-6½	ins. deep, 10-12 ins. wide.....	99 lbs.....	27.75

No. 1-78 HEAVY, or CONTRACTOR'S PLOW

Similar to the No. 1-78, except that the wearing parts and beam are heavier, and it has two heavy iron braces running from the curve of the beam to the handles. This is an excellent plow for general grading purposes. It turns the same furrow as the regular No. 1. Send for Prices.

SYRACUSE DRAG SCRAPER

THE CONTRACTOR'S FAVORITE

Prices:

No.	Capacity.	Weight.	Price.	
1	7 cu. ft.	105 lbs	\$10.50	Solid Pressed Steel With Two Runners
2	5 cu. ft.	95 lbs.	10.00	
3	3½ cu. ft.	85 lbs.	9.50	

Measurements:

No.	Length.	Width.	Depth.
1	33 in.	32 in.	11½ in.
2	31 in.	28 in.	10½ in.
3	30 in.	27½ in.	9 in.

ABC "ALCO" WASHER for ELECTRIC or GASOLINE ENGINE POWER

THE ABC ALCO ELECTRIC is the outstanding washer in its field. For more than ten years it has served the American housewife—has lifted her burden of washtime drudgery. And the first ones manufactured are still giving more than satisfactory service, week in and week out.

The feature that has contributed most to its popularity and made it the unquestioned leader, is the unique underneath drive. All mechanism is under the tub, surrounded by the rigid frame of heavy steel, entirely out of range of the person or clothes of the operator. This "safety first" feature appeals instantly to women.

Whether of double or single type, the "Alco Electric" is honestly built throughout of the best materials obtainable. The power motor (50% over-size) is especially designed for this machine. It furnishes ample power to operate both washer and wringer at the same time.

Sturdy and compact, the ABC "Alco Electric" is a complete, smooth, quiet-running washing machine. The tub is built of the finest selected Florida Cypress, much larger, heavier and therefore more lasting than most other makes. The finish is exceptionally attractive—the tub is beautifully varnished and the metal parts are finished in aluminum.

The ABC "Alco Electric" is manufactured and guaranteed by one of the oldest and largest exclusive power washing machine manufacturers in the world. It is produced on a **quantity plus quality** basis which makes the Alco Electric the best "dollar-for-dollar" value in the country.

You will be more than satisfied with your power washer if it is an "Alco Electric." It does its work quickly—an hour or two suffices for the largest family washing. It is economical—it saves clothes and money. And the crowning glory of the ABC "Alco Electric" is that it **washes clean**.

No. 53—ABC "Alco" Electric Single Tub Average Family Size Capacity—6 sheets or equivalent.

Full swinging wringer—Works in any position. Operates on the motor power. Can be run while washer is working, or separately.

Motor—Standard water-proof $\frac{1}{4}$ H.P. motor—any voltage or frequency, complete with 10-foot cord and plug.

Height—From floor to top of tub, 34 inches.

Floor space—

Frame, length 29 inches; width 26 inches. Folding bench when extended for use adds 15 inches to length.

Weight—
Net, 221 lbs.
Shipping weight, 276 pounds.

Price—
\$95.00.

No. 54—ABC "Alco" Twin Electric—Double Tub
For Large or Heavy Washes

Capacity—6 sheets or equivalent in each tub. Total capacity 12 sheets or equivalent.

Both tubs equipped with dolly. Actuated by separate starting levers. Both tubs can be run at same time or either one alone.

Full swinging wringer—Works in any position. Operates on motor power. Can be run while either or both tubs are operating, or separately.

Motor—Standard water-proof $\frac{1}{4}$ H.P. motor. Any voltage or frequency. Complete with 10 foot cord and plug.

Height—From floor to top of tub, 34 inches.

Floor space—Frame, length 43 inches; width 26 inches. Folding bench when extended for use, adds 15 inches to width.

Price—
\$120.

Weight—Net 311 pounds. Shipping weight, 405 pounds.

Gasoline Engine Power Washers

No. 51—ABC "Alco" Power—Single Tub Belt Drive for Gasoline Engine. This washer is of the same capacity and construction as the No. 51E, except that the drive shaft is extended and equipped with flat faced pulley.

Power—Regularly equipped with 12-inch pulley for belt drive. Speed of main drive shaft required, 175 revolutions per minute.

Height—From floor to top of tub, 34 inches.

Floor space—Frame, length 29 inches; width 27 $\frac{1}{2}$ inches. Folding bench when extended for use adds 15 inches to length.

Weight—Net, 187 lbs. Shipping weight, 246 lbs. **Price**—\$65.00.

No. 52—ABC "Alco" Twin Power—Double Tub

Belt Drive for Gasoline Engine

This washer is of the same capacity and construction as the No. 52E, except that there is no motor.

Power—Regularly equipped with 12-inch pulley for belt drive. Speed of main drive shaft required, 175 revolutions per minute.

Height—From floor to top of tub, 34 inches.

Floor space—Frame, length 43 inches; width 27 $\frac{1}{2}$ inches. Folding bench when extended for use adds 15 inches to width.

Weight—Net, 274 pounds. Shipping weight 340 pounds.

Price—\$90.00.

Everybody's Rotary Washing Machine

The Best Thing Yet

Well constructed, of good material. Will wash the most delicate fabric as well as the regular weekly wash. A boon to the housewife. Easy to operate, nothing to get out of order. **Price**.....\$15.00

Electric Welded Wire Hoops, Virginia White Cedar Tub, Roller Bearings.

This is the lightest running and easiest working Washing Machine made. Roller bearings; no friction. Works in both directions. Very simple; nothing to get out of order. Nicely corrugated on sides and bottom. Hoops are galvanized wire and are welded by electricity; these are much stronger than the old-style flat hoops, and CANNOT DROP OFF, being sunk in grooves. Our special price.....\$15.00

Relief Clothes Wringers

No. 330—Small Family—Rolls,
10x1 $\frac{1}{2}$ ins.\$5.50

No. 332—Large Family—Rolls,
12x1 $\frac{1}{2}$ ins. 6.50

No. 330—Rolls, 10 ins., each..... 2.00

No. 332—Rolls, 12 ins., each..... 2.25

CHAMPION STEEL FIELD ROLLERS

In offering our Champion Steam Field Roller we do so believing it to be the best roller of its kind on the market. We call particular attention to the patent pressed steel head, which keeps the earth from clogging in the shells as in an open-head roller; also to the removable chilled bushing, which is bolted fast to the head, and which is a valuable feature, as they can be readily replaced by any one at a trifling expense and saves the trouble and cost of sending the roller to the machine shop when the bearings are worn out. Diameter is 26 inches. Wood frame.

No. 105—Size, 8 feet, 2 sections; weight 600 lbs. Price, \$42.50.
No. 106—Size, 8 feet, 3 sections; weight 630 lbs. Price, \$45.00.

Prices include double trees and neck yoke.

BUCH'S No. 105½ LAND ROLLER

The description of No. 105½ is identically the same as Roller No. 105, excepting that it has a steel frame instead of wood frame.

This roller has our angle steel frame, which makes it an all-steel roller, except the tongue. In this respect it may be said that it is a trifle more durable than the wood frame, as naturally the steel will outlast the wood. There is little choice between them. It is an excellent implement in every respect. Rollers Nos. 102½ and 107½ are of the same construction. Diameters, rolling surface and prices will be furnished on application. Material and workmanship are of the highest grade. With proper care it ought to last a lifetime, as there is nothing to wear out but the wood journals, and these can be replaced at a trifling cost. 8-foot, 2-section, \$42.50; 8-foot, 3-section, \$45.00.

WHY A SOIL PULVERIZER

The I. H. C. Culti-Packer.

The Soil Pulverizer is not recommended to replace any tillage tool which you ordinarily use. It simply finishes what the other seedbed makers begin. Under the old way, a field was plowed, disked and smoothed with a peg-tooth harrow—but you know of many, many times when after those operations were complete the field was far from smooth. There were great lumps of dirt still cluttering up the surface. Hard clods were scattered about, and under the hot sun these became solid and utterly devoid of moisture. It is not the best kind of a seedbed to plant grain in, because the drill furrow openers will not penetrate evenly—some seed is scattered about on the surface to be eaten by the birds and the resulting stand is considerably under normal.

Made in all sizes. 93 inches long, front 15-inch diameter, rear 12-inch diameter.

Send for Special Catalog and Price.

WATER BALLAST LAWN ROLLER

filled with water to any desired weight. It can thus be regulated to suit soft turf, firm lawns or driveway, tennis court, etc. It can be emptied for storing away, making it light and easy to handle. The drum is high carbon steel with all seams electric welded. Edges are rounded back to prevent cutting of lawns, courts, etc.

LADDERS

AUTOMATIC EXTENSION LADDERS

Made of white spruce pine sides, hickory rounds, automatic hooks operated by the rope, rigid and durable. Allow 2 feet for lap on ladders 32 feet and under, and 3 feet on ladders over 32 feet.

20 to 30 ft. 42c per ft.
32 to 40 ft. 45c per ft.

SINGLE LADDERS

Of very best seasoned wood.

12 to 18 ft. 36c per ft.
Over 18 ft. 40c per ft.

STEP LADDERS

Best material, well braced, with bucket rest.

4 ft. to 12 ft. 40c per ft.

Prices Water Ballast Rollers

No	Dia. in.	Length in.	Empty	Weight		Price List
				Filled with Water	Filled with Sand	
601	14	24	60	250	400	\$17.00
602	18	24	75	330	475	20.00
603	24	24	100	440	630	23.00
604	24	32	115	590	850	26.00

THE COLDWELL LAWN MOWERS

COLDWELL IMPERIAL HIGH-WHEEL LAWN MOWER

This machine is without doubt the best non-ball-bearing Lawn Mower manufactured. Ten-inch drive wheel, rigid of frame, steel blades, thorough in material and workmanship in every respect.

16-inch.....\$20.00 18-inch.....\$22.00
20-inch.....\$24.00

INTERSTATE

This is a good Mower, at a medium price, for all ordinary work. It is made on thoroughly practical lines and is so constructed that it cannot be easily disarranged. The drive wheels are 9 inches in diameter, with the gears raised up from the ground, fully protected from the dirt and cut grass. The revolving cutter is 6 inches in diameter and has 4 crucible steel blades highly tempered and ground true their entire length. It is carried on our patented adjustable ball bearings.

14-inch.....\$12.00 16-inch.....\$13.00
18-inch.....\$14.00

THE JEWEL

The Jewel is a first class, low wheel, machine equipped with adjustable bronze bearings. A very light weight, easy running mower.

12-inch.....\$7.50 14-inch.....\$8.00
16-inch.....\$8.50

THE BANNER

The best low priced lawn mower on the market. Material, workmanship and finish equal to many high priced machines. A light, durable mower guaranteed to give excellent satisfaction and priced to meet the demand for a cheap lawn mower for small gardens.

12-inch.....\$6.75 14-inch.....\$7.50 16-inch.....\$8.25

COLDWELL'S "REGAL" LAWN MOWER

Coldwell's "Regal" is the best ball bearing lawn mower on the market, the principal feature being that the ball-bearings are in the drive wheels instead of in the revolving cutter journals, these latter being supplied with adjustable bronze bushings. By having ball-bearings in the drive wheels, the weight of the lawn mower is carried thereon, and when the bearings are adjusted, the drive wheels are brought back to their original centers; this prevents crowding of the gears and never allows the drive wheels to get loose.

These lawn mowers are equipped with five blades, our patent reversible channel-shaped bottom knife, triple-pawl indestructible ratchets in both wheels and the simplest adjustment of knives ever made. The gears are fine cut, insuring quietness of running, while the large diameter drive wheels insure lightness of draft. The handle adjustment is such that it can be readily adapted for mowing terraces; they can also be supplied with grass catchers when desired. It is fully guaranteed to give entire satisfaction and to have double the life of any other lawn mower on the market, as all its bearings are cheaply renewable, being fastened to and not a part of the side frames.

PRICES REGAL MOWERS

16 inch.....\$23.00 18-inch.....\$25.00

COLDWELL'S IMPROVED HORSE LAWN MOWER

Coldwell's Improved Horse Lawn Mower is conceded to be superior to any other mower on the market. This is the opinion of experts, both mechanics and men who have had long experience in caring for lawns. Some of its points of merit are: Light draft, large driving rollers, non-clogging castor wheels; can be thrown out of gear without driver leaving seat; both sides of machine can be adjusted at once; device for instantly raising all knives from the ground when passing over stones or other obstructions, or when drawing over a roadway; side-draft attachment to prevent horse from walking on grass before it is cut.

Coldwell Mowers wear well. The material is the best. Coldwell Mowers were adopted several years ago by the Baltimore City parks and have been used since then in preference to other makes. They are also used by the leading country clubs and on the principle lawns around Baltimore. Guaranteed to be the best.

35-inch, complete with seat and shafts.....\$160.00

30-inch, complete with seat and shafts.....\$140.00

Horse and Hand Lawn Mowers Sharpened and Repaired in a Thorough and Satisfactory Manner

REED MOTOR LAWN MOWER AND ROLLERS

Special Standard

For mowing lawns in the modern way, with gasoline power, and with the advantage of light rolling when mowing.

Simple construction, ease of operation and full flexibility are secured through exclusive and patented features.

The gasoline motor drives the whole machine, the operator has only to use the hand lever to connect up the power, and guide the outfit by simply swinging with the handles to direct its course.

Special cutting units for power mowers are connected to trail from the front end of the main frame, and are free to conform to rough and uneven lawns as well as all turning movements as the machine is guided or steered. The outfit mows when turning just the same as going straight ahead.

Differential drive is used in transmitting the power to the corrugated ground rollers, giving plenty of ground traction and without injury to the lawn.

The freely trailing connection to the cutting unit, and the differential drive gives the full flexibility and makes the machine steer and guide so easily.

The light rolling presses the roots of the grass into place in the spring, and keeps the lawns nice and smooth, as will be much appreciated later in the season when the ground becomes dry and harder. The weight of about 20 pounds per lineal inch does not pack too hard or injure the lawn. Expert lawn builders place great importance on this light rolling feature. A caster can be substituted for the cutting unit and the outfit used

as roller only.

Motors used are high grade, four cycle type, easy to start, smooth running with plenty of surplus power. Speed is controlled with automatic governors.

The cutting units are Crestlawn high speed, special for power outfits. They have Timken tapered roller bearings for the reel shaft, with automatic adjustment to take up the wear, so that the reel is always held positively in position, it is only necessary to adjust the cutter bar to proper contact with the revolving blades. The whole cutting unit is independent and can be quickly removed for sharpening or replacing.

The light rolling not only presses the roots of the grass into place in the Spring, but keeps the lawn level and smooth. The weight of about 20 pounds per lineal inch on the ground rollers does not pack too hard or injure the lawn, later when the ground is dry.

Expert lawn builders place great importance on this rolling feature for securing the finest results. The great difference is appreciated when walking over a lawn that has been nicely rolled all season, when the ground becomes solid, or hard.

All cutters on the **REED Mowers** being driven by friction or ground traction, are in no danger of being broken when obstacles are met suddenly. They simply stop until the obstruction is removed.

REED Motor Lawn Mowers are furnished in Special Standard, mowing 30 inches wide, which is recommended for general use, Regular Standard 30 inch with smaller engine, or Regular Standard 22 inch, are used for level and smaller lawns. For very large lawns ask for information on the Triplex, cutting 87 inches wide.

With the 30 inch **REED Motor Lawn Mower**, four to six acres can be cut in one day, or as much as five hand mowers. The 22 inch machine will mow about three acres and the Triplex about 15 acres per day.

COLDWELL MOTOR LAWN MOWER

The **Coldwell Motor Mower** is the evolution of over fifty years' experience in manufacturing lawn mowers of quality, durability and efficiency. It is a practical and economical machine for any place having one or more acres of lawn and is indispensable for large estates, Parks and public grounds. Due to its simplicity it can be operated and cared for by the average gardener's helper or laborer without any special knowledge of motors. Will cut from six to eight acres of lawn per day, saving many times its cost in labor. It cuts long tough grass that will stall other mowers. It will be in service when others are worn out and discarded.

This walk type motor mower has an abundance of reserve power for cutting on steep grades. In all **Coldwell Motor Mowers** the roller is the same width as the cutting knives, which insures a proper and uniform rolling of the entire lawn with each cutting. This rolling smooths the surface, conserves the moisture and is of great benefit in the control and elimination of weeds and lawn pests. This machine can be used as a motor roller alone when desired.

Another distinctive feature found in **Coldwell Motor Mowers** is the simple lever control and transmission of power directly to the revolving cutters as well as to the drive roller.

The motor is a 2½ H. P. Fuller & Johnson, single cylinder, hopper cooled, four cycle engine, equipped with dual ignition. A patent lifting arrangement allows the revolving cutter to be raised when passing over obstacles or when crossing roads.

Forced Feed Lubrication Throughout—We furnish a standard "Zerk" automatic grease gun with each mower. This is a simple, clean and certain means of using proper lubrication to all bearings, thereby increasing the efficiency and lifetime of the mower.

Coldwell Walk Type Mowers combine efficiency and simplicity to the highest degree. They represent the result of twenty-six years' experience of engineers who have specialized in motor mower construction and design. These mowers have been in use for many years and are used exclusively on a large number of estates and parks. Fully guaranteed.

A riding sulky can be supplied for above machine at slight additional cost.

MODEL "H", 30 inches

MODEL "G," 35 inches

Coldwell Lawn Mower

Write for Special Prices and Catalogue on the Above.

No. 170 Single-Row Fertilizer Distributor.

"IRON AGE" AND SPANGLER SINGLE-ROW FERTILIZER DISTRIBUTORS

Stirring point in the rear mixes fertilizer with the soil.

Price.....\$35.00

This is a most convenient and satisfactory machine to distribute fertilizer in an open furrow after the ground is prepared for planting potatoes, tobacco, corn, peas, beans, etc. This machine has practically the same force feed as used on the well-known "Iron Age" Potato Planter where it has been successfully used for a great many years. The mechanism of this fertilizer distributor is exceedingly simple, yet positive, in its action.

The revolving disc and feed wheels are so arranged that they keep the fertilizer in a loose, evenly and easily handle condition. The galvanized hopper holds a full sack, 167 pounds. A gate regulates the amount of fertilizer sown, and saves waste when turning at end of rows. This machine has two feed wheels and 3 different sprocket wheels to regulate the amount of fertilizer sown. Will sow fine or coarse fertilizer 400 to 3,000 pounds to the acre.

Price.....\$35.00

FARMER'S FRIEND PEA AND BEAN DRILL

This simple, compact and splendid working tool has for many years held its own against all competitors. Each year it gains a host of new friends and becomes more popular. The runner and covering wheel are distinguishing features of this machine. These make it practically $\frac{1}{4}$ of a 2-horse planter, the runner cutting a furrow, the wheel closing it and packing the earth over 8, 12, 16 and 20 inches apart. Plates for ensilage and for any kind of seed can be obtained. Plants corn, peas and beans. With special plates, which we can furnish, it will plant peanuts, rice, broom corn, sorghum, popcorn, carrot, beet, turnip, millet, onion seed, etc.

Price With Lead Wheel.....\$25.00

BINDER TWINE

It is impossible to give the price of Binder Twine in advance, as the price is subject to market changes. Write for prices.

CRYSTAL METAL FARM BELLS

These Bells are covered with a rich gold bronze, black varnished hangings. No. 1, 40 lbs., \$4.50; No. 2, 50 lbs., \$6.00; No. 3, 75 lbs., \$8.00; No. 4, 100 lbs., \$11.00.

INTERNATIONAL KNIFE GRINDER

There is nothing harder on the mower or on the team than dull knives. The International Knife Grinder can be clamped to the rim of the wheel, where it is easy to use. The knife sections can all be ground with a perfectly clean beveled edge, all of them exactly alike. This grinder is equipped with a fine-tempered steel regulator, which adjusts the pressure so that all of the sections can be ground evenly and regularly. The handle runs parallel to the knife, which is always in plain sight while being ground. Thus there is no danger of cutting the operator's hands. The grinder can also be fastened to a bench. A special stone for grinding tools or gumming saws will be furnished on special order.

Price.....\$6.00

"NEW MODEL" SEED DRILL

We have exact regulation of seed discharge by using an eccentric index or indicator, which adjusts the slide for seed opening exactly where you want it.

Packed weight, 50 pounds.

Price, \$12.50.

A Seed Drill with 30 years' success behind it.

Exact adjustment for flow of seed. Marked adjusted either side. Covering wheel attached so you can roll soil high and heavy.

HAND POWER HORSE CLIPPING AND SHEEP SHEARING MACHINES

Progressive, Up-to-Date Farmers and
Horse Owners Everywhere Recognize
the Advantage of Clipping Horses

Stewart No. 1 Enclosed Type Ball- Bearing Clipping Machine (Latest Model)

Has new style rigid base; tubular up-right. All gears are cut from solid metal and are enclosed in a dust-proof metal box. They run constantly in a bath of oil, which reduces friction to a minimum. All wearing parts are hardened tool steel. New type, light, easy running, flexible

shaft, 6 feet long. Complete, with one set of Stewart's 1-nut tension knives. Weight, boxed, 36 pounds.

Price.....\$12.75

No. 2 Chicago Clipping Machine (Stewart Patent)

Has positive power; rigid base; fine strong

crank handle; 6½-foot flexible steel shaft. All gears are cut from solid metal and wearing parts all tool steel hardened. Can be turned with either right or left hand. Complete, with one set of Stewart's 1-nut tension knives in case. Weight boxed 56 pounds. Price each.....\$17.50

PARTS OF HANDLE AND KNIFE USED ON ALL

No.		Net Weight	List Price.
C-1	Stewart Horse Clipper Handle and Knife, complete.....	20 oz.	\$4.50
C-2	Pair Stewart Horse Clipper Blades, top and bottom.....	8 oz.	3.00
C-3	Horse Clipper Handle, complete, without knives.....	10 oz.	1.75
90	Top Plate.....	3 oz.	1.25
91	Tension Spring of Handle.....	1-16 oz.	.05
92	Tension Bolt of Handle.....	1-6 oz.	.05
93	Eccentric Roll of Handle.....	1-15 oz.	.10
94	Tension Nut of Handle.....	1-6 oz.	.05
95	Pin and Shaft of Handle.....	2½ oz.	.35
97	Shank of Handle.....	3½ oz.	.40
98	Front Part of Handle.....	4 oz.	.50
99	Bottom Plate of Handle.....	5 oz.	1.75

SHEEP SHEERING ATTACHMENT

For Use on Our No. 1 or No. 2 Horse Clipping Machines

This attachment consists of complete No. 5 Stewart Shear Head, 4 sets of shearing knives, the solid core, universal jointed shaft and cogs, as shown here. Weight, boxed, 15 pounds. Price of complete attachment, as described \$12.50.

BUCH'S RIVETLESS STEEL TROUGHS

Made of 12 gauge Black Tank Steel—Cast Iron Heads—No rivets to rust out—No solder joints to cause leaks—Freezing will not crack or burst it—Edges fitted with steel tubing—No sharp edges to injure stock.

Following sizes carried. Special sizes made to order:

No.	Length Feet.	Width at Top Inches.	Depth Inch.	Capacity Gals.	Weight Lbs.	Price
58	5	14	8	20	65	8.00
59	6	14	8	24	76	9.75
60	8	14		32	93	11.85
61	10	14	8	40	119	14.70
69	5	16	9	30	70	9.25
70	6	16	9	36	85	11.25
71	8	16	9	48	111	14.40
72	10	16	9	60	127	17.00
80	5	18	10	40	91	10.60
81	6	18	10	48	102	12.50
82	8	18	10	64	122	15.90
83	10	18	10	80	141	19.90
84	12	18	10	96	168	24.00

No seams for food to lodge in, and, being easy to clean, there is no likelihood of foul, unhealthy odors. There is no danger of bursting from freezing, and the price is within the reach of all. These Troughs are very popular with all who use them. The width of these Hog Troughs at the top is 12 inches and at the bottom 2 inches; the depth is 6 inches, and the capacity per foot is 2 gallons. They are made in lengths as follows: 2, 2½, 3 and 3½ feet, and so on, every half foot, up to 8 feet. Price, per foot, 90c.

CAST IRON HOG TROUGHS

AMERICAN FARM FENCE

Made of large, strong, high-grade steel wire, heavily galvanized. Amply provides for expansion and contraction. Is practically everlasting. Never goes wrong, no matter how great a strain is put upon it. Does not mutilate nor injure stock.

TURNS CATTLE, HORSES, HOGS AND PIGS

Every Rod Guaranteed by us and guaranteed by the manufacturers. Call and see it. We can show you how it will save you money and fence your fields so they will stay fenced.

MATERIAL

Hard, Stiff Steel—The development of American Fence, the years of experiment and hundreds of thousands of dollars that have been put into the work of perfecting machinery and producing the grade of special steel that makes American Fence what it is today would be a long story. Suffice it to state that about one year ago we succeeded in producing a composition in steel that for

fence-making is simply par excellence. By the use of this special steel the value of American Fence to the user is increased many fold, and we firmly believe it to be as near absolute perfection as can be attained, or the necessities of the case demand. Wire drawn from this steel while hard is not brittle. It is stiff and springy, but pliable enough to be nicely spliced. There is such a distinction as live steel and dead steel. Every wire in American Fence as now made is a live wire, doing business all the time, always ready for emergencies and absolutely reliable.

In the above design the No. 9 wire is used for top and bottom bars, No. 11 wire for intermediate bars and stays, excepting No. 2158 and No. 2053, which is top and bottom No. 11 and intermediate bars No. 14. **Should you desire any other style Fence, write for booklet.**

Design.	Bars.	Height.	Stays.	Price per Rod.
726	7	26-inch	6-inch	\$0.50
726	7	26-inch	12-inch	.38
635	6	35-inch	12-inch	.36
845	8	45-inch	12-inch	.47

Design.	Bars.	Height.	Stays.	Price per Rod.
949	9	49-inch	12-inch	\$0.55
1948	19	48-inch	6-inch	.72
2158	21	58-inch	6-inch	.75

CYCLONE ORNAMENTAL GALVANIZED LAWN FENCE

The Style F Cyclone Lawn Fence is considered by us the most attractive and most practical pattern made by the factory, and we catalogue this style exclusively. The manufacturers make a number of other styles special circulars of which we will be pleased to send you on application. The characteristic features of Cyclone Fence are the careful uniformity of the weaving, the full-gauge wires which are used, the extra-deep crimping of picket wires, which adds greatly to the beauty and strength of fence, the secure manner in which these pickets are locked in the double cable wires and the general strength of the whole fabric. The wire is carefully selected, and all of these features count for the extra-lasting qualities of Cyclone Fence. With every full roll of Cyclone Fence a fence stretcher is furnished gratis. The lawn, the yard and the home are given the appearance of comfort and attractiveness by the use of a first-class wire fence, and from a sanitary and healthful standpoint, a wire fence is far more desirable than the old-style board fence.

DIAMOND MESH POULTRY NETTING

The wire we offer is No. 20 Double-Twist 2-inch Mesh, thoroughly galvanized. Sold in bales of 150 running feet.

(Galv. After Weaving.)	No.	Ins. Wide.	Sq. Feet.	List Price, Per Bale.	Retail Price, Per Bale.
20	12	150		\$ 2.14	\$1.35
20	18	225		3.08	1.90
20	24	300		3.92	2.45
20	36	450		5.35	3.30
20	48	600		7.13	4.40
20	60	750		8.91	5.50
20	72	900		10.69	6.60

Price, 1½¢ per square foot in less than bale lots. Staples for fastening, 10¢ per pound.

One-Inch Mesh.

(Galv. After Weaving.)	No.	Ins. Wide.	Sq. Feet.	List Price, Per Bale.	Retail Price, Per Bale.
20	12	150		\$ 4.95	\$ 3.05
20	18	225		7.12	4.40
20	24	300		9.08	5.60
20	36	450		12.38	7.65
20	48	600		16.50	10.20

THE LOTT STRETCHER

The simplest cheapest and most efficient tool ever gotten out for stretching fence. It is strong enough to stretch from 10 rods to a mile of fence at a time. Any body can operate it.

POST-HOLE DIGGER—(See Index.)
TOWNSEND WIRE STRETCHER—\$1.50.

WIRE STAPLES—Broad and narrow.
BARB AND RIBBON WIRE—Price on application.

AMERICAN WALK GATE

3 feet by 50 inches, \$4.00.
3 feet by 58 inches, \$4.25.
3½ feet by 50 inches, \$4.50.
3½ feet by 58 inches, \$4.75.

AMERICAN SINGLE DRIVE GATE

10 feet by 48 inches..... \$9.00
12 feet by 48 inches..... 10.25
14 feet by 48 inches..... 11.25

Prices on Other Size Walk, Single-Drive Gates Furnished on Application

McCORMICK-DEERING ENSILAGE CUTTERS

Five Sizes, all with Steel Flywheels

Built Throughout of High-Grade Steel

McCormick-Deering ensilage cutters are made to properly cut all kinds of ensilage. They will handle clover, alfalfa, peas, beans, sorghum, kafir corn, sunflowers, milo maize, fetereta, corn, and other crops. The proper design and steel construction throughout enables them to do the hardest kind of cutting with the minimum of power.

McCormick-Deering ensilage cutters have built up an enviable reputation during the past quarter of a century because of their unusual service.

These machines measure up in every way—in construction, in durability, in performance, in length of service, etc., with the well-known line of McCormick and Deering harvesting machines.

The main frames on Types A, B and E are made of heavy channel steel; they are trussed and braced so that there is practically no vibration even when doing the hardest kind of work.

All McCormick-Deering ensilage cutters comply with the strictest safety laws now found in many states. The gearing and working parts are completely enclosed.

Knife on Steel Flywheel—All McCormick-Deering ensilage cutters are equipped with heavy steel flywheels. They are heavy enough to give the desired momentum. The construction is such that there is a continuous throwing and blowing of the ensilage straight up the blower pipe.

The cutting and elevating is done in one operation. As the ensilage is never allowed to stop from the time it is cut until delivered into the silo there is a saving of power. The "Knife-on-flywheel" construction eliminates extra blower and conveying devices which are found on some cutters.

High and Wide Feed Throat—The paddle roll has been a distinctive feature on McCormick-Deering ensilage cutters since 1912. These cutters were the first on the market to be equipped with the paddle roll. The paddle roll forces the uncut fodder into the feed rolls. It makes feeding easy.

All sizes can be used also for shredding. The capacity of the machines is about the same as for cutting ensilage. Shredded fodder is convenient to handle, easy to store and more readily eaten by the stock.

These ensilage cutters have many other valuable features which please their owners. These features are described in the McCormick-Deering ensilage cutter catalogue. Ask or write for one.

SPECIFICATIONS

	Length of Cuts	Rev. per Min.	Power Kerosene	*Cap. Tons per Hr.
Type A	$\frac{3}{8}$ "- $\frac{1}{2}$ " $\frac{3}{4}$ "-1" (Two knives) $\frac{3}{8}$ "- $\frac{1}{2}$ "- $\frac{3}{4}$ "-1" (Four knives) $\frac{1}{4}$ "- $\frac{1}{2}$ "- $\frac{3}{4}$ "-1" Same as Type F Two knives only	500-700	20-25 hp.	16-25
Type B		700-800	15-20 hp.	12-16
Type E		800-900	10-15 hp.	10-12
Type F		800-1000	4-6 hp.	3-6
Type G		800-900	8-10 hp.	8-10

Knife on Boiler-Plate Steel Flywheel

*Cutting or shredding. Based on $\frac{1}{2}$ -inch cut.

Write for Prices

MYERS HAND PUMPS

Myers Victory. Power Force Head, underground Three Way pump, with 6, 8 and 10 inch stroke.

Built very Strong and Durable. Plungers can be withdrawn through base of pump and leathers renewed without disturbing pipe line or going below platform. Adapted for any depth wells.

Myers Single Acting Force and Lift Cog Gear Pumps. The advantage of this style handle is that it allows the piston to move in a direct line without swaying from side to side, as is necessary with the ordinary handle. The advantage of the cog leverage is that it reduces the power at the handle $33\frac{1}{3}\%$, and makes pumping easy in deep wells.

Complete line of House and Pitcher pumps, with brass and iron cylinders.

No. 432 Myers Self-Lubricating Working Head, a novel device in which all the gears and moving parts are enclosed in a one-piece casting, forming the Oil-Reservoir. This construction not only insures perfect lubrication, but protects the moving parts from dust and dirt which not only increases the life of the Working-Head, but also guarantees perfect safety. The pump head is a malleable head tapped for 2 inch pipe and bushed for $1\frac{1}{2}$ " and $1\frac{1}{4}$ " pipe.

Let us know what your requirements are, and we will gladly quote you on the proper pump for your requirements.

Special pump catalogue furnished on request.

KANAWHA PUMPS FITTED FOR WELLS

Depth of Well	No. 2, 6x6 House Pump.	No. 5, 7x7 Farm Pump.	No. 7, 8x8 Stock Pump.
8 feet	\$13.20	\$15.80	\$22.80
9 feet	13.60	16.20	23.20
10 feet	14.00	16.60	23.60
11 feet	14.40	17.00	24.00
12 feet	14.80	17.40	24.40
13 feet	15.20	17.80	24.80
14 feet	15.60	18.20	25.20
15 feet	16.00	18.60	25.60
16 feet	16.40	19.00	26.00
17 feet	16.80	19.40	26.40
18 feet	17.20	19.80	26.80
19 feet	17.60	20.20	27.20
20 feet	18.00	20.60	27.60
21 feet	19.20	22.00	30.00
22 feet	19.60	22.40	30.40
23 feet	20.00	22.80	30.80
24 feet	20.40	23.20	31.20
25 feet	20.80	23.60	31.60
26 feet	22.00	25.00	34.00
27 feet	22.40	25.40	34.40
28 feet	22.80	25.80	34.80
29 feet	23.20	26.20	35.20
30 feet	23.60	26.60	35.60

Depth of Well.	No. 4, 7x7 Pump Head.	No. 6, 6x6 Pump Head.
31 feet	\$32.50	\$28.50
32 feet	32.90	28.90
33 feet	33.30	29.30
34 feet	36.10	32.10
35 feet	36.50	32.50
36 feet	36.90	32.90
37 feet	39.70	35.70
38 feet	40.10	36.10
39 feet	40.50	36.50
40 feet	40.90	36.90
41 feet	44.90	40.90
42 feet	45.30	41.30
43 feet	45.70	41.70
44 feet	46.10	42.10
45 feet	48.90	44.90
46 feet	49.30	45.30
47 feet	49.70	45.70
48 feet	51.30	47.30
49 feet	51.70	47.70
50 feet	52.10	48.10

Unlined pumps are not recommended.

For pumps fitted with Closed Bracket Handles, add \$2.50.

These Prices Apply to Wood Pumps.

THE MYERS AUTOMATIC, SELF OILING WATER SYSTEMS

No. 600AT. For use in Cisterns or Shallow Wells up to 22 feet in Depth. Designed for operation from any kind of City Current or from Farm Lighting and Power Systems. Operation is automatically controlled by use of the Automatic Controller. Cost of operation very small. All working parts are automatically lubricated by oil splash from the crank case, which eliminates frequent useage of a dirty oil can. Floor space 27" x 29" x 51" high.

Galvanized Tank. Capacity 180 gal. per hour.

No. 1655AM. Myers Deep Well Fresh Water System. Operation same as No. 622AM System, except for wells 24 feet or more in depth. Capacity depends on size of cylinder used, from 300 to 450 gallons per hour. Floor space, length 46 in., width 16 in., height 24 in.

No. 622AM. Myers Direct Water System. Fresh Water Direct from the Well. No Storage Tank Needed. Why use a Toy Outfit and Stale Water when you can have fresh water direct from the well or cistern.

Complete unit, the only thing necessary in the installation is to connect the discharge to the house line. The ordinary leakage of a defective faucet does not start the pump on a Myers System. Capacity 450 gallons per hour. Floor space: Width 15 in., length 50 in. height 25 in. For wells up to 24 feet in depth.

Illustration shows an interior view of any home with a complete Water System.

The water supply is furnished in this installation by the **Myers Direct Water System (No Storage Tank Needed)**. Why not equip your Suburban and Farm Home with a supply of **Fresh Running Water**, and save the drudgery of carrying water.

We carry a complete line of **Water Systems, Hand and Power Pumps** for all purposes.

Tell us what your requirements for water are, and allow us to quote you on the proper **Water System or Pump** for your requirements. Special pump catalogue furnished on request.

THE MYERS JUNIOR DIRECT WATER SYSTEM

Complete Unit. Self Oiling. No Storage Tanks. Fresh Water Direct from the Well. Pumps direct to the Faucets. Two sizes, 200 gallon per hour and 300 gallon per hour

Why use stale water when you can have fresh water direct from the well? Has sufficient capacity to supply a Gem Nozzle for lawn sprinkling. Motor driven—automatically controlled—economical—efficient.

Designed for operation from any kind of city current or from Farm Lighting and Power Systems.

FLOOR SPACE—Width 22 inches. Length 27 inches. Height 27 inches.

For shallow wells up to 24 feet in depth.

The ordinary leakage of a defective faucet does not start the pump on a **Myers Direct Water System** as there is a gallon of water in reserve to take care of minor defects in the plumbing.

The **Myers Junior Direct Water System**—a complete unit. The only thing necessary for installation is to connect the discharge to the house line.

The outfit is composed of a Self Oiling Pump mounted complete with a **REPULSION-INDUCTION TYPE MOTOR**, Pressure Gage and Electric Switch. The air chamber on the pipe line is of sufficient size to properly cushion the stream and at the same time not to any unnecessary surplus water, as is the case of Storage Tanks.

It is never necessary to draw more than 1 gallon of water until the pump starts, after which it pumps fresh water direct from the supply to the faucets. It avoids the expense and space required by a large storage tank and all the disadvantages connected therewith.

OPERATION—The **Myers Direct Water System** is of sufficient capacity to pump directly against faucets supplying an ordinary residence. The opening of any faucet starts the pump. The expense of the current in operating an outfit of this class is no greater than is required for operating pumps of one-half the capacity when connected with large storage tanks as they are obliged to work under pressure of from 40 to 50 pounds, whereas the **Myers Direct Water System** works under pressure of 10 to 30 pounds only.

Prices on Application.

CYLINDER TYPE HAND CUTTERS

No. 11¼—"ONE KNIFE"

Ratchet feeding device, which can be adjusted to cut from ¼ inch to 2 inches; has wooden side springs for feeding rolls, large heavy flywheel, long-reach crank, babbitted bearings, hardwood frame, securely bolted. A strong, easily operated box for cutting hay and fodder; has one knife, 11¼ inches long, with a chilled shear plate, ground to an edge.

Price, \$20.50.

No. 11½—"TWO KNIFE"

The feeding rolls on the cutter are operated by means of cog wheels and sprockets. The feed is constant and uniform, and the cutter has large capacity. The feed rolls are equipped with coil tension springs; the cutter has large heavy flywheel, large crank, chilled shearbar and hardwood frame. Length of cut, ¼ inch, ½ inch and 1 inch. Special gears for cutting ⅛ inch can be furnished on order.

Price, \$26.50.

MEYERS PUMP JACKS

Fig. 1635 represent the Myers Universal Pump Jack, designed to be used in connection with any ordinary windmill head pump without disarranging the pump or pipes in any manner. It is mounted on a substantial circular base which surround the pump stand, and is bolted securely to the platform, and also clamped to the pump stand, making a most substantial job. We believe this to be a more practical device than the ordinary cheap jack now in use, which is bolted direct to the body of the pump stand only.

The Universal Jack is fitted with steel shafts and our regular Bulldozer machine cut gear wheel and pinion. The connecting arms are hard steel in one continuous piece with lifting strain against edge of steel, which greatly increases the strength. The wrist pins are turned steel, held in position by heavy bolts. The pulleys are 12 inches in diameter.

We offer the Universal Pump Jack to the trade as being the strongest and most complete device of its kind. Price..... \$16.00

Fig. 2029 illustrate the Myers Self-Lubricating Pump Jack, engine driven, a novel device in which all gears and moving parts are enclosed in a one-piece casting, forming the Oil Reservoir. 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. Furthermore, it guarantees perfect safety.

CONSTRUCTION—Gear and Pinion are machine cut and move in oil. The Gear is fitted with an eccentric cast integral which operates a walking beam hinged at one end to the main frame or base. The revolving of eccentric moves the forward end of walking beam vertically giving a 6-inch stroke to the pump piston. Can be used in connection with any make of Pump Stand. Has Angle Steel Arms, making as a whole the most durable Pump Jack on the market. Price..... \$19.00

The Myers Master Double Gear Pump Jack, as represented by Fig. 2001, is the latest production, especially designed for use with windmill pumps for deep well work. It is made extra wide, measuring 13 inches between the gear wheels, which adapts it for use with 3-way pumps. It has double gears and pinions.

The Gears and Pinions are 1½ inch face, machine cut.

The Wrist Pins are 1 inch in diameter, hard steel, machine smoothed, screwed into the gear wheel, and are secured in addition by a lock nut.

The Shafts are 1½ inch drawn steel securely keyed to the gears.

The Pulleys, 12 inches x 3 inches, are located in the center of the jack, providing for a center pull, thus doing away with all side strain as in other style jacks.

The Frame is made in two separate pieces, held together with ¾ inch steel rods.

The Side Arms are angle steel bars, adjustable to any length stroke or height of pump.

The Crosshead is extra strong, fitted with a ball and socket joint to attach the pump rod. This socket joint prevents binding and removes all unnecessary strain and friction on the piston rod. The socket joint also permits the piston rod to pass through at any angle, or pump to set at any angle.

The Myers Master Double Gear Pump Jack is designed to meet the demand for an extra strong jack where great strength and wearing qualities are desired. Price... \$19.00.

UNIVERSAL BALL & SOCKET JOINT

2029

2001

CENTURY ELECTRIC MOTORS

Since the distribution of electric current has become general through the suburban and farming districts, many people are now operating their water systems and various machinery with electricity.

They find this means economical and very convenient.

POLYPHASE

TYPE "SC" SQUIRREL CAGE INDUCTION MOTORS

Type "SC" motor squirrel cage construction consists of high conductivity copper bars brazed into formed U shape cross section rolled copper end rings, with a material that will not melt under the most severe operating conditions. The pyramidal style of field winding is employed (2 pole excepted), which gives generally better characteristics and ventilation. The temperature rise is well within 400 Centigrade under continuous full load operation.

The bearings are machined from phosphor bronze castings, with machine cut figure 8 oil grooves, and provided with brass oil rings.

The general design of frame, end brackets, etc., is such as to permit of free circulation of air, at the same time protecting the winding from contact with foreign bodies. Definite provision is made for excluding dust from the oil wells.

Starting current in no case exceeds the N. E. L. A. and Electric Power Club starting suggestion.

Sheet Steel baked Enamel finish Ventilating Fawn.

Type "SC" Squirrel Cage Polyphase Motors are built for all standard speeds and voltages, under the same rigid specifications covering workmanship, test, performance, etc., as are used in the production of other Century apparatus.

Write for Prices

Motor Prices on Application

N. B.—Specify current used. If alternating current give phase frequency and voltage. If direct current give voltage.

Best by Every Test

THE MYERS SELF-OILING POWER SPRAY RIG

The Automatic Pressure Governor insures safety. Secures uniform pressure and eliminates unnecessary wear. Relief valves not required.

The Myers Self-Oiling Power Spray Rigs are fitted with cypress tanks from 100 gallons to 300 gallons capacity, Rotary Agitator, and ALL STEEL SHORT TURN TRUCK. It can be either belt driven, chain driven or direct geared. Pressure from 250 pounds to 300 pounds recommended. The rear axle is made of 1½-inch round steel with drop center, circulating under side of the Spray Tank, and is attached to the main sills by heavy ribbed cast brackets, making the most rigid form of construction. The Front Axle is made of 4-inch channels trussed together and thoroughly braced.

The frame is made of 4-inch channel steel with heavy steel cross members. Hot riveted.

The Pump is the Myers Self-Oiling with Myers Pressure Regulator and Unloading Valve. This is an ideal Power Spray Rig which we highly recommend for those wishing a Power Spray.

Prices furnished upon application.

INVINCIBLE WATER SUPPLY OUTFIT WITH MYERS POWER PUMP AND GASOLINE ENGINE

The use of pressure tanks instead of elevated tanks for supplying water under pressure is becoming more and more universal each year. The pressure tank is nothing more than a heavy, carefully made air-tight steel tank, into which the water is pumped. When the tank is what is commonly called empty, it is really full of air. Into this tank which is full of air water is pumped, and as the air cannot escape from the tank, it is gradually compressed until, when the tank is two-thirds full of water, you have a back pressure from the air equal to that you would get from a tank elevated 100 feet. If a high-grade tank like those furnished with our **Invincible Outfits** is used and the connections properly made, you will have to pump new air into tank in very small quantities, the only reason for pumping air being to replace that which is absorbed by the water and drawn off. To replace this air different devices are used. Sometimes simply an air cock in the suction pipe of the pump, or a Hydro-Pneumatic Cylinder, or a separate air compressor, which devices are listed here. The advantages of a pressure tank system are its absolute reliability, its simplicity, and as these tanks are either placed in a cellar or buried in the ground, with the end extending into the cellar. The water is kept an even temperature, being neither very hot in Summer or freezing cold in Winter; this is a big advantage in watering stock. It does away with the necessity of having an elevated tank in house, which is undesirable, or an elevated tank on tower outside, which is frequently unsightly and very liable to freeze up in cold weather. Price on application.

The Proper Size Tank to Select—The proper size of tank depends upon the total water consumption and the method of pumping. If the pump is operated by electric motor where reliable current is available, a small tank will give comparatively good service. In a case of this kind, we would suggest a tank with a total capacity of twice the usual daily consumption, although if an automatic switch is used a tank with a total capacity equal to the daily consumption will give good service. Where an engine is used for pumping, we would suggest a tank of a total capacity of not less than twice the number of gallons used daily. In fact, we consider it better to use a little larger tank than this. When you are pumping by hand, we would suggest twice as many gallons capacity as the daily consumption, and if pumping by windmill, a tank with a total capacity of from four to six times as many gallons as are liable to be used daily.

Information Blank—We would be glad to mail on application to anyone interested in the installation of an **Invincible Water Supply Outfit** one of our special information blanks, which will enable you to clearly give the information which will enable us to intelligently recommend suitable equipment.

MYERS SELF-OILING BULLDOZER POWER PUMP

(Patent Applied For)

Self-Oiling. Fully Enclosed. Back Geared 5 to 1. Renewable Bearings "A." 100-Pound Pressure.

Floor Space:

2½x3 Pump.....	14x31 inches	4x5 Pump.....	24x46½ inches
3x4 Pump.....	18x37 inches	5x5 Pump.....	24x48 inches

For General Service.

Capacity 500 Gallons at 70 R. P. M.

No. 612—Myers Self-Oiling Bulldozer Power Pump with vacuum chamber, 2½x3 inches. Brass-lined cylinder, 12x2 inches. Tight and loose pulleys, ½ inch. Brass piston rod, suction and discharge, 1½ inches. Price.....\$50.00

Capacity 1,000 Gallons Per Hour at 70 R. P. M.

No. 613—Myers Self-Oiling Bulldozer Power Pump with vacuum chamber, 3x4 inches. Brass-lined cylinder, 14x2½ inches. Tight and loose pulleys, ¾ inch. Brass piston rod, suction and discharge, 1½ inches. Other sizes furnished up to 10,000 gallons per hour capacity. Price.....\$80.00

Send for Catalogue and Prices on Larger Size.

MYERS STANDARD BARREL SPRAY PUMPS, ETC.

For Hot, Cold or any Kind of Mixture—Has Mechanical Agitator, Solid Brass Ram Plunger, Ground Bevel Valve and Seat

MYERS O. K. COG GEAR SPRAY PUMP

The new Myers O. K. Spray Pump has a special clamping device that can be adjusted to any barrel, regardless of the height or width. The cylinder is what is known as a ram plunger, made of solid brass tube with a closed end, which passes through a circular hemp packing, which adapts it for pumping hot, cold or any kind of mixture. The packing gland has a simple and positive adjustment, by which all wear can be readily taken up. The valves can be easily taken out and repaired. The air chamber is made of 2 1/4-inch steel tube, the handle is wrought steel, with adjustable stroke, and the pump is fitted for two strings of discharge hose. Price of Pump, with 1 lead of 15-foot hose, 8-foot pipe extension and Vermorel or Bordeaux nozzle, including barrel, \$32.50.

If Barrel not wanted \$4.00 Less.

LEVER BUCKET SPRAY PUMPS

No. R324 represents the Myers Lever Bucket Spray Pump, made of brass and fitted with brass valves and patented agitator. The cylinder is 1 inch in diameter with solid plunger. The air chamber is 50 per cent larger than the ordinary bucket spray pump, has malleable iron foot rest and malleable lever. Price, plain \$6.50.

Add for 8 ft. extension rod \$0c.

No. R. 324

No. 325

No. 325, Brass Spray Pump with agitator, hose and combination fine, coarse and solid stream nozzle, with malleable foot rest. Price, plain \$4.25. Add for 8 ft. extension rod, 75c.

No. R-318-B MYERS IMPROVED BARREL SPRAY PUMP

The entire Pump sets in the barrel containing the liquid and is bolted fast to the staves at the upper end. The working parts being all submerged, the possibility of losing packing is done away with. Valves and seats are ground brass, brass cylinder and discharging pipe, patent expansive bucket, large 30-inch air chamber Vermorel or Bordeaux nozzle, mechanical agitator and pipe extension. Price, including barrel, \$21.00.

If mechanical agitator is not wanted, deduct 75c. If pipe extension is not wanted deduct \$1.75.

If Barrel not wanted \$4.00 Less.

THE MYERS COMPRESSED AIR OIL SPRAYER

Fig. 1862 illustrates the Myers Pneumatic Sprayer as built to meet the demands for this style of Spray Pump. It is made of heavy galvanized iron with 1 1/4 in. brass tube cylinder attached to the can by means of a heavy brass screw nut. The small diameter cylinder operates easier than larger sizes. The nut is operated by lugs on the lower part of the handle, which engage in opening at the top of the nut. By means of these lugs and handle the nut can be screwed tightly to the top of the tank, and at the same time lock the plunger in opposition which also permits of the tank being carried by the handle when desired. In the Myers construction we have done away with the large butterfly nuts as used on others, which are very objectionable owing to the fact that it is not only difficult to screw the cap perfectly tight but also very injurious to the hands in pumping.

The Handle is D-shaped in form, and large enough to be operated by any one with perfect comfort.

The Nozzle is one of the special features of this Sprayer. By means of the small lever the spray can be adjusted from a broad fine spray, covering the ordinary distance into a complete long distance spray throwing water 25 feet, by means of which the top of any small fruit tree can be reached. This style nozzle is a patented article used only on Myers Pneumatic Sprayers. Fill 3/4 full of water at starting—for best results.

The Valve, a very important part of a pump of this kind, is simple and effective. It is made of a pliable rubber disk supported by metal plate held in position by a brass coil spring and brass stud, on which it operates. Can be removed instantly.

PRICE LIST, Represented by Fig. 1862

No. 296, Myers Pneumatic Sprayer complete with long distance nozzle as shown in Fig. 1862.	
Galvanized. Price.....	\$5.50
No. 296B, Same as No. 296, except with Brass Tank. Price.....	\$8.75
Extension for Compressed Air Sprayer with nozzle	\$1.10
With lever nozzle.....	\$1.40

EXTENSION SPRAY RODS

MYERS SPRAY GUN, LONG DISTANCE SPRAY

The idea to enable one man to do the spraying, thus saving the expense of two extra men as is the case with the ordinary spray rig using two lines of hose with bamboo extensions.

By a one-third turn of the handle the spray can be adjusted from a long distance spray reaching the top of the tree to an extremely broad spray sufficient to cover

the entire tree or shut off entirely.

It is furnished with four separate spray discs designed to deliver the entire capacity of the pump, either 4, 6, 8 or 10 gallons per minute.

One-third turn of the handle adjusts the spray from a wide open nozzle to a complete shut-off of the mixture. Price, \$6.00.

THE MYERS HAY UNLOADER, TRACK, FORKS AND FIXTURES

Fig. 2

Fig. 3

Fig. 1

Fig. 4

Patent Double-Lock Hay Unloaders, Patent Steel Tracks, Slings, Forks, Pulleys, Etc.

A test of thirty years has demonstrated the superiority of the Myers Hay and Grain Tools. They are now universally known and acknowledged to be the best, most practical, simplest in construction and that they meet all the requirements.

A comparison of our carriers with others will show many points of superiority in our favor. These special features and advantages are covered by letters patent owned and controlled by us.

It is of the greatest importance that implements of this class, which are subjected to severe usage during the hurry of the haying season, should be thoroughly well built and constructed of first-class material throughout. The best malleable iron is used in the construction of our goods.

We give the above view of Myers Hay Unloader to be used on Myers Double-Angle Steel Track. This is the latest and best hay carrier, and it embodies all the features of the Straight Reversible and Swivel Reversible Carrier, and has many advantages over any other machine on the market. It is fitted with the Myers reliable double lock, which engages the fork pulley on each side, thus insuring a perfect locking device. One of the most important features of this carrier is the wide-open mouth, which permits the fork pulley to enter when swinging at any angle. This feature can be readily understood by referring to the illustrations above, and noting the shape of fork pulleys (Fig. 1). This construction insures a satisfactory working carrier under all conditions. The track wheels (Fig. 2) have turned steel axles, and weight is carried in center of wheel; the rope sheaves are fitted with wide hub and have longer bearings than any other make of carrier. For strength, simplicity, neatness of design and up-to-date features it is without a peer. We also offer the Myers Unloader for Wood Track. The Wood Track Unloader possesses all the good features of the Steel Track Unloader. Price, \$10.00.

Fig. 5

REGULAR DOUBLE-HARPOON FORK

Fig. 5

The best known Fork.

25 in. \$2.50. 31 in. \$2.75

PULLEYS, HOOKS. ETC.

Fig. 7

Fig. 8

Malleable Rafter Brackets (Fig. 3), each.....	\$.06
Steel Hooks (Fig. 4), each.....	.18
Floor Hook, ¾-inch, each..	.18
Plain Maple Sheave Pulleys (Fig. 8), each.....	.70
Knot-Passing Maple Sheave Pulleys (Fig. 7), each....	.70
Rafter Nails, per lb.....	.10

Manila Rope, either ¾ or ½-inch diameter, at market prices, usually about 36c per lb.; about 5 feet to the pound.

MYERS LOCK-LEVER FORK

(Fig. 6)

Has 50 per cent more capacity than the regular Double Harpoon Fork on account of the cross-bar being nearer the top. Operated with one lever. Price, \$6.50.

Fig. 6

MYERS PATENT STEEL TRACK

The style of this Track is here illustrated. It is made of two T carbon rails, very hard and stiff. Note the manner of clamping it together so that the two joints do not come opposite each other. A wrench only is needed to put this Track together. Price, per foot, 25c

SIX-ROW 100-GALLON TRACTION SPRAYERS

No. 357

FOR TRACTION SPRAYERS

A strong point in favor of the Iron Age line is that we can furnish a complete orchard attachment, which costs but a small part of the price of the sprayer, but increases its value one-third to one-half.

The trucker will find still another advantage in this six-row machine. Where he grows two crops together, such as tomatoes and peas, he can stop off every other nozzle so as to cover only one of the crops. Price, \$215.00.

No. 357—Here is a machine for the farmer who wishes to spray at the highest pressure obtainable from traction and to do it rapidly. The "Iron Age" Triplex Pump will deliver spray under a pressure of about 175 lbs. when operated from the wheels by traction. Just as the six-cylinder automobile runs more smoothly than the four, this pump will run somewhat more smoothly than the Duplex, as each plunger connects with the crank shaft at a different angle. This reserve power makes it a long-lasting pump.

Large acreages of potatoes demand a quick work, and a machine that covers six rows at high pressure is worth the difference in cost. It cuts the team travel one-third and covers the ground more than half again as fast as with the four-row sprayer on account of time saved in turning—a vital matter in these days of scarce labor.

FOOD COOKER AND BOILER

These are used for cooking food, rendering lard, scalding hogs, poultry, making soap; very useful for boiling spray mixtures. Heavy, cold-rolled steel furnace, extra-large feed door, wrought-iron handles, firmly riveted on furnace; kettles are smooth and made of heavy cast iron, never buckling or warping from heat. Made to set on ground or brick foundation.

Prices:

No. 1—24-gal.	\$19.50
No. 2—36-gal.	21.50
No. 3—50-gal.	24.00
No. 4—60-gal.	26.50

SIMPLEX PLATFORM SCALE

This is the best cheap-grade Portable Platform Scale on the market. It is intended for use where a Scale is only used occasionally, and is not subject to hard usage. The iron parts are finished in black japan, and the wood parts are painted blue, and are well finished.

The beam is carefully graduated and made of solid brass, with brass sliding poise. The lever and beam pivots are of steel drawn to a knife edge, and are supported in hardened bearing loops.

Each Scale is sealed to U. S. Standard weights, and is carefully packed.

No. Capacity. Price.

1128—500 lbs. \$22.00

1124—1000 lbs. 26.00

PLOW HANDLES

NOT FINISHED

1½x2 ins., 5 ft. long, per pair	\$0.80
1½x2 ins., 5 ft. long, per pair	.90
1½x2½ ins., 6 ft. long, per pair	1.25
1½x2½ ins., 5½ ft. long, per pair	—
1½x2 ins., side bend, per pair	—

WE CARRY A FULL LINE OF WOOD AND STEEL-FRAME GRINDSTONES

LEGGETT'S CHAMPION DRY POWDER DUSTER

For farm, garden, vineyard, tobacco fields, etc. Adjustable to any width of row. Many thousands in use. Distributes Paris Green, London Purple, Hellebore, Sulphur Lime, Dry Bordeaux Mixture, Dry Bordeaux Mixture and Paris Green Compound, Spanish Pink, Pyrethrum Powder, etc.

LEGGETT'S
CHAMPION
DUSTER

Dusts Potato Vines as fast as you walk, two rows at a time. Illustration shows tubing and nozzles. Any one can use it. Weighs, cased for shipping, 17 pounds.

This machine keeps the poison at a safe distance from the operator.

Price, \$15.00.

FEED GRINDERS

It has been found that when steers are fed on finely ground corn meal with other concentrates and roughages they have made a gain of nearly one-half pound more per day than those fed on the same amount of whole grains with equal amount of concentrates and roughages. Similar results have been secured in feeding calves, pigs and other live stock. Corn and cob meal is an excellent feed for dairy cows, as the cob meal lightens the feed and makes it more easily digested. Even the general farmers will find that their stock will be heavier and in a more healthy condition at a decreased cost if they grind their feed. Delivery and truck men whose horses are constantly on the go and have but a few minutes to eat while standing on the street will find that they can get more work from their teams if they feed them ground grain. The reason for the saving that results from such feeding is that the animals masticate ground grain more readily and it is more easily assimilated. The cost of feeding ground grain can be greatly reduced over what it costs when purchased from a custom grinder if an International Feed Grinder is used. One of the three types here described will be found adapted to every locality. The type B is intended for grinding corn on the cob and is supplied with a cob breaker and suitable grinding plates which pulverize both the corn and the cob thoroughly. The type C mill is designed for grinding small grain or shelled corn and is fitted with a feeding spiral which forces the grain to the grinding plates. The type D mill is intended for grinding corn in the husks and is supplied with revolving cutting knives which cut up the cobs and the husks so that the grinding plates can pulverize them. Various accessories for use with these mills are described in special catalogue.

Grinding feed means saving feed, and saving feed means saving money. You know from your own experience that when feeding whole corn or oats to your stock a large portion of it passes through the intestinal tract undigested. By experiment this has been found to be from 12 to 26 per cent. That means that 26 out of every 100 bushels of corn and 12 out of every 100 bushels of oats fed to farm animals is wasted. It fills the stomach and satisfies the hunger, but does not nourish them or increase their weight. The above figures are the results of experiments at government stations and the tests were made on animals with good teeth and otherwise in healthy condition. In cases where the animals' teeth are poor or they are afflicted with diseased mouth or gums, the loss is still greater, for in such cases they will swallow the grain whole.

It has been found in all experiments that a greater per cent of finely ground grain is assimilated than when it is simply cracked, for in the latter condition it is often swallowed whole. With the finely ground grain the stomach and intestinal juices can act upon it without the necessity of its being thoroughly masticated. The difficulty with which kaffir corn and milo maize are masticated because of their smallness and hardness makes them even less likely to be digested than Indian corn. Often one-third to one-half is swallowed whole. It is especially important then, if these grains are fed, to have them thoroughly ground. When fed to dairy cows, oats and corn ground together and fed with roughages have been found to produce from one to three pounds more milk per day with a corresponding increase in butter fat than when whole grain is fed with the same amount of roughages.

This plainly shows the economy of a feed grinder on the dairy farm, and points the way to larger returns for the man who is dissatisfied with his cream profits.

Prices of I. H. C. Feed Mills:

Type B, 6-inch.....	\$38.50	Type C, 6-inch.....	\$33.00
Type B, 8-inch.....	47.50	Type C, 8-inch.....	37.00
Type B, 10-inch.....	\$57.00	Type D, 8-inch.....	62.00
Type D, 10-inch.....			\$62.00

NEW HOLLAND GRINDING MILLS FOR EAR CORN OR SHELLED GRAIN

These very popular and excellent working mills have a decided point in their favor, and that is that while doing excellent and fast work, they are slow-speed machines, a factor for reducing friction, and operate with less power than any other mill we know of. By a peculiar construction the ears are not crushed by main force as in other mills. The lugs of the cob grinders are placed spirally on the shaft, so that not more than 1 or 2 will catch the ears of corn at one time, and, being short, they pierce and break out pieces of the ear, and thus gradually reduce it. Having large pulleys and no extra shafts, belts, chain or cog gearing, the draft is made the lightest possible. Simplicity and durability are the keynotes in the construction of these mills. The frame is in one casting, and there is only one shaft; the cob grinders and grinding plates are all on this shaft. The material is of extra quality, and there are a number of little features about the mill which all go toward making it very durable and long-lived. The grinding plates are made of the hardest suitable metal.

No. 6½ NEW HOLLAND MILL

This mill may be operated with any light power, from 2 to 6 horsepower. The speed should be from 200 to 600 revolutions per minute, according to power. Light powers require lower speeds. Capacity, 6 to 30 bushels per hour. Price, complete, \$37.50.

No. 10 NEW HOLLAND MILL

Similar to the No. 6½, but is heavier, larger and has much greater capacity. It is suitable for any power, from 6 to 12 horse, and will grind from 20 to 60 bushels per hour. Speed required, 200 to 600 revolutions per minute. Price, complete, \$45.00.

ADVANTAGES IN CORN AND COB MEAL

The man with a good grinder has another decided advantage besides that of being able to feed ground grain instead of whole grain. He can increase the bulk of the corn he feeds from one-fifth to one-fourth by grinding cobs and corn together, making corn and cob meal. Hence he has more feed per acre of corn, and a feed upon which the stock will thrive better than on corn meal alone. Practical experiences of feeders all over the country and tests at Experiment Stations prove that better gains are made and less digestive troubles experienced when animals get corn and cob meal than when they get the corn meal only.

Corn meal is so heavy and condensed that when fed alone it lies in the digestive tract in too solid a mass for the digestive juices to thoroughly permeate it. Grinding the cob with the corn lightens the meal, makes it porous, prevents compaction in the stomach and alimentary canal and allows the digestive juices to go freely through the entire quantity.

Not only does the cob meal, when ground and fed with the corn meal, give valuable assistance to the process of digestion, but it contributes largely to the nutritive value of the feed as shown by analysis made at various State Experiment Colleges. General testimony seems to show that a pound of corn and cob meal has the same feeding value as a pound of pure corn meal.

INTERNATIONAL 10-20-H.P. TRACTOR

The International 10-20 Kerosene Tractor has 88 years of farm machine building experience and more than 13 years of tractor building knowledge back of it. It has passed successfully through long and rigid tests under actual field conditions in all sections of the country. It is a popular size and weight, and owners of the International 8-16 are pleased with the way it performs both on the drawbar and on the belt. It is because of the splendid way it performs under actual service day after day, year in and year out, that it is permitted to bear the name International. Knowing International Harvester tractors as no doubt you do, you can feel confident that you can get real service from this latest addition to the line. It is built to give additional credit to the already splendid reputation of I. H. C. tractors.

AUTO TYPE CENTRAL CONTROL

You will like the auto type centralized control used on the International 10-20 Kerosene Tractor. At your first opportunity, sit on the seat and note how convenient the levers and control are arranged. You will like the spring seat, which adds to the comfort of the operator. Observe the steering wheel is within easy reach of the operator's seat. The spark and throttle levers are as convenient as on an automobile. The speed changing levers are located on the left-hand side within easy reach. The clutch and brake are operated by foot pedals.

The transmission gearing is completely enclosed in a dust-proof case. All gears operate in a bath of oil. The gears are made of high-grade drop-forged steel. They are machined, carbonized and hardened. By carbonizing and hardening is meant the process that hardens the surface of the steel for wear, but still leaves the inside tough for strength. They are large, amply strong and would transmit a great deal more power than will ever be required of them. The high efficiency of the transmission is due to the use of roller bearings.

REPLACEABLE CYLINDER SLEEVES

The engine is built with removable, close-grained, gray iron cylinder sleeves. If the cylinder becomes scored, a new cylinder sleeve may be put in without having to discard the whole cylinder. This method of constructing the cylinders makes it possible to replace scored cylinders with the least possible cost.

I. H. C. Tractors made in three sizes—McCormick Deering 10x20; 15x30; 20x45.

INTERNATIONAL HAY PRESSES

Block Setter

The block-setting attachment on the 14x18 and 16x18-inch pull power presses consists of a sheet-steel block case bolted to the feeder side supports. To set the block with this device is a very easy matter. The block is laid upon the block case, and when the plunger comes forward the man who does the wiring pushes the block forward onto the block case.

Self-Feeder

The self-feeder used on the International Two-Horse and Motor Hay Presses increases the capacity of the press by securing regular feeding. The self-feeder works as regularly as the plunger operates, and if the hay is pitched into the hopper, it is sure to be forced into the bale chamber without delay. After using a press and becoming familiar with it, there is a tendency for the operator to become careless and try to get large charges of hay down into the bale chamber by using his feet. This is a very dangerous practice, and often results in serious injury to the operator. The use of the self-feeder eliminates all opportunity of resorting to this dangerous method of feeding.

The self-feeder is made almost entirely of steel, and is operated from the toggle links by means of heavy steel bars. This insures the feeder working as regularly as the plunger operates. A heavy relief spring affords sufficient resistance, and at the same time allows the feeder head to spring back if any hard foreign substance should get into the bale chamber. The feeder head lifts without pulling up any hay.

This feeder is not furnished for the One-Horse Press, and is only furnished for Two-Horse Presses when specially ordered at an additional cost. Regular on Motor Presses.

BALE FOR YOURSELF — BALE FOR YOUR NEIGHBORS

Make an Extra Profit

Baled hay brings higher market prices—allowing a profit on the baling.

The owner of a good hay press not only makes a profit on his own baling, but can do the work for others at a good profit.

When the hay is in the bale, the markets can be watched closely and shipments quickly made where prices are highest. Less storage space is required, and the bales are quickly and easily handled.

Save Room and Time

Save more room—baled hay occupies one-fifth the space that loose hay does. It is convenient to feed and transport. It insures the retention of a larger proportion of the nutrients of the baled hay or fodder.

Bale your oat straw and feed it with corn ensilage—it makes an excellent combination.

Own an International Hay Press, and whether you bale as a profession, side line or for your own farm use, you'll realize splendid profits.

Send For Special Catalogue and Prices

ROOFING, CEMENT AND PAINTS

Certain-teed Asphalt Roof Coating.

The life of composition roofing can be renewed and greatly prolonged by the use of this coating. A good roofing coated with Certain-teed every two or three years will last indefinitely. Price, 1 gal. 90c; 5 gals. \$3.25; ½ bbl. 55c per gal; bbls. 44c per gal.

Certain-teed Asbestos Roof Coating

Forms a durable weather-and-water proof surface for metal, concrete or other roofs. Also may be used on asphalt composition roofs and for general weather-proofing purposes, such as water-proofing foundations, etc. This is strictly an asphalt product. It contains no coal tar. Price: 1 gal. \$1.00; 5 gals. \$4.00; ½ bbl. 75c per gal.; bbls. 58c per gal.

Certain-teed Plastic Cement

A durable, permanent, waterproof and waterproof composition of semi-hard consistency for repairing leaks in metal, shingle or composition roofs, for stopping holes in gutters, flashings,

water troughs, etc., and for general weather-proofing purposes. Made of the best materials obtainable. Price:

1 lb. package.....	\$0.20	50 lb. package.....	\$5.00
10 lb. package.....	1.25	½ bbl., 275 lbs.....	15.00
25 lb. package.....	2.75	Bbls., 450 lbs.....	23.00

THE GUARD ROOFING

The Guard roofing is a very good grade of roofing, but, of course, cannot be compared with the Certain-Teed for durability. However, where a temporary roofing is desired it is just the thing. If weather conditions are not too severe it will last four or five years. It is fire-resisting, pliable and easy to put on in either cold or warm weather. The materials used in the manufacture of Guard Roofing has been selected with the best of care. Put up in rolls 36 inches wide, containing 108 square feet. Nails and cement packed on inside.

Prices:

1-ply.....	\$1.30
2-ply.....	1.70
3-ply.....	2.00

CERTAIN-TEED ROOFING

When you want a smooth-surfaced roofing for your house, barn, garage, factory, warehouse, skyscraper, church, apartment building or farm building, get CERTAIN-TEED—guaranteed 5, 10 or 15 years for 1, 2 or 3-ply, respectively—backed by the responsibility of the world's greatest and biggest roofing and building paper mills. The Certain-teed label on this roofing stand for a definite guaranteed service—a protection for you. Why try to save a dollar or two by putting on a cheap roof that is not guaranteed, when you can buy Certain-teed for just a little more money and get much longer service on your roof. In the long run it's less expensive to buy Certain-teed.

Prices:

1-ply, 108 square feet.....	\$1.35
2-ply, 108 square feet.....	1.75
3-ply, 108 square feet.....	2.40

PAINTS AND VARNISHES

We carry a full line of Certain-Teed Paints and Varnishes for the rural and suburban trade. We specialize on barn and house paints of best quality, and our prices are as low as a quality paint can be sold. Write for details and prices.

CANS

GARBAGE CANS

(Galvanized.)

No.	Capacity, Gallons.	Price.
425	4	\$2.50
435	6½	3.00
445	9½	3.40

MONITOR ASH CANS

(Made of Heavy Galvanized Tin.)

No.	Capacity, Gallons.	Price.
2½	11¾	\$4.00
3	17	4.75
4	22	5.00
5	24¾	5.75

Covers are not included in price.

Covers for Cans—2½, 70c; 3, 90c; 4, \$1.10; 5, \$1.25.

OIL AND GREASES

POLARINE

1-Gal. Flat Can

A perfect motor lubricant. No other oil has had a greater share in establishing the success and pleasure of motoring than Polarine.

Polarine is a scientifically prepared oil, designed to meet every need of the motorist, and may be relied upon to lubricate properly in either zero or tropical weather. Its adoption will add many years to the life of a car, in addition to securing freedom from carbon deposits in valves, cylinders and spark plugs.

Polarine is all oil—all lubrication; therefore unexcelled in friction-reducing properties.

Put up in one and five-gallon lithographed cans; also in half-barrels and barrels.

1-gal. can.....	\$1.25
5-gal. can.....	5.00
½ barrel, per gal.....	65
Barrels, per gal.....	60

RUDDY HARVESTER OIL

(Ruby in Color)

1 Gallon

ounce cans, ready for use. Price, 15c.

This oil is the result of many years of experience with the needs of the agricultural trade. It is especially adapted for use where a heavy oil is made necessary by loose bearings. It will stay where it is put; is not affected by extreme heat. It reduces friction to a minimum, and gives perfect lubrication.

Put up in quart, half-gallon, gallon and five-gallon lithographed cans; also in half-barrels and barrels.

½-gal. can.....	\$0.65
1-gal. can.....	1.00

HOUSEHOLD LUBRICANT

For use on lawn mowers, sewing machines, graphophones, hinges, etc. This is a very high-grade oil and is put up in very convenient four-ounce cans, ready for use. Price, 15c.

STANDARD HAND SEPARATOR OIL

(Light Yellow in Color)

1 Gallon

Standard Hand Separator Oil is a high-grade lubricant especially adapted for use on cream separators. It will not gum, rust or corrode the bearings.

It feeds freely into the closest bearings and insures the perfect lubrication that is essential to the free spinning of the bowl and the complete separation of cream from milk. It lessens the driving effort and lengthens the life of the separator.

Put up in quart, half-gallon, one-gallon and five-gallon lithographed cans; also in half-barrels and barrels.

1-qt. can.....	\$0.40
½-gal. can.....	.65
1-gal. can.....	1.00

TRANSMISSION OIL

For use in transmission or gear cases, where a heavy bodied oil is required. It is a dark oil of highly efficient lubricating and long lasting qualities.

1-gallon cans.....	\$1.15
5-gallon cans.....	5.00

MICA AXLE GREASE

25-Pound Pail

Mica Axle Grease is the best that skill and science can produce. It is made of the best grease stock and ground mica, which fills up the pores and crevices in the axle and forms a hard, bright, smooth coating, thus reducing friction to the minimum. Mica Axle Grease never wears off, and it leaves no gum or paste on the spindles.

Mica Axle Grease is the most popular axle grease on the market, because it saves horsepower, saves harness repairs, saves wear and tear on wagons.

Mica Axle Grease can be supplied in one and three-pound lithographed tins, ten, fifteen and twenty-five-pound galvanized iron pails, fifty and 100-pound kegs and in half-barrels and barrels.

1-lb. box.....	\$0.15
15-lb. bucket.....	1.50
25-lb. bucket.....	2.50

EUREKA HARNESS OIL

(Very Dark Blue)

1 Gallon

Eureka Harness Oil is specially manufactured for oiling, blacking and preserving all kinds of leather, especially harness, automobile and carriage tops, etc.

All harness needs a preservative. To neglect it means that sooner or later it will crack and break.

In Eureka Harness Oil we offer the best harness oil obtainable. It is superior to all neatsfoot oils, because it is free from acids and will not become rancid. It penetrates the leather and prevents the cracking of leather and breaking of stitches; makes leather water-proof, and it lasts much longer and goes farther than any other oil.

1-gal can.....	\$1.25
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THRESHER HARD OIL

5 Pounds

A lubricant adapted for general use on crank pins, shafting, loose pulleys, valve motions, eccentrics, slides, main journals, etc. For use in spring or compression cups or in open boxes.

Made in different consistencies, varying from No. 0, which is very soft, to No. 5, which is very hard, the intermediate grades being Nos. 1, 2, 3, 3½ and 4.

Put up in one, five, ten, twenty-five and fifty-pound lithographed tins; also in half-barrels and barrels.

1-lb. can.....	\$0.25
5-lb. can.....	1.00
10-lb. can.....	1.50
25-lb. can.....	4.50

COMPOUND NEAT'S-FOOT OIL

This is a combination of Neat's-Foot and Mineral oils in right proportions and properly compounded to prevent the Animal Oil from becoming rancid, thus producing a combination that will greatly improve Harness or any leather where this oil is used.

1-gallon cans.....	\$1.50
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SAW TABLES AND SAWS

AMERICAN SLIDE-TABLE SAW

A splendid machine. The frame is constructed of 4-inch hardwood mortised and bolted. The arbor is 1½-inch cold rolled steel. The distance from fly-wheel to saw is 3 feet 1½ inches. The table operates on rollers, which run on a grooved and smooth track, and a cast guide keeps it in position. An iron counterbalance, not shown in illustration, is furnished. This is attached by a rope to the table, and brings it back to position when the cut is made. The machine is furnished with a guard, as shown in illustration. The saw blade is the very best obtainable, and will be replaced free if found defective. Left-handed machines, as shown in illustration, furnished, unless otherwise ordered. Weight, 400 pounds. Speed, 1,000 revolutions per minute when a 24-inch saw is used.

Prices:

With 26-inch saw.....	\$40.00
With 28-inch saw.....	42.00
With 30-inch saw.....	44.00

WOOD AND POLE SAWS

The frames are made of selected seasoned hard wood, accurately mortised and tenoned and securely bolted together by steel rods alongside the girts and passing through from one side of the frame to the other. They are strongly braced in every direction and handsomely painted with two coats of brilliant red paint on the wood and black on the iron parts.

The mandrels are polished steel, perfectly true and run in heavy babbitted boxes. On the Nos. 3, 4 and 5 these boxes are united by a heavy cast-iron yoke, insuring perfect alignment and cool bearings.

The balance wheels are accurately balanced, insuring a quiet, steady-running, durable machine. They weigh from 75 to 80 pounds, which is best for general work, but we can supply heavier balance wheels when desired at small extra cost.

Each machine is fitted with a strong, adjustable saw guard that will admit any size saw from 20 to 30 inches.

No. 4 has extension table for cutting poles of 4 or 8-foot cord wood. By changing the iron guard to the opposite end of the tilting table this machine can be set up exactly as No. 3.

Prices:

24-inch blade.....	\$41.00
26-inch blade.....	42.00
28-inch-blade.....	43.50

PORTABLE AND STATIONARY SAW OUTFITS

—Send for special catalogue.

Believing that a cheaply built wood saw is dear and a bad investment at any price, we have always sold high-grade machines only, and, value compared with cost, we are giving greater value than is possible in the cheaply built machines.

The table is so arranged as to extend nearly five feet beyond the saw blade. It makes a highly satisfactory combined pole and cordwood saw, because the length

and arrangement of the table is such as to enable the operator to handle long poles about as easily and rapidly as cord wood. To facilitate handling a roller is placed at one end of the table. Weight, 354 pounds.

Prices:

Without saw.....	\$33.50
With 24-inch saw.....	41.00
With 26-inch saw.....	42.00
With 28-inch saw.....	43.50
With 30-inch saw.....	45.00

We carry a full line of CIRCULAR SAWS:

22-inch, No. 12 gauge.....	\$ 5.00
24-inch, No. 11 gauge.....	6.00
26-inch, No. 11 gauge.....	7.00
28-inch, No. 10 gauge.....	8.00
30-inch, No. 10 gauge.....	9.00

SAW MANDRELS—Write for special circular of sizes and prices.

No. 3 Cord Wood Saw Right Hand

Specifications.

Mandrel, 1½ in. diameter, 52 in. long.
Distance saw to balance wheel, 42 in.
Mandrel pulley, 6x6 in.; speed, 1,200 to 1,800, depending on size saw.
Will take saws 20 in. to 30 in. with 1½ in. hole.
Shipping weights, No. 3, 300 lbs.; No. 4, 330 lbs.
No. 5, 385 lbs.; No. 6, 335 lbs.
These machines are regularly shipped knocked down. Shipped set up if so ordered, without extra charge.

CORD WOOD SAW MANDRELS

For those desiring to make their own wood work, we can furnish Mandrels with balance wheel, pulleys and boxes. These are always made right-hand and furnished with yoked boxes, as shown above, unless otherwise ordered. If desired, they can be furnished with flat boxes without the yoke. Can also be furnished without balance wheel. Pulley is 6-inch diameter by 6-inch face. Weight of Mandrel, with boxes, pulley and balance wheel, 160 pounds. Boxed for export, 210 pounds, 4 cubic feet.

Price.....\$22.00

NIAGARA DUSTERS FOR FIELD AND ORCHARD WORK

The 1922 models of Niagara Dust Machines, made of aluminum and operating on Hyatt roller bearings or upon ball bearings, will dust in one day forty acres of orchard or thirty-five acres of strawberries and bush fruits, or thirty acres of potatoes, cabbages and other vegetables. Orchards which require the services of three men and a team two days to spray can be dusted in three hours time by two men and a team. Potatoes, vegetables and small fruits can be dusted in one-fifth of the time required to spray them.

This saving in labor and rapidity in operation is vital to fruit and vegetable growers in the busy spring time when other important work must be neglected for spraying, and when the effectiveness of the fungicide depends upon applying it at critical times. In almost all localities it is difficult to secure competent labor for spraying at times when this need is most pressing. By the dusting operation large acreages may be covered in a single day with fewer men.

By the dusting method a dense cloud may easily be thrown over the highest fruit trees, or the dust may be used with equal efficiency for bush fruits, potatoes, or other low growing plants, oftentimes obtaining perfect distribution in places where it would be impossible to spray.

The **Niagara Power Potato Duster**, or **Model F-22-P**, is built especially for canterloupes and potatoes and low growing crops like celery, strawberries, etc. This is the Model F-22 duster with the 5 horse-power water cooled Pierson Motor mounted on a cart with two 4-foot iron wheels. The motor operates the duster while the team pulls the outfit. Model F-22-P dusts 4 rows of potatoes at a time, and easily covers 30 acres of potatoes a day.

NIAGARA HAND DUST MACHINES

Many growers have an acreage insufficient to warrant the purchase of a large duster; yet some kind of an inexpensive, practical device must be procured for the application of insecticides and fungicides to growing crops in order to protect them from injurious pests. It is for these growers that the **Niagara Blower Dust Gun** is especially designed.

This is the ideal machine for low crops. In one hour it dusts 1/2 acre of potatoes, celery, strawberries and like crops. It is easily and quickly used on young orchards, vineyards and shrubs, and on florists' and home garden ornamental plants.

VERMOREL DUSTERS (Bellows Type)

For applying Sulphur, Arsenate of Lead, Calcium Arsenate, Bordeaux Mixture, Nicotine Dust Etc.

Made in both single and double action.

Very light and compact in construction. Weight eleven pounds; capacity six quarts, nine to fifteen pounds of material. Double action differs from single principally in the fact that it functions both on the up and down strokes, thus giving forth a semi-continuous flow.

PRICE

Single Action.....	\$15.00
Double Action.....	20.00

Write for Special Catalogue and Prices on Above Machines.

McCORMICK-DEERING DRILLS, DOUBLE-RUN FEED

The McCormick-Deering 12-7 fertilizer double-run feed drill equipped with open delivery, chilled bearing single disks and wood wheels.

If you are looking for strong construction coupled with light draft and the best grade of field work, select a McCormick-Deering grain drill in the proper size and style to suit. The double-run feed which is a part of these drills is a reliable and efficient grain feeding device which does good work under all conditions. It is simple, accurate, and places the same quantity of seed into each furrow, resulting in an even stand and maximum yield. McCormick-Deering drills are built to serve over a long period of years. Every manufacturing detail receives the rigid scrutiny of trained mechanics and inspectors. Defective and cheap parts have no place in McCormick-Deering drill construction; the result—a better drill at a price you can afford to pay.

A Size and Type for Every Seeding Requirement

McCormick-Deering grain drills are built in two types—"Plain" and "Fertilizer." Both types are built in a variety of sizes to fit every man's individual seeding requirements. A sufficient variety of furrow openers are supplied to work in all kinds of soil to the best advantage. Drills may be equipped with pin or spring hoes, open

delivery single disks, closed delivery single disks, saw blade double disks, curved blade double disks or shoes. Individual press wheels for beet planting, gang press attachments for pressing soil over each planted row, and force feed grass seed attachments for all sizes and types of drill are furnished at extra cost when ordered.

McCORMICK-DEERING LIME SOWER

The essential requirements for a good lime sower are simplicity, durability, wide sowing range, and a no-clog feed. It must also be light in draft and convenient to use.

The extreme simplicity of the McCormick-Deering appeals to the user of farm machines. It means long life at an attractively low operating cost. It means less dead weight to move over the ground. It means lighter weight and lighter draft without sacrificing needed strength. Every needed adjustment has been provided on the McCormick-Deering and every possible convenience built in. It is made in one size only with a total hopper capacity of 10 bushels, and sows a strip 8 feet wide.

The McCormick-Deering lime sower is regularly equipped with a hinged screen. It excludes all particles larger than half-inch and thus prevents breakage of the feed wheels or clogging of the outlets. When the screen is lowered the center board serves as the driver's seat.

A LIGHT DRAFT SOWER

STRENGTH IN EVERY DETAIL

Spreading ground limestone, lime and other heavy materials requires a machine of great strength. The McCormick-Deering lime sower is built from the ground up for heavy work. The stiff sides of the hopper are bolted solidly to the steel hopper bottom and to the cast hopper ends. The two sides are braced and tied by 10 steel straps, 4 inside and 6 outside—extending from the steel bottom to the hopper top.

Every wheel has 16 one-half inch spokes upset at the rim and cast with a wide stagger in the hub. Wheels are 44 inches high with a steel tire 4 inches wide. Each wheel is fitted with a removable sleeve, dust cap and hard oilers. When worn, the removable sleeve may be replaced easily and quickly at small cost. The main axles on which the wheels and agitators are mounted are made from steel $1\frac{1}{4}$ inches square. The constant agitation of practically all of the material in the hopper makes it possible to distribute from 168 to 13,000 pounds of ground limestone per acre.

THE FULLER & JOHNSON STEEL FRAME BEMIS TRANSPLANTER

The machine can be thrown in and out of gear, greatly increasing its life. A ratchet clutch throws the mechanism out of gear when backing, saving water and avoiding breakage.

A strainer in the barrel prevents the valve from becoming clogged and the obstruction of free flow of water.

When in operation the front truck can be locked so machine will run straight on the row. This does away with the wobbling side motion experienced where swivel or castor rollers are used.

The wheels are our own patent, 36 inches high, very strong, made with replaceable boxings and spokes, which can be easily replaced by any blacksmith in case of breakage. Wide tires reduce draft.

The droppers do not get off at the end of the row.

The tongue is joined like a wagon, so there is no weight on the necks of the horses.

The entire machine is simple and very strong so that with proper care it will last for years.

The grower is independent of labor and free from a lame back.

SEND FOR SPECIAL CATALOGUE

This machine has revolutionized tobacco setting, as there are now practically no large tobacco growers in the United States who set their plants by hand. It is also extensively used by market gardeners, nurserymen, etc. The supply of water can be regulated as conditions require.

We make a special potato planter in the trench with the plants and check-rower attachment for use where cross-cultivation is desired. For planting on ridges we can furnish the machine with two-wheel front truck to straddle the ridge and adjustable axles to raise the machine to conform to the height of the ridge. These axles provide for a variation of 5 inches in height of the machine.

The essential features of a transplanting machine, including the floating shoe, pressure plates, etc., are covered by our patents, and the working parts of our machine are so perfect that it is acknowledged by growers in all sections of this country, and in many foreign countries, that the Fuller & Johnson Bemis Transplanter is the best. The plants can be set when they are ready, no matter how dry the ground. In hand setting plants are often set when too small or when too large, as they must be set when the weather is suitable. As there need be no delay in planting on account of dry weather, the ground can be carefully prepared just before planting so as to kill all the weeds. The planting is equal to once cultivating, as the machine stirs the ground in the row, killing the weeds. The roots are not doubled up, and the plants start better. Even pressure is obtained on uneven ground by means of the floating shoe and pressure plates, which are independent of the shoe and of each other. This is the only successful device for this purpose used on a transplanter, and is covered by our patents. Spring pressure can also be applied from the lifting lever if desired. The earth is pressed about the plants by means of the hardened polished steel plates. The shoe is also made of hardened steel and finely polished. Price, \$110.00.

THE TIGER PLANT SETTER

The Tiger Planter was designed primarily for the purpose of enabling the farmer to transplant, irrespective of seasonal conditions. At the same time, it was constructed so as to make the planting more rapid and accurate.

As shown in the illustration, the machine consists of a reservoir for water mounted upon a strong metal frame. The driver's seat is on top of this reservoir, while the planter's seats are low down and at the extreme rear.

The heavy castor wheels in front press the ground so that a better defined trench can be opened by the runner which follows it.

At the spot where the plant is placed a certain quantity of water is emitted, and the earth gently pressed around the shoot by pressure plates or press wheels. This water is discharged at intervals regulated by the sprocket wheels of the trip shaft.

The Important Feature of the Transplanter is the Valve Mechanism. Examine the Tiger.

The adjustment of the press wheels is practically the same as that of the plates, and full adjustment is provided for shifting the plates both laterally and vertically.

The introduction of spring pressure directly on the plates or wheels, together with the heavier spring pressure on the runner, forms a combination eminently suited to the conditions under which the work of transplanting must be done.

Adjustment is provided for increasing or decreasing the lift of the valves and the length of time the valve is held open is controlled by an adjustable valve bar.

First. It has a positive force to gauge setting of plant.

Second. The rearward movement of hand holds plant until the soil is pressed firmly about the plant.

Third. Flow of water is under perfect control and can be regulated to deposit as small a quantity as desired or one pint to each plant.

Fourth. Valve is non-corrosive, has a flat rubber stopper resting on a brass seat, which is faced perfectly level.

Fifth. Valve is composed of few parts, is easily taken apart, no complicated mechanism to cause trouble.

Sixth. Swing of valve is almost noiseless, returns with a gentle easy movement.

Seventh. Valve pivots on a wide bearing, and all wearing parts are provided with sufficient surface to insure many years of service.

Price, \$110.00.

GENUINE No. 2 HAINES MARKERS

The Genuine No. 2 Haines Marker has been greatly improved for this season. Among the changes made is the disc hanger being in two parts. When the bearing becomes worn it may be replaced at small cost. The top of hanger has teeth cast all around the top, so that any angle may be had. The frame of the marker has improvements and has been strengthened. The lever and quadrant have been re-designed.

The marker is made in two sizes, for two rows and four rows. All sizes have self-oiling disc bearings.

All these improvements have been added to make the marker thoroughly up-to-date. Look the Genuine No. 2 Haines Marker over before you buy and you will make no mistake.

The marker can be regulated to open rows at any depth required by the use of the lever in front of the operator, and may be adjusted while the machine is in motion.

The marker is of light draft and easily controlled by a light boy, as it is not necessary for operator to dismount at ends of furrows to lift one pound.

The marker is a perfect covering or listing machine, covering one or more rows as may be required, and is under perfect control of operator by use of lever that may be adjusted while the machine is in motion.

The marker is very quickly changed from marking to covering; it is only necessary to loosen two nuts and move disc along to the required place and adjust. The machine is graduated with the different distances that may be plainly seen by the operator.

The marker is strongly built and equipped with marking-pole, double trees and neck-yoke, and the machine is under the control of the operator, who, by lowering or raising lever can adjust depth of furrows and raise disc from ground at ends of row while turning without dismounting.

Price, \$45.00.

We also have the exclusive agency for the IMPROVED GILTZ MARKER.

The GILTZ is a well-known marker throughout Anne Arundel County, having been in use many years. This marker has been greatly improved by Mr. Giltz, the patentee, with the following features: First he has solved the problem of an absolutely dust-proof wheel hub boxing. The wheels are higher than any other marker made and are adjustable from two to six feet for covering and opening the furrows, and is elevated to a sufficient height to prevent main frame from dragging. The angle irons are made of heavy Carnegie steel, and will positively not bend. Be sure to see this marker before purchasing. Price, \$75.00.

THE HAINES FERTILIZER DISTRIBUTOR

Will Handle All Grades of Commercial Fertilizer, Lime and Ashes, in Rows of All Widths

The Haines Universal Distributors are made in several sizes to meet the various requirements of the planters and farmers.

It can be used as a broad caster for lime or fertilizer. It is easy to load and brings the distributor near the ground, only 11 inches for materials to fall, and for that reason the light materials are less liable to be carried away by the wind. Any quantity per acre may be sown by these machines by simply moving one lever to the adjustment required.

No gears of any kind, no chains, no sprocket wheels, no belts and no springs—fewer parts than any other machine. A positive force feed, strong enough to handle the materials being used without caking in the hoppers, and at the same time giving regular discharge of materials.

Six-Foot Size, \$55.00.
Eight-Foot Size, \$60.00.

VAN BRUNT LIME AND FERTILIZER SOWER

With Oscillating Agitators

The Van Brunt Lime and Fertilizer Sower is built in the standard size to cover eight feet of ground, with a carrying capacity of ten bushels. For strength, durability and simplicity it is unexcelled.

This sower has 36-inch steel wheels with staggered spokes, heavy, wide rims, removable dust-proof boxings, and compression grease cups with chilled wheel bearings.

Heavy wood wheels will be furnished if desired.

The hopper is exceptionally strong, of selected well-seasoned matched lumber; steel ends with angle steel corners, thoroughly braced; close-fitting covers and removable screens.

Shifter levers on rear of hopper are provided with feed gauge lock, so that when set to sow a certain amount, the feeds may be closed entirely

or quantity reduced when desired, and thrown back to the original position, avoiding the necessity of resetting the feed gauge.

Each ground wheel is a drive wheel, driving one-half of the machine. There are no gears or chains to break or get out of order.

Ground wheels are provided with pawls and ratchets, permitting the machine to be turned or backed without affecting the feeds, and one or both ends of the machine may be disengaged from the feeding mechanism in an instant by releasing the pawls. This feature is very desirable in going to and from the field, or in sowing strips less than the width of the machine.

REMOVABLE ROTARY WING FEED—Even Distribution Assured.

The Van Brunt Lime and Fertilizer Sower is built with an improved rotary wing feed (none better). It has been thoroughly tested and is adapted to distribute crushed lime rock, slacked lime, all brands of standard commercial fertilizer, nitrate of soda, land plaster, granulated calcium chloride, dry wood ashes, etc., in any desired amount from 150 to 8,000 pounds per acre, according to bulk and weight of material.

The improved rotary wing feed does not drift, but is sown evenly from each feed.

The feed shafts are in two parts. By shifting one lever, both feed shafts may be lifted out and the hopper easily and thoroughly cleaned.

The double feed shaft with direct wheel drive allows the operator to disengage both feeds for transporting, or one-half the machine independent.

McCORMICK AND DEERING MANURE SPREADERS

The basis of profitable farming is a fertile soil. In farming, as in other businesses, there are poor years and good years, but the farmer who keeps up the productivity of his soil will forge ahead.

The way to do this is to spread barnyard manure properly. It is good business to build up crop yields with a McCormick-Deering manure spreader. Put the manure on your fields finely, uniformly, and economically; the extra fertility will in a short time pay for the McCormick-Deering.

You cannot afford this year to pass up an opportunity to save all the manure and use its fertility in making your farm more productive. See us soon about the McCormick-Deering manure spreader. It is built in two sizes, so you can find a size suitable for your farm.

Here is a spreader that is light-draft and long-lived—built in two sizes to meet the requirements of large or small farms. Every feature found in the McCormick-Deering is a practical development growing out of years of experience. Read the following features—they indicate real spreader value: (1) Auto-Steer; (2) Front Wheels Track with Rear; (3) Two All-Steel Beaters; (4) Wide-Spread Spiral; (5) Narrow Tread; (6) Self-Aligning Bearings; (7) Steel Main Frame; (8) Six Feed Speeds; (9) Positive Apron Drive; (10) Made in Two Convenient Sizes.

If you will stop in at our store we will point out these features to you. You will agree that they put the McCormick-Deering ahead of all others. Come in at any time.

HERCULES GASOLINE ENGINES

The care used in building Hercules Engines—kerosene and gasoline—may best be seen from a careful study of the numerous features illustrated. Take, for instance, the engine base. Note the milled groove at the top and the tongue that is milled on the cylinder pad which fits into the base groove. These are both done on special

machines absolutely accurate, so that the tongue and groove fit together without any side play. This is a very important feature of the Hercules construction, as it makes it absolutely impossible for any side play of the piston or connecting rod. In addition to this accurately machined joint, the cylinder is held to the base by six heavy cap screws, three on each side. The main bearings are designed extra wide with large reinforced bearing stands. The bearing radius and sides are accurately machined in relation to the groove in the engine base, so that the crank shaft and connecting rod must be in absolute line with the cylinder bore. This reduces friction to a minimum, and means less wear, more power and longer life. Removable diecast bearings, made of high-grade babbitt metal, are used in the bearing radius as a seat for the crank shaft. The Hercules governor is of the fly-ball type, with speed regulator, and we consider it much superior to the cheaply constructed flywheel governors. A steel pinion is used on the crank shaft to drive the governor.

1½-3-5-7-9-12 H. P.

Style No.	Gas.	Kero.	Speed	Plain Pulley	Face	Fly Wheel	Wt.	Floor Space	Over All	Diam.	Ship.	Price.	
			H.P.	R.P.M.		Diam.		Width	Length	Height	of Crank Shaft	Wt.	
1½N													\$ 65.00
1½A			1½	550	4 in.	4 in.	18 in.	44 lbs.	27 in.	31 in.	1¼ in.	320	75.00
3 A	K3A	3	475	8 in.	4 in.	22 in.	93 lbs.	26 in.	40 in.	22 in.	1½ in.	625	110.00
5 A	K5A	5	425	12 in.	6 in.	28 in.	165 lbs.	28 in.	47 in.	27 in.	2 in.	912	200.00
5-horsepower Portable Hercules Engine.....													285.00
7-horsepower Portable Hercules Engine.....													335.00

Send for Special Catalogue.

Best by Every Test

DAYTON TRANSPLANTER

A steel barrel need not be coopered each year and should last indefinitely. Adequate pressure on opening shoe and press plates provided by using the weight of the droppers—this mechanism independent of the main frame carried by the wheels. Positive spacing of the plants. The plant is put down when the valve operates.

Plants may be set at any desired distance from 14 inches to 64 inches apart. This spacing is regulated by the size of the sprocket used on the counter-shaft and the number of trip pins used on the knocker. The distance of setting easily changes, simply by slipping off the right drive wheel and changing this sprocket. The various sized sprockets for different distances of planting are furnished as regular equipment. A positive self-cleaning valve which will not become clogged. In addition to the driver this machine can be operated by two young boys or girls to place the plants—skilled labor is not necessary. A two-wheel foretruck can be furnished in place of front pressure wheel, in case it is desired to straddle a ridge for planting sweet potatoes or similar crop. The two-wheel truck however is not regular equipment but is furnished only on special orders and at an extra cost.

The runner and press plates shows independent adjustment of runner opener and pressure plates. By turning adjusting handles any amount of pressure may be secured on the plates.

Press plates may also be adjusted laterally and vertically to get the exact result wanted. The same runner can be used for either deep or shallow planting, by raising or lowering the press plates. The driving mechanism used to transfer the power from the main drive wheel to the countershaft, which propels the pitman rod which opens and closes the water valve. It will be noticed that the pressure to force the opening shoe into the ground is obtained by using the weight of the droppers. Thus by using the adjustment provided and increasing the leverage any wanted amount of pressure can be provided and the runner forced well into the ground under all conditions. By means of a lever the runner is raised when turning and held up automatically, and when the same lever is released the runner goes back into the ground again after the turn is made.

By using the above method a floating arrangement is made possible, which makes the shoe runner and pressure plates follow perfectly the uneven surface of the field, and provides ample trench for the plants and uniform pressure around the roots to hold them into position under all circumstances.

In raising tobacco, cabbage, sweet potatoes, tomatoes, strawberries, in fact all plants which require transplanting, it pays to use a modern transplanter.

It is not necessary to wait for rain. Instead, when your plants are just the proper size, regardless of how dry the soil may be, you may safely plant them with a Dayton Transplanter, as there is no danger of your plants getting too large by waiting for the proper weather conditions to set them out. Also it has been proven by experience that a crop set with a transplanter will mature more uniformly and from ten days to two weeks earlier than a crop set out by hand. This ten days may mean many dollars at harvest time and the difference between profit and loss on the crop.

A fertilizer attachment can be furnished for this transplanter which has a non-clogging positive feed and places fertilizer in the row just ahead of the planting.

We Deliver Free

in the U.S.
and
possessions

by Parcel Post or Express

to Any
Express
Office

at Our Option

All Vegetable and Flower Seeds by the Packet, Ounce and 1/4 Pound

Purchasers Pay Transportations on 1/2 Pounds, Pints, Quarts, 1/2 Pecks, Pecks, Bushels, and Barrels;
Also on Farm Seeds, Tools, Implements, Requisites, Fertilizers and Insecticides.

If Wanted by Parcel Post, Add Postage as Noted for these
POSTAL WEIGHT OF BEANS, PEAS AND CORN, ONE POUND PER PINT.

PARCEL POST RATES.

Weight in Pounds	Distance not over 150 miles	Over 150 and not over 300 miles	Over 300 and not over 600 miles	Over 600 and not over 1000 miles
1.....	\$.05	\$.06	\$.07	\$.08
2.....	.06	.08	.11	.14
3.....	.07	.10	.15	.20
4.....	.08	.12	.19	.26
5.....	.09	.14	.23	.32
6.....	.10	.16	.27	.38
7.....	.11	.18	.31	.44
8.....	.12	.20	.35	.50
9.....	.13	.22	.39	.56
10.....	.14	.24	.43	.62
11.....	.15	.26	.47	.68
12.....	.16	.28	.51	.74
13.....	.17	.30	.55	.80
14.....	.18	.32	.59	.86
15.....	.19	.34	.63	.92
16.....	.20	.36	.67	.98
17.....	.21	.38	.71	1.04
18.....	.22	.40	.75	1.10
19.....	.23	.42	.79	1.16
20.....	.24	.44	.83	1.22
21.....	.25	.46	.87	1.28
22.....	.26	.48	.91	1.34
23.....	.27	.50	.95	1.40
24.....	.28	.52	.99	1.46
25.....	.29	.54	1.03	1.52
26.....	.30	.56	1.07	1.58
27.....	.31	.58	1.11	1.64
28.....	.32	.60	1.15	1.70
29.....	.33	.62	1.19	1.76
30.....	.34	.64	1.23	1.82
31.....	.35	.66	1.27	1.88
32.....	.36	.68	1.31	1.94
33.....	.37	.70	1.35	2.00
34.....	.38	.72	1.39	2.06
35.....	.39	.74	1.43	2.12
36.....	.40	.76	1.47	2.18
37.....	.41	.78	1.51	2.24
38.....	.42	.80	1.55	2.30
39.....	.43	.82	1.59	2.36
40.....	.44	.84	1.63	2.42
41.....	.45	.86	1.67	2.48
42.....	.46	.88	1.71	2.54
43.....	.47	.90	1.75	2.60
44.....	.48	.92	1.79	2.66
45.....	.49	.94	1.83	2.72
46.....	.50	.96	1.87	2.78
47.....	.51	.98	1.91	2.84
48.....	.52	1.00	1.95	2.90
49.....	.53	1.02	1.99	2.96
50.....	.54	1.04	2.03	3.02
51.....	.55	1.06		
52.....	.56	1.08		
53.....	.57	1.10		
54.....	.58	1.12		
55.....	.59	1.14		
56.....	.60	1.16		
57.....	.61	1.18		
58.....	.62	1.20		
59.....	.63	1.22		
60.....	.64	1.24		
61.....	.65	1.26		
62.....	.66	1.28		
63.....	.67	1.30		
64.....	.68	1.32		
65.....	.69	1.34		
66.....	.70	1.36		
67.....	.71	1.38		
68.....	.72	1.40		
69.....	.73	1.42		
70.....	.74	1.44		

INSECTICIDES
CANNOT
BE SENT BY
PARCEL
POST

WEIGHT OF AGRICULTURAL SEEDS,
PER BUSHEL, AND QUANTITY
USUALLY SOWN PER ACRE.

Weight per Bushel.	Pounds per Acre.
14 lbs. Awnless Brome.....	35 to 40 lbs.
60 lbs. Alsike, alone.....	6 lbs.
60 lbs. Alfalfa or Lucerne.....	20 lbs.
48 lbs. Barley, broadcast.....	2 bus.
.. lbs. Broom Corn, in hills.....	6 to 8 qts.
48 lbs. Buckwheat, broadcast.....	1 bus.
21 lbs. Crested Dog's Tail.....	25 lbs.
20 lbs. Creeping Bent.....	50 lbs.
60 lbs. Crimson Clover.....	15 to 20 lbs.
56 lbs. Corn, for soiling.....	1 to 2 bus.
24 lbs. English Rye or Perennial Rye.....	50 lbs.
20 lbs. Evergreen Lawn.....	3 to 4 bus.
56 lbs. Flax, for seed.....	1 bus.
.. lbs. Flax, for fiber.....	2 to 3 bus.
56 lbs. Field Corn, in hills.....	4 qts
50 lbs. German Millet.....	50 lbs
48 lbs. Hungarian Millet.....	48 lbs
44 lbs. Hemp.....	22 lbs
20 lbs. Italian Rye.....	50 lbs
14 lbs. Kentucky Blue.....	38 lbs
22 lbs. Meadow Fescue.....	50 lbs
7 lbs. Meadow Foxtail.....	30 lbs.
14 lbs. Orchard Grass.....	42 lbs.
32 lbs. Oats, broadcast.....	2 to 2 1/2 bus.
10 lbs. Red Top, chaff.....	.40 to 50 lbs.
14 lbs. Red Top, unhulled.....	30 to 40 lbs.
32 lbs. Red Top, fancy.....	6 to 8 lbs.
60 lbs. Red Clover.....	15 lbs.
56 lbs. Rye, broadcast.....	1 bus.
12 lbs. Sheep Fescue.....	30 lbs.
48 lbs. Sorghum, drills.....	4 qts.
.. lbs. Sorghum, broadcast.....	8 qts.
10 lbs. Tall Meadow Oat.....	50 lbs.
45 lbs. Timothy, alone.....	1/2 bus.
.. lbs. Timothy, with other grasses.....	8 lbs.
Together for an acre.....	
.. lbs. Red Clover.....	8 lbs.
.. lbs. Timothy.....	10 lbs.
.. lbs. Red Top.....	14 lbs.
.. lbs. Teosinte, in hills.....	1 to 3 lbs.
60 lbs. Vetches, broadcast.....	1 bus.
14 lbs. Wood Meadow.....	30 lbs.
60 lbs. White Clover, alone.....	6 lbs.
.. lbs. White Clover, with other grasses.....	3 lbs.
60 lbs. Wheat, broadcast.....	1 1/2 to 2 bus.
.. lbs. Wheat, in drills.....	1 1/2 to 2 bus.

VEGETABLE SEED TABLE
THE QUANTITY OF SEED USUALLY
SOWN TO AN ACRE.

Asparagus.....	5 lbs
Beans, dwarf in drills.....	1/2 to 3/4 bus.
Beans, pole, in hills.....	8 to 10 qts.
Beet, in drills.....	4 to 6 lbs.
Cabbage, in beds, to transplant.....	1/2 lb.
Carrot, in drills.....	2 to 3 lbs.
Celery, to transplant.....	1/2 lb.
Corn, in hills (sugar).....	4 qts.
Kale.....	4 to 6 lbs.
Melon, musk.....	1 1/2 to 2 bus.
Melon, water.....	2 to 3 lbs.
Mustard, broadcast.....	12 to 16 lbs.
Mangel wurzel.....	4 to 6 lbs.
Onions, in drills to make large onions.....	6 to 8 lbs.
Onion Seeds, for small sets.....	40 to 60 lbs.
Parsnips, in drills.....	4 to 6 lbs.
Peas, early, in drills.....	1 1/4 bus.
Peas, Marrowfat, in drills.....	1 1/4 bus.
Peas, broadcast.....	2 to 3 bus.
Potato, cut tubers in drills.....	8 to 11 bus.
Radish, in drills.....	6 to 8 lbs.
Radish, broadcast.....	10 lbs.
Salsify, in drills.....	6 to 8 lbs.
Spinach, in drills.....	12 to 20 lbs.
Squash, bush varieties, in hills.....	4 to 6 lbs.
Squash, running varieties, in hills.....	3 to 4 lbs*
Turnip, in drills.....	1 lb.
Turnip, broadcast.....	2 lbs.
Tomato, to transplant.....	1/4 lb.

FERTILIZERS

**NITRATE OF SODA BLOOD, BONE AND TANKAGE
LAND PLASTER**

SPECIAL STRAWBERRY TOP DRESSER

AGRICULTURAL HYDRATED LIME

PULVERIZED SHEEP MANURE

This is purely a natural and most nutritious plant food, clean to handle, and its effect is immediate and lasting. There is nothing better to mix with soil for potting plants. Florists who use it extensively advise mixing about one-seventh manure and six-sevenths soil. As a top dressing for lawns it is unequaled.

Prices—5 lbs. 25c. 10 lbs. 45c. 30 lbs. \$1.20. 50 lbs. \$1.75. 100 lbs. \$3.00
Special prices in tons, half tons, or carload.

SOFT GROUND BONE

Made from softer material than the regular "Ground Bone," and contains some little meat and blood. The great objection to the use of Pure Bone (the price) no longer prevents its use by any one wanting to restore wornout land. Try it and be convinced.

Prices—5-lb. package 25c. 10-lb. package 45c. Per bag (167 lbs.) \$5.00. Per ton \$50.00.

DRIED BLOOD

For roses, carnations, etc. One of the quickest acting fertilizers, its chief element being nitrogen. Apply 300 lbs. per acre. For indoor culture it is unexcelled.

Prices—5 lbs. 50c. 10 lbs. 90c. 25 lbs. \$2.00. 50 lbs. \$3.50. 100 lbs. \$6.00. 200 lbs. \$12.00.

HEADQUARTERS FOR GARDEN AND SPRAY HOSE

**WE CARRY IN
STOCK A FULL
LINE OF HOSE
FOR GARDEN
AND SPRAYING
PURPOSES**

**PRICES AND
SAMPLES
CHEERFULLY
SENT UPON
REQUEST**

Full Line of Farm Implements

Including

Planet Jr. Horse and Hand Garden Tools

Iron Age Horse and Hand Garden Tools

Bemis and Tiger Transplanters

All Sizes Gasoline and Kerosine Engines

Power and Spray Pumps

All Kinds of Spray Material and Insecticides