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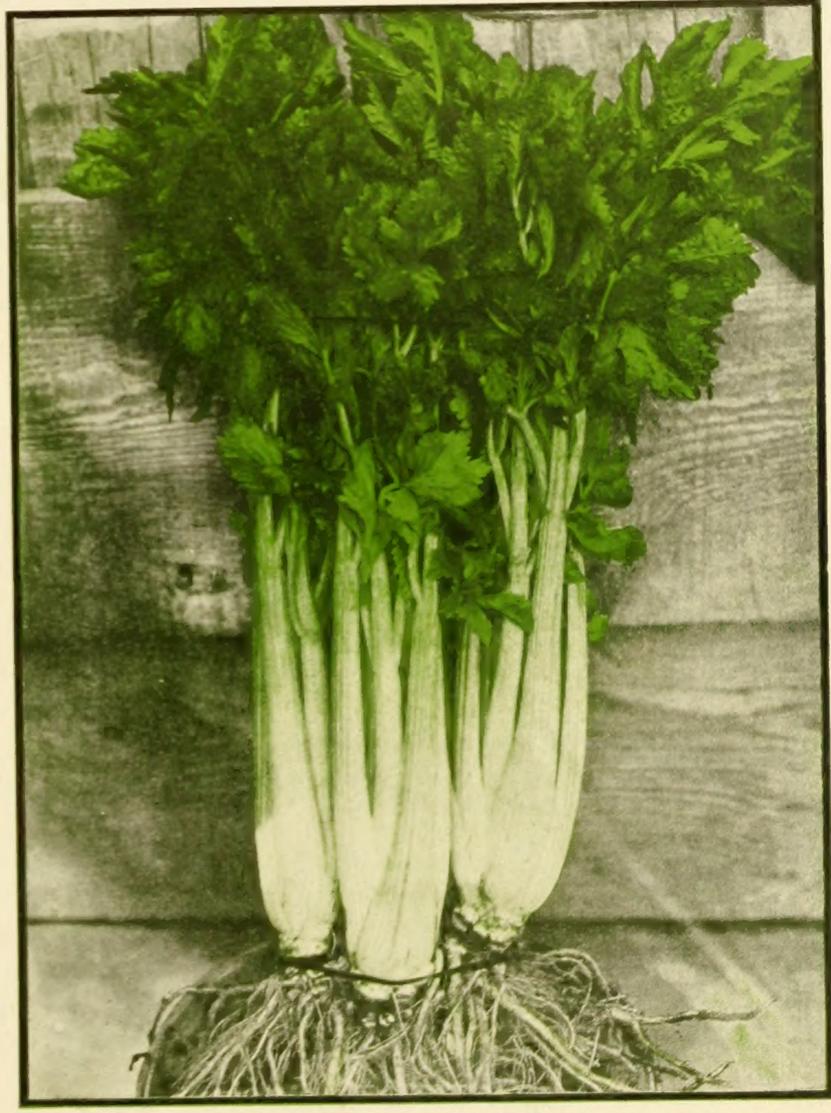
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ANNUAL CATALOGUE

Machinery, Fertilizers, Seeds, Etc.
1917



QUALITY IS
OUR FIRST
CONSIDERATION

DWARF GOLDEN
SELF BLEACHING
CELERY.

C. M. WOOLF & CO. Inc.

1005 B. ST., NW.

WASHINGTON, D. C.

OUR CATALOGUE FOR 1917

GENERAL INFORMATION

How to Send Money—Remittances should be made either in the form of an Express Money Order, P. O. Money Order, Bank Draft or Registered Letter. 1c and 2c stamps will be accepted for small amounts, provided they are carefully wrapped, so as to prevent sticking.

Be Sure to Give Full Name and Address with each order. Every season we get a number of orders without name of sender or Post Office, and the postmark on the envelope is often too obscure to be made out. There is no way of finding out who the senders are; consequently we are blamed, whereas the fault is their own entirely. We therefore, beg our correspondents to write their full name and address on each order.

We prefer written orders, but when orders are given by telephone, they are accepted as understood, and at the risk of the purchaser, in case of misunderstanding in transmitting telephone orders.

Seeds by Mail—Since our last catalogue was printed, all Seeds, Bulbs, and Plants have been admitted to the Parcel Post rate of postage, and are now available at the same rate of postage as other merchandise. For full information and Parcel Post rates, see table below. **Remember**, however, that we pay the postage on all packets, ounces and one-quarter pounds at the price quoted in this catalogue.

Seeds by Express—Express rates have also been materially reduced since issuing our last catalogue, and on the average, express rates are now lower than Parcel Post rates to points beyond the third Zone, and when practical, we would advise customers to order goods shipped by Express, as it is far more satisfactory, quicker and safer. Goods ordered C. O. D. by Express must have 25 per cent. of the amount accompany the order. We do not make shipments by Freight C. O. D. to points where there is no bank.

POISONS AND LIQUIDS CANNOT BE SENT BY PARCEL POST

POUNDS	LOCAL	First Zone 1 to 50 Miles	Second Zone 50 to 150 Miles	Third Zone 150 to 300 Miles	Fourth Zone 300 to 600 Miles	Fifth Zone 600 to 1,000 Miles	Sixth Zone 1,000 to 1,400 Mi.	Seventh Zone 1,400 to 1,800 Mi.	Eighth Zone All over 1,800 Mi.
1	\$.05	\$.05	\$.05	\$.06	\$.07	\$.08	\$.09	\$.11	\$.12
2	.06	.06	.06	.08	.11	.14	.17	.21	.21
3	.06	.07	.07	.10	.15	.20	.25	.31	.36
4	.07	.08	.08	.12	.19	.26	.33	.41	.48
5	.07	.09	.09	.14	.23	.32	.41	.51	.60
6	.08	.10	.10	.16	.27	.38	.49	.61	.72
7	.08	.11	.11	.18	.31	.44	.57	.71	.84
8	.09	.12	.12	.20	.35	.50	.65	.81	.96
9	.09	.13	.13	.22	.39	.56	.73	.91	1.08
10	.10	.14	.14	.24	.43	.62	.81	1.01	1.20
11	.10	.15	.15	.26	.47	.68	.89	1.11	1.32
12	.11	.16	.16	.28	.51	.74	.97	1.21	1.44
13	.11	.17	.17	.30	.55	.80	1.05	1.31	1.56
14	.12	.18	.18	.32	.59	.86	1.13	1.41	1.68
15	.12	.19	.19	.34	.63	.92	1.21	1.51	1.80
16	.13	.20	.20	.36	.67	.98	1.29	1.61	1.92
17	.13	.21	.21	.38	.71	1.04	1.37	1.71	2.04
18	.14	.22	.22	.40	.75	1.10	1.45	1.81	2.16
19	.14	.23	.23	.42	.79	1.16	1.53	1.91	2.28
20	.15	.24	.24	.44	.83	1.22	1.61	2.01	2.40
21	.15	.25	.25						
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23	.16	.27	.27						
24	.17	.28	.28						
25	.17	.29	.29						
26	.18	.30	.30						
27	.18	.31	.31						
28	.19	.32	.32						
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30	.20	.34	.34						
31	.20	.35	.35						
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33	.21	.37	.37						
34	.22	.38	.38						
35	.22	.39	.39						
36	.23	.40	.40						
37	.23	.41	.41						
38	.24	.42	.42						
39	.24	.43	.43						
40	.25	.44	.44						
41	.25	.45	.45						
42	.26	.46	.46						
43	.26	.47	.47						
44	.27	.48	.48						
45	.27	.49	.49						
46	.28	.50	.50						
47	.28	.51	.51						
48	.29	.52	.52						
49	.29	.53	.53						
50	.30	.54	.54						

Seeds, Bulbs and Plants have been admitted to the Parcel Post rate of postage, and are now carried at the same rate as other merchandise, with the exception that packages weighing up to 8 ounces are carried at the rate of 1c for each 2 ounces, regardless of distance. **Remember**, however, that prices quoted in this catalogue on packets, ounces and one-quarter pounds are postpaid, but when larger quantities are ordered sent by mail, add the required postage as per rate table to the left. When pounds are ordered, remit postage for 2 pounds; when 2 pounds are ordered, remit postage for 3 pounds; and so on, as the wrapping of the packages will make it run over the actual weight ordered. When figuring the amount of postage, if in doubt as to the exact amount required, remit even more than you think necessary, and we will return the amount not needed, as we cannot send packages postage collect, nor charge on our books small amounts due for postage stamps. When ordering pints, remit for postage on 1 pound mailing weight, and for quarts remit for 2 pounds mailing weight.

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Poisons and liquids cannot be sent by Parcel Post; these should be ordered sent by express or freight.

We appreciate the patronage you have given us during the past year. Our business is growing all the time. We attribute this to our efforts to furnish only high-grade seeds.

With Parcel Post rates now in effect you can easily get our Superior Seeds delivered at your home at most reasonable prices.

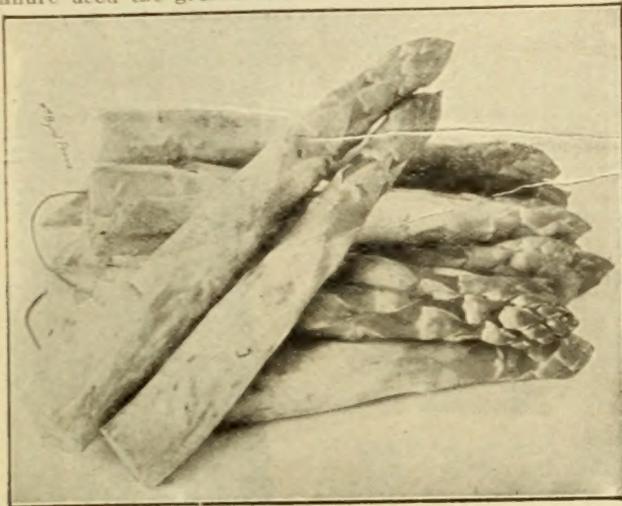
Send us your order.

SUPERIOR VEGETABLE SEEDS

ASPARAGUS

German, Spargel French, Asperge Spanish, Esparragos
One ounce for 60 feet of drill.

CULTURE.—Will require about 3 years from time of sowing until the bed is in full bearing, but once established is good for 20 years. It should be sown in drills 1 foot apart, and when the plants are 4 or 5 inches high they should be thinned out so that the plants will be 9 inches apart from each other in all the rows. Great care must be taken for the first year to keep down all weeds. The deeper the soil and the more manure used the greater will be the crop.



Conover's Colossal.

CONOVER'S COLOSSAL.—The best known, and one of the most desirable sorts. Pkt. 5c; oz. 10c; ¼ lb. 15c; lb. 50c.

GIANT ARGENTEUIL.—New. A most promising variety, nearly twice the size of any other. Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 75c.

PALMETTO.—Large, thick, dark green shoots with a distinctly pointed tip. Pkt. 5c; oz. 10c; ¼ lb. 15c; lb. 40c.

COLUMBIAN MAMMOTH WHITE.—This splendid white variety is a sport from Conover's Colossal, and originated on Long Island. The shoots are pure white, and require no artificial blanching; brings a much higher price in market than any other sort. Pkt., 5c; oz., 10c; ¼ lb., 20c; 1 lb. 50c.

Asparagus Roots

A saving of one to two years is effected by planting roots. Those offered below are strong, two-year-old roots, and the proper size for setting. Per 100

Columbian Mammoth White	\$1 00
Conover's Colossal	75
Palmetto	1 00

BRUSSELS SPROUTS

(Species of Cabbage; Cultivation the Same)

German, Rofen-Kohl French, Chou de Bruxelles
Spanish, Berza de Brusels

One ounce will sow a bed of 40 square feet and produce about 3,000 plants.

CULTURE.—This is a delicious vegetable, superior to either borecole or spinach. The small, cabbage-like heads which grow upon the stem are much improved by a moderate frost. Sow in hot-beds in March or April, and in the open ground in May; cultivate same as broccoli.

Prices: Pkt., 5c; 1 oz., 20c.

BEANS

Dwarf or Bush

German, Bohnen French, Haricot Spanish, Frijole nano
One quart to 100 feet in drills; or 150 hills, 2 bushels to the acre in drills.

A succession of sowings can be made from the first week in May until September. These dates are for the latitude of New York; farther south the sowing must be done earlier; farther north, later. Plant in drills about 2 inches deep, and from 18 inches to 2 feet apart, according to the richness of the soil; the poorer the soil the closer they can be planted. The seeds should be dropped about 2 inches apart.

Wax-Pod or Butter Beans

Bush Varieties

BLACK GERMAN WAX. (Black seed.)—Very early; round, yellow pods; a well-known standard sort. Pt. 30c; qt. 50c; peck \$3.00.

CURRIE'S RUST-PROOF WAX.—Pods long, flat and straight; very productive and rust-proof; black seed. Pt. 30c; qt. 50c; peck \$3.00.

DAVIS WHITE KIDNEY WAX.—Pods remarkably long, straight and handsome, waxy white color; enormously productive; seed white. Pt. 30c; qt. 50c; peck \$3.00.

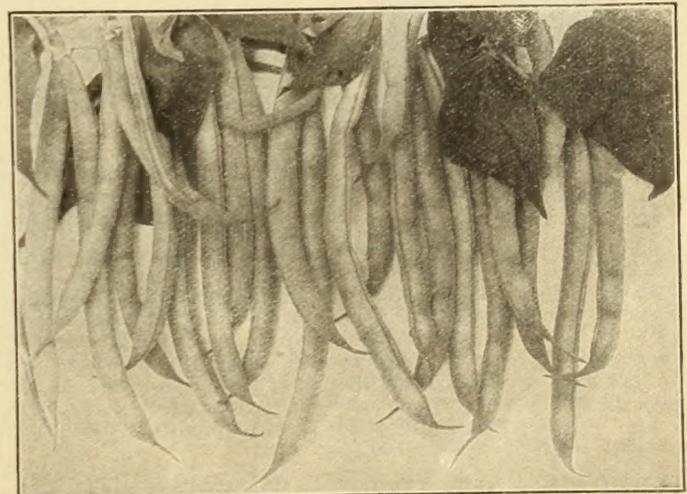
GOLDEN WAX.—Very popular; well-known standard sort. Pt., 30c; qt., 50c; pk., \$3.00; bu., \$10.00.

HODSON WAX.—New; claimed to be rust-proof and very productive. Pods long, cream-yellow. Pt., 30c; qt., 50c; peck \$3.00; bushel \$10.00.

KIDNEY WAX (Wardwell's).—Extra early; purely wax pods, long, flat and remarkably free from rust. Pt., 30c; qt. 50c; pk. \$3.00.

PROLIFIC DWARF BLACK WAX.—An improved strain of Black Wax of more vigorous habit and far more productive. Pods waxy yellow, with slightly curled point. Pt. 30c; qt. 50c; peck \$3.00.

Green Pod Bush Beans



BURPEE'S STRINGLESS GREEN POD.—New, extra early, prolific; entirely stringless; crisp, tender; fine quality. Pt. 30c; qt. 50c; peck \$3.00.

LONGFELLOW.—Early and prolific; pods long and very tender. Pt. 30c; qt. 50c; peck \$3.00.

BLACK VALENTINE.—A distinct form of Valentine; of handsome appearance and excellent quality. Pt., 30c; qt., 45c; peck \$2.75; bushel \$9.00.

NAVY BEANS.—Used as dried winter beans. Pt. 30c; qt. 50c; peck \$2.50.

HORTICULTURAL DWARF.—Late and productive; pods showy; great favorite in New England; fine shell variety. Pt. 30c; qt. 50c; peck \$3.00.

HOPKINS' IMPROVED VALENTINE.—An improved strain of Round Pod Red Valentine. Pt. 30c; qt. 45c; peck \$2.50; bushel \$9.00.

Beans—Pole or Running

One quart to 150 hills; 10 to 12 qts. to the acre in drills.

These are more tender and require rather more care in culture than the Bush Beans, and should be sown two weeks later. They succeed best in sandy loams, which should be liberally enriched with short manure in the hills, which are formed, according to the variety, from 3 to 4 feet apart. From 5 to 6 seeds are planted in each hill, about 2 inches deep. As the matured Bean is used mostly, the season is too short for succession crops in the North, though it is advantageous to plant succession crops in the Southern States, where the season of growth is often from March to November. Rough cedar or similar poles about 7 or 8 feet high should be used for Lima Beans to climb on. They should be set in the ground at least 18 inches, so as to prevent being blown over.

CUT SHORT, or CORN HILL.—A speckled Bean, used for planting among corn. Pt. 25c; qt. 40c; gal. \$1.50; pk. \$2.75.

KENTUCKY WONDER.—Fine green pod sort; early and productive; entirely stringless. Pt. 25c; qt. 40c; gal. \$1.50; peck \$2.75.

KING HORTICULTURAL.—Pods bright carmine color, and both beans and pods are much larger than the common kind. Pt. 30c; qt. 50c; peck \$3.00.

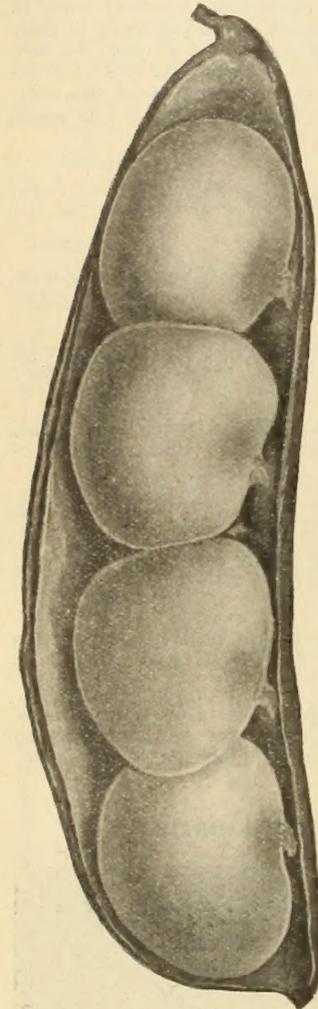
LAZY WIFE.—Beans white; pods green and entirely stringless; produces an enormous quantity of pods. Pt. 40c; qt. 60c; peck \$3.50.

Pole Lima Beans

LIMA, KING OF THE GARDEN.—Heavy cropper; bean and pod very large. Pt. 20c; qt. 30c; pk. \$1.75; bu. \$7.00.

LIMA, SEIBERT'S EARLY.—The earliest and one of the best for home or market garden. The green-shelled beans are of immense size, but so tender that they shrink in drying to about the size of the large white Lima. Pt. 20c; qt. 35c; pk. \$2.00; bu. \$7.00.

BURPEE IMPROVED BUSH LIMA.—Pods and beans are extremely large. Plant grows more erect than Burpee's Bush Lima and is more productive. Pt. 25c; qt. 40c; pk. \$2.50; bushel \$9.00.



King of the Garden



Lazy Wife

LEVIATHAN.—The earliest Pole Lima grown. The plant is strong and takes to the poles more readily than any other sort. It is fully a week earlier than any other Pole variety, therefore can be grown successfully where other sorts would be caught by frosts of early autumn. Moreover it is a prodigious cropper, producing its pods in large clusters from base to top of pole, frequently from 5 to 10 together. Pt. 30c; qt. 45c; pk. \$2.50; bu. \$9.00.

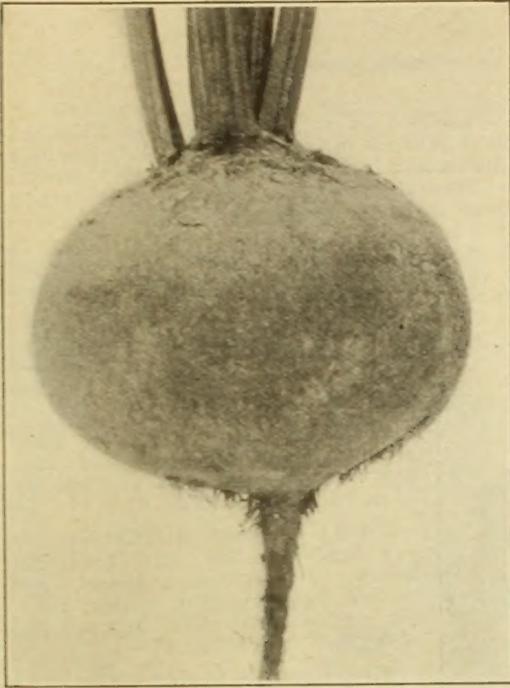
BUSH LIMA, HENDERSON'S.—Beans smaller than Burpee's or Dreer's, but very early and enormously productive. Pt. 15c; qt. 25c; gal. 90c; pk. \$1.75.

FORDHOOK BUSH LIMA.—An improved type of Dreer's Bush Lima, excepting that it is also very much earlier. Pt. 25c; qt. 40c; pk. \$2.50; bu. \$9.00.

BUSH LIMA, DREER'S.—Beans are similar to Dreer's Pole Lima, but ten days earlier and a true Bush Bean. Pt. 25c; qt. 40c; pk. \$2.25.

LIMA, LARGE WHITE.—Extra large size. Selected stock. Beans very large. Pt. 15c; qt. 30c; gal. 90c; pk. \$1.75; bu. \$6.50.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE



Crosby's Egyptian.

MANGEL-WURZEL

6 to 8 pounds of seed will sow an acre.

CULTURE.—The following varieties are extensively grown for feeding stock and are excellent food to increase the flow of milk. As they grow much larger than the varieties cultivated for table use, they require more room, and should be sown in drills about 2 feet apart. The seeds should be dropped about 2 inches apart in the drills, and when strong enough thinned out to 12 to 15 inches in the row. The long varieties are best suited to a deep soil, and the globe sorts succeed better than the long sorts on sandy soil.

GOLDEN TANKARD.—Best and most popular for dairy farming; a very large, yellow-fleshed sort, said to contain a large amount of sugar; grows largely above ground, is hardy and a heavy cropper. $\frac{1}{4}$ lb. 20c; $\frac{1}{2}$ lb. 30c; 1 lb. 50c.

LONG RED.—This is an old-fashioned long red Mangel. $\frac{1}{4}$ lb. 20c; $\frac{1}{2}$ lb. 30c; 1 lb. 50c.

CARROT

German, Mohre French, Carotte Spanish, Zamahoria

One ounce will sow 100 feet of drill; 3 pounds required for an acre.

CULTURE.—Carrots require a very finely pulverized soil to grow them to perfection. A good, light and well-enriched sandy loam is the best for this crop. For field culture, sow in drills 3 to $3\frac{1}{2}$ feet apart, so as to cultivate by horse. Market-gardeners sow in drills, about 18 inches apart, and cultivate by hand. For early crops cover $\frac{1}{2}$ inch deep, and thin to six inches apart in the row; for late cover $\frac{3}{4}$ inch deep, and thin to four inches.

EARLY SCARLET HORN.—A very popular sort; quick-growing; deep orange in color; blunt-rooted; 6 to 8 inches in length. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 35c; $\frac{1}{2}$ lb. 60c; 1 lb. \$1.00.

BEET

German, Kuntelrube French, Betterave Spanish, Betteraga

One ounce to 50 feet of drill; 5 to 6 pounds to the acre in drills.

The soil which is best suited is that which is rather light and thoroughly enriched with manure. For an early supply, sow in Spring as soon as the ground becomes fit to work, in drills about 1 foot apart and 2 inches deep. For main crop, sow the first week in May, and for Winter use sow in June.

BASSANO, EARLY FLAT.—An early, tender variety; color light red. Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 25c; 1 lb. 75c.

CROSBY'S EGYPTIAN.—The best for early market; is early as the original strain of Egyptian, is thicker and less inclined to push up a woody stock as it advances in growth. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb. 30c; 1 lb. \$1.00.

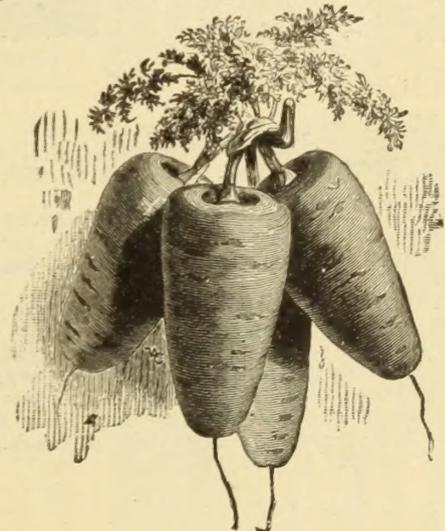
EARLY BLOOD TURNIP.—One of the best known and most popular early sorts; smooth and dark red; excellent quality. Pkt., 5c; oz. 10c; $\frac{1}{4}$ lb. 25c; 1 lb. 75c.

ECLIPSE BLOOD TURNIP.—

Very early, round, smooth and dark red. Our strain of this variety is very select; it has a very small top, and is one of the best for market. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; 1 lb. 85c.

DETROIT DARK RED.—Round; skin dark red; flesh light red, very sweet. Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 30c; 1 lb. 85c.

DEWING'S EARLY BLOOD TURNIP.—An improved variety of deep blood red color, fine form and flavor; a favorite market sort. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; 1 lb., 60c.



Improved Long Orange.

IMPROVED LONG ORANGE.—The best known and most largely cultivated of any carrot; excellent for stock or table use; roots deep orange, 12 to 15 inches long. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 35c; $\frac{1}{2}$ lb. 60c; 1 lb. \$1.00.

DANVERS HALF-LONG.—One of the heaviest croppers; roots dark orange color, 8 to 10 inches in length, thick, and ending in a somewhat abrupt point; first class for all soils. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 30c; $\frac{1}{2}$ lb. 60c; 1 lb. \$1.00.

OXHEART, or GUERANDE.—Roots short and very thick, and intermediate between Scarlet Horn and Chantenay; color, deep orange; fine-grained and sweet; easily dug; annually grows in favor. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 35c; $\frac{1}{2}$ lb. 60c; 1 lb. \$1.00.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

CABBAGE

German, Kohl

Spanish, Berza de repollo

French, Chou

One ounce will produce 3,000 plants.

CULTURE.—Soil for Cabbage should be rich and heavy loam, with good drainage. On such a soil, with an abundance of stable manure, excellent crops are sure to be grown. For early spring, sow in fall, not too early, or the plants are liable to bolt in the spring instead of heading. In a month the plants will be fit to transplant to coldframes, where they are wintered, taking care in planting to set the young plants down to the first leaves. Transplant in spring as soon as the ground can be worked, setting the plants 2 feet apart one way and from 12 to 18 inches the other, according to the variety. If it is desirable to economize space, lettuce or radish may be sown between the rows, as they will be out of the way before the Cabbage needs the room. For late or winter crops, the seed is sown in May and the plants set out in July. In this case they are set in rows 2x3 feet, so as to work them with a horse and cultivator. To prevent the turnip-flea from attacking the young plants, sift the air-slacked lime or tobacco-dust over them as soon as they appear above ground.

ALL-SEASONS.—Heads very deep; can be planted for early or late crop, and is a splendid keeper; about as early as Early Summer, but forming much larger heads. Pkt., 5c; oz., 20c; ¼ lb. 60c; 1 lb. \$2.00.

EXCELSIOR LATE FLAT DUTCH.—A very valuable late variety; for main winter crop has no equal; sure header, fine keeper. Pkt., 5c; oz., 20c; ¼ lb. 50c; 1 lb. \$1.75.

CHARLESTON LARGE WAKEFIELD.—Popular with market-gardeners in the South. This strain is about one week later than the Early Jersey Wakefield, but the heads are fully one-half larger; will not burst when ripe like most early sorts, and can be left standing in the field some time without damage. Pkt., 5c; oz., 20c; ¼ lb., 50c; 1 lb. \$1.75.



Charleston Large Wakefield.

RED ROCK (Henderson Mammoth).—The largest and surest heading red Cabbage. Heads as large and solid as Flat Dutch, and fine-grained. Pkt., 5c; oz., 25c; ¼ lb., 75c; 1 lb., \$2.50.

RICE'S SELECTED EARLY JERSEY WAKEFIELD.—This is the most widely known and popular early variety. Heads are cone-shaped and very solid. Pkt., 5c; oz., 20c; ¼ lb., 50c; 1 lb. \$1.75.

HENDERSON'S EARLY SUMMER CABBAGE.—A splendid Second Early Cabbage, large, round, flat heads, 8 to 10 pounds each. As an ideal second early Cabbage it continues to hold its place. It forms large, flat, round, solid heads, weighing usually 8 to 10 lbs. each. The quality is excellent, tender and sweet. It comes in about ten days later than Early Jersey Wakefield, but is more than double in weight. Pkt., 5c; oz. 20c; ¼ lb. 50c; 1 lb. \$1.75.

DANISH BALLHEAD.—One of the very best winter sorts; heads round and very solid. Pkt., 5c; oz., 20c; ¼ lb. 60c; 1 lb. \$2.00.

EARLY DWARF YORK.—A standard early English variety; heads small and heart-shaped. Pkt. 5c; oz. 20c; ¼ lb. 50c; 1 lb. \$1.75.

EARLY FLAT DUTCH.—Earlier and heads smaller than Late Flat Dutch; a good second-early, sure header, weighing 10 to 12 lbs.; valuable market sort. Pkt., 5c; oz., 20c; ¼ lb. 50c; 1 lb. \$1.75.

HENDERSON'S SUCCESSION.—One of the best of Cabbages; heads very large and somewhat flat; ten days later than Early Summer; much prized by gardeners. Pkt., 5c; oz., 20c; ¼ lb. 60c; 1 lb. \$2.00.

GREEN CURLED SAVOY, 80 DAYS.—This is undoubtedly the finest type of Winter Cabbage. After having been frosted it boils like marrow, and is not surpassed even by the Cauliflower in its best condition. The strain is not to be confounded with low-priced imported seeds. It is a shy producer of seed, and consequently never plentiful. Pkt., 5c; oz., 20c; ¼ lb. 50c; 1 lb. \$1.75.

RICE'S SUREHEAD.—All head and always sure to head; this very popular variety is rightly named Surehead, because it never fails to form a good solid head, even on poor soil, but the richer the soil the larger and finer the head; it is the finest late Cabbage in this country, and best for market. Heads the list for winter use. Pkt. 5c; oz. 20c; ¼ lb. 60c; 1 lb. \$2.00.

LARGE LATE DRUMHEAD.—Heads large, flat, solid, and a good keeper; planted for main crop for winter keeping. Pkt. 5c; oz. 20c; ¼ lb. 50c; 1 lb. \$1.75.

SWISS CHARD

The City Man's Garden

SWISS CHARD (The City Man's Garden).—Also called "Cut and Come Again" Spinach. This vegetable gives maximum returns for little care and space; it yields a constant crop from July to Winter. The leaves are used for greens the same as Spinach or beet tops; they are equal in quality and easier to prepare than spinach, and far superior to beets. Sow early in Spring, in rows 16 inches apart, and thin out to 6 inches apart in the rows. It can be used all Summer when spinach is not available. Later the leaves grow very large, with broad, flat, pure white stems, and mid-ribs, which may be cooked like Asparagus or made into very good pickles. As it grows, thin out for use and keep clear of weeds. Good cultivation increases the tenderness of the leaves.

LUCULLUS SWISS CHARD.—A new Moss Curled sort. Very large leaves. The mid-ribs are very broad and form a good substitute for asparagus during the Summer months. Pkt. 5c; oz. 10c; ¼ lb. 25c; 1 lb. 75c.



Swiss Chard.

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CAULIFLOWER

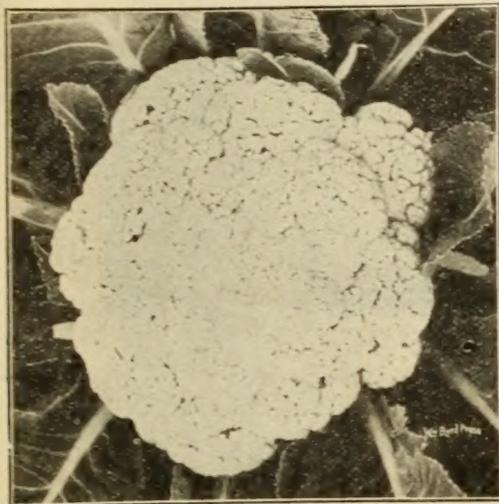
German, Blumentohl

Spanish, Coliflor

French, Choufleur

One ounce will sow a bed of 40 square feet, and produce about 3,000 plants.

CULTURE.—When grown to perfection this is a most delicious vegetable, and well repays generous treatment in cultivation. With a deep rich soil and an abundance of moisture, which in dry seasons must be applied artificially, Cauliflower can be grown well. The cultivation is similar to that of the cabbage. For early fall crops sow in May, and transplant in June, in rows of 4 feet apart, setting the plants 2 feet apart in the rows; water frequently if the ground is dry. Frequent hoeing and a liberal supply of rich liquid manure, to keep up a continuous and rapid growth, will produce splendid heads of the most delicate flavor. It facilitates blanching if the leaves are gathered loosely together and tied over the top of the head to protect from the sun. Cut before the flowers begin to open. Sow as late as June 20 for late crops, in beds or in hills, covering $\frac{1}{2}$ inch deep.



Henderson's Early Snowball.

DRY WEATHER CAULIFLOWER.

—During some seasons after a very late spring, hot weather comes on very quickly. In such a year this variety has proven itself of exceptional merit. Also in warm parts of the country, where there is not much cool weather, it is a most desirable sort. Very sure heading and second early. Heads larger than Snowball and snow white. Our seed is A1, and procured from the original grower in Denmark. Pkt., 25c; $\frac{1}{2}$ oz., \$1.00; oz., \$2.00; $\frac{1}{4}$ lb., \$6.00.

HENDERSON'S EARLY SNOWBALL.—This is undoubtedly the finest

variety ever introduced; it is the earliest, and produces beautiful snow-white heads of the most delicious flavor. The seed we offer is pure and genuine, and sure to prove satisfactory. Pkt., 25c; $\frac{1}{2}$ oz., \$1.00; oz., \$2.00; $\frac{1}{4}$ lb., \$6.00.

EXTRA SELECTED EARLY ER-FURT.—The finest strain of the Erfurt Cauliflower; almost as early as the Snowball; grows about 15 inches high, producing very solid, pure white heads of the very finest quality; seldom fails to form a good-sized head. Pkt., 25c; $\frac{1}{2}$ oz., \$1.00; oz., \$2.00; $\frac{1}{4}$ lb., \$6.00.

CELERY

German, Sellerie

Spanish, Apio

French, Celeri

One ounce will produce 7,000 plants.

CULTURE.—Sow seeds in hotbeds or coldframe. As soon as the plants are about 3 inches high, transplant to a nicely prepared bed in the border, setting them 4 or 5 inches apart. When about 8 inches high, and fine, stocky plants, set them in the trenches. Earth up a little during the summer, keeping the leaf stalks close together, so that the soil cannot get between them. Finish earthing up in autumn, and never hoe or earth up in moist weather, nor when the plants are moistened with dew.

To preserve Celery for winter, dig trenches 1 foot in width and as deep as the tops of the plants. Stand the Celery in these, erect as they grew, with what dirt adheres to the roots, packing closely, but not crowding. After the trench is filled it should be covered with straw or leaves as a protection from frost. Do not cover until the weather becomes quite cold, and then only a little at a time, as the cold becomes greater. Celery will bear a good deal of frost. The trench must have good drainage.

DWARF GOLDEN SELF-BLANCHING.—Our strain of this variety is unexcelled and absolutely reliable; this sort is, without doubt, the finest early Celery in cultivation. It is perfectly solid, of a fine, nutty flavor; attains a good size, and when blanched is of handsome golden yellow color. Pkt. 5c; oz. 50c; $\frac{1}{4}$ lb. \$1.50.

GIANT GOLDEN HEART.—A selection from Dwarf Golden Heart, which it resembles, but grows larger and is a better keeper; a favorite with Chicago gardeners. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; 1 lb., \$1.25.

GIANT PASCAL.—The largest variety grown; is also the best keeper; of fine, nutty flavor, and very easily blanched; deservedly popular for fall and winter use. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; 1 lb., \$1.25.

SCHUMACHER.—Very large, golden yellow heart, crisp and 50c per lb.

IMPROVED WHITE PLUME.—A well-known and perhaps the most popular variety of Celery; very early, ornamental, and for quality, surpassed by none; has great merit as an early market sort. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 50c; 1 lb. \$1.50.



Improved White Plume

SOUP CELERY.—Seed for flavoring soups, pickles, etc., 50c. per lb.

PINK PLUME.—New. Practically identical with Improved White Plume, but with the added merit of the stalks being richly suffused with pink; attractive in appearance and very fine in quality. Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 60c; 1 lb., \$2.00.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

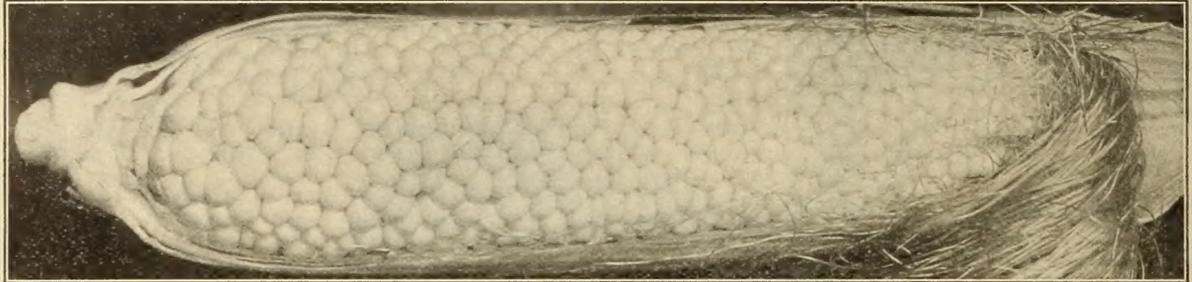
CELERICAC (Turnip Rooted Celery)

German, Knollen Sellerie French, Celeri-rave Spanish, Apio raiz de Nabo

CULTURE.—A variety of Celery with turnip-shaped roots, which are white-fleshed, comparatively tender, and have the flavor of celery stalks. The seed may be sown in the open ground in April, and the young plants nursed in the same way as celery; but in planting out the ground is manured and dug, not trenched, and the plants are set in shallow drills 12 inches apart, watering freely. As the growth advances, draw the earth to the plants, by which the knotty roots will be blanched and made delicate and tender.

LARGE EARLY ERFURT.—We have found this to be a great improvement on some of the older sorts of Celericac, for while of equally good flavor, it attains a larger size. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 50c; 1 lb. \$1.50.

LARGE SMOOTH PRAGUE.—An improved form of Turnip-rooted Celery; round, smooth roots, with very few side roots. This is the largest variety, and one of the very best. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 40c; 1 lb. \$1.40.



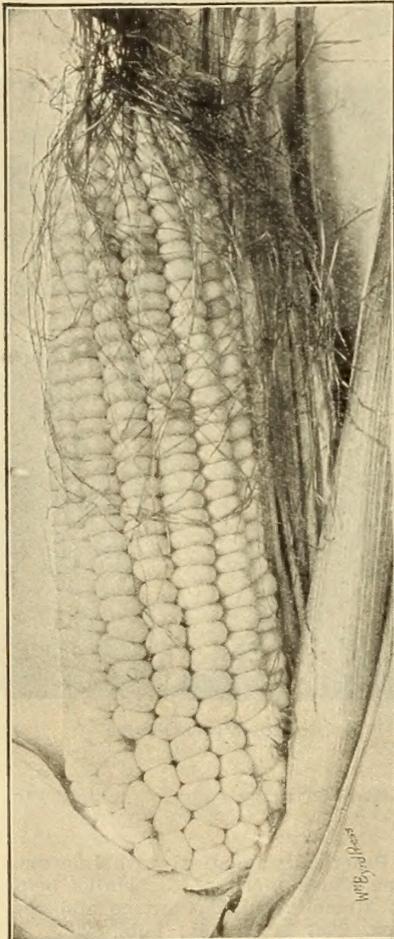
CORN, SUGAR

German, Wefchtern Spanish, Maiz French, Mais

One quart will plant 200 hills; 1 peck will plant 1 acre in hills.

CULTURE.—Corn requires a good soil and a warm situation. Commence for first early by planting the early varieties about May 1, and if a continuous supply is wanted all

summer, make plantings about two weeks apart from May 1 until the last of July, first planting early varieties, then later ones. Plant in rows 3 feet apart, and make the hills about the same distance apart in the rows. Five kernels in the hills are plenty. Cover about 1 inch deep for early, and a little deeper for late. Thin to three plants in a hill.



Adams' Extra Early.

Extra Early Sugar Corn

ADAM'S EXTRA-EARLY.—Not a sugar Corn, but largely grown for early use, especially in the South. Pt., 20c; qt. 30c; pk. \$2.00; bu. \$6.00; ear, $3\frac{1}{2}$ c; dozen, 35c.

GOLDEN BANTAM.—Extremely early yellow variety of delicious flavor. Pt. 30c; qt. 50c.

IDEAL SWEET CORN.—The earliest and one of the best corns. Large ears. Delicious and tender. Pt. 20c; qt. 30c; pk. \$1.75; bu. \$5.00; ear, 5c; doz. ears, 40c.

Medium Early Sugar Corn

ADAM'S EARLY.—Not a sugar Corn, but grown extensively all over the country for market purposes. Pt. 20c; qt. 30c; pk. \$2.00; bu. \$6.00; ear, $3\frac{1}{2}$ c; dozen, 35c.

BLACK MEXICAN.—One of the sweetest and best varieties grains black when ripe, but when in condition for the table cooks remarkably white. Pt. 20c; qt. 30c; pk. \$2.25.

STABLER'S EARLY.—Large, white ears of finest quality; very desirable for both canners and gardeners. Pt. 30c; tq. 50c; pk. \$2.75.

MAMMOTH EARLY.—An earlier and smaller variety of the Late Mammoth. Pt. 20c; qt. 30c; pk. \$2.00.

PREMO.—An early variety of unusual merit. The ears are large and the grain very sweet. It matures in 60 days, which makes it a most desirable sort. Pt. 20c; qt. 30c; pk. \$2.00.

Late Sugar Corn

COUNTRY GENTLEMAN.—Very distinct from any other sort; sometimes yields as many as five ears on a stalk; cob very small, with deep kernels of pearly whiteness. This is considered the finest of all Sweet Corn; the quality is delicious, and will delight the most fastidious epicure. Pt. 30c; qt. 50c; pk. \$3.75.

LATE MAMMOTH.—The largest and latest variety; ears of immense size, grains large and broad; quality of the best. Pt. 15c; qt. 50c; pk. \$3.75.

STOWELL'S EVERGREEN.—The standard for quality and the best known variety; a favorite alike with canners and market men; remains a long time in condition suitable for boiling. Pt. 30c; qt. 50c; pk. \$3.75; ear 6c; dozen, 60c.

WHITE EVERGREEN SUGAR CORN.—Pt. 30c; qt. 50c; pk. \$3.75.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE.



CUCUMBER

German, Gurfe

Spanish, Pepino

French, Concombre

One ounce will plant 50 hills; two pounds will plant an acre.

CULTURE.—For earliest use, sow the seed in the hot-bed or green-house in February or March, in warm loam, where the temperature is about 90 degrees; cover half an inch deep, and, when the plants are of fair size, transplant into hills (made in the green-house), four plants in a hill, so that when the weather permits the whole hill can be moved to the open ground by means of tins made for that purpose. Plant for general use in the open ground, about June 1st, in hills 6 feet apart each way, and thin to 3 plants in a hill. Fine old manure (about 6 cords per acre) is sufficient; or, better still, plant on land from which a crop has been taken, and which was heavily manured for that crop. A sprinkling of dry plaster will keep off the striped bug.

IMPROVED LONG GREEN.—Fine for pickling when small; also good for table use when about half grown. Pkt., 5c; oz. 10c; $\frac{1}{4}$ lb. 25c; 1 lb. 75c.

JERSEY PICKLING.—Used extensively by pickle manufacturers in New Jersey and Pennsylvania. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb. 25c; 1 lb. 75c.

EARLY FORTUNE.—A very fine, early and productive sort. White Spine. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 25c; 1 lb., 80c.

WHITE SPINE, ARLINGTON IMPROVED.—One of the finest Cucumbers for forcing, and one of the most perfect in shape, size, color and quality; very brittle and crisp. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb. 25c; 1 lb. 75c.

WEST INDIAN GHERKIN.—The only genuine Gherkin. Small, oval and covered with spines; color light green; used exclusively for pickling. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; 1 lb., \$1.25.

COLLARDS, or COLEWORT

German, Blattertohl

French, Chou

Spanish, Cabu

One ounce will produce 3,000 plants.

A variety of Cabbage known in different sections as "Cole" and "Colewort." It is extensively used in the South for "greens," where it continues in luxuriant growth all the winter.

TRUE GEORGIA.—Used as "greens" mainly in the South and West. As the leaves are pulled off others grow in their places. Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 25c; 1 lb. 60c.

CORN SALAD

LARGE GREEN CABBAGE.—A small, hardy salad; used also as a substitute for lettuce; can be sown in September and wintered over the same as Spinach. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 15c; 1 lb., 35c.

WATER CRESS (True)

WATER CRESS.—Highly esteemed as a salad during the Spring and Fall. Also used 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., 5c; oz., 30c; $\frac{1}{4}$ lb., \$1.00; 1 lb., \$3.00.

ENDIVE

German, Engivie

French, Chicoree

Spanish, Endivia

CULTURE.—Endive is one of the best salads for fall and winter use. Sow for an early supply about the middle of April. As it is used mostly in the fall months, the main sowings are made in June and July. Plant 1 foot apart each way. When the plant has attained its full size, gather up the leaves and tie them by their tips in a conical form. This excludes the light and air from the inner leaves, which, in the course of from three to six weeks become bleached.

WHITE CURLED.—For early use; should be used when young. Pkt., 5c; oz. 15c; $\frac{1}{4}$ lb. 40c; 1 lb. \$1.25.

GREEN CURLED.—Same price as White.

EGGPLANT

German, Gierpanze

French, Aubergine

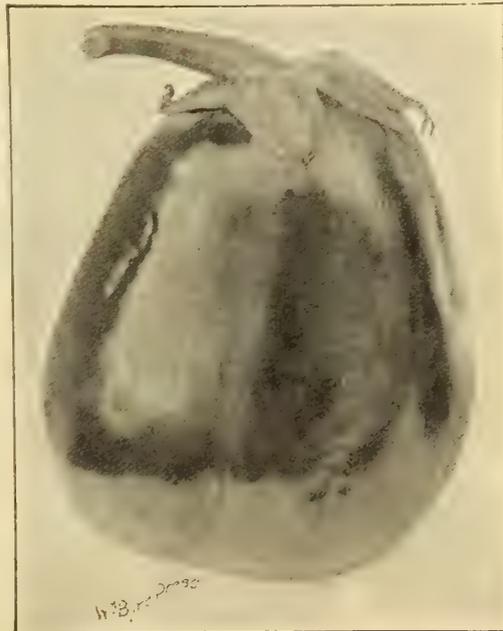
Spanish, Berengena

One ounce for 1,000 plants.

CULTURE.—The Eggplant will thrive well in any good garden soil, but will repay good treatment. The seeds should be sown in hot-bed or green-house in March or April, and when about an inch high potted in 2-inch pots. Plant out about June 1st, 2 $\frac{1}{2}$ feet apart. If no hot-bed is at hand they can be grown in any light room where the temperature will average 75 degrees.

BLACK BEAUTY.—The earliest large variety; color rich dark purple. Pkt. 10c; oz. 50c; $\frac{1}{4}$ lb. \$1.50.

NEW YORK IMPROVED PURPLE SPINELESS.—Similar to New York Improved Purple, except that it is entirely free from spines. Pkt. 10c; oz. 50c; $\frac{1}{4}$ lb. \$1.50.



LEEK

German, Lauch French, Poireau
Spanish, Puerro

One ounce will plant 200 feet of drill.

CULTURE.—The Leek is very hardy and easily cultivated; it succeeds best in a light but well-enriched soil. Sow as early in the spring as practicable, in drills 1 inch deep and 1 foot apart. When 6 or 8 inches high transplant in rows 10 inches apart each way, as deep as possible, that the neck, being covered, may be blanched.

LARGE LONDON FLAG.—The oldest and best-known and most largely grown variety. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 40c; 1 lb. \$1.00.

GOOD SEEDS
ARE THE CHEAPEST
BUY OURS



Large London Flag.

GOURD

One ounce will plant 25 hills.

CULTURE.—Gourds are tender annuals, and should not be planted until all danger of frost is over, and not less than 6 feet apart each way, in good rich loam. Three plants in a hill will be sufficient to leave at the last hoeing.

DIPPER.—This, like the Sugar Trough, has a thin but hard shell, and can readily be made to serve useful purposes. Oz. 15c; $\frac{1}{4}$ lb. 50c.

KOHL-RABI

German, Kohl-Rabi French, Chou-Rave Spanish, Col de nabo

One ounce will sow 200 feet of drill.

CULTURE.—This vegetable, the popularity of which is rapidly increasing, combines the virtues of the turnip and cabbage, but excels both in nutritive, hardy and productive qualities. The seed may be sown in June, in rows 18 inches apart, and the plants thinned out to 8 or 10 inches in the rows.

EARLY WHITE VIENNA.—Best for general table use; flesh tender and white. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; 1 lb., \$1.25.

LARGE GREEN, or WHITE.—Good for table use and is also used for feeding stock. Same prices as White Vienna.

MUSHROOM SPAWN

Mushrooms may be grown in cellars, under green-house benches or in sheds, wherever a temperature of 50 degrees can be kept up throughout the winter. We issue a special circular giving full cultural directions, which will be sent on request. By express—15c per brick; 10 bricks for \$1.30. A brick is enough for 9 square feet. Mailing weight, 2 lbs. per brick.

HERBS**Sweet, Pot and Medicinal**

CULTURE.—The seeds should be sown in Spring, in shallow drills, 12 inches apart, and the young plants thinned out or transplanted to about 4 inches. They should be harvested on a dry day, just before the blossom develops, dried quickly and bottled, or closely packed in dry boxes, with the air entirely excluded.

	Pkt.	Oz.
Anis. Used for flavoring.....	\$0.05	\$0.10
Balm. Very fragrant leaves.....	.05	.30
Caraway. The seeds of this herb are used for flavoring and render satisfaction when devoted to this purpose.....	.05	.10
Catnip.....	.05	.30
Coriander. Seeds used for flavoring.....	.05	.10
Dill. Used for flavoring pickles.....	.05	.10
Horehound. Very useful in curing coughs.....	.05	.20
Lavender. Leaves very fragrant.....	.05	.15
Rosemary. Leaves very fragrant.....	.05	.40
Sage. A highly aromatic herb; most useful of all.	.05	.15
Savory, Winter.....	.05	.15
Sweet Basil. Leaves used for flavoring.....	.05	.15
Sweet Fennel. Seeds aromatic.....	.05	.10
Sweet Marjoram. Used as a seasoning.....	.05	.15
Summer Savory. Used as a culinary herb.....	.05	.10
Thyme. Used as a seasoning.....	.05	.25

KALE, or BORECOLE

German, Blatter-Kohl French, Chou Vert Spanish, Breton

One ounce will produce 3,000 plants.

CULTURE.—Sow from the middle of April to the beginning of May in prepared beds; transplant in June, and treat in the same manner as for Cabbage. Of all the Cabbage tribe, this is the most tender and delicate, and would be much more extensively grown than it is if its excellent qualities were generally known. The varieties are all extremely hardy, and are best when touched by frost.



Dwarf Green Curled Scotch.

DWARF GREEN CURLED SCOTCH, or NORFOLK.—Rarely exceeding 18 inches in height, but spreading out under good cultivation to 3 feet in diameter; leaves beautifully curled and bright green. Oz., 10c; $\frac{1}{4}$ lb., 20c; 1 lb., 50c.

GERMAN CURLED.—Price, 50c per lb.

IMPROVED IMPERIAL CURLED KALE.—A beautifully curled and crumpled sort, of strong, vigorous habit. The leaves are a beautiful dark-green color, and delicate in flavor. A striking feature in this Kale is that it will stand longer before going to seed than any other. In the latitude of Washington it will stand throughout the winter without protection. Pkt., 5c; $\frac{1}{4}$ lb., 15c; 1 lb., 50c.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

LETTUCE

German, Lattich

French, Laituce

Spanish, Lechuga

One ounce will sow 100 square feet, or 120 feet of drill.

CULTURE.—Requires a rich, moist soil, and to be crisp and tender needs to be grown in cool weather. For winter use, sow in hot-beds every two weeks, at the rate of one ounce of seed to four sashes (a sash is 3 feet long by 6 feet wide); cover very lightly and transplant first to 3 inches apart each way, afterward to 8 inches. For garden or field, sow in rows, and cover one-fourth of an inch deep, and thin out to 12 inches apart in the rows. For New England, the White-seeded Tennisball, for cultivation under glass, and the Black-seeded Tennisball, for outdoor use, are the standard varieties.



Boston Market.

WHITE LOAF LETTUCE.—The best of all. Has large heads, suitable for frames or outdoor. Fine for market gardeners. Pkt., 5c; oz., 15c; ¼ lb., 30c; 1 lb., \$1.00.

BIG BOSTON.—A most desirable variety, either for forcing in cold frames or open ground planting; always produces large, solid, salable heads. Pkt., 5c; oz., 15c; ¼ lb., 35c; 1 lb., \$1.00.

BOSTON MARKET.—One of the best for forcing under glass, as well as for outside use; forms fair-sized heads; edges of leaves slightly tinged with red. Pkt., 5c; oz., 15c; ¼ lb., 35c; 1 lb., \$1.00.

GRAND RAPIDS.—As a distinctly forcing and shipping Lettuce this variety undoubtedly stands at the head of the list; beautiful in appearance. Pkt., 5c; oz., 20c; ¼ lb., 30c; 1 lb., \$1.00.

IMMENSITY.—New. The largest head Lettuce in the world. Tender, sweet and crisp. Pkt., 5c; oz., 15c; ¼ lb., 30c; 1 lb., \$1.00.

PRIZE-HEAD EARLY.—Leaves green and red, very thin, crisp and tender; one of the best for private use. Pkt., 5c; oz., 15c; ¼ lb., 30c; 1 lb., \$1.00.

SALAMANDER.—Fine, compact heads, which resist summer heat admirably; very popular in some sections. Pkt., 5c; oz., 15c; ¼ lb., 35c; 1 lb., \$1.00.

SIMPSON BLACK-SEEDED.—Nearly double the size of the Early Curled Simpson; leaves are delicate golden yellow; superior variety for forcing or sowing out-of-doors. Pkt., 5c; oz., 15c; ¼ lb., 35c; 1 lb., \$1.00.

MAY KING.—Heads extra large and solid; green outside, but heart clear yellow; very desirable. Pkt., 5c; oz., 15c; ¼ lb., 35c; 1 lb., \$1.00.

MELON, MUSK

German, Melone

French, Melon

Spanish, Melon Muscatel

One ounce will plant about 80 hills.

CULTURE.—A rich, deep, sandy loam, well worked and highly manured with old rotten compost, is of the first importance. Plant when all danger of frost is over, in hills 5 to 6 feet apart each way; scatter a dozen seeds to a hill, and after they are out of danger from bugs, thin to three or four plants. When they have four or five leaves, pinch off the end of the main shoot, which will cause the lateral branches to put forth sooner. This will strengthen the growth of the vines, and the fruit will come earlier to maturity.

SWEET AIR CANTALOUPE

We know from what we have seen of this melon for the past three seasons that we cannot speak too highly of this melon. It is the sweetest, finest flavored, juiciest and best melon ever offered.

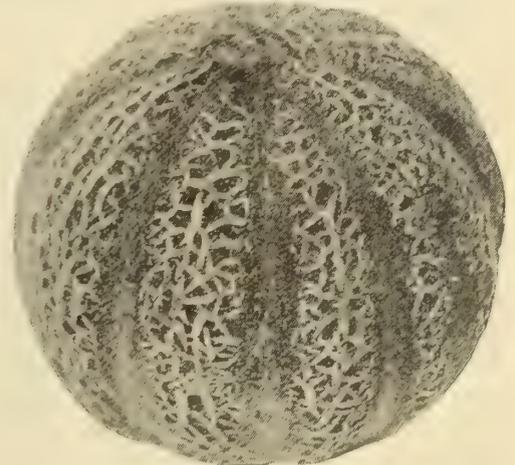
It is a little larger than the Rocky Ford, well netted, thick green flesh, small seed cavity. When the other standard sorts have been flat to the taste this has been perfect in sweetness.

It is prolific. The best to grow for profit; the best for table; the best for restaurant; what more can we say. Pkt. 5c; oz. 15c; ¼ lb. 50c; 1 lb. \$1.50.

ANNE ARUNDEL.—An improvement on Baltimore or Acme, of same shape and color, but twice as large. Pkt., 5c; oz., 10c; ¼ lb., 25c; 1 lb., 75c.

BALTIMORE, or ACME.—This is the favorite melon in Baltimore markets, and is also known and highly esteemed by market men in New York and Philadelphia. It is early, oblong in shape; flesh green and very fine. Pkt., 5c; oz., 10c; ¼ lb., 25c; 1 lb., 75c.

EMERALD GEM.—One of the very earliest varieties; fruit small, skin deep emerald green; flesh a handsome salmon-color and very thick; flavor most delicious; a splendid melon for hotels and restaurants. Pkt., 5c; oz., 10c; ¼ lb., 25c; 1 lb., 75c.



Sweet Air Melon.

HACKENSACK EXTRA EARLY IMPROVED.—A selection from an improvement on the old Hackensack, and similar in shape and appearance; nearly as large, and fully ten days earlier. One of the finest for market gardeners; quality perfect. Pkt., 5c; oz., 10c; ¼ lb., 25c; 1 lb., 75c.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

MELON MUSK—Continued

ROCKY FORD.—An improved and oblong form of the Netted Gem. A most excellent green-fleshed sort. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; 1 lb., 60c.

TIPTOP.—Varies from round to slightly oblong; skin, pale green, covered with a handsome netting; flesh, rich, deep salmon color and sweet and spicy in flavor. The flesh being thick, fine-grained and firm, makes this an excellent shipping melon. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; 1 lb., 50c.

PAUL ROSE.—This new melon is superior to all others as a market variety, and has few equals for the home garden. Fruit oval; flesh rich orange red. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; 1 lb., 60c.

FINE NETTED NUTMEG.—Small, very early and fine-netted; fruit round; flesh green and very sweet. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; 1 lb., 75c.

MELON, WATER

German, Waffermelone

French, Melon d'Eau

Spanish, Zandia

One ounce will plant 50 hills.

CULTURE.—Watermelons are cultivated in hills which should be 6 to 8 feet apart each way, and composed of light, moderately rich soil. The hills should be dug about 2 feet square, 18 inches deep, and half filled with well rotted manure, which must be thoroughly incorporated with the soil. Plant in May, ten seeds to a hill, and when the plants are well up, thin out to three. Cultivate until the vines cover the ground, and pinch the ends of the growing shoots to induce early fruiting.

TOM WATSON.—This melon has created quite a furore wherever grown, and we believe is unquestionably the best quality shipping melon in our list. It has a dark green rind, solid red, luscious meat, ripening close up to the rind. The rind is very tough, making it an excellent melon for shipping long distances. Its flavor and fine qualities also commend it very strongly for the private grower. We believe it is destined to become one of the most popular melons on our list. Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 15c; 1 lb. 50c.

EDEN.—Similar in appearance to Kolb Gem and of even better quality. Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 15c; 1 lb. 50c.

FLORIDA FAVORITE.—Highly prized for its delicious flavor; large, oblong; rind dark green, with stripes of lighter green; ten days earlier than Kolb Gem. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 15c; 1 lb., 50c.

KOLB GEM.—Originated in Alabama, and more largely grown in the South than any other melon; as a shipping variety has no superior; rind, dark green, mottled; shape, nearly round; quality, superb. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 15c; 1 lb., 40c.

MONTE CRISTO, or KLECKLEY'S SWEETS.—Fruit oval and of medium size; skin dark green; flesh rich bright red, very sweet and tender. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 25c; 1 lb., 75c.

SWEETHEART.—New. Globular in shape; skin very bright, mottled green; flesh bright red, firm, and heavy, but crisp, melting and exceedingly sweet. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 15c; 1 lb., 40c.



Sweetheart.

TRIUMPH.—New. Nearly round, large and an excellent shipper; skin dark green; flesh bright red. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 15c; 1 lb., 40c.

GEORGIA RATTLESNAKE.—An excellent market variety; large, oblong; rind dark, mottled and striped. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 15c; 1 lb., 50c.

ONION SEED

German, Zwiebel

Spanish, Cebolla

French, Oignon

One ounce will plant 100 feet of drill; 5 or 6 pounds in drills for an acre. For sets from 50 to 60 pounds should be sown to the acre, according to the richness of the soil.

CULTURE.—The Onion thrives best in a rather deep, rich, loamy soil, and, unlike most vegetables, succeeds well when cultivated on the same ground for successive years. The best culture requires that the ground be deeply trenched and manured the previous autumn, and laid up in ridges during the winter, to pulverize. As early in the spring as the ground is in working order, commence operations by leveling the ground with a rake and tread it firmly; sow thinly in drills about one-fourth of an inch deep, and 1 foot apart; cover with fine soil, and press down with the back of a spade or a light roller. When the young plants are strong enough, thin gradually so that they stand 3 or 4 inches apart. Keep the surface of the ground open and free from weeds by frequently hoeing, taking care not to stir the soil too deeply or to collect it about the growing bulbs.



Silver Skin Onion.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

ONION SEED—Continued

YELLOW GLOBE DANVERS.—Undoubtedly the best-known and most popular of all Onions; the earliest yellow variety; is entirely free from stiff necks. Globular in shape; has a small top. It is the most productive, producing as high as 1,000 bushels per acre, and will average on good soil with proper culture, 700 or 800 bushels. Pkt., 5c; oz., 20c; ¼ lb., 50c; 1 lb., \$1.50.

PRIZETAKER.—This variety of recent introduction, annually grows in favor. It excels every Onion now existing in beauty, size and productiveness, and equals the best in quality, being mild in flavor as the imported Spanish Onions of our groceries. Pkt., 5c; oz., 15c; ¼ lb., 45c; 1 lb., \$1.50.

LARGE RED WETHERSFIELD.—Onion growers who prefer the red varieties will find our pedigree strain far surpassing the ordinary Red Wethersfield in size, productiveness and keeping qualities. It is of the finest form, skin deep purplish red, flesh purplish white, much finer than many of the red sorts. Immense crops of this Onion are grown each season from our seed by some of the largest growers in the United States who realize the very highest prices for their crops. Pkt. 5c; oz. 15c; ¼ lb. 40c; 1 lb. \$1.25.

WHITE PORTUGAL, or SILVERSKIN.—A large, flat, white Onion of mild and pleasant flavor; hard and fine-grained, and a good keeper. Extensively sown for sets, and is also largely grown for pickling. Pkt. 5c; oz. 40c; ¼ lb. \$1.00; 1 lb. \$3.00.

ONION SETS

Prices on application.

WHITE ONION SETS.—Grown from our choice strain of the Philadelphia White Silverskin seed.

YELLOW ONION SETS.—These will produce handsome well-ripened bulbs of large size quite early in the summer.

OKRA

German, Dcher

French, Gombo

Spanish, Quimbombo

One ounce will plant 100 hills.

This is an annual from the West Indies, cultivated for its green seed-pods, which are used in soups or stewed and served like Asparagus. It is highly esteemed in the South for making gumbo soup. The pods when young and tender should be sliced in sections, strung on a thread and hung up in the shade to cure like dried apples; can be used for soup at any time.

CULTURE.—Sow the seed thinly in dry, warm soil, in shallow drills 2 feet apart. After the plants are up, thin them out to 9 inches apart; hoe frequently, and draw a little earth to the stems as they grow. Gather the pods when quite green and about 1½ inches in length.

EARLY DWARF WHITE.—White pods. Pods extra long when fully matured, measuring a foot in length; thick and fleshy; early and prolific. Pkt. 5c; oz. 10c; ¼ lb. 15c; 1 lb. 40c.

LONG GREEN.—Pods long, green and ribbed, and a heavy bearer. Long Green same price as Dwarf White.

PARSLEY

German, Peterfilie

French, Persu

Spanish, Perejil

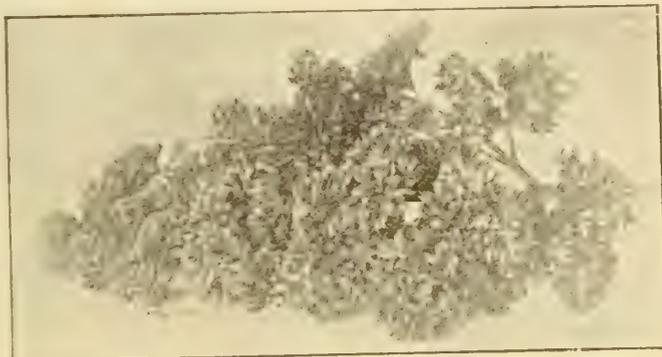
One ounce for 150 feet of drill.

CULTURE.—Parsley succeeds best in rich, mellow soil. As the seed germinate very slowly it should be sown early in spring, previously soaking the seed for a few hours in tepid water. Sow thickly in rows a foot apart and half an inch deep. For winter use, protect in a frame or light cellar, or a few plants may be placed in pots or boxes and kept in the house.

CHAMPION MOSS CURLED.—An English strain with moss curled foliage and a very vigorous grower. A standard variety; desirable. Pkt. 5c; oz. 10c; ¼ lb. 20c; 1 lb. 75c.

EMERALD DWARF EXTRA CURLED.—Leaves finely cut and curly and bright green; good for home or market gardening. Same price as Moss Curled.

FINE DOUBLE CURLED.—A standard variety; plants bear an abundance of finely curled leaves; ornamental. Same price as Moss Curled.



Champion Moss Curled Parsley.

PEPPER

German, Pfeffer

French, Piment

Spanish, Pimiento

One ounce will produce 2,000 plants.

CULTURE.—Grown largely for pickles. Sow in hotbeds early in April, and transplant to the open ground when the weather is favorable. They should be planted in warm, mellow soil, in rows, 18 inches apart. They may also be sown in the open ground when danger of frost is past.

CHINESE GIANT.—New. The largest and finest mild red variety. Pkt. 5c; oz. 50c; ¼ lb. \$1.50; 1 lb. \$5.00.

LARGE BELL, or BULL NOSE.—A favorite and well-known pickling sort; is early, large, mild, and thick-skinned. Pkt. 5c; oz. 30c; ¼ lb. 75c; 1 lb. \$2.50.

LONG RED NARROW CAYENNE.—Pods slender, about 3 inches long and bright red; very pungent and productive. Pkt. 5c; oz. 30c; ¼ lb. \$1.00; 1 lb. \$3.00.

RUBY KING.—The best and most prolific mild red Pepper for market or family use; so sweet and mild they can be eaten raw like an apple; largest size. Pkt. 5c; oz. 30c; ¼ lb. \$1.00; 1 lb. \$3.50.

SWEET MOUNTAIN, or MAMMOTH.—Large and mild-flavored; a well-known standard sort; color glossy red; rind thick and fleshy; popular with all growers for market. Pkt., 5c; oz. 25c; ¼ lb. 75c; 1 lb. \$2.50.



Chinese Giant Pepper.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

PARSNIP

German, Pastinate

French, Panais

Spanish, Pastinaca



Hollow Crown Parsnip.

One ounce to 200 feet of drill; 5 to 6 lbs. in drills to acre.

CULTURE.—Sow as early in spring as the weather will admit, in drills 15 inches apart, covering half an inch deep. When well up, thin out to 5 or 6 inches apart in the rows. Unlike carrots they are improved by frost, and it is usual to take up in fall a certain quantity for winter use, leaving the rest in the ground till spring, to be dug as required.

SUGAR, or HOLLOW CROWN.—A very reliable and favorite sort for general culture. Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 20c; 1 lb. 50c.

GUERNSEY.—Roots not quite so long as Hollow Crown, but thicker and more easily gathered; smooth and fine grained. Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 20c; 1 lb. 50c.

PEAS

German, Erbfen

French, Pois

Spanish, Guizante

One quart for 75 feet of drill; 2 or 3 bushels in drills for an acre.

CULTURE.—Our trial of Peas is probably the most extensive on this side of the Atlantic, and it enables us to discard inferior sorts and to offer in the following list only the best varieties. Peas come earliest to maturity in light, rich soil.

For early crop, a deep loam or soil strongly inclining to clay is best. For early crops, decomposed leaves or leaf-mold should be used; or, if the soil is very poor, strong manure may be used. For general crops a good dressing should be applied, and for the dwarf-growing kinds the soil can hardly be too rich. When grown as a market crop, Peas are never staked; for private use, they are generally sown in double rows, and the tall varieties staked up by brush. For an early crop, sow as soon as the ground can be worked, and make repeated sowings every two weeks for succession. After the first of June sowing should be discontinued until the middle of August, when a good crop may sometimes be secured by sowing an extra early sort for fall use.

LAXTONIAN.—A grand, early, dwarf Pea; enormous pods; the largest of peas. The pods of Laxtonian are very large, and are produced on a low-growing, sturdy vine, without support of any kind. The flavor is just as rich and good as any of the later varieties, which entitles it to a permanent place in every garden. The plant is only $1\frac{1}{2}$ feet high, branching in habit. Pt., 25c; qt., 40c; pk., \$2.50; bu., \$10.00.

Extra Early Dwarf Peas

BLISS AMERICAN WONDER.—One of the earliest wrinkled sorts, and one of the most popular. Height, $\frac{3}{4}$ ft. Pt., 15c; qt., 25c; gal., 90c; pk., \$1.75; bu., \$6.00.

SUTTON'S EXCELSIOR.—New. As early as American Wonder, with much larger pods and more prolific. Height, 1 ft. Pt., 15c; qt., 25c; gal., 85c; bu. \$6.00.

Extra Early Peas (Not Dwarf)

DWARF TELEPHONE (Carters Daisy).—Excellent new variety; large, well-filled pods; peas of fine flavor. Height, $1\frac{1}{2}$ ft. Pt. 30c; qt. 50c; pk. \$3.00; bu. \$10.00.

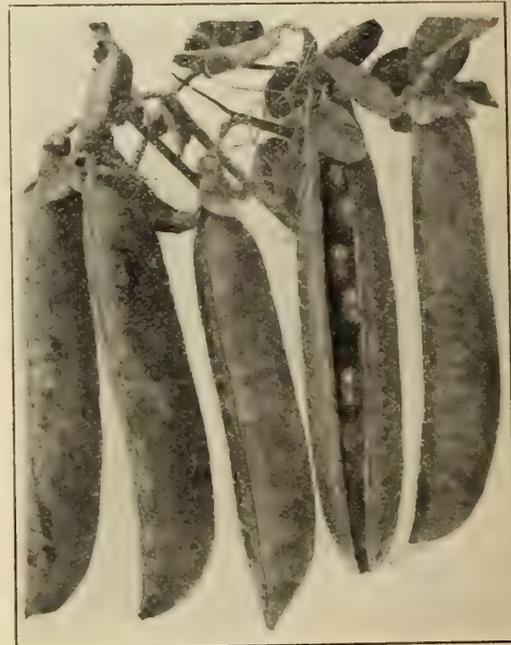
GENUINE ALLEN'S IMPROVED TELEPHONE.—Pod very large and of very dark green color, making it excellent for market purposes. Immense peas of first-class quality; one of the finest yet introduced. Pt. 25c; qt. 40c; pk. \$3.00; bu. \$8.50.

THOMAS LAXTON.—Similar to Gradus, but more hardy and productive. Height, 3 ft. Pkt. 5c; pt. 20c; qt. 35c; pk. \$2.25; bu. \$7.50.

ALASKA.—The earliest blue Pea; a fine sort; popular with canners and market gardeners; ripens uniformly. Height, $2\frac{1}{2}$ feet. Pt. 20c; qt. 35c; pk. \$2.25; bu. \$7.50.

BLACK-EYED MARROWFAT.—(Hand-picked stock). Is very hardy and prolific. Height 5 ft. Pt. 20c; qt. 30c; pk. \$2.00; bu. \$5.50.

LARGE WHITE MARROWFAT.—(Hand-picked stock). Cultivated very extensively for the summer crop. Height, 4 feet. Pt. 20c; qt. 30c; pk. \$2.00; bu. \$5.50.



Telephone Pea.

MAMMOTH MELTING SUGAR.—Edible pods. A fine new variety, producing abundantly; large, broad pods, very brittle and entirely stringless. 4 ft. high. Pt. 20c; qt. 40c; pk. \$2.50.

GENUINE ALLEN'S AMEER.—New. Extra early blue Pea; large, dark green pods; on order of Gradus. Height, 3 ft. Pt. 20c; qt. 30c; pk. \$2.00; bu. \$6.50.

FIRST AND BEST.—Very early and prolific; a standard variety. Popular with canners. Height, $2\frac{1}{2}$ ft. Pt., 15c; qt., 25c; gal., 75c; bu., \$5.00.

GENUINE ALLEN'S GRADUS, or PROSPERITY.—Without doubt the finest extra early Pea yet introduced; it is in condition to pick about four days after Rice's Extra Early. The pods are very large, and well filled with large, wrinkled, deep green peas of the very finest quality. Height 2 ft. Pt. 20c; qt. 35c; pk. \$2.25; bu. \$7.50.

TELEPHONE.—Pods very large; filled with immense peas of first-class quality; one of the very finest yet introduced. Height $4\frac{1}{2}$ ft. Pt. 20c; qt. 35c; pk. \$2.25; bu. \$7.50.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

POTATOES—For Seed.



Early Rose Potato.

German, Kartoffeln

Spanish, Bataas

French, Pomme de Terre

In drills 3 feet apart, 12 to 14 bushels to the acre. One peck will plant about 125 hills.

CULTURE.—The Potato, like all robust-growing vegetables, can be grown with varying success on soils of all kinds and in all conditions of fertility, but the soil best suited to it is a sandy loam. In all heavy soils it is more subject to disease, and the flavor, also, is much inferior. In breaking up good pasture land, the decaying sod answers sufficiently well for the first year in lieu of manure. Manure is applied either in rows or hills, or broadcast over the ground and plowed in—the latter in most cases being preferable. If the soil is good, but little manure is required. In highly enriched soil the plants are more liable to disease than when grown in soil that is naturally good. The best fertilizers are those of a dry or absorbent nature, as plaster, lime, superphosphate of lime and bone dust. For wet soils these are particularly beneficial, as they not only promote growth but prevent disease. Plant as early in spring as the ground can be had in fair working order, in hills or ridges about 3 feet apart, covering in light, warm soils about 4 inches deep, but in cold, wet situations $2\frac{1}{2}$ or 3 inches will be sufficient.

Prices of all varieties of Potatoes on application.

Extra Early Potatoes

EARLY OHIO.—Now widely known and deservedly one of the most popular sorts. It has the advantage of being fit for use and sale even before fully ripe. A few days earlier than the Early Rose, and similar in color and habit of growth. Quality, dry and mealy.

EARLY ROSE.—Our stock of this popular variety is in its original purity, the planting stock having been renewed annually for several years past from Houlton, Maine, where it is very popular and about the only variety planted for market.

EARLY SIX WEEKS.—Undoubtedly the earliest Potato grown; similar to Early Ohio in every respect, but claimed by the originator to be earlier than this standard well-known sort. We recommend this for first-early planting.

IRISH COBBLER.—A variety which becomes popular wherever tried on account of its earliness, handsome appearance and excellent quality. Tubers are round and smooth, skin creamy white and often netted; flesh white. We do not hesitate to recommend this variety.

DOUBLE X EARLY.—One of the earliest and best Potatoes grown. No other Potato has more friends nor a better reputation than the Double X around Washington and vicinity. The tubers are oblong-oval, round at the seed end, with eyes that are almost even with the surface. An excellent keeper, very productive, of fine quality, and has proved to be a most valuable addition to our list of extra early varieties.

Medium-Early and Late Potatoes

GREEN MOUNTAIN.—The best second early potato now on the market; fine yielder; fine flavor; fine appearance. Free from blight and rot. Keeps well, and is always ready for the table.

MCCORMICK, or GERMAN PEACH BLOW.—Should be planted in July and early August. It is one of the heaviest yielders, and in good season makes a fine table sort.

SWEET POTATO ROOTS

BIG STEM SWEET POTATOES.—They are of fine size. They make only a very few roots. The quality is first-class.

JERSEY SWEET POTATOES.—Too well known to require any description. These are from reliable growers.

PUMPKIN

German, Kurbis

French, Potiron

Spanish, Calabaza

One pound will plant from 200 to 300 hills.

CULTURE.—The common practice is to drop two or three seeds in every third or fourth hill in the cornfield, but if cultivated on a large scale the seed may be sown in hills 8 feet apart each way, four plants to the hill, and otherwise treated the same as recommended for melons or cucumbers.

SWEET, or SUGAR.

—This is a small, round and very prolific variety; skin and flesh a deep orange-yellow; very fine-grained, sweet and fine for pies. The pie Pumpkin of New England. Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 15c; 1 lb. 75c.



Sweet, or Sugar Pumpkin.

CONNECTICUT FIELD.—This variety is most extensively used throughout New England and New York for field culture; is generally planted with corn. Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 15c; 1 lb. 35c.

CUSHAW, or CROOKNECK.—Grows to a very large size, sometimes attaining a weight of 70 pounds, and resembling, in shape, the Winter Crookneck squash; of light cream-color, sometimes slightly striped with green. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb. 35c; 1 lb. \$1.00.

KENTUCKY FIELD.—Flat and round somewhat similar to a cheese. Color of skin a deep orange; flesh is somewhat lighter; one of the best for table use. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb. 15c; 1 lb. 35c.

KING OF THE MAMMOTH.—This is truly a giant among Pumpkins; specimens have been grown to weigh 250 pounds. In shape it is round, flat and slightly ribbed; color of skin and flesh bright golden yellow and of good quality, making excellent pies, but grown principally for stock; keeps well. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 35c; 1 lb., \$1.00.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE.



RADISH

German, Rettig, Radies
French, Radis, Rave, Pelite
Rave
Spanish, Rabano

One ounce will sow 100 feet of drill.

CULTURE.—The soil for Radishes should be very rich, light and mellow, well broken by digging, as their tender and mild qualities depend much upon their rapid growth. For very early use, sow in gentle hotbeds in February, and in the open air as soon as the ground can be worked, at intervals of ten or twelve days for a succession as long as they may be wanted. The winter varieties should be sown in August, lifted before severe frost, and stored in the cellar.

LONG CINCINNATI MARKET.—An improved strain of the well-known Long Scarlet Short-Top. An excellent variety. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 15c; 1 lb., 40c.

CRIMSON GIANT.—Extremely large, but never pithy; suitable for forcing or open culture; very tender and crisp. Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 20c; 1 lb. 50c.

PHILADELPHIA WHITE BOX.—One of the best varieties for growing under glass, as well as for outdoor culture; it is a rapid grower, with a short top; a beautiful round white variety; grows to a good size, and is always crisp, fine grained and tender. Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 20c; 1 lb. 50c.

OLIVE-SHAPED, FRENCH BREAKFAST.—Pink color, olive shape, white-tipped, and the favorite variety in the markets of Paris; popular everywhere. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb. 20c; 1 lb. 50c.

VICK'S SCARLET GLOBE.—One of the very earliest Radishes in cultivation; equally good for forcing or open culture in spring and early summer; color a beautiful scarlet; crisp, juicy and tender. Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 20c; 1 lb. 60c.

LONG ICICLE.—The finest white variety; very early. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; 1 lb., 50c.

WHITE STRASBURG.—One of the best of the long summer sorts; roots are long, handsome and tapering, and both skin and flesh pure white; flesh firm, brittle, tender, retaining these qualities when roots have become old and large. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 15c; 1 lb., 40c.

Fall or Winter Radish

HALF-LONG BLACK SPANISH.—Intermediate between Long and Round Black Spanish. Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 20c; 1 lb. 50c.

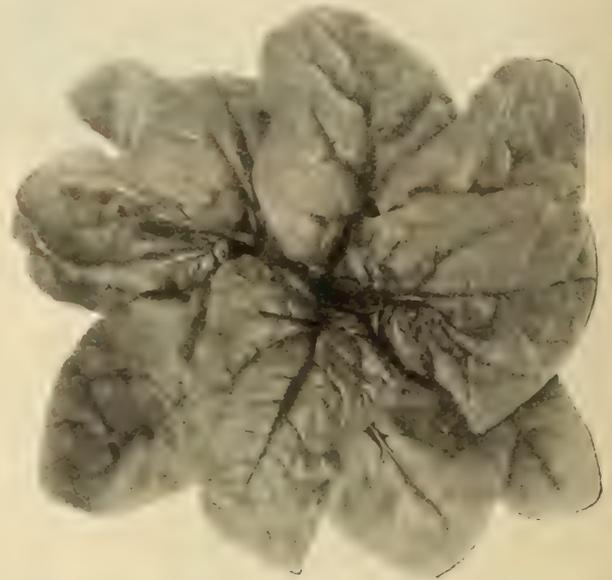
ROSE CHINA WINTER.—Bright rose-colored skin; flesh white and quality excellent; one of the best for fall and winter use; a favorite with marketmen. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb. 20c; 1 lb. 50c.

WHITE CHINESE, or NEW CELESTIAL.—It is ready for use when $2\frac{1}{2}$ or 3 inches long, and continues until nearly 6 inches long, making it almost an all-season Radish. The flesh is firm, solid, and pure white, and is very attractive in appearance. Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 20c; 1 lb. 50c.

SPINACH

German, Spinat French, Espinard Spanish, Espinaca
One ounce for 100 feet of drill; 10 to 12 pounds in drills for an acre.

CULTURE.—This is a very important crop in our market gardens, and is one of the most easily managed of all vegetables, requiring but little culture, and may be had fit for use the entire season. The main crop is sown in September. It is sometimes covered up in exposed places with straw or salt hay during winter, which prevents it from being cut by frost; but in sheltered fields there is no necessity for covering. For summer use it may be sown at intervals of two or three weeks from April to August. Spinach is best developed and most tender and succulent when grown in rich soil.



BLOOMSDALE SAVOY-LEAVED.—Home Grown; a heavy cropper, of fine quality and very hardy; succulent leaves, curled and crinkled like a Savoy Cabbage; hardier and most productive sort. Oz. 10c; $\frac{1}{2}$ lb. 50c; 1 lb. 75c.

LONG-STANDING THICK-LEAVED.—Stands the longest before running to seed; dark green. Grown especially for us in Holland. Same prices as Savoy.

SALSIFY, or OYSTER PLANT

German, Rodsbart

French, Salsifis

One ounce will sow 50 feet of drill.

CULTURE.—Sow the seed in light, deep soil, early in spring, in drills 12 inches apart and 1 inch deep, thinning out the young plants to 4 or 5 inches. The roots will be ready for use in October, when a supply should be taken up and stored like carrots. Those remaining will suffer no injury by being left in the ground till spring, but should be dug up before commencing their growth.

MAMMOTH SANDWICH ISLAND.—We consider this the largest and most profitable Salsify in cultivation; roots are two to three times the size of the ordinary Salsify, and of more agreeable flavor. It is pure white in color, and invaluable to market gardeners. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 50c; 1 lb. \$1.50.



PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

SQUASH

German, Kurbik French, Courge Spanish, Calabaza

One ounce Early will plant 50 hills; 1 oz. Marrow, 25 hills.

CULTURE.—The plants are very tender and sensitive to cold, and planting must be delayed until settled, warm weather. The general principles of culture are the same as those given for cucumbers and melons, but the plants are less particular as to soil. The summer varieties should be planted 4 feet apart each way, and the winter sorts 8 feet. Three plants are sufficient for a hill. Care should be taken not to break the stems from the Squashes intended for winter use, as the slightest injury will increase the liability to decay.



EARLY WHITE BUSH SCALLOPED.—A standard summer variety; good either for home or market garden. Pkt. 5c; oz. 10c; ¼ lb. 15c; 1 lb. 60c.

BOSTON MARROW.—Fine fall variety; oval, bright orange; flesh yellow and firm; best for pies, and also for canning. Pkt. 5c; oz. 10c; ¼ lb. 15c; 1 lb. 50c.

BENNING'S WHITE BUSH SQUASH.—The best of the White Bush varieties. Pkt. 5c; oz. 10c; ¼ lb. 40c; 1 lb. \$1.00.

GIANT SUMMER CROOKNECK.—Double the size of the ordinary Crookneck and very warty, but similar in other respects. Their handsome appearance commands an extra price in the market. Pkt., 5c; oz., 10c; ¼ lb., 30c; 1 lb., \$1.00.

IMPROVED HUBBARD.—The well-known and standard late variety; our strain is excellent. Pkt., 5c; oz., 10c; ¼ lb., 25c; 1 lb., 75c.

TOMATO

German, Liebesapfel French, Tomate Spanish, Tomates

One ounce will produce 1,500 plants.

CULTURE.—The Tomato is raised from seed, which should be sown in the hotbed about February 20th, and continuous sowing made until April 1st, according as the plants are wanted for use. When the plants are about 2 inches high, transplant to 4 inches apart; and, after three or four weeks, transplant from the hotbed into a coldframe, setting the plants 8 inches apart each way. (A coldframe is simply a low wooden frame covered with glass, used to protect such plants as are not sufficiently hardy to withstand our winters.) Keep the plants cool, so as to make them stocky. Set out in the open ground about June 1st, in well-enriched soil setting the plants 5 feet apart each way.



Bonny Best Tomato.

BONNY BEST EARLY TOMATO—It has been selected for earliness, solidity, smoothness and evenness of ripening up to stem. Fifteen days earlier than the

Beauty Tomato, and as early as the Earliana. Vigorous grower; bright red color, enormously productive. Pkt., 5c; oz., 20c; ¼ lb., 60c; 1 lb., \$2.00.

ACME, EARLY.—Well known and generally cultivated; early, smooth; ripens evenly; color purplish red. Pkt., 5c; oz. 15c; ¼ lb. 50c; 1 lb. \$1.50.

BEAUTY (Livingston's).—Large, smooth, pinkish red; thick flesh, regular form. Pkt. 5c; oz. 20c; ¼ lb. 60c; 1 lb. \$1.75.

SPARKS' EARLIANA.—New. Claimed to be the earliest; large, smooth, red; very prolific. Pkt. 5c; oz. 25c; ¼ lb. 75c; 1 lb. \$2.50.

JUNE PINK.—New. Very early; of medium size, round, smooth and very solid. Color, pink. Pkt., 5c; oz., 25c; ¼ lb., 75c; 1 lb., \$2.50.

LIVINGSTON'S GLOBE.—New. Fruit large, always firm and smooth; color rose, tinged with purple. Pkt., 5c; oz., 25c; ¼ lb., 75c; 1 lb., \$2.75.

MATCHLESS.—Very large, smooth, solid, and fine-flavored; cardinal red. Pkt. 5c; oz. 20c; ¼ lb. 60c; 1 lb. \$2.00.

NEW STONE.—A great favorite with canners; the heaviest and most solid-fruited of the large Tomatoes of good quality. Our stock is distinctly superior to most of that offered under this name, being more uniform, better colored and larger. Fruit round, apple-shaped, very large, deep red, and astonishingly heavy. Pkt. 5c; oz. 20c; ¼ lb. 50c; 1 lb. \$1.75.

PEAR-SHAPED RED.—Used for preserves and to make "tomato figs." Fruit bright red; distinctly pear-shaped, and with a peculiar flavor. Pkt., 5c; oz., 25c; ¼ lb., 75c; 1 lb., \$2.50.

PEAR-SHAPED YELLOW.—Similar to Red Pear-Shaped, except in color. Pkt., 5c; oz., 25c; ¼ lb., 75c; 1 lb., \$2.50.

PONDEROSA.—Very large, solid and of good flavor; specimens have been grown to weigh 4 pounds; color, bright red; very few seeds. Pkt. 5c; oz. 25c; ¼ lb. \$1.50; 1 lb. \$5.00.

TRUCKER'S FAVORITE.—The finest large purple-fruited sort. Pkt., 5c; oz., 20c; ¼ lb., 50c; 1 lb., \$1.50.

CHALK'S JEWEL.—New. Very early, productive; smooth, round, of superior quality. Pkt. 5c; oz. 25c; 1 lb. \$2.25.

"JOHN BAER" TOMATO.—Earliest Tomato on earth. We believe we are offering to our trade the best, the earliest, and finest tomato ever offered to the public. Fruit large and solid; bright red in color, and shaped somewhat like the Globe Tomato and about its size. Pkt. 10c; oz. 35c; ¼ lb. \$1.50; 1 lb., \$4.00.

TURNIP

German, Rube French, Navet Spanish, Nabo

One ounce will sow 150 feet of drill; 2 pounds will sow an acre.

CULTURE.—For early use, sow as soon as the ground can be worked in spring, in drills 15 inches apart, and thin to 8 inches apart as soon as the plants are large enough to handle. For succession, sow at intervals of a fortnight until the last week of July, from which time until the end of August sowings may be made for main and late crops. The sowings should be made just before rain if possible, a rapid growth being important.

AMBER GLOBE.—Excellent for table use or feeding stock; flesh, yellow, firm and sweet. Pkt. 5c; ¼ lb. 15c; 1 lb. 40c.

EXTRA EARLY PURPLE-TOP MILAN.—The earliest Turnip in cultivation, and a splendid variety; bulb, white, flat, of medium size, with a bright purple top; one of the sweetest and finest-flavored of summer sorts. Pkt. 5c; ¼ lb. 25c; 1 lb. 75c.

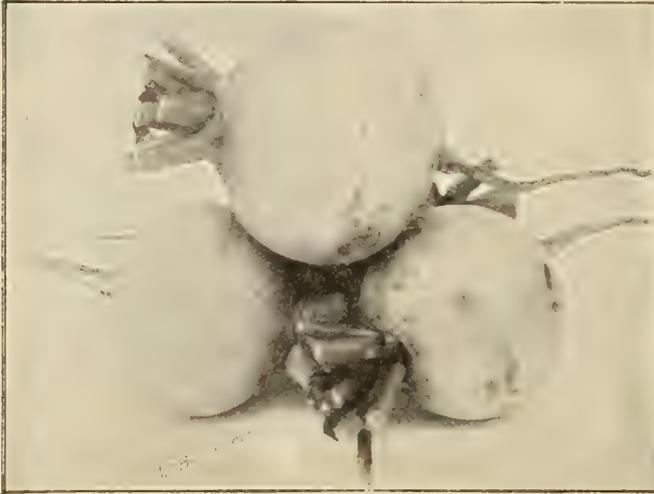
RED, or PURPLE-TOP STRAP-LEAVED.—The most widely cultivated and best known variety. Used largely for sowing broadcast among corn and potatoes. It is round and flat, white on the bottom and a reddish purple above ground, and a very quick grower. Though used for stock-feeding, it is esteemed as a fine table variety. Pkt. 5c; ¼ lb. 15c; 1 lb. 35c.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

TUNRIPS—Continued

RED or PURPLE-TOP WHITE GLOBE.—Quite similar to Purple-Top Strap-Leaf, excepting in shape, being almost a perfect globe, and grows to a large size; immense cropper. Pkt. 5c; $\frac{1}{4}$ lb. 15c; 1 lb. 40c.

RICE'S IMPROVED GOLDEN BALL.—One of the sweetest and most desirable yellow-fleshed varieties; of medium size, a perfect globe shape, with firm, hard, yet rich and sweet flesh; it has no equal as a table variety, and keeps well. Pkt., 5c; $\frac{1}{4}$ lb., 15c; 1 lb., 40c.



YELLOW ABERDEEN (Purple Top).—A very handsome Turnip. Bulbs round and flat, deep reddish purple on top and pale yellow on the bottom; flesh pale yellow, very tender and fine flavored. Pkt. 5c; $\frac{1}{4}$ lb. 15c; 1 lb. 40c.

YELLOW AMBER GLOBE.—A splendid sort for general crop; grows large; a good keeper, with bright yellow flesh. Pkt. 5c; $\frac{1}{4}$ lb. 15c; 1 lb. 40c.

COW-HORN.—Large cropper. This variety is pure white, excepting a dash of green at the crown, and in shape is long like the Carrot. Excellent for stock. Pkt. 5c; $\frac{1}{4}$ lb. 20c; 1 lb. 50c.

Swedish, or Russian Turnip (Rutabaga)

One ounce will sow 150 ft. of drill; 2 lbs. will sow an acre.

CULTURE.—Should be sown from the 20th of June to the middle of July, in drills 2 feet apart, and thinned out at the first working to 10 inches between the plants. Flesh close-grained, hard; will endure considerable cold. The roots are best preserved in a pit or cellar during winter, and are excellent for the table early in spring. Pkt., 5c; $\frac{1}{4}$ lb., 15c; 1 lb. 50c.

SWEET PEAS

The Beautiful and Popular Flower of the Day.

CULTURE.—As early as the ground can be worked in the spring make a trench 6 inches deep in rich soil, sow the seed in the bottom, covering not more than 2 inches deep; as the plants grow, fill in the earth around them and see that some suitable support is provided for them to run upon. Flowers must be picked before pods form, otherwise vines will not long continue to blossom.

ECKFORD CHOICE MIXED.—Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; 1 lb., 75c.

NASTURTIUMS

CHOICE MIXED TALL.—Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; 1 lb., 45c.

CHOICE MIXED DWARF.—Same price as Tall.

CLOVER AND GRASS SEED

Sold at Market Prices.

In offering field seeds to the trade, we fully appreciate the importance of pure, clean seed, and have endeavored to secure only such seed that is of the highest standard. We offer you high-grade, re-cleaned seed at the lowest prices for seed of equal quality.

MEDIUM CLOVER SEED.—A very valuable crop for pasture and hay, a great soil enricher when turned under.

ALFALFA.—A very profitable crop for every farmer. Can be cut three or four times a year. Yields a heavy crop.

SAPLING, or MAMMOTH CLOVER.—Grows much larger than the common clover and will generally last much longer.



Crimson Clover.

WHITE DUTCH CLOVER.—It forms a very close herbage and remains green throughout the season, making it one of the best varieties for lawns. It is also an excellent food for bees.

CRIMSON CLOVER.—An annual clover which produces a very early and abundant hay crop. Is also a great land improver, as the roots are great nitrogen absorbers.

ORCHARD GRASS.—A most excellent grass for pasture and hay. It withstands dry weather better than almost any other grass. Can often be cut twice in a season.

ALSIKE.—A white clover which grows very tall. It is a very valuable crop, especially for dairy farms.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

CLOVER AND GRASS SEED—Cont.

KENTUCKY BLUE GRASS SEED.—Adaptable to most any sort of soil. Furnishes an abundance of rich, sweet food for all kinds of stock. Will last for years when a good sod is once formed.

RED TOP, or HERD GRASS SEED.—Very hardy and well adapted to low, damp lands, but will grow anywhere. Is fine for pasturage.

TIMOTHY.—There is no grass more valuable for hay, especially in the North. Especially adapted to moist, loamy soils. Is too well known to require a description.

MILLET, GERMAN.—Produces abundantly and makes an excellent feed for stock.

SPECIAL LAWN GRASS MIXTURES.—Our experience with this mixture impels us to say that we have never seen a better one. Has given general satisfaction to our many customers. If you want a beautiful, permanent lawn, use our mixture and you will not be disappointed.

SEED WHEAT

GOLDEN AMBER.—We specially recommend this Wheat for heavy yield; straw very stiff, standing up when almost all other kind break down.

LEAP'S PROLIFIC BEARDLESS.—This is a well known, standard variety, yielding heavily.

MIRACLE WHEAT, BEARDED.—Sow only about ½ bushel to 3 pecks to acre. Yields very heavily.

Prices upon application.

SPECIALLY SELECTED SEED CORN

OF THE FINEST QUALITY.

For Field Culture

BOONE COUNTY PRIZE WINNING STOCK.—We have secured from an expert corn grower of the State of Maryland a special selected stock of this corn, specially grown for seed purposes for securing the best development of ear and the largest yielding of corn.

IMPROVED GOLDEN DENT.—This is now the standard variety in many of the corn-growing sections of the Middle West. Ears average nine to ten inches long, tapering slightly toward tip, are about six inches in circumference, contain 16 to 20 rows, and are remarkably uniform. Kernels light yellow, deeply dented, and well placed on a cob of medium size. Usually matures in 110 to 115 days.

IMPROVED LEAMING.—A very popular and productive variety. On good land the stalks grow tall, producing two good ears to each stalk. The ears are long, with small red cob well filled with grains of medium size, of a rich golden color. It ripens in from 100 to 110 days, and makes a good crop even in dry seasons.

HICKORY KING CORN.—This has the largest grains with the smallest cob of any white corn. So large are the grains and so small the cob that on an ear broken in half a single grain will almost completely cover the cob section. Of strong growth, the stalks take a firm hold in the ground and stand upright. It yields splendid crops on light soil, and is un-



doubtedly the most productive white field corn for the South.

BURPEE'S GOLDEN BEAUTY.—It is the largest grained and handsomest yellow corn we have ever seen. The ears have brightest golden-yellow grains, of remarkable size and completely filled out to the extreme end of the cob. The cobs are unusually small.

COCK'S PROLIFIC.—White, flinty; unexcelled for meal or hominy. Exceedingly productive, bearing four and five ears to a stalk, making it one of the best ensilage corns on the market.

EUREKA ENSILAGE CORN.—We consider this one of the best for ensilage purposes. Our seed is specially grown and may be depended upon.

Prices upon application.

FODDER AND SOILING PLANTS

CHOICE WESTERN WHITE SEED OATS.

Selected seed of choicest qualities, for winter and spring sowing.

Prices on application.

COW PEAS (THE GREAT SOIL IMPROVER)

Make Poor Land Rich, Good Land Productive, and Enrich the Soil.

Green crops plowed under are one of the best and cheapest ways of improving the soil. For this purpose the cow pea is most popular, especially for medium or light soil. They should be sown in May or June, at the rate of 1½ bushels to the acre, and plowed under as soon as they have attained their full growth. There is no surer or cheaper means of improving poor soil than by sowing cow peas.

COW PEAS FOR HAY

If planted early, say by middle of May, in the central corn belt section, a crop can be cut and cured for hay the same as clover, then the stubble, in a short time, will put out a new growth to be turned under in the fall as a fertilizer.

The best varieties of Cow Peas for all purposes are the following:

Southern Black Eye Cow Pea.
Southern Black, or Ram's Horn.
Whip-Poor-Will, Clay and New Era.

CANADA FIELD PEAS AND OATS FOR FODDER

These make a fodder, and hay which double the production of milk.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

FODDER AND SOILING PLANTS—Continued

SOJA OR JAPANESE SOY BEAN

The demand for the Soja Beans has grown remarkably of late years. Their great value is as a forage crop, for fertilizing the soil and for pasturing or feeding the green fodder much in the same way as the cow pea.

SAND OR WINTER VETCH

For forage and fertilizing purposes; it succeeds and produces good crops on poor, sandy soils as well as on good lands, growing to a height of 4 to 5 feet. It is perfectly hardy throughout the United States, remaining green all winter.

EARLY AMBER SUGAR CANE

The high value of Northern grown sugar cane for fodder and ensilage is becoming rapidly known. When fed down young as a pasture it grows rapidly again. The seed and fodder is valuable as food for horses and cattle.

DWARF ESSEX RAPE

Makes Splendid Fall, Winter and Spring Pasturage—Fine for Cattle, Sheep and Hogs.

Rape for fall sowing should be put in in July, August or September. Makes a large yielding, nutritious, succulent green feed or pasturage all through the fall, winter and early spring. The fattening properties of Rape are said to be very much better than those of clover, and it makes a first-class

crop, either for sowing alone, or for grazing during the fall and winter; can be sown with Crimson Clover. Rape can be successfully sown both in the fall and spring. Early fall seeding, however, gives the best results. Rape is best sown in drills at the rate of 3 to 5 pounds per acre; or it can be sown broadcast, when from 6 to 8 pounds per acre should be used.

WEBER'S IMPROVED EVERGREEN

The Best Broom Corn In Cultivation

MAMMOTH RUSSIAN SUNFLOWER

TEOSINTE (Reana Luxurians)

This gigantic Grammea will furnish a continuous daily supply of most nutritious green food for horses and all kinds of cattle all through the Summer. It also makes splendid dry fodder, yielding enormously, and being more nutritious and better relished by all stock than corn fodder. It stools out enormously after being cut.

Prices on application.

The cost of the very best seed is so small, compared with the value of the growing crops, that sensible planters realize that they cannot afford to risk seed of doubtful pedigree, and we know just as well that we cannot afford to risk our hard-earned reputation by selling seed of doubtful character.

Inoculate Your Alfalfa, Clovers, Cow Peas, Soy Beans, Vetches and all other legume crops with

Mulford Cultures

FOR LEGUMES

MULFORD CULTURES contain pure, tested strains of active, vigorous nitrogen-fixing bacteria for inoculating seeds of legumes or soil.

MULFORD CULTURES are "different" and should not be confused with other brands.

The color is different (they are dark, almost black, due to a special ingredient added to increase the growth and activity of the bacteria).

The count is different (bacterial counts show fully twice as many bacteria as in the old-form cultures).

The bottle is different (being sealed—an important feature which prevents all possibility of contamination from the outside air).

Legumes offer the best-known means of maintaining soil fertility and rejuvenating over-cropped and worn-out fields. They add both humus and nitrogen to your soil and thus increase your yield of wheat, cotton, corn and other non-legume crops.

The U. S. Department of Agriculture and many State Agricultural Experiment Stations recommend inoculation of legumes with nitrogen-fixing bacteria to induce a prompt "catch" and increase your yield.

MULFORD CULTURES ARE PREPARED FOR

Alfalfa (Lucerne)	Red Clover	Soy Beans	Sweet Peas	Lespedeza
Crimson Clover	Alsike Clover	Peanuts	Garden Peas	Beggar Weed
Sweet Clover	Burr Clover	Vetch	Garden Beans	And Others
	Cow Peas	Velvet Beans	Lima Beans	

Be sure to specify the particular legume on which you desire to use the MULFORD CULTURES, otherwise we will not know how to fill your order.

PRICES: 5-Acre Size, \$5.00 ("A Dollar per Acre"); 1-Acre Size, \$1.50; Garden Size, $\frac{1}{4}$ Acre, 50c. These prices include delivery on freight shipments.

FREE DESCRIPTIVE LITERATURE SENT UPON REQUEST.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

Small Cost **Large Returns**
Easy to Use **No Labor Expense**



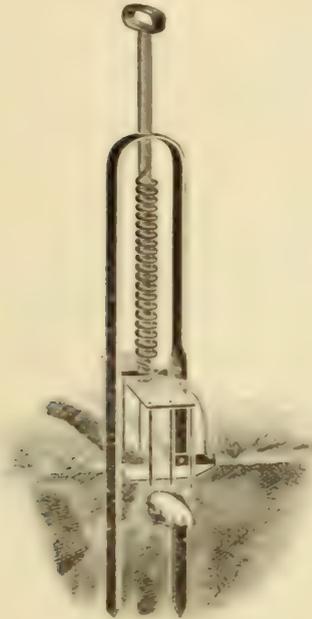
Uninoculated ALFALFA Inoculated

Photographed on same scale. Plant on left not inoculated—Plant on right inoculated with Mulford Culture for Alfalfa. All other conditions identical

THE CONTRAST SPEAKS FOR ITSELF

Horticultural Tools

Mole Traps



The Reddick

Made of Steel, Heavily Tinned, Rust Proof

Price..... 75c

Little Giant, Self-Setting

Self-setting by pressing down on lever. A very convenient feature found on no other trap. Made from best spring steel thoroughly galvanized. Simple and durable in its construction.

Price..... 75c

Steel Dibbles



For transplanting plants. By far the best thing for the purpose ever introduced. Right angle, polished steel.

Price..... 35c

Hand Weeders

A very handy and useful little instrument; made of malleable iron; tinned.

Price..... 15c

Garden Trowels

Socket handle; malleable blade.

Price..... 15c

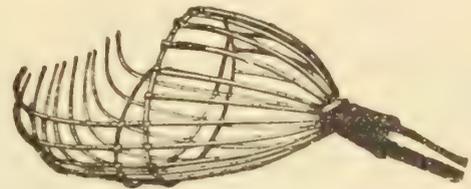
Sixteen gauge steel; 6 inch blade; has a socket handle that will not come out in dry weather.

Price..... 25c

Thermometers

House thermometer.

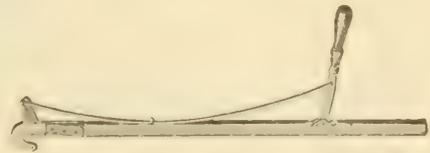
Price..... 50c



Fruit Picker

The Pennsylvania; made of steel wire, heavily tinned.

Price..... 50c



Tree Pruners

4 feet long	\$0.75
6 feet long .....	.85
8 feet long	1.00
10 feet long	1.10
12 feet long	1.25
Extra Knives .....	.20c each



Detroit Tree Pruners

6 feet long	\$2.40
8 feet long	2.40
10 feet long	2.60
12 feet long	2.60

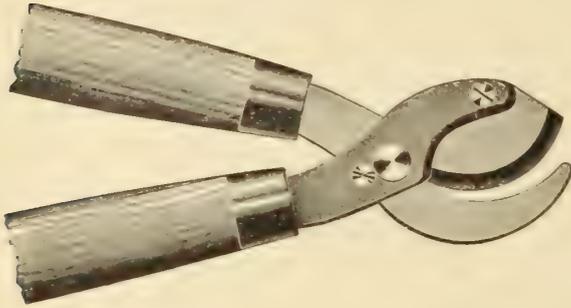


Jointed Pruner

Disston Pruning Saws

Double edge, 20 inches long.

Price.....\$1.00



Cronk's Pruning Shears

36 inches long, 2 handles.

Price.....\$1.25

Hedge Shears

English; 2 handles. 12-inch notched blades.

Price.....\$2.00

Grass Shears

7½-inch blades. American.

Price.....30c

Scythe Stone

English Round.....15c

Darby Creek.....10c

Grass Hooks—(Or Cycle)

Price, English.....50c

Price, American.....35c

Scythes



English, 36 and 38 inches.....\$1.40
 German, "Hand Made".....1.25
 American, 36 inches.....1.00
 Weed.....1.00
 Bush.....1.00

Snaths

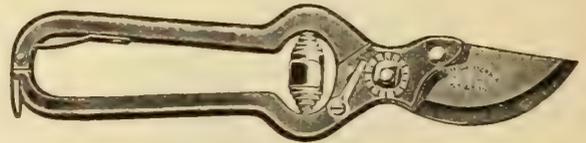
Grass, patent.....85c
 Bush, double ring.....\$1.00

Hand Pruning Shears

"California Pattern"

For grape vines, rose bushes, etc. Malleable handle; steel blades; nickel-plated flat spring.

Price.....\$1.00



California pattern Gun Metal Shear. Same as above.
 Price.....75c
 Malleable handle; steel blade, with coil spring.
 Price.....35c

Asparagus Knife



No. 2 Iron Age Curved Steel blade, highly polished.
 Price.....40c



No. 1 Iron Age flat polished steel blade.
 Price.....30c

Florists' and Garden Tools

Grafting Wax

¼-lb. Sticks.....10c
 ½-lb. Sticks.....15c
 1-lb. Sticks.....25c

Glazing Points

"Peerless," the finest glazing point on the market; glass cannot slip; no rights or lefts to bother with.

Per 1,000.....75c

Lawn Rakes

Automatic Self-Cleaning; 22 teeth, wooden.
 Price.....60c

Wood Rake.
 10 teeth, Hand Made, bow.....50c
 20 teeth.....35c

Regular steel.
 12 teeth.....65c
 14 teeth.....75c
 16 teeth.....85c
 18 teeth.....\$1.00

Steel Bow Rakes

11 teeth.....75c
 13 teeth.....85c
 15 teeth.....90c
 17 teeth.....\$1.00

Malleable Rakes

8 teeth.....30c
 10 teeth.....35c
 12 teeth.....40c
 14 teeth.....45c
 16 teeth.....50c

Watering Pots

Heavy Galvanized Steel.
 4-qt. size.....65c
 6-qt. size.....75c
 8-qt. size.....85c
 10-qt. size.....90c
 12-qt. size.....\$1.00
 16-qt. size.....1.25

Forks

Manure, Extra Heavy, diamond tine, D handle.
 4-tine\$1.50
 5-tine 1.75
 Manure Forks, 4½ foot handles.
 Plain ferrule60c
 Acme\$1.00
 Keen Kutter\$1.00
 Hay Forks, 6 foot straight handle.
 3-tine strap ferrule, 85c
 2-tine wheat fork, 65c
 Stone Forks, D handle any opening.
 Prices ...\$1.75 to \$2.25



Hoes

Regular field and garden; best steel; solid socket.
 7-inch60c
 8-inch65c
 Riveted Sheet Steel Hoes.
 Socket pad35c
 Regular Planter's Hoes.
 7-inch60c
 8-inch60c
 Mortar Hoes.
 10-inch blade, solid shank.....\$1.00
 Mortar Mixing Hoes.
 2 holes in blade, 10-inch.....\$1.00
 Garden Mattock. For garden and other light work.
 1¾x2½ in. blade....60c

Onion Hoes

Heavy steel; riveted shank; 2-prong or 1-prong.
 Price25c and 35c
 Potato, Stone and Manure Hooks,
 4-tine steel potato hook.....65c
 5-tine, heavy85c
 5-tine steel potato or manure hook.....\$1.00
 4-tine steel stone hook.....\$1.00

Spading Forks

Heavy angular tines.
 Polished steel\$0.75
 Keen Kutter, extra fine 1.00

Shovels

SQUARE or ROUND POINT



Ames, D handle, No. 2\$1.25
 Ames, long handle, No. 2 1.25



Harlan, D handle85c
 Harlan, long handle85c

Spades

Ames, long handle\$1.25
 Ames, D handle 1.25
 Harlan steel, long handle85c
 Harlan steel, D handle85c
 K. K. D. handle 1.00



Scoops

Solid Socket, High Carbon Steel.

No. 270c
 No. 375c
 No. 480c
 No. 585c
 No. 690c
 No. 795c
 No. 8\$1.00

Special prices on dozen lots.

Wire Potato or Corn Scoop\$1.50
 Malleable Potato or Corn Scoop..... 1.25

Post Hole Diggers

Double handle\$2.00
 Samson, one handle..... 2.75
 Eureka, split handle..... 1.25
 Lock Lever 2.00
 Keen Kutter, 8-in. Post Hole Auger.... 3.00
 Steel Post Spade and Rammer..... 1.50

Axes

In Axes we carry the best lines only. We aim to sell only those we know to be first class in every respect and that have an established reputation.

Kelly Perfect\$1.00
 Kelly Flint Edge..... 1.00
 Red Warrior90
 Keen Kutter, "Warranted"..... 1.00

Handled Axes

Keen Kutter, "Warranted".....\$1.50
 Kelly Perfect 1.25
 Kelly Perfect (boy size)..... .90

"Norcross" Cultivator-Hoes & Weeders



are among the most Modern Tools for Garden and Flowers. Like a Human Hand, they will work closer to plants without injuring them than any other Implement known, leaving the soil level, loose and untrampled.

Cost but a trifle more than the common hoe. All prongs detachable. Extra high-grade Handles. Finely finished throughout.

5-prong (weight 3 lbs.)85c
 3-prong (weight 2 lbs.)65c
 Midget (weight 12 ozs.)35c

Midget Weeder can be sent by Parcel Post for 10c extra.

Spraying Outfits

Myers O. K. Cog Gear Spray Pump

For Hot, Cold or Any Kind of Mixture. Has mechanical Agitator, solid brass Ram Plunger, ground bevel Valve and Seat. Malleable iron handle.



PRICE LIST.

No. R308C, with adjustable malleable base, with two leads of 15 ft. 7-ply, 1/2 in. hose and two Fembro nozzles. Price, each.....\$25.00

These Pumps are constructed with Cog Gear Handle, which increases the leverage 25 per cent. over the plain handle. Air chamber is 2 1/2 inches. This in connection with the cog gear enables the operator to carry a pressure of 200 lbs. and to supply two leads of hose satisfactorily.

No. R318B, as above with one lead of 15 ft. of 1/2-in. 5-ply discharge hose, graduating Vermorel nozzle. Price, each.....\$17.50

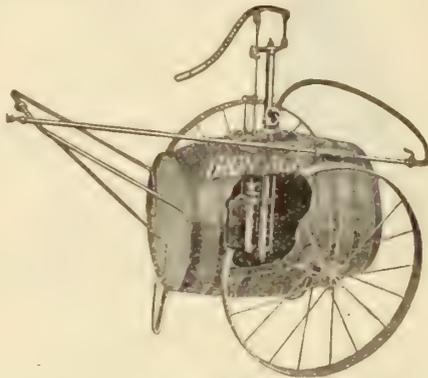
Iron Age Barrel Sprayer, No. 197

20 Gallon Capacity Mounted on Steel Wheel Cart.

This is a very complete outfit of limited capacity.

There are 33 inches of half-inch hose and two lengths of pipe, 2 feet each, with stop cock, improved Vermorel nozzle and one sliding hand grip, an extra cap for washing wagons, windows, etc., and steel handles and barrel leg.

Price.....\$20.00



The Myers Handy Portable Sprayer

With Cog Gear Spray Pump and Mechanical Agitator.

Made of Extra Heavy Galvanized Iron. Capacity 12 1/2 Gals. Suitable for Spraying Trees, Whitewashing, Painting, Etc.

The pump is fitted complete with mechanical agitator, 15 ft. of hose and an 8 foot pipe extension in two 4 foot parts, which adapts it for spraying large trees and also for use in whitewashing on the inside of low buildings.

The tank is made of heavy galvanized iron thoroughly reinforced at top and bottom by steel bands.

The wheel and handles are made of wrought steel thoroughly braced.

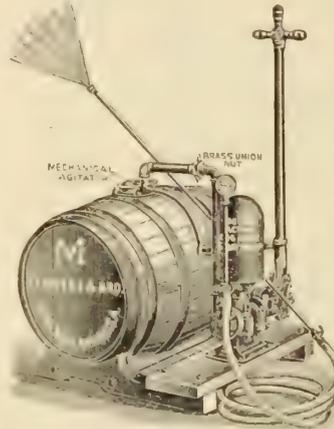
The wheel is 16 inches in diameter.

No. R336B, Myers Handy Portable Sprayer, complete as shown in illustration with Mechanical Agitator and Vermorel Nozzle. Price.....\$17.50



The Myers Double Acting Cog Gear Complete Spray Pump Outfit

Mounted on Skids with 50 Gallon Barrel and Mechanical Agitator.



With Brass Valves and Ground Bevel Brass Seats, Two-Inch Seamless Brass Removable Cylinder,

Hemp Packed Plunger.

SPECIAL FEATURES:

Cog Gear Movement, increased leverage adapted for spraying under heavy pressure, mounted complete, occupying smallest possible space. Capacity sufficient for 8 nozzles; well adapted for spraying potatoes.

PRICE LIST, FIG. 1518.

No. R316B, Pump complete as above with pressure gauge, one 15 ft. lead, 1/2 inch 7-ply discharge hose, one Fembro (Fig. 1290) nozzle, one 8-foot pipe extension with lever shut-off and mechanical agitator. Price, \$35.00

No. R316C, as above, with two leads of hose, nozzles and extensions. Price.....\$37.50

Price List of 2-Inch Duplex Pump Mounted as Above.

No. R444B, Pump complete as above, with one 15-foot lead, 1/2 inch 7-ply discharge hose, one Fembro (Fig. 1290) nozzle, one 8-foot pipe extension with lever shut-off and mechanical agitator. Price.....\$40.00

No. R444C, as above, with two leads of hose, nozzle and extensions. Price.....\$42.50

"Kant - Klog"

STYLE G is fitted with the Thumb Pressure Spring Hose Cock. A light pressure of thumb starts the spray. Remove it stops instantly. The only cock made that can be locked open for a continuous spray, leaving both hands free.

Has the "Kant - Clog" Nozzle. The only Nozzle that can be successfully cleaned without stopping the spray or removing the Nozzle from the tree. The only Nozzle ever made to give both flat and round sprays or solid streams.

Sprayer Body. Made of Galvanized Steel. Top and bottom dome shaped—joined to body under heavy pressure making a complete double seam. Tested under high pressure thereby avoiding troubles experienced with other constructions.

Air Pump. Heavy Brass two inches in diameter.

Hose Couplings. Solid Brass, standard cut threads, Hose high grade three-ply.

Safety Valve. Allowing air to escape after desired pressure has been obtained. Capacity, 17 quarts.

Price.....\$5.00



Style G.

Spraying Outfits—Continued

Myers Bucket Spray Pumps are constructed entirely of brass. They are provided with a large air chamber, brass ball valves, and detachable hose. Have patent jet agitator to keep spraying solution thoroughly mixed and agitated, and are fitted with malleable foot rest. Especially adapted for small orchards shrubbery, whitewashing, etc.



Price.....\$4.50

The Standard Spray Pump

Spraying with the Standard Spray Pump means doing the work from the ground without ladders, platforms or extension rods; means a clear saving of more than half the

time; means that one man does all the work, does it easily and effectively.

Ask for special Catalogue.

Price.....\$4.00



The "Easy" Compressed Air Sprayer



The only one of its kind on market. Strong, durable and attractive.

Has a large and strong pump. Automatic shut-off nozzle. legs under tanks. Can be used for whitewashing, disinfecting and cleaning chicken houses, and is very desirable for large gardens, etc. It is built of galvanized steel or brass as desired. Holds one gallon.

Price.....\$2.00

The Auto-Spray Pump

A SELF-OPERATING or AUTOMATIC SPRAYER

Length of cylinder, 21 inches; weight, loaded, 39 pounds; diameter of cylinder, 7 inches; capacity, about 4 gallons; weight, empty, 7 pounds; extension pipes extra.

Auto-Spray No. 1A—Brass Reservoir, Stop Cock. Price.....\$7.50

Auto-Spray No. 1B—Brass Reservoir, Auto-Pop and Auto-Pop Nozzle.

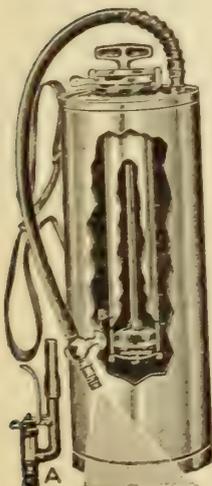
Price.....8.00

Auto-Pop Nozzle Extra. Price.....1.50

Tin Can Sprayer

One-half tablespoonful of Paris Green and one filling with water is sufficient to destroy all the bugs on 1,300 hills of potatoes.

Price.....50c



PATENTED.

The Bidwell Automatic Sprayer

The Bidwell is built entirely of brass and copper in order to provide a strong enough construction to withstand the pressure of 45 lbs. per square inch, which it is necessary to carry in order to distribute the spray properly. The tanks are, in fact, tested to withstand from 90 to 100 lbs. pressure per square inch. The heads are shaped by hydraulic presses, sweat into the copper tank and tested before the edges are rolled. The seam in the tank is riveted, then soldered and sweat tight.



Bidwell Automatic Sprayer.

Remember these Bidwell features: One pumping will discharge the entire contents. No liquid wasted; only one-half the labor and time consumed to fill and discharge; one-half liquid saved on account of better distribution of spray under pressure.

Price.....\$8.50

Non-Clog Automatic Nozzle

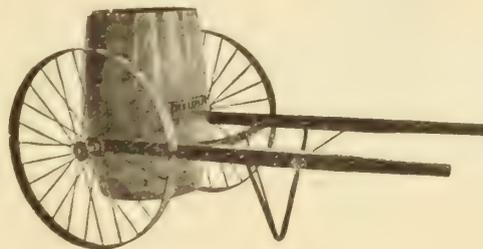
Weight, 4 1/2 ounces. The Non-Clog Automatic Nozzle can be adjusted to throw every graduation of spray from a fine, wide angle, bell-shape, 18 inches from the nozzle mouth, covering a surface of over three feet, to a concentrated and heavier spray, throwing a distance of twenty feet. Four discs go with each nozzle.

Price, Non-Clog Automatic Nozzle, brass....\$1.25

Banner Powder Gun, or Bellows

Applies any powder poison on any plant in any desired quantity, and does it any time of the day. Complete, with spreader for distributing the blast.

Price.....90c



Myer's All-Steel Barrel Cart

Well made and durable in all its points. 36-inch wheels, 3-inch tires.

Any barrel Spray Pump can be used with it.

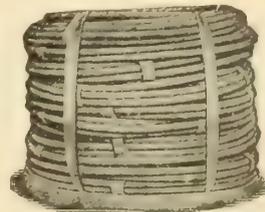
Price—With Barrel.....\$12.00

Cart only.....9.00

Rubber Hose

BEST QUALITY. LOWEST PRICE.

Winner, 4-ply.....10c
 Delmar, 5-ply.....12c
 Delphine, 7-ply.....15c
 Hose Reel, a good one for.....\$1.25
 Hose Nozzles, sprayer.....50c
 Hose Nozzles, solid stream. 25c
 Fountain Sprayer, heavy brass; easily moved without turning off the water.
 Price.....\$1.00
 Hose Couplings and Bands. .20
 Hose Menders and Bands.. .15



PRICES SUBJECT TO CHANGE WITHOUT NOTICE

Insecticides

Lion Brand Lime-Sulphur Solution

KNOWN AS CALIFORNIA WASH

For San Jose Scale and All Other Scale on Trees, Shrubs, Etc.

Lion Brand stands for full, concentrated strength, absolute purity, and undisputed superiority over all other lime-sulphur solutions.



Price, per qt.35c
 Price, per gal.85c
 Price, per 5-gal. cans....\$3.00

Lion Brand is the most perfect, uniform, safe and effective preparation and combination of lime and sulphur that can be made for destroying scale. It is so concentrated that one 50-gallon barrel will make 600 gallons for strongest use, or 1,200 gallons for summer spraying, by adding water only.

No damage will be done to the tree when dormant if this mixture does go on full strength. It is a clear, cherry-colored solution, free from sediment.

Ask for special Catalogue.

Target Brand Scale Destroyer

For San Jose Scale and All Other Scale on Trees, Shrubs, Etc.

Quart cans\$0.35
 1-Gallon cans 1.00
 5-Gallon cans 3.50

Flowers of Sulphur

IN BARRELS OF 155 LBS.

Price, 25 lbs. or less; per lb.5c
 Special prices on larger quantities.

Flour of Sulphur

Most excellent for spraying purposes. (See formula below.)

Price, 25 lbs. or less; per lb.5c

Special price on larger quantities.

Lime-Sulphur Formula

Lime, 20 lbs.; Sulphur, 15 lbs.; Water to make 50 gals.

Boil one to two hours with a small quantity of water, then dilute to 50 gallons with boiling water. Do not let mixture become cold; spray while yet warm. For winter or early spring use.



Paris Green

1/4 lb. package15c
 1/2 lb. package25c
 1 lb. package50c
 2 lb. package\$1.00
 5 lb. package 2.25

Bordeaux Mixture

For Rots, Blights, Mildew and Other Fungous Diseases.

1 qt. can40c
 1/2 gal. can65c
 1 gal. can\$1.25

Ask for Special Catalogue.



Bordeaux Mixture (Powder)

For Blight on Potato, Tomato, Celery Plants, Trees, Etc. Also for Fungous Diseases.

1 lb. package, per lb.35c
 5 lb. package, per lb.30c
 Larger sizes quoted on application.

Bug Death



Bug Death is a fine powder and in composition is peculiar to itself, inasmuch as it does not depend upon arsenic for its killing power. We give Bug Death our fullest endorsement. Bug Death is safe and sure to use on potatoes, tomatoes, currants, gooseberries, cucumbers, melons and garden truck generally. Full directions on each package.

Bug Death prevents blight, increases yield, improves quality. It can be used dry or in a spray.
 1 lb. package15c
 3 lb. package35c
 5 lb. package50c

Acre an Hour Sifter

For applying Bug Death and other Powdered Insecticides to potato vine, cabbage, tomato, tobacco, etc., as fast as a man can walk. Will cover a plant 3 feet in diameter. Easy job for the boys.

Price60c



Dicky Duster

The most practical and best selling implement for applying Bug Death and all powders to plants.

Price25c



Hammond's Slug Shot

Non-poisonous powder. It requires no further mixing or preparation; easily applied and not injurious or dangerous to animal or person applying it. Destroys potato bugs, slugs, worms, caterpillars, etc.

5 lb. package35c

Insecticides—Continued

Niagara Soluble Sulphur Compound

DIRECTIONS FOR MIXING: Fill the spray tank one-half or more full of water and pour the powdered material slowly into the tank making sure that the agitator is in motion during this time. Soluble Sulphur Compound dissolves readily in cold water. When using Arsenate of Lead (dry or paste) add to the tank after the Soluble Sulphur Compound.

DIRECTIONS FOR USE: Dormant Sprays—For early spring or late fall spraying for the control of such troubles as San Jose Scale, Oyster Shell Bark Louse, Peach Lecanium Scale, Peach Leaf Curl, Aphis and Pear Psylla Eggs, etc., use 12½ pounds of Soluble Sulphur Compound to 50 gallons of water. This strength should never be used after the buds open. Summer Sprays—For summer spraying when the trees are in foliage, for fungus diseases such as Apple Scab, Bitter Rot, Mildews, etc., one pound to 50 gallons of water. Arsenate of Lead may be used with this strength of material.

AMOUNT OF MATERIAL NECESSARY TO USE.

Experience has shown that for thorough work and best results the following approximate amounts of diluted material should be applied:

Apple and Peach Trees—1 to 5 years old, 1 gal.; 5 to 10 years, 1½ gals.; 10 to 15 years, 2 gals.

Price, per lb. 25c
Price, per 5 lbs. \$1.00

Arsenate of Lead



To control codling moth and all leaf-eating insects. Especially recommended for rose bushes and tender plants. Particularly good for potatoes.

1 lb. \$0.25
2 lb.40
5 lb. 1.00

For use add cold water slowly and stir until a thin paste is obtained before adding to the volume of water. Use one ounce to a gallon of water and apply with a spray pump.

Dry Arsenate of Lead

By far the best and cheapest Arsenate of lead to use. Mix thoroughly with a small quantity of water to a cream consistency, then add the required amount of water according to recommendation.

1 lb. package 40c
5 lb. package \$1.75

“Caascu”

INSECTICIDE AND FUNGICIDE

For Potato plants, grapes, etc. Prevents blight. Quickly kills the bug.

For Spraying: Use 2½ lbs. to 50 gallons water. Place in pail, add water and stir thoroughly to a thin paste, adding balance of water. Strain through cheese cloth before putting in sprayer.

For Dusting: Use two to four pounds to acre, applying with powder gun or sifter.

Price: Per lb. 25c 5 lbs. \$1.00

Due to the unsettled condition of the market, prices named are effective at time of going to press—January 1, 1917. Orders will be filled at prevailing prices at time order is received. Write for firm prices.

Pyrox

(Reg. U. S. Pat. Office)

ONE BEST SPRAY FOR POTATOES, TOMATOES, EGGPLANT, CUCUMBERS, ETC.

If you spray your crops with Bowker's Pyrox you will add to your profits. Pyrox not only kills the destructive leaf-eating bugs and worms and protects the vines from blights, rust and fungous, but it has a healthful, stimulating action on the leaves, which are the lungs of the plant. Even if no insects or fungus are to be feared, it pays to spray your crops with Pyrox, for its stimulating effect alone.

Pyrox sticks to the foliage through heavy rain, which gives you a great advantage. Most sprays wash off with every shower. The Bowker Company has been manufacturing Pyrox for fifteen years. Its use is no longer experimental.



PRICES:

1 lb. (not mailable)	\$0.30	50 lb., 1 keg.	\$ 7.50
5 lb., 1 stone crock.	1.25	100 lb., 1 keg.	13.50
10 lb., 1 stone crock.	1.75	300 lb., 1 keg.	38.00
25 lb., 1 container.	4.00	500 lb., 1 barrel.	60.00

Kerosene Emulsion

A valuable remedy against Scale and many soft bodied and sucking insects, such as Plant Lice, Leaf Aphis, Woolly Aphis, Celery Aphis, Squash Bug, Leaf Hopper, Mealy Bug, Cabbage Worm, etc. It kills the green plant louse scale and many other sucking insects at once. Used by many with 10 parts of water. Prices:

1 pt. \$0.25
1 qt.40
1 gal. 1.00



Bordeaux Mixture and Paris Green

(POWDER)

This compound has proved very successful during 14 years past. Cheaper than Paris Green. It kills the bugs and defends against flea beetles and blight.

1 lb. package, per lb. 30c
Larger sizes quoted on application.



STERLINGWORTH CUT WORM KILLER

It is a coarse powder for sprinkling near the plants to be protected. Chickens and birds are not poisoned if they eat the dead cut worms. There is no guess work about it doing the business. It has an enticing odor that the worms prefer to vegetation. The dead cut worms "tell the story."

Prices: 1 lb., 25c; 5 lbs., \$1.00; 25 lbs., \$4.00; 100 lbs., \$12.00.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

Insecticides—Continued



STERLINGWORTH FISH OIL SOAP

Possesses the valuable features of Whale Oil or Fish Oil Soap with the additional insecticide values of tobacco, and may be used for all insect killing purposes for which Whale Oil or Fish Oil Soap may be used, with doubly satisfactory results. It is a most effective, reliable and cheap remedy for destroying San Jose Scale, Oyster Snell Scale, Aphids, most plant lice, etc., on trees, shrubs, plants, etc. Those who use this soap once seldom return to the use of Whale Oil or Fish Oil Soap put up in loose junks in the old-fashioned round boxes, which contain no tobacco.

Prices: 1 lb., 20c; 5 lbs., 75c.

which Whale Oil or Fish Oil Soap may be used, with doubly satisfactory results. It is a most effective, reliable and cheap remedy for destroying San Jose Scale, Oyster Snell Scale, Aphids, most plant lice, etc., on trees, shrubs, plants, etc. Those who use this soap once seldom return to the use of Whale Oil or Fish Oil Soap put up in loose junks in the old-fashioned round boxes, which contain no tobacco.

Chicken Foods

“Rarva” Meat Meal

Very necessary in poultry yards where best results are desired. Contains 85 per cent protein.

100 lb. bags\$4.50
Less quantity, per lb.05

“Royal” Meat Meal

A good product, containing 65 per cent protein.

100 lb. bags\$3.50
Less quantity, per lb.4c

Crushed Bone

Made from fresh, clean bone, with no chemicals applied during process of manufacture. Should be fed daily. Excellent for producing eggs and keeping fowls strong and healthy.

100 lb. bags\$3.00
Less quantity, per lb.4c

Alfalfa Meal

A green food the year round. Very high in protein, and furnishes a growing food which has, also, a medicinal value. Increases egg yield.

100 lb. bags\$2.00
Less quantity, per lb.03

Queen Mash Feed

A combination of ground grain, alfalfa meal, meat meal and everything necessary for producing a large egg yield. Mix with hot water and it is ready to serve.

100 lb. bags\$2.75
Less quantity, per lb. 3 1/2c

Developing Food

A Dry-Grain, Granulated Mixture for Promoting the Growth of Chicks After They Reach the Age of Six Weeks. Prepared Especially to Follow the Use of Chick Food.

When the chicks are six to eight weeks old they are able to eat, and exhibit a preference for larger particles of grain than are found in our Chick Food. Developing Food fulfills this requirement and is properly balanced to supply the materials needed for rapid growth of bone, muscle and feathers. Ordinarily it should be fed between the ages of four and twelve weeks. By our method of feeding we start Developing Food the sixth week and continue until the chicks are ready for special-fattening as broilers or roasters, or are placed on range at twelve to fourteen weeks of age.

Sterlingworth Poultry Charcoal

The Best Selected and Cleanest Charcoal Sold for Poultry.

Sterlingworth Poultry Charcoal acts as an absorbent and destroyer of gases produced in the digestive tract when the system is out of order and also of impurities in the blood. It aids digestion, promotes health, and is generally corrective of many poultry ills. No poultryman can afford to be without it.

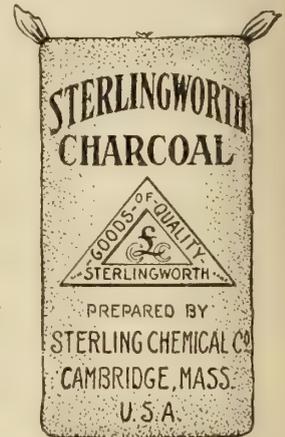
Sterlingworth Charcoal is carefully selected with the purpose in view for which it is to be used, and milled into just the right sizes for poultry, pigeons, ducks, geese, etc.

XX (Fine Granulated) for Chicks and Chick Food Mixtures.

XXX (Medium Granulated) for Half-Grown Fowls, Pigeons, etc.

XXXX (Coarse Granulated) for Grown Fowls, Geese, Turkeys, etc.

Prices: 50 lb. paper-lined burlap sacks, \$1.25 each; 2 lb. cartons, 10c each.



Oyster Shells

A very important adjunct to the poultry yard and should be supplied liberally at all seasons of the year. Will help increase the egg yield.

Regular—100 lb. bag65c
Fine—100 lb. bag65c

Mica Crystal Grit

Chickens should be liberally supplied with this grit, as few farms furnish sufficient gravel for poultry to properly digest food. Three sizes—Nos. 1, 2 and 3.

100 lb. bags75c

Ravena Chick Food

In compounding Ravena Chick Food, the protein or flesh-and-muscle-forming element is maintained high, the heat-producing and the fat-forming elements are reduced to their proper proportion, and the ash or mineral elements are in sufficient amount to supply the needs of the rapidly growing bird. Our Chick Food contains no weed seeds.

Ravena Scratch Food

In compounding the Ravena Scratching Food, it is our aim to produce a properly balanced ration that will aid the mash food in producing healthy birds and a large supply of properly-sized, well-fertilized eggs.

Prices upon application.

Blatchford's Laying Mash

A Balanced Ration of Ground Grains, Blood Meal and Alfalfa, Ready-Mixed for Hopper and Wet Mash Feeding. Gives Maximum Egg-Yield.

Our Laying Mash is a mixture of sound, sweet, nutritious grains in ground form, to which is added liberal portions of blood meal and meal alfalfa, thus supplying in proper proportions both animal and vegetable protein. It is not in any sense a condiment or an egg stimulant. On the contrary, it is strictly a food—a palatable, highly-nutritious, balanced egg-ration, ready-mixed for the daily mash and for hopper feeding.

This Laying Mash is of superior merit, and means more eggs and better chickens. The same care that goes to make Blatchford's Calf Meal the best is exercised in making this the best Mash.

Ask for prices.

Poultry Remedies



Conkey's Medicines and Remedies never disappoint. Use them and your poultry will keep healthy and give you big returns.

Keep Your Profits
 Save those sneezing, swollen-headed fowls by placing in the drinking water
Conkey's ROUP CURE
 It kills the germ. Prices 50c and \$1
 CONKEY'S BOOK ON POULTRY free if you call or send 4c postage.

Roup Cure

Roup Cure kills the disease germs and gives tone to the birds. It is given in the drinking water without trouble.
 25c and 50c sizes.

Cholera Cure

Use it and save your chickens. Given in the drinking water. Good also for indigestion, dysentery and kindred diseases.
 25c and 50c sizes.

Head Lice Ointment

Price per box10c

Gape Cure

Kill the worm which sucks the life from the throats of little chicks. Conkey's will cure them.
 25c, 50c and \$1.00 sizes.

Sterlingworth Diarrhoea Remedy

This Remedy is Guaranteed to Give Satisfaction. If It Fails We Will Refund the Purchase Price.



STERLINGWORTH DIARRHOEA REMEDY

Particularly White Diarrhoea has driven more poultrymen out of the business than any other disease. Millions of chickens die yearly from this trouble which could be saved if Sterlingworth Diarrhoea Remedy was used. Poultrymen should not wait until their chickens become diseased, but should use it as a preventive. Remember that cholera is an entirely different disease from diarrhoea and must be treated differently. It is not a cure-all, but a reliable remedy only for diarrhoea, dysentery and other kindred bowel troubles in chickens. It is a powder for use in the drinking water.

Per box50c



W & C LICE POWDER

Spread a newspaper on the floor or ground. Hold the fowl over it while dusting. Five minutes after you have completed the application brush out the fowl's feathers, and if there are not as many dead lice on the paper as there were live ones on the fowl, state the facts to us at once, and we will return you the purchase price. If it is not better (not AS GOOD—but BETTER) than any lice powder you have ever used, we will cheerfully return the money. There is one best Lice Powder. We claim to have it. Try one package and get your money back if it is not better than what you have used. Lice cut your egg production and affect the fowl's general health. Keep down the lice, or the lice will keep you down. Never set a hen without putting Woolf's Lice Powder in her nest.
 Prices: 5 oz. box, 10c; 15 oz., 25c; 48 oz., 50c; 100 oz., \$1.00.

W. & C. Lice Paint

A sure remedy. Don't let your fowls suffer. Clean out your coops with Lice Paint.

Prices: Quart, 35c; 1/2 gallon, 60c; gallon, \$1.00.

Zenoleum Lice Powder is a very superior article. It is fully guaranteed and is in use in 43 Agricultural Colleges.

Price per box25c

Black Diamond Lice Powder is highly recommended for chicken house disinfecting.

Price per box25c

"Oculum"

Scientific Remedy and Preventive for Cholera, Roup, White Diarrhoea and Sore Head; Also Cure for Gapes

Inoculation for fowls is a new discovery. Oculum is a sure cure for Cholera, Roup, White Diarrhoea, and Sore Head in fowls. It is also a preventative of these diseases. Inoculate your fowls with Oculum and they will be healthy. The deadly germ of Cholera and White Diarrhoea is in the egg. The chick when hatched is a candidate for early death.

Zenoleum

Lice-Killer, Disinfectant, Animal-Dip

One Gallon of Zenoleum makes 100 Gallons on Positive Disinfectant and Germicide.

Won't poison—Won't hurt you. Won't explode or burn. Kills vermin, cures skin trouble.

Invaluable as a remedy for diseases of Poultry and all Live Stock.

Kills lice and Cures Mange.

Disinfects Incubators.

Look for the Red and Green Label.

Price list Zenoleum Disinfectant and Dip:

Eight Ounces makes 6 gal. of fluid.....	\$0.25
One Quart makes 25 gal. of fluid.....	.50
Half Gallon makes 50 gal. of fluid.....	.90
One Gallon makes 100 gal. of fluid.....	1.50
Two Gallon makes 200 gal. of fluid.....	3.00
Three Gallon makes 300 gal. of fluid.....	4.50
Five Gallon makes 500 gal. of fluid.....	6.25

THE ZENOLEUM GUARANTEE

If Zenoleum is not all we say it is—or even what you think it ought to be, you can have your money back. No argument—No letters—Just money.

pratts.

Poultry Regulator and Remedies. Sold Always With a Positive Money Back Guarantee

PRATT'S POULTRY REGULATOR

This is the original Poultry Regulator of America, in use by the most successful poultry raisers everywhere.

It is a guaranteed egg producer, and when regularly used, hens lay throughout the year.

It is a perfect digestive and tonic and will prevent chicken cholera, gapes, roup, rheumatism, expel worms, prevent leg weakness, egg eating. It also greatly improves turkeys, geese, ducks, pigeons and guineas—insuring quick, healthy growth.

100-lb bags, \$9.00; 25-lb. pails at \$2.50; 50c pkgs., weight 4 lbs.; \$1.00 pkgs., weight 9 lbs.



Poultry Remedies—Continued

PRATT'S LICE KILLER

(Powdered Form)



It quickly and thoroughly kills all lice on little chicks, big chicks, setting hens, and incubator chicks. It rids horses, cattle, hogs, dogs and cats of lice, and destroys ticks on sheep. It destroys insects and bugs on vines, plants and flowers. A valuable deoderizer and disinfectant, for all poultry houses, barns, stables, and dwellings. Drives out moths from closets, furniture, carpets and clothing. .25c and 50c.

PRATT'S BABY CHICK FOOD

This is one of the greatest Money Savers and greatest Chick Savers ever placed on the market. Every man, woman or child who raises little chicks, turkeys, ducks and geese should try at least one package of Pratt's Baby Chick food. It is a scientific food ration to be fed for the first three weeks. If you want real success with your hatches, if you want to save all the baby chicks, if you want them to grow fast—get Pratt's Baby Chick Food on our recommendation for your first trial, after that you will never be without it. Put up in 1-lb., 3-lb., 6-1/2-lb. packages, also 14-lb., 25-lb., 50-lb. and 100-lb. bags.



Prices: 10 lb. pkg., each 75c; 20 lb. pkg. \$1.25; 40 lb. pkg. \$2.25; 100 lb. keg, \$5.00; 200 lb. bbl. \$9.00; 300 lb. bbl. \$13.00; 500 lb. bbl. \$21.00.



"Getting the Last Drop" Blatchford's Calf Meal

As good as New Milk at half the Cost



100 pounds makes 100 gallons of Perfect Milk Substitute.

Send for pamphlet, "How to Raise Calves Cheaply and Successfully Without Milk."

At your Dealers or

BLATCHFORD'S CALF MEAL FACTORY
WAUKEGAN ILLINOIS

25 lb. sack \$1.00
50 lb., sack 2.00
100 lb. sack 3.75

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

PRATT'S ROUP REMEDY

(Tablets or Powder)

is a scientific preparation GUARANTEED to prevent and cure roup, colds, canker, catarrh and diphtheria.

In severe cases individual treatment with the tablets is the only sure method. For mild cases and as a preventive crush the tablets or use the powdered form, and mix in the drinking water. Sold in 25c., 50c., and \$1.00 boxes.



PRATT'S WHITE DIARRHOEA REMEDY

This remedy will positively save many dollars worth of little chicks to poultry raisers. It has taken us nearly three years to find a remedy for White Diarrhoea and we are so sure that we have it in this article that we authorize our dealers throughout the world to refund the purchase price in case it fails. Extra large box, 50c; small size, 25c.



WHY NOT MAKE MONEY WITH YOUR POULTRY AND LIVE STOCK?

Breeders and Farmers everywhere who are using THE STAR POULTRY AND LIVE STOCK REMEDIES AND FOODS are making big profits with their Fowls and Stock, because modern ideas and modern progress are marked in each one of THE STAR PREPARATIONS, and when using these preparations there is a guarantee of success. Why worry along with the same old losing methods? Get acquainted with THE STAR LINE, and learn the profitable side of Poultry and Live Stock keeping.

For Live Stock:

STAR-CALF-A.—The 100 per cent Calf Food. Prices: 25 lb. bag, \$1.00; 50 lb. bag, \$2.80; 100 lb. bag, \$3.50.

Some of the Star Remedies and Foods for Poultry:

STAR-EGG-O.—A Tonic for Moulting and Laying Fowls, an egg producer. Good for chicks, turkeys, ducks, and geese. Prices: 25c, 50c, \$1.00 pkgs.; 10 lb. pail, \$1.50; 20 lb. pail, \$2.45.

STAR-CHIC-A.—The 100 per cent Pure Baby Chick Food. Prices: 10c and 40c pkgs.; 12 1/2 lb. bag, 90c; 25 lb. bag, \$1.60; 50 lb. bag, \$3.00; 100 lb. bag, \$5.75.

STAR ROUP POWDER.—For Colds, Roup and Canker in all kinds of Fowls. Prices: 25c and 50c pkgs.

BLUE STAR POWDER.—For Cholera in all kinds of Fowls. Prices: 25c and 50c pkgs.

STAR GAPE POWDER.—For Gapes in Chicks. Prices: 25c and 50c pkgs.

STAR BLACKHEAD POWDER.—For Blackhead in Turkeys. Prices: 25c and 50c pkgs.

STAR LICE POWDER.—For Body Lice on all kinds of Fowls. Prices: 10c and 25c pkgs.

STAR LICE OINTMENT.—For Head Lice on all kinds of Fowls. Price: 25c pkg.

STAR WHITE DIARRHOEA TABLETS.—For White Diarrhoea in Chicks. Price: 50c pkg.

STAR TONE.—A medicine for Ailing Fowls. Price, 25c pkg.

SCALY LEG OINTMENT.—For the Scaly Leg in Poultry. Price, 25c pkg.

STAR CHICKEN POX TREATMENT.—For Sore Head in Fowls. Prices: 25c and 50 pkgs.

STAREOLA.—A Disinfectant and Deodorant. Prices: 25c, 35c, 60c, 90c and \$1.50 pkg.

Poultry Appliances

WE ARE AUTHORIZED AGENTS FOR

Genuine Standard Cyphers Incubators

(Look for Trade Mark—Demand the Label)

Practical poultry raisers who mean business and desire the greatest possible success should look for and demand the qualities that have made Cyphers Incubators world famous.

Fire-proofed, insurable, self-ventilating, self-regulating, non-moisture, efficient, durable and positively guaranteed.

For 1917 we offer our customers the Cyphers Company's complete line of incubators and brooders—the best on the market. For years the Cyphers Incubator has been consistently improved, always maintaining its leadership, until today it represents all that is most efficient, convenient and reliable in incubator construction.



**STANDARD
CYPHERS INCUBATOR**
Fire Proofed—Insurable.

To own a Cyphers is to have an incubator that stands first, not only because it has affixed to it the fire insurance label granted by the National Board of Fire Underwriters and bears a world-wide reputation, but because of the well-established fact that it is the best hatcher of large, vigorous, livable chicks. It is positively guaranteed to outmatch any other make of incubator under widely-varying conditions, season after season, and to last ten years without repairs.



Demand This Label—Your Safety

Form of Brass Label to be found (in serial numbers) on Every Standard Cyphers Incubator. All sizes.

Every Standard Cyphers Incubator is guaranteed by the manufacturers to do first-class work in the hands of every purchaser, who will give it a fair trial, and we hereby place our guarantee back of theirs. In buying a Cyphers you take no chances. Persons who earnestly desire to succeed in the poultry business should have the right tools with which to work.

Sizes and prices of Cyphers Fire-Proofed Incubators free on board cars at Washington, D. C.

No. 0 holds 70 hen eggs.....	\$15.00
No. 1 holds 144 hen eggs.....	23.00
No. 2 holds 244 hen eggs.....	34.00
No. 3 holds 390 hen eggs.....	40.00

Notice.—The above prices are factory prices. In buying of us you save on freight and also save valuable time. Goods are carried in stock by us the year around. Remember that time is money.

Standard Cyphers Combination Brooders and Colony Roosting Coops

Cyphers Unequaled Apartment Brooders and combination roosting coops have the same important advantages over all other makes that are possessed by Cyphers Company's 1915 incubators, in that they are fire-proofed and insurable, having the first fire-insurance inspection label ever granted on a brooder.

Cyphers 1917 Brooders, every size and style, are self-regulating, self-ventilating and vermin proof. The outdoor styles are usable also as colony coops for the growing chicks. They are easily and quickly converted into colony roosting coops by simply taking out the hover, which is made removable for that purpose.

Fire-proofed, Insurable, Self-Regulating



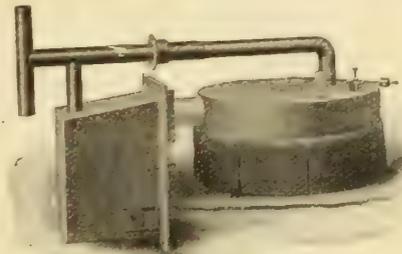
Style B Outdoor Brooder

(Three apartments. Safest and most popular "Foster Mother" ever designed.)

This double use of the Cyphers Brooder means a considerable saving of money. It makes a safe and comfortable enclosure for the young chicks at night and saves the buying of a coop for them. These outdoor brooders, on account of their fire-proof construction, can be used indoors, although we supply a special brooder.

Cyphers Adaptable Hovers

In addition to this unequalled line of brooders, we offer separately the Cyphers Company's world's challenge Adaptable Hover. This machinery-made, all-metal, guaranteed fire-proof heating and brooding device is suitable to be used anywhere that heat is required for brooding chicks or ducklings. It can be used in a roosting coop, colony house, shell, hen house, barn or other building with or without any additional enclosure for the chicks, or in a large goods case or organ or piano box,



All-Metal Adaptable Hover

and is pronounced by thousands of users to be the best device thus far invented for heating home-made brooders. Recommended especially for use in long brooding houses, one hover for each pen. Adaptable, hover is complete in itself, bears insurance label as a separate device, and is safe to use anywhere. Weight, boxed for shipment, only 40 pounds.

Complete Catalogue for 1917 contains fully illustrated description of this self-regulating, fire-proofed hover, also of the entire line of Cyphers apartment brooders.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

Poultry Appliances—Continued

Sizes and prices of Cyphers Adaptable Hover and Combination Brooders:

Adaptable Hover, cap. 75 chicks.....	\$ 8.50
Style A, 2-Apartment Outdoor Brooder, cap. 75 chicks..	14.50
Style B, 3-Apartment Outdoor Brooder, cap. 100 chicks..	18.50
Style C, 3-Apartment Outdoor Brooder, cap. 100 chicks..	20.00
Style D, 3-Apartment Indoor Brooder, cap. 75 chicks....	13.50

Notice.—The above prices are factory prices. In buying of us you save on freight, and also save valuable time. Goods are carried in stock by us the year around. Brooders shipped knocked down at low freight rates.

International Sanitary Hovers



The International Sanitary Hover is composed of six parts, namely, the hover itself; the lamp, the lamp holder; the draft pipe; the thermometer; and the detachable curtain.

The top part or dome of the hover is made of two thicknesses of galvanized iron, the inch of space between them being packed with mineral wool, one of the best-known non-combustible conservers of heat. This generous filling of high-grade insulating material prevents excessive radiation of heat upward.

The lower part of the hover is made of black iron. In shape it is an inverted dome, sloping downward from the outer edges to the center, where is attached the galvanized-iron bowl in which the lamp sits.

Now, our experience and the testimonials of hundreds that have used the International Sanitary Hover prove that 100 chicks can be accommodated under it with absolutely no crowding nor discomfort.

These hovers have an actual hovering space—that is, a space where chicks assemble for warmth, of from 275 to 350 square inches. Price complete.....\$9.00

Cyphers Portable Hover

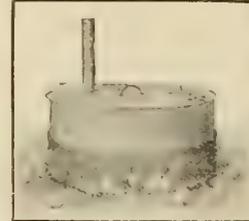
Self-Regulating: For Indoor Use

The Cyphers Company Portable Hover is self-regulating, as far as a brooding device can be made so. We use on this Hover the same high-grade, dependable, toggle-joint, zinc and steel thermostat that we do on our entire line of Standard Brooders.

This latest-improved Portable Hover is positively and infallibly automatic in ventilation, which renders absolutely impossible the trapping of "dead air" or poisonous gases in the space underneath the curtain where the chicks hover day and

night and must be provided with a continuous supply of life-supporting, health-giving oxygen in the form of fresh air.

This Hover was designed expressly for indoor use—in brooder houses and other poultry buildings, in dwellings, or in well-built and well lighted apartments of any kind, but it also will do excellent work in colony houses, in large-sized brood coops and in home-made or factory-built brooder cases. It is highly recommended by us for convenient and economical



use in poultry houses or in well-lighted rooms or apartments that have auxiliary heat during coldest winter weather. In moderate winter weather, during the spring months and in warm latitudes, no auxiliary heat is needed. Used without a brooder case or other small-sized enclosure, this Hover will operate perfectly in any temperature above the freezing point, and will do satisfactory work in a considerably lower temperature if the inmates are warmly bedded and protected from drafts, especially at night.

As its name indicates, the Cyphers Portable Hover can be picked up at any time—hover, lamp-box, lamp, regulating device, all complete—and moved to a new spot or to any place the operator may desire and the device will continue in operation right along. The lamp need not be removed at this time nor the wick so much as turned down. Is very convenient for cleaning and for moving the chicks from one location to another.

This Hover has a rated capacity of seventy-five newly hatched chicks, or of fifty chicks that are ten days to six weeks old. It will hover comfortably one hundred newly hatched chicks.

Price\$9.00

Cyphers Automatic Moisture Device

For Use on Standard Cyphers Incubators in Arid Districts, High Altitudes, Dry Apartments, etc.

Cyphers patent-diaphragm incubators are known the world over as non-moisture machines. Under normal and ordinary conditions they require no supplied moisture whatever. Tens of thousands of purchasers have used them season after season, during the last sixteen years.

MacKay Colony Brooder

PATENTED JULY 14, 1914

Other Patents Pending



The MacKay Colony Brooder was introduced to the poultry world last season. So quickly was its superiority recognized by leading poultrymen throughout the country that we can

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

Poultry Appliances—Continued

point to a general use, under all sorts of conditions, extending through an entire brooding season. The experiences of users prove that for solid, lasting qualities, for economy, and for reliable operation the MacKay Colony Brooder stands in a class by itself.

We would call particular attention to our new small model, the MacKay Junior, which has been designed for the farmer, the specialty breeder and for poultrymen who do not believe in placing a large number of chicks under a stove. It is a MacKaly Colony Brooder in every respect, except that it is fitted with a circular, ball-bearing grate instead of our duplex grate.

All MacKay Colony Brooders are provided with ropes and pulleys for raising and lowering the deflector; also with legs to allow for the necessary air space between stove and floor.

Solid cast-iron heater, insuring long, lasting service, and large enough to hold coal for the entire night.

Inverted conical hopper, bolted to top-plate, through which coal is passed directly to the fire-box, being fed from on top without disturbing the deflector or chicks.

Special duplex grate, without bolt or screw to rust or wear off; it can be removed and replaced in a few seconds without otherwise disturbing the stove.

Operating rods and levers which have a direct action and are centre swung, thus preventing lost motion. Any desired temperature can be secured and maintained by adjusting counterweight.

Guards that protect the operating attachments and prevent any interference with their proper action.

Grill cast in lower draft opening to insure absolute safety.

Prices:

MacKay Colony Brooders

- No. 1. 50 inch deflector size, cap. 800-1000 chicks.....\$33.00
- No. 2. 42 inch deflector size, cap. 300-500 chicks..... 30.00
- MacKay Junior, cap. up to 300 chicks..... 18.00

Cyphers Dry-Food Hopper

Cyphers Self-Feeding Dry-Food Hopper is a practical labor and food saving device for feeding dry grain food, either whole or ground. These Hoppers are well made of heavy galvanized iron.

The Cyphers Dry-Food Hopper has two compartments, a large one for grain mixtures, holding about six quarts, and a small one for beef scrap, holding about three quarts.

Cyphers Dry-Food Hopper, each, 75c; per dozen, \$8.00

The N. W. Fountain



This fountain is especially adapted to feeding and watering little chicks. Is perfectly sanitary, easily cleaned and filled. Price of metal part for quart Jars, 10c; for half-gal. Jars, 15c.

Boston Dry-Food Hoppers

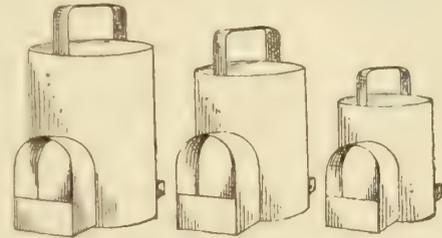
The Food-Saving, Rat-Proof Hopper That Made Dry-Feeding of Poultry a Success.

Boston Dry-Food Hoppers are made in four sizes—two sizes for adult fowls and two for chicks.

The Boston Hopper—all sizes—hangs against the wall or can be placed on the floor or ground. The swinging grid or metal guard prevents the fowls from wasting the food. The Hopper can readily be "locked" at night (or in the day-time) by simply hooking the grid to the front section at the lower end—thus making the device rat-proof.

- Large: For Dry Feed: 17 in. high, 8 in. deep, 13 in. wide. Holds ½ bushel: Each.....\$1.00
- Small: For Meat Scrap, Grit, Etc.: 17 in. high, 8 in. deep, 7 in. wide. Holds 1 peck: Each..... 80
- Long Chicken Size: 29 in. long, 8 in. high, 4½ in. deep. Holds 1 peck: Each..... 1.25
- Short Chicken Size: 15 in. long, 8 in. high, 4½ in. deep. Holds ½ peck: Each..... .90

Sexton Drinking Fountain



Sanitary, Easily cleaned, assuring clean water at all times. Price:

- 1 gal.50c
- 2 gal.75c

Cyphers Wall Fountain

These fountains are something new and extra serviceable in the way of poultry fountains. The back is flattened so that it can be hung on the wall of a building, or against an upright post or board at any height. A galvanized iron hood projects over the water trough and protects the water from becoming soiled. These fountains are equally serviceable for young chickens, or adult fowls, and are especially useful for pigeons. They are made of the best galvanized iron.



One-gallon size, each 60c; two-gallon size, each 75c.

Cyphers Grit and Shell Box

Cyphers Sanitary Self-Feeding Grit and Shell Boxes work a material saving in grit, oyster shell, ground bone, charcoal or poultry foods. They are thoroughly practical, self-feeding boxes, well made out of heavy galvanized iron.

Cyphers Grit and Shell Box, each 50c.

Poultry Appliances—Continued

Galvanized Drinking Trough for Poultry

These troughs are fitted with covers with openings that allow the fowls to drink, but prevents them from getting into the water, thus insuring clean drinking water.

Price, 22 inches long\$1.25



Cyphers Insulated Brooder Stove

For Use in Home-Made Brooders

Also is a Cyphers Company invention. This long-bowl, improved safety stove combines a heater proper, a burner equipped with metallic chimney, an insulating plate that serves also as a stove slide, and an upright plate of galvanized iron that forms the door to the brooder through which the stove is operated. The flame can be adjusted and the oil bowl filled without removing the stove from the brooder. The heat of the flame is deflected away from the oil reservoir, and the oil remains cool at all times.

Price, each \$1.75

Cyphers Galvanized Iron Drinking Fountains

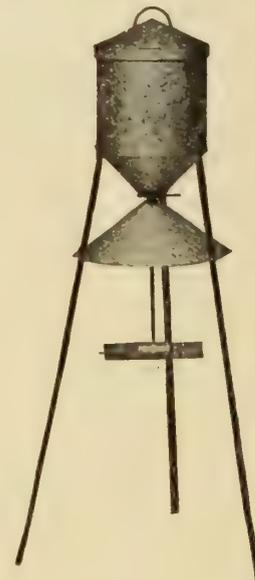
The water supply is often the medium that conveys contagious disease from one fowl to another. In the drinking vessel it comes in contact with and is infected by the discharges from the nostrils of ropy fowls and those having canker, chicken pox and other head and throat diseases. It is essential, therefore, that the drinking fountain should be easy to clean. Cyphers Fountains are made of heavy galvanized iron, all seams being carefully turned and soldered. They are so formed that in freezing weather the pressure of ice inside will not split the seams.



	Each.
Small size, 1 qt. (for chicks).....	\$.25
Medium size, 2 qts. (for growing chicks or ducklings) ..	.30
Large size, 3½ qts. (for fowls).....	.50
Special duck size, 2 gals. ....	.75

Special prices on larger quantities.

Norwich Automatic Feeder



Norwich automatic Feeder.—Saves grain, increases egg yield. Rat and damp proof. No. 1, 8-qt. Hopper, 12 lbs., \$3.00.

Cyphers High-Grade Tested Thermometers

Hundreds of hatches in incubators fail because of inferior thermometers, and large numbers of chickens, are killed in brooders for the same reason. The thermometers here listed are manufactured especially for us, and are thoroughly tested before they are shipped. Two-thirds of the thermometers on the market are made from improperly seasoned glass tubes. Our thermometer tubes are carried in stock two years before being mounted on the scale.



Incubator Thermometers50c
Brooder Thermometers50c

Cast Iron Drinking Fountain



Cast in two parts—Conical top keeps fowls from getting on top of it. They are very durable, and insure clean drinking water.

2 qt. size50c

Cyphers X-Ray Egg Tester

Price..... 35c

Pilling's Caponizing Set

Price..... \$2.50

Poultry Appliances—Continued

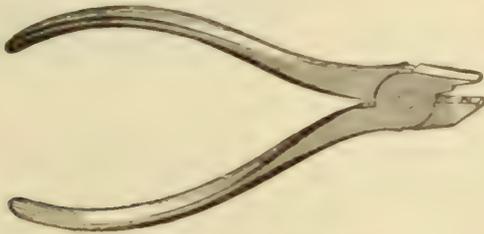
Cyphers Safety Brooder Stove

Used in Heating Home-Made Brooders

Cyphers Safety Brooder Stove was invented by this company. This stove consists of a brass oil fount and a safety water pan of the same metal, that holds nearly a quart of water and extends out over the entire surface of the oil bowl, thus placing a sheet of cold water an inch to an inch and a half in thickness between the oil in the fount, or bowl, and the flame.

The wick tube extends upward through the water pan and through the cast-iron base into the flue chamber, which is composed of the best quality of Russian sheet iron, the top consisting of a solid casting of common iron.

Price \$1 75



Perfect Marker

Price 50c

Pilling's

Price 25c

Cyphers Lice-Proof Perch Support

Per pair 50c

Ovinapithol Nest Eggs

Lice destroyer and nest egg combined. Simply put it in the nest.

Each 5c; 50c doz.

China Nest Eggs

Dozen 25c

Lime Nest Eggs

Dozen 20c

Gape Extractor

Each 25c



Champion Leg Bands

One doz., 15c; 25 for 25c; 100 for 75c

Celluloid Leg Bands

Quantity	Four Poultry Sizes	Pigeon and Day Old Chicks
12 Bands	\$.20	\$.15
25 "	.35	.30
50 "	.60	.50
100 "	1.00	.75
500 "	4.50	3.00
1000 "	8.00	5.50

Mann's Clover Cutter for Poultry

It is strongly built. The workmanship is first class in every particular, and it will last for years without repairs. Made either with or without the stand.

Price, with stand \$10.00
Price, without stand 8.00

Mann's Green Bone and Vegetable Cutter

The feed is both automatic and self-governing. Cuts all gristle and meat. Nothing escapes uncut.

No. 5-C.—The machine is exactly the same as the No. 5-B, with a crank handle instead of a balance wheel. Capacity not quite equal to 5-B. Weight, 35 lbs.
Price \$6.00

No. 5-B.—This machine is exactly the same as the No. 5-BM, except that it has not the iron stand. The capacity is the same. Weight, 60 pounds.

Price \$8.00



1902 Model.

No. 5-BM.—Intended for flocks of 15 to 25 hens. Mounted on iron stand. Cylinder 6 inches in diameter; 4 inches deep.
Price \$10.40

No. 7.—Intended for flocks of 40 to 100 hens. Mounted on strong iron stand with large table for box or pan to receive cut bone. Weight, 107 lbs. Cylinder, 7 1/4 inches in diameter; 5 1/4 inches deep. Capacity, 1/2 to 1 lb. per minute.
Price \$12.00

No. 7 1/2.—Semi-power machine.
Price \$16.00

The Banner Root Cutter

Simple in construction. Easy to operate. Has a self-feeder. Separates dirt from cut feed. Cuts with a clean cut. Does not crush, grind or tear the feed.

The No. 20— For Hand Use

Has a capacity of 30 to 50 bushels per hour. Weight, 120 pounds.
Price \$10.00

The No. 25—For Hand or Power

This is a new style machine. It can be used by hand or light power. Is very strong and durable. Capacity, 30 to 60 bushels per hour. Weight, 100 lbs.
Price, with crank \$10.00
Price, with pulley and crank 12.00

The No. 16—Small Power Cutter

With Fly Wheel and Band Wheel.

Supplied with crank also for hand use. Capacity by hand, 30 to 50 bushels per hour. Weight, 150 lbs. Capacity by power, 2 to 3 bushels per minute.
Price \$16.00
Larger size, with fly wheel 4.00

Poultry Appliances—Continued Red Chief Grinding and Feed Mills

It combines all the elements of rapid work, perfect grinding, and requires little power. A necessity in every household. Weight, 15 lbs.



Price \$3.00
Larger size, with fly wheel..... 4.00

Enterprise Bone, Shell and Corn Mill

Price, No. 750...\$8.50
None better.

Red Chief Corn Sheller

A most excellent sheller for use in connection with poultry yard.

Price \$1.50



Sprouted Oats and Many Eggs

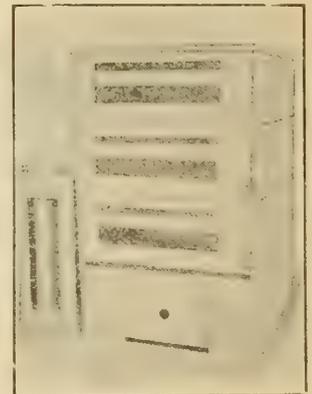
The Efficiency of the Poultry Silo,—the Grain Sprouter,—is as thoroughly established as that of the Dairy Silo. Hens must have green feed in order to do their best in egg production. While cabbage, beets, cured clover and alfalfa are good, yet there is nothing for prolific egg production that equals the Living, Vitalizing, Oat Sprouts, or sprouts of any of the grains such as rye, barley, wheat, etc.

And in order to get an abundance of Succulent, Crisp, Quickly Grown Sprouts, buy a

DOUBLE QUICK OR COLFAX SPROUTER,

the Perpetual Poultry Silo, that grows green feed while you wait. Makes 2 to 4 bu. feed from 1 bu. dry grain. Cuts Down the Feed Bill and Runs Up the Egg Yield.

DOUBLE QUICK SPROUTER. The Original Grain Sprouter. Outside case of Cypress, the wood that never rots. Lined with asbestos and other insulation to retain heat. Inside grain chamber of galvanized metal. Lamp heat passes up between grain chamber and outside walls. No loss of heat. Very economical to operate. Made in six sizes from ¼ bu. to 8 bu., for a few hens to 1,000.



COLFAX METAL SECTIONAL SPROUTER.—Made of Metal and built in Sections. Buy what you now need and add sections as your flock and need increases. Double walls,—outside wall of metal lined with asbestos. Inside grain chamber of metal. Lamp heat passes up between the walls. Sections fit on bases and each other with the stovepipe fit thus preventing leakage at joints of smoke and heat, and also getting out of alignment of the sections. Made in two sizes of bases, the small base and its sections for the small flock while the large base and sections are for the poultry farm or ranch.

All Sprouters complete with Lamp, thermometer, directions, etc.

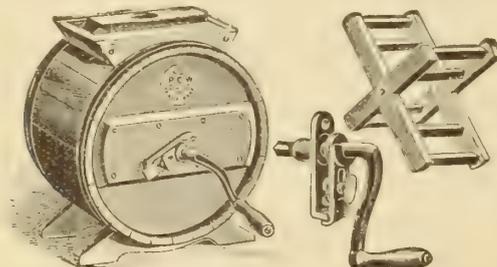
Prices Double Quick Sprouters	
No. 1, ¼ bu., 2 trays, 25-37 hens.....	\$ 5.55
No. 2, ½ bu., 4 trays, 50-75 hens.....	6.75
No. 3, 1 bu., 5 trays, 100-150 hens.....	9.00
No. 4, 2 bu., 6 trays, 200-300 hens.....	11.25
No. 5, 4 bu., 12 trays, 400-600 hens.....	17.25
No. 6, 8 bu., 16 trays, 800-1200 hens.....	25.50

Prices Colfax Metal Sectional Sprouters.	
Small Base, ¼ bu., 2 trays, 25-37 hens.....	\$4.20
Small Sections, ¼ bu., 2 trays, 25-37 hens.....	2.10
Large Base, 1 bu., 2 trays, 100-150 hens.....	7.35
Large Sections, 1 bu., 2 trays, 100-150 hens.....	3.45

DAIRY SUPPLIES

RICHMOND CYLINDER CHURN

Made of White Cedar, free from knots. A most excellent churn for farm use. Guaranteed to give satisfaction.



No. 1, will churn 3 gallons.....	\$2.50
No. 2, will churn 4 gallons.....	3.00
No. 3, will churn 7 gallons.....	3.50
No. 4, will churn 10 gallons.....	4.00

GOSHEN CHURN

A good barrel churn, easy to operate, easy to clean.



No. 0, 3 gal. size.....	\$4.50
No. 1, 5 gal. size.....	5.00
No. 2, 7 gal. size.....	5.50
No. 3, 10 gal. size.....	6.50

Glass Thermometers

8 inch.. .25c 10 inch...50c

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

Dairy Supplies—Continued



We sell the famous
"LOUDOUN LINE" OF
DAIRY SUPPLIES.

Special Catalogue and
prices on application.
Milk Pails, 50c and 60c.

GALVANIZED PAILS.

- 10 qt.40c
- 12 qt.45c
- 14 qt.50c

Brick Butter Prints

Seeley Pattern, furnished
with sheaf of wheat or other
attractive designs.

- 1/2 pound.....50c
- 1 pound60c

Round Style Butter Prints

- 1/2 pound.....25c
- 1 pound.....40c

So-Bos-So

So-Bos-So (Kilfly) is a liquid mixture designed to protect
cows and horses from torture of flies.

The preparation is positively harmless. It is used with
splendid results as a disinfectant and germicide. If your ani-
mals are troubled with lice, use So-Bos-So (Kilfly). Spray
your poultry with So-Bos-So (Kilfly). It kills lice or any
vermin that may infect the fowls. Put in 1-gal. cans.



Price, per gal.\$1.00

THE ELECTRIC SPRAYER

shown in above cut may be used for spraying other disinfect-
ants and insecticides as well as So-Bos-So.

Price 50c

Medicated Salt Bricks

Dr. Blackman's Medicated Salt Bricks is the "common-
sense" way of administering a stock medicine which will
give good results. It is a guaranteed worm medicine and
stock tonic, and is fine for the kidneys and blood and for
coughs and colds. Stock dose themselves and at the same
time get sufficient salt which is very important if you wish
to get best results from your stock. Try it. Sold on a
guarantee.

Price per brick, 25c; per doz., \$2.50.

Shaw Calf Weaners

The Shaw Calf Weaner is thoroughly practical. The action
is entirely in the basket, it being hinged to the end of the
nose piece. The basket is made of
heavy galvanized wire, with extra
bars running through. The halter
that goes over the neck is made of
solid leather, and can be adjusted
to suit the calf's head.



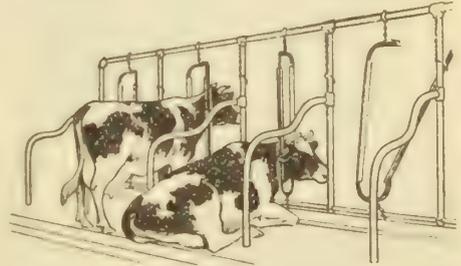
- No. 135c
- No. 250c
- No. 375c

Rice's Calf Weaners

Also prevents cows from sucking
themselves.

- No. 1 (for calves).....35c
- No. 2 (for heifers).....50c
- No. 3 (for cows).....75c

Dairy Barn Equipment



We are agents for the Loudon and the Harris Stanchions,
Stalls, Litter Carriers, etc. There is none better.

Furnish us a list of your requirements, and we'll be pleased
to submit prices.

When you equip your Dairy Barn with either of the above
lines, you have the best. Consult us when ready to equip
your barn.

PORTER STEEL STANCHION.

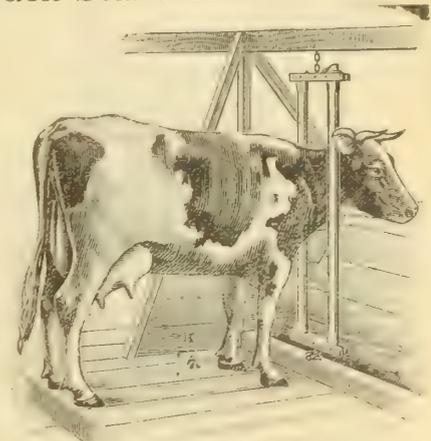
The old reliable. Simple construction. Strong and durable.
Price, each\$1.75

Wooden Stanchions

Robertson's Chain
Hanging Stanchions
and Successful
Dairying Go Hand in
Hand.

Simplicity in con-
struction, and being
made of the best ma-
terial and in the most
substantial manner,
they are perfectly
safe and durable.

The animal cannot
get caught by the
head or horns, as
when fastened with
chains or ropes, and
can be fastened or
released in one-half
the time.

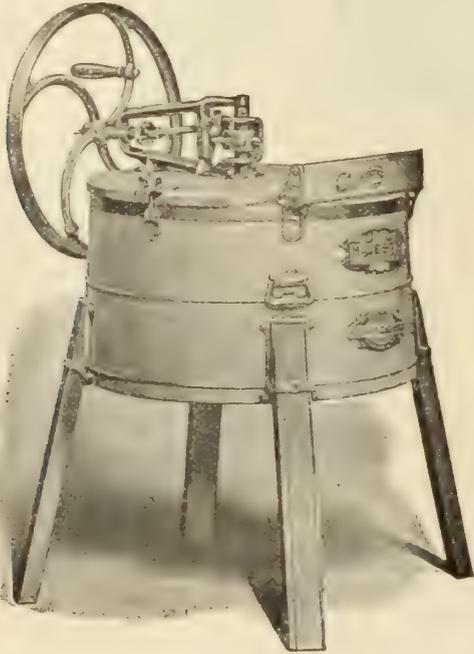


Price, adjustable\$1.50
Ask for price in quantity.

Household Goods

Majestic Washing Machines

It is a fact unquestionable that white cedar is the only wood known that successfully resists the action of water, as witness white cedar shingles and posts oftentimes last for a hundred years. Ninety per cent of the washtubs used are made of cedar because they are preferred. That being the case, why should not cedar washing machines also?



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. The tubs are made of selected Virginia White Cedar, and are nicely corrugated on sides and bottom. The hoops are made of 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.

Price \$7.50



Wringers

**CHALLENGE
CLOTHES WRINGERS**

There is no better wringer on the market. You make no mistake in buying it. Warranted for three years.

Price \$2.50

Rival, no better made, sells for \$3.50.

Parers and Seeders

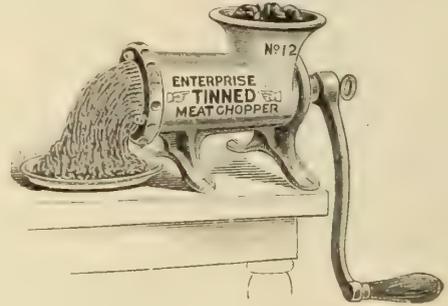
White Mountain Apple Parer, Corer and Slicer

A very good one.

Price 65c

Enterprise Meat and Food Choppers

Cuts all kinds of meat and vegetables into clean-cut, uniform sizes. We handle the following sizes:



- No. 10, cap. 3 lbs. per min. (with clamp).....\$3.00
 - No. 12, cap. 3 lbs. per min. (with legs)..... 2.75
 - No. 22, cap. 4 lbs. per min. (with legs)..... 5.00
 - No. 32, cap. 5 lbs. per min. (with legs)..... 6.50
 - Family size, with 4 knives..... 1.50
- Stuffing Attachment, 50c to 60c each.

Enterprise Sausage Stuffers

Too well known to need comment.

- 4 qt. size\$7.00
- 6 qt. size 8.00
- 8 qt. size 9.00

Perry's Sausage Stuffer

A very excellent article for farm use.

Price \$1.00



Sliding Kraut Cutter

With 2, 3 or 4 Knives

These Kraut Cutters are constructed on the same principle, but are a decided improvement on the old style machine. Each knife is independent of the other, and can be quickly adjusted to cut fine or coarse at will.

- Ajax, 2 knife, 6 1/4 x 17 in.25c
- Ajax, 2 knife, 6 1/4 x 18 in.35c
- Ajax, 2 knife, 7 x 21 in.60c

Rotary Knife Peach Parer

A very useful article.

Price \$1.25

Cherry Seeder

Price 50c

Enterprise Cherry Seeder

Price 75c

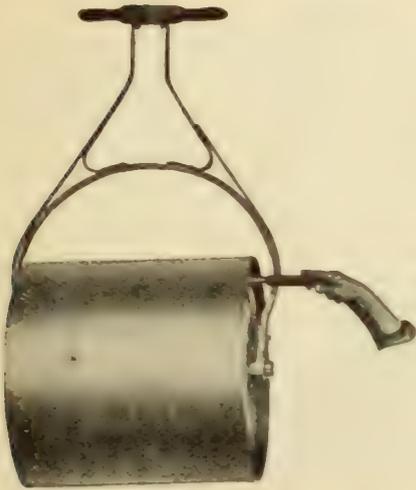
Farm Bells

These bells are covered with a rich gold bronze and the hangings with a good weather-resisting varnish.

- No. 1, diameter 15 in.\$2.50
- No. 2, diameter 17 in. 3.00
- No. 3, diameter 19 in. 4.25
- No. 4, diameter 21 in. 5.50

Lawn Machinery

The Water Ballast Lawn and Garden Roller



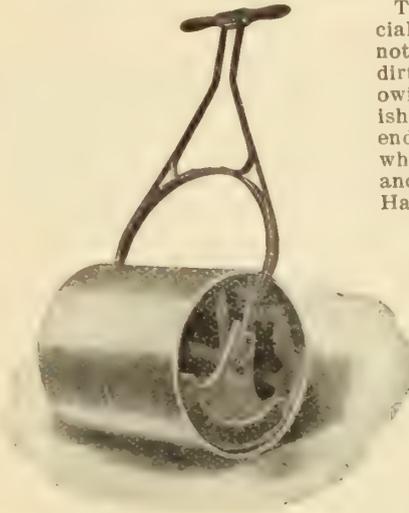
Only a moment's time required to obtain any weight from 75 lbs. to 500 lbs. Simply fill with water.

Diameter of drum, 24 inches; length, 24 inches; weight, 125 pounds.

Price \$12.00

Size 18x24 inches; weight 75 lbs.; capacity, 75 to 300 lbs. Price, \$10.00

Gold-Metal Hand Lawn Rollers Cast Iron



These rollers are especially desirable; they will not dent; wet grass and dirt do not cling to them, owing to their highly polished surface and rivetless ends. Have counterbalance which holds up the handle and makes it easy to push. Handle is adjustable.

No. LR401—Diameter 15 inches; length, 16 inches; sections, 2; face, 8 inches; weight, 150 pounds.
Price \$7.50

No. LR402—Diameter 15 inches; length, 24 inches; sections, 3; face, 8 inches; weight, 200 pounds.
Price \$9.50



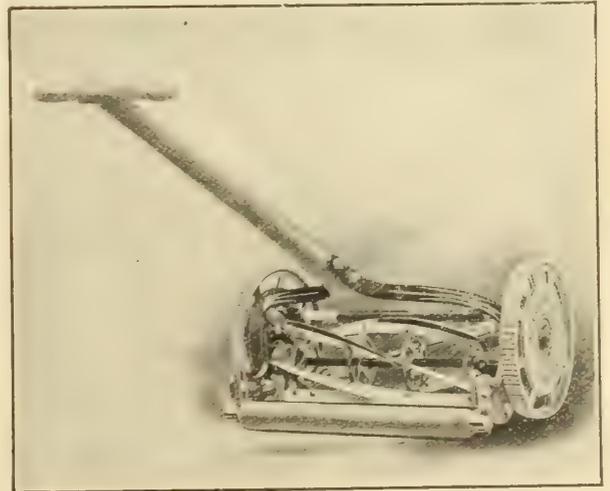
Coldwell's "Demountable" Cutter Unit Horse Lawn Mower

The Demountable Cutter Unit Horse Mower is constructed upon an entirely new principle and is a wide departure from anything of the kind ever made. The cutter section, which is the vital part of a lawn mower, is made into a unit and is independent and removable from the main frame of the mower. This unit consists of a simple frame containing the revolving cutter, the bottom or stationary knife and parts necessary for adjusting the same to each other. It is attached to the main frame of the mower by four locking screws and can be attached or removed in less than a minute. It being separate and independent of the main or larger frame, it relieves the knives from the twisting and strain that usually occurs in

Diameter of Drive Rollers, 15 inches. Gears, External, front drive. Diameter of Revolving Cutter, 7 inches. Number of Blades, 4 and 6. Bearings, Adjustable Split Bronze. Width of Cut, 30 to 40 inches.

30 inch, 4 knives	\$ 65.00
35 inch, 4 knives	75.00
40 inch, 4 knives	100.00

"Rajah"



the frame of the ordinary horse mower when used on rough ground. This unit, being the cutter section of the mower, is the only part necessary to be handled when in need of sharpening or adjusting.

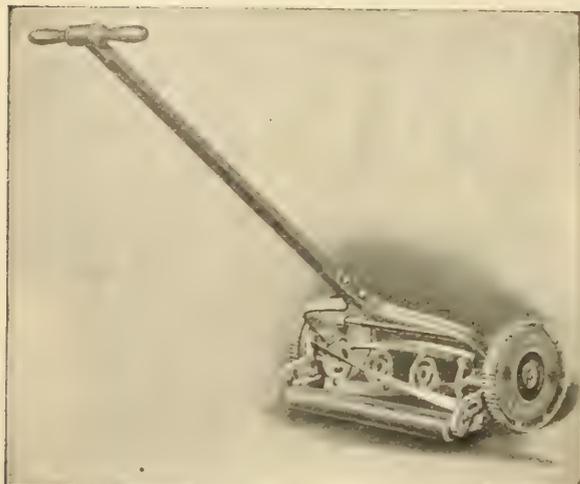
A high grade ball-bearing mower, easily adjusted and fully guaranteed in every respect.

"Rajah," 16 inch, 5 blades, 10 1/4 inch wheel.....	\$8.00
"Rajah," 18 inch, 5 blades, 10 1/4 inch wheel.....	9.00

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

Lawn Machinery—Continued

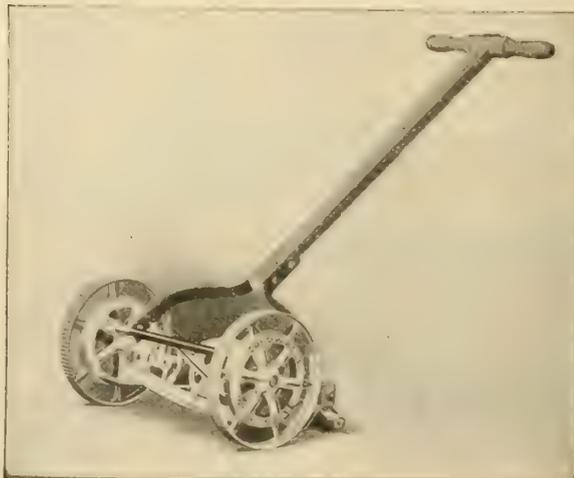
Cadet Lawn Mower



The "Cadet" is without doubt the best cheap lawn mower on the market. We specially recommend this to those wanting a good mower at a reasonably low price.

- "Cadet," 12 inch, 3 blades, 8 inch wheels.....\$2.50
- "Cadet," 14 inch, 3 blades, 8 inch wheels..... 3.00
- "Cadet," 16 inch, 3 blades, 8 inch wheels..... 3.25
- "Cadet," 18 inch, 3 blades, 8 inch wheels..... 3.50

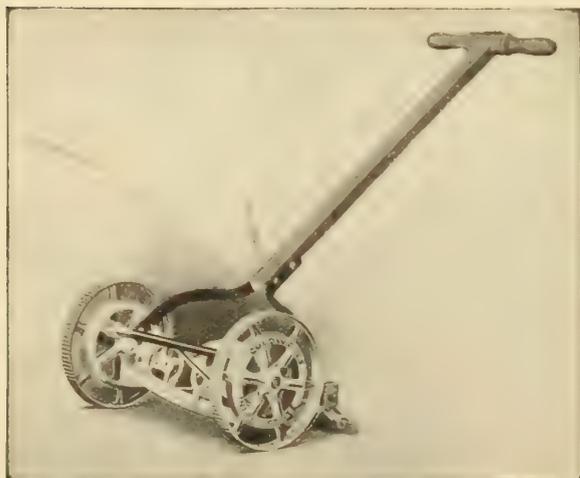
"Interstate"



Its open side frames and drive wheels reduce the weight, making it a light and easy mower to handle. Ball-bearing cutter shift.

- "Interstate," 14 inch, 4 blades, 10¼ inch wheels.....\$6.50
- "Interstate," 16 inch, 4 blades, 10¼ inch wheels..... 7.00

Colonial Mower



The "Colonial" is one of our most popular sellers. Ball-bearing, and made of best material.

- Colonial, 12 inch, 4 blades, 10¼ inch wheel.....\$4.50
- Colonial, 14 inch, 4 blades, 10¼ inch wheel..... 5.00
- Colonial, 16 inch, 4 blades, 10¼ wheel..... 6.00 hot months.

The Fountain "Shower."

A neatly finished all brass hose nozzle or "rose" for use either in the hand for sprinkling flowers or lawn, or as a lawn sprinkler by laying it upon something to elevate it slightly. The perforations are not smoothly cut, but are pricked in from the top, so that the water is distributed in the form of a fine mist even at low pressures.



Price50c

The "Baby" Fountain Sprinkler



All Brass Fountain Spray
For lawn. Easy to handle.
Price.....25c

If you desire a beautiful lawn use our lawn seed, our bone meal, a Water Ballast Roller and a Coldwell Lawn Mower. This makes a combination that will please you. You will want some of our rubber hose to water it during the dry,

Garden Tools

No. 31 Planet Jr. Combined Seeder and Wheel Hoe

Price\$8.00

This new tool designed especially for private gardeners is thoroughly well-made and offered at a price to make it pay the smallest gardener. It holds one quart of seeds but will sow even a small packet of garden seed at the proper thickness and depth.

It is quickly changed to a single wheel hoe and has first class quality attachments that will make the care of the garden a real pleasure. The seeder attachment will save

you seeds and time, and the wheel hoe part will save time and much hard work, and you will get much better results. It can be used satisfactorily by man, woman or the growing boy.



No. 32 Planet Jr. Seeder.

Price\$5.50

This is the No. 31 described above but without the wheel hoe attachment.

No. 33 Planet Jr. Single Wheel Hoe.

Price\$3.25

This is the No. 31 but without the seeder attachment which can be ordered separately later if wanted.



No. 28 Planet Jr. Combined Hill and Drill Seeder, Wheel Hoe, Cultivator, Rake and Plow

Price\$16.00

Packed weight, 71 lbs. Holds 3 quarts.

Equipment: One pair 6-inch hoes, One pair 4½-inch hoes, Three cultivator teeth, One landside plow (all oil tempered), One pair 5-tooth rakes, One leaf guard, One marking attachment, Steel handles.

This is our latest and best Combined Hill and Drill Seeder and Single Wheel Hoe. It shows in its construction the results of the last four years' close study of this class of tools and is the culmination of forty years' experience.

We Recommend It, therefore, as our very best seeder. It is light running; is supplied with a narrow opening plow which plants the seed in a narrow, straight line, leaving a minimum amount of hand weeding; for the weeds are usually enough to one side or the other of the straight, narrow row of plants as to be cut out easily with a wheel hoe.

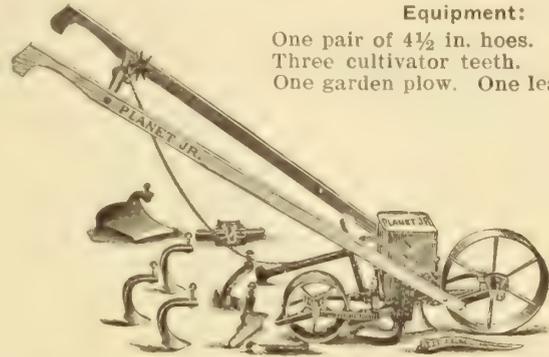
As a Seeder it drops all garden seeds in hills, 4, 6, 8, 12 or 24 inches apart, or sows them in drills with accuracy, opening the furrow, covering, rolling down and marking the next row all at one passage. The seeds drop in sight of the operator, the rear of the spout being open and white.

No. 4 Planet Jr. Combined Hill and Drill Seeder Wheel Hoe Cultivator and Plow

Steel Driving Wheel. Weight, packed, 47 lbs. Holds 2½ qts.

Equipment:

One pair of 4½ in. hoes.
Three cultivator teeth.
One garden plow. One leaf guard.



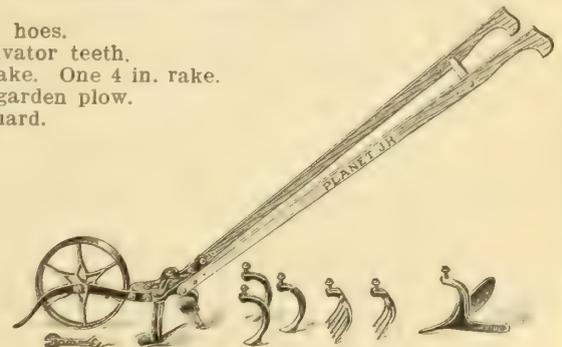
Price. Complete, \$12.75.

As a Seeder, only \$10.25.

The tool combines, in a single convenient implement, a capital hill-dropping seeder, a continuous row seeder, an admirable single wheel hoe, an excellent furrower, a capital wheel cultivator, and a rapid and efficient wheel garden plow. In a word, with a great variety of tools, excellent in design and quality, it is without an equal for easy adjustment, lightness, strength, and beauty. It is a practical, every day, time, labor, and money saver. It sows in continuous rows with great uniformity, and drops with accuracy in hills, 4, 6, 8, 12 or 24 inches apart. **THE FEED IS AUTOMATICALLY STOPPED** by raising the handles, and started by lowering them.

No. 16 Planet Jr. Single Wheel Hoe Cultivator Rake and Plow

Two 6-inch hoes.
Three cultivator teeth.
One 7 in. rake. One 4 in. rake.
One large garden plow.
One leaf guard.



Single Wheel Hoes.

Price, as in cut.....\$6.75

Packed weight, 29 lbs.

Never have hand seeders and wheel hoes been appreciated as they are to-day, and never has the necessity for such tools been so urgent and their value better determined.

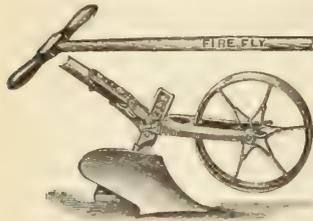
Every garden should have Planet Jr. Tools for labor saving and to enable one to grow larger and better crops.

Garden Tools—Continued

Fire-Fly Garden Plow

Packed weight, 13 lbs.

This tool is exceedingly useful to owners of small gardens. It will throw a furrow four to six inches wide and one to three inches deep, and deeper by going twice. Furrows for manure or seeds can be opened and covered. In cultivating, plow away, weed and plow back again. This tool will enable a busy man to do in his spare minutes nearly all the work of a family garden. Chicken raisers find it of great advantage in plowing up their scratching yards.



Price.....\$2.75

No. 17 Planet Jr. Single Wheel Hoe



Equipment: One pair 6 inch hoes. Three steel cultivator teeth. One large garden plow. Packed weight, 23 lbs. Price, as in cut.....\$5.75

No. 25 Planet Jr. Combined Hill and Drill Seeder, Double Wheel Hoe, Cultivator and Plow



Holds 2½ quarts. Weight, complete, 64 lbs.

It combines in a most practical way the Planet Jr., No. 4 Drill and No. 12 Double-Wheel Hoe.

Equipment: One pair of 6 inch hoes. Two pairs of cultivator teeth. Two plows. Two leaf guards.

Price.....\$15.50

This combination is intended for gardeners who have a large enough acreage in crops for a double-wheel hoe to be used to good advantage, and yet prefer not to buy seeders and wheel hoes separately.

As a seeder it is practically the same as the Planet Jr. No. 4; will sow in drills any thickness or drop in hills 4, 6, 8, 12 or 24 inches apart, and has the same feed, hill-dropping mechanism and automatic device for stopping the feed, and has also the new seed index. It is thoroughly substantial and is accurate in planting all kinds of garden seeds in either hills or drills. Feeding may be stopped instantly by raising the handles and also by pushing down the index bar.

The attachment for making up rows for the seed drill as shown in the cut is a great labor-saver when fertilizers are to be used. First make the furrow with the two plow points together, lining out the next row with the marker.

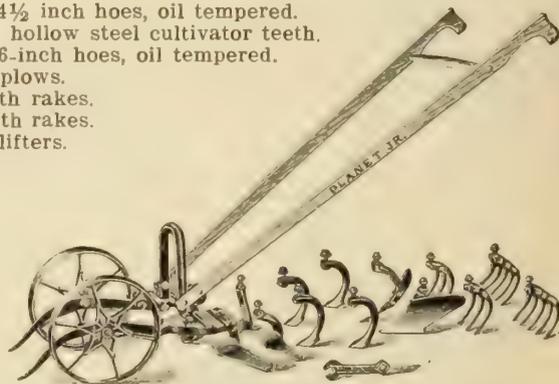
The change from drill to wheel hoe and back again is quickly made, and the entire combination is one we can heartily recommend and guarantee satisfactory.

No. 11 Planet Jr. Double Wheel Hoe

Price, with Attachment, as in cut.....\$10.50

Packed weight, 37 lbs.

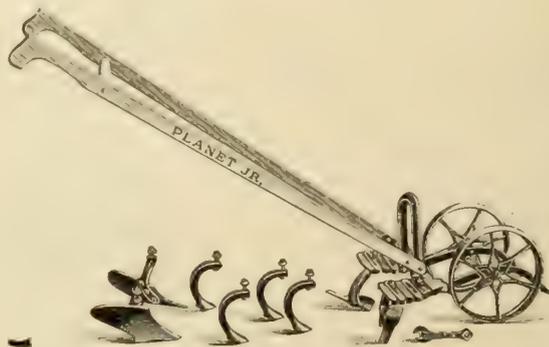
One pair 4½ inch hoes, oil tempered.
Two pairs hollow steel cultivator teeth.
One pair 6-inch hoes, oil tempered.
One pair plows.
Two 3-tooth rakes.
Two 5-tooth rakes.
Two leaf lifters.



No. 12 Planet Jr. Double Wheel Hoe

Price, with Attachments.....\$8.25

Packed weight, 31 lbs.



Equipment: One pair of 6 inch hoes. Two pairs of hollow steel cultivator teeth. One pair of plows. One pair of leaf lifters.

Garden Tools—Continued

Iron Age No. 1 Double and Single Wheel Hoe

From double to single wheel form. The double wheel hoe is for working astride the plants when they are young—the single wheel for working between the rows, after the plants have grown too high to be worked properly the other way. A long axle is furnished for the one wheel and it takes but a minute to change. This is the only combination double and single wheel hoe on the market.

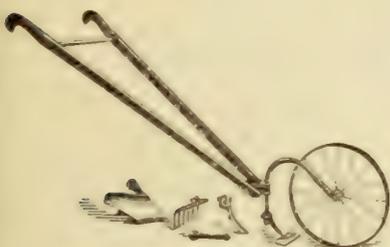


Fig. 82.

- No. 1, Fig. 75, complete with all tools.....\$7.00
(Packed weight 40 lbs.)
- No. 2, with Side Hoes only..... 4.25
- No. 13, with Side Hoes and Teeth..... 5.50

Iron Age No. 12 Wheel Plow and Cultivator

It has four working tools as shown in the engraving—it will plow in all but hard ground, open furrows and cover them; hill growing crops, hoe, rake, and cultivate.

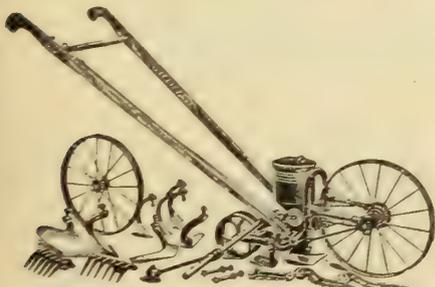


For the laborer and mechanic who cannot afford much money for a garden tool, who has time only for the simplest work, but who, nevertheless, wants a garden with the least work possible. It means a big reduction in living expense and better health for his family and himself. The No. 12 is low priced, but complete in itself for the work to be done. This tool, also, can be used to advantage in stirring the soil in poultry yards.

Price..... \$3.50

Iron Age No. 6 Combined Hill and Drill Seeder, Double and Single Wheel Hoe

Gives you twice the value and is the best tool to buy if you have enough work for a seeder.



- No. 6, Fig. 114 (Packed weight, 57 lbs.).....\$12.00
- No. 7, Hill and Drill Seeder only..... 9.00
- No. 14, with Hoes and Teeth only..... 10.50

What It Will Do.

It will open its own furrow, sow in continuous rows or drop in hills, cover the seed with loose soil, pack it with roller and mark the next row. Then when the time comes the drill attachment is taken off and the different cultivating tools can be used as needed.

No. 4 Combined Drill Seeder and Double and Single Wheel Hoe

A drill seeder, like No. 6 except that it does not have hill dropping device and has a different opening plow. Sows in continuous rows only. For the man who makes a specialty of



Fig. 83.

one or more crops that are always sown in continuous rows and, naturally, has no use for the hill dropping parts.

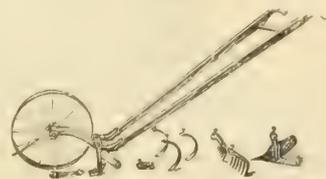
- No. 4, Fig. 83, with tools.....\$11.00
(Packed weight, 55 lbs.)
- No. 5, as Drill Seeder only..... 8.00
- No. 40, with Side Hoes and Teeth only..... 9.50

Iron Age No. 20 Single Wheel Hoe

This is a practical garden tool—so it follows that it must be light or people would not use it, yet strong and durable to make its use pay. Next,

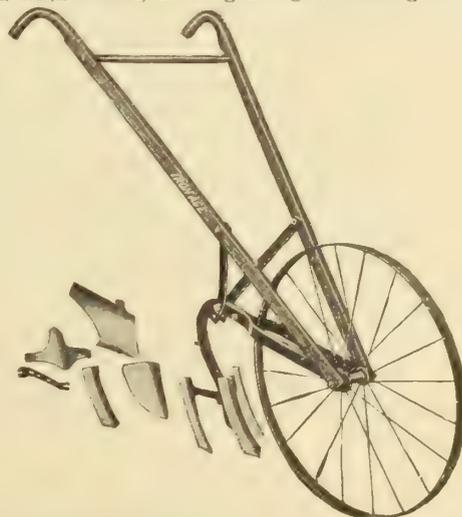
It will do all of the necessary between-the-row hoeing, cultivating, furrowing, ridging, weeding, leveling, etc., in any home or market garden.

Price..... \$6.00



Single Wheel Hoe

This is one of the best light all-round tools in existence; has extra high wheel, making it light running.



Price, including Seven Tools.....\$3.50

Farming Implements

GENUINE OLIVER CHILLED PLOWS

The No. 11 James Oliver Sulky Plow

Made Right and Left Hand

Have you ever noticed that the farmer who takes pride in his field and who plows it with an ordinary three-wheeled sulky plow, finds it necessary to finish up the last four or five furrows with a walking plow? If you ever saw a farmer with a No 11 James Oliver Sulky Plow do this, you can put it down that he took it so easy in plowing the major part of the field that he was ashamed of himself, and finished up with a walking plow to ease his conscience, for there is no other reason why he should depend upon some other plow to finish what the No. 11 started, and the No.

11 never hesitates to start in any field. It is the only three-wheeled plow made—remember that—on which the trucks can be narrowed by the operator so that in plowing the last furrow, both wheels will run in the dead furrow, finishing up the field just as neatly and cleanly as the first.

Price, upon application.



The Oliver Plow was introduced into this section more than thirty-five years ago, and is still the standard. The fact can be testified to by all of the farmers who have used them. The word Oliver is a synonym for excellence.



PLOWS—PRICES

STEEL BEAM—RIGHT AND LEFT HAND

No. A-1 and A-2 Right Hand Only.....	\$7.00
No. B, Right Hand Only.....	9.50
No. 10	11.00
No. 13	12.00
No. 19, Right and Left Hand.....	13.00
No. 20, Right and Left Hand.....	13.50
No. 40, Right and Left Hand.....	14.00
No. 40 XX, Right and Left Hand.....	14.50

The above are also furnished in Wood Beam.
All Wood Beam Plows \$1.00 less.

NOTE.—A Clevis, Wrench and an extra share are included in prices for Plows fitted with Cast Shares, but wheels and jointers are not.

Oliver Steel Beam Plows

All the strong features of the Oliver Wood Beam are incorporated in the Steel Beam Plow. Light draft is one of its strong points. Scouring in all kinds of soil is another equally valuable requisite.



We cannot too highly recommend the Oliver Steel Beam Plow. It makes friends wherever it is sold.

Rolling Coulter\$3.50

The S-29 Chilled Subsoil Plow

This plow can be used as a subsoiler or as a middle-breaker, by attaching double mould-board, which is made in one piece out of chilled metal, thus giving the buyer two plows at the cost of one, and that at a very low price.

No. S-29 Steel Beam, without mouldboard, capacity 9x4 in.
Price.....\$8.00

No. S-29 Steel Beam, with mouldboard, capacity 9x13 in.
Price.....\$9.00

All Jointers, \$2.00 extra. All Wheels, \$1.00 extra.

We carry repairs for the Oliver Chilled Plows in stock.

Genuine Farmers' Friend Plow

No. 5\$2.90
No. 7-R 4.50

CAN ALSO FURNISH SYRACUSE PLOWS. WE CARRY
A FULL LINE OF SPRACUSE PLOW REPAIRS.

Kentucky Plows

Pony Kentucky, wood beam (Includes extra share).....	\$3.00
Pony Kentucky Share .....	.30
Pony Kentucky Landside .....	.15

We have a full line of repairs for Kentucky Plows and Farmers' Friend Plows on hand.

Plow Handles

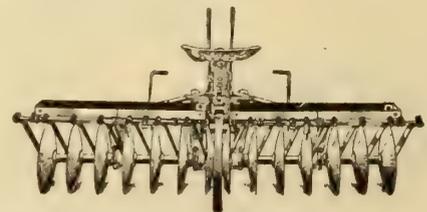
Planed and Finished

1½ in. x 2 in., 5 feet long.....	30c
1¼ in. x 2¼ in., 5 feet long.....	40c
1½ in. x 2½ in., 5 feet long.....	50c

MALLEABLE CLEVISES, SHACKLETS, TWISTED AND STRAIGHT MALLEABLE PLOW RINGS AND OPEN LINKS.

Full line of Bolts for all Plows.
Prices on application.

Single Discs Harrows



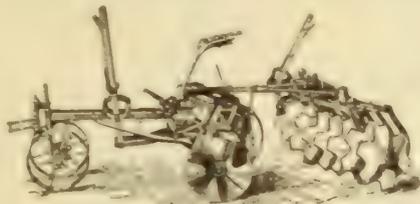
Price, with Fore Truck, 8-16 in. Disc.....	\$32.50
Price, with Fore Truck, 10-16 in. Disc.....	35.00
Price, with Fore Truck, 12-16 in. Disc.....	37.50

A full line of extra teeth and parts in stock.

Farming Implements—Continued

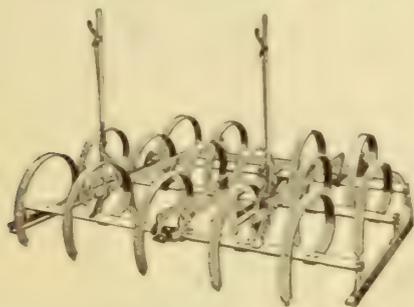
Double Disc Harrow With Flexible Frame

The Double Disc Harrow is just what its name indicates—two harrows combined in one, for the purpose of saving time and labor in tilling the soil. Its capacity is twice that of any other form of Disc Harrow, for it works the ground twice at one operation. One man and three horses operate the Twenty Disc, doing as much work as could be done with two ordinary harrows employing two men and six or eight horses. Moreover, the work is more thoroughly done, for the second harrowing follows immediately after the first, before the freshly cut ground has had time to dry out or become hard.



Price, with Tongue Truck.....\$62.00

Spring Tooth Harrow



Deering, 15 tooth, with Runners.....\$18.50
Deering, 17 tooth, price with Runners..... 20.00
Deering, 21 tooth, with Runners..... 22.50
Deering, 23 tooth, price with Runners..... 25.00

Spike Tooth "U" Bar Zig-Zag Harrows

Closed End

This is a practically all steel implement. The Steel "U" Bars, Teeth and Clips are exactly the same. The outside frame is made of channel steel and the tooth bars are riveted to it by means of steel rivets. This construction gives protection to the tooth bars and prevents injury by their coming



in contact with stumps, fences or other obstructions. It also affords protection to trees when the Harrow is used for orchard work.

All teeth are 5-8-inch steel.

50 Tooth, 2 Section\$12.50
60 Tooth, 2 Section 13.50

One section of the above may be used for garden or light work with one horse.

One Section of 50 Tooth Harrow.....\$6.50

Success, Jr., Potato Digger

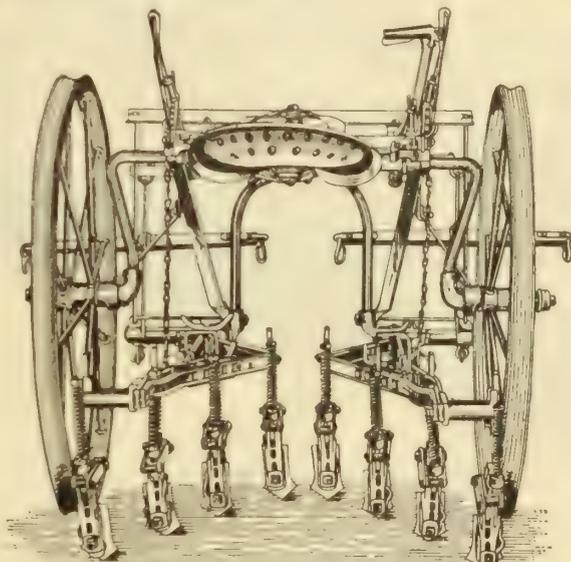
The Success Jr. Digger is made of Steel throughout excepting the beam and handles. Without question it is the most successful plow digger ever placed on the market.

Price\$9.00



Oliver Riding Cultivator

When the first descriptive circular of the Oliver Cultivator was written, upon entering the race where so many were competing, it was done with a feeling of confidence that the cultivator would prove to be a universal favorite.



At this time (after several years on the market) we can boast of the distinction of having won the race with the competition completely outclassed.

Absolute and distinct advantages over other implements are what count, and the following are to be found in the Oliver Cultivator:

The work is done perfectly, because of the parallel gangs, always held a uniform distance apart, always maintaining full depth and never shirking when going through hard ground.

This good work is done with the greatest ease by the operator because of the power lift for the gangs, provided by draft of team, and the pivotal seat bar guide which shifts the gangs, besides pivoting the pole to guide the machine. The Oliver is absolutely the easiest to guide of any cultivator ever invented.

It is easy on the team, because of perfect draft lines—therefore no neck weight or neck draft. Light to draw, because of short frame and otherwise novel construction.

Automatic Balance Frame. The movement of one lever assisted by the team raises and lowers both gangs, and at the same time balances the frame.

For narrow rows, the wheels can be set 38 inches between the tires and still give ample room for guiding where planting has been done badly out of check.

As a hard ground cultivator it has no equal. There are no springs or high hitch to draw the shovels out of the ground, which are, therefore, always hungry for their work.

It is a profitable cultivator for the farmer, as it does not wear out easily, never breaks, saves time and manual labor, and does faster and better work than is possible with any other.

Price, with 8 Spring Shovels.....\$37.50

Farming Implements—Continued

Imperial Steel Land Roller

The Imperial Roller is built for hard service. It is strong, solid and substantial. The Drums are made of high carbon sheet steel, No. 12 gauge, and the ends are closed with tight fitting solid sheet steel heads, put together with bolts (not rivets). Dirt and stones are excluded from the interior of the Drums, which turn independently on the axle.

Cast sleeves or collars are placed in the hubs at the ends of each Drum, and the wear, if any, comes on them and not on the axle.

The axle is made of 1 7/8-inch steel shafting, and turns in hard maple boxes carried in steel hangers. We were the first to use hard wood boxes in Land Rollers, and years of service have proved their superiority. They are better than metal bearings for the conditions in which they are used, wear longer and are easily replaced by the farmer himself.

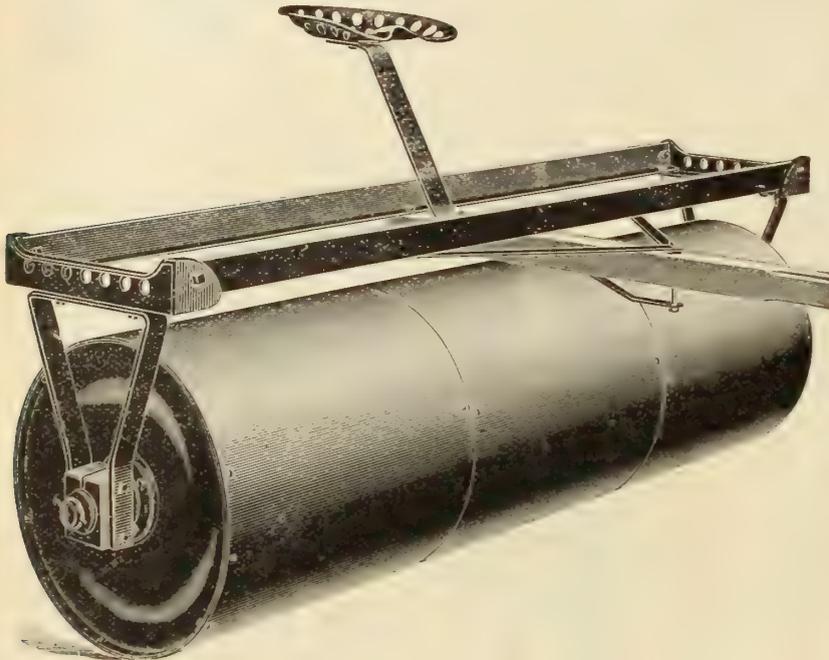
The frame or top of the Roller is made of steel, full 1/4-inch material, and is better, stronger and more durable than a wood frame.

The Imperial Roller is simple of construction, strong in every part and every pound of material is the best obtainable. With ordinary care it will last a lifetime. Comparison with other Rollers in the following particulars is invited:

Weight and quality of steel used in drums; weight of steel used in frame; diameter of axle; construction of drums with closed heads bolted together; material and construction of hangers; bearing, as to durability, ease of renewal, and fitness for the service required.

No. 7—8 feet, 3 sections, 24-inch diameter, weight 635 pounds.

Price.....\$30.00



The Buckeye Pivot Axle Riding Cultivators

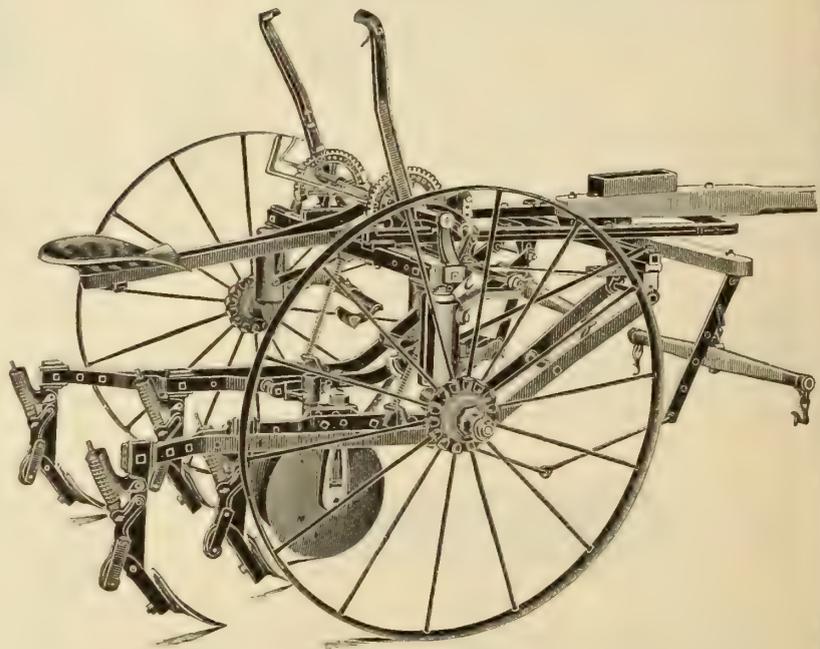
Pressure of the foot on the foot-lever turns the wheels and moves the beams at the same time, thus shifting the entire cultivator instantly in the desired direction.

Space between beams can be instantly changed while the machine is in motion, by a convenient spacing lever.

Single tongue; square tube steel frame; forty-two inch steel wheels; spring pressure; steel seat adjustable for length and height; drop-hitch directly connected with beams; height of arch, 34 inches; adjustable arch.

Especially adapted to crooked rows and hill-side cultivation.

Price, with 6 Spring Shovels...\$35.00



Imperial Alfalfa Harrow

This Harrow is especially adapted to the cultivation of Alfalfa. Has 21 spring teeth and is mounted on wheels.

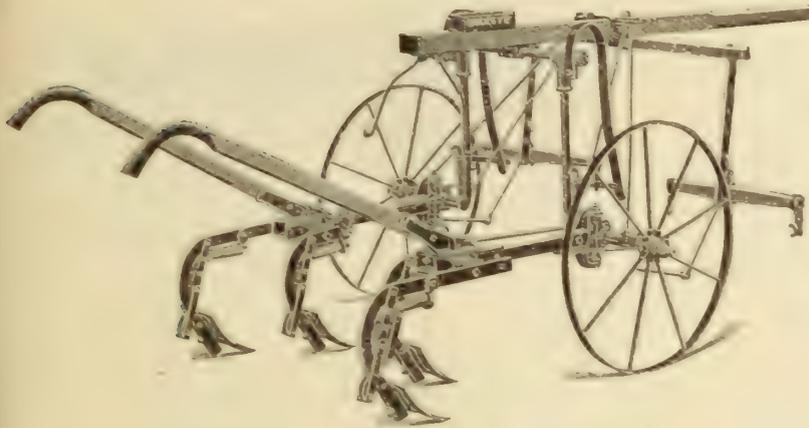
Price\$25.00

Reversible Harrow Tooth Points

Fastening device to the old tooth very simple, making any length desired. Points reversible. Has pulverizing qualities for any soil.

Price20c

Farming Implements—Continued



Buckeye Walking Cultivator

The Buckeye Balanced Frame Walking Cultivator with parallel beams has many new and improved features, making it far superior in every way to any other cultivator of this style on the market.

The steel axle is of one continuous piece, giving it great strength.

Perfectly balanced. Light and neat in appearance.

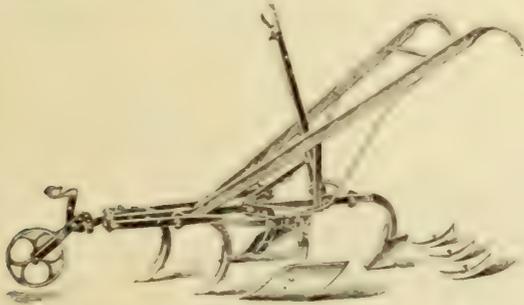
Steel wheels, 30 inches high, double tongue. Flat steel lifting springs.

Price, with 4 Spring Shovels.....\$25.00

Price, with 6 Spring Shovels..... 27.50

Iron Age Cultivators—No. 600 Horse Hoe

An up-to-date tool for the Twentieth Century farmer who wants quick, thorough work and a machine that can be adapted to the necessary operation to produce a first-class crop. He also wants a tool that he can hitch to, confident that when he unhitches he will have done a good day's work.



and that the tool will still be in good shape for the next day. The No. 6 meets these requirements—it can be adjusted for a wide variety of uses, and to meet the many conditions common to each vicinity—it has the necessary strength, yet light and compact.

Price..... \$6.50

Our No. 1005 Cultivator

Is a plain five-tooth cultivator. It is sold largely in sections of the country where laborers are careless or do not know how to handle the tools—where a strong, rigid, cheap tool is needed.

Price, Plain.....\$4.00
Price, with lever expander..... 5.00



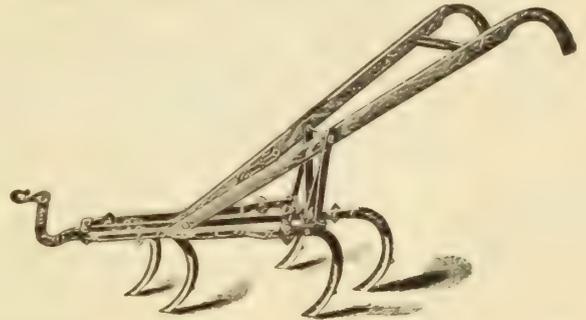
Spike Harrow Teeth

1/2 inch, 5/8 inch, 3/4 inch, 7/8 inch sizes.

Price, per pound 6c

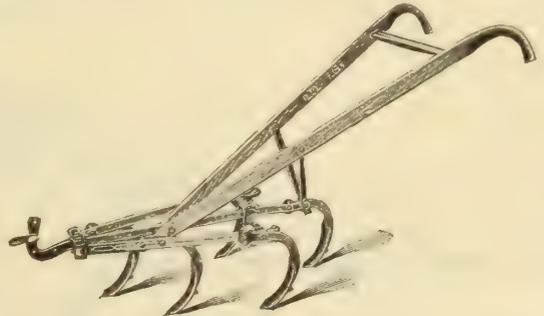
McCormick Cultivators

McCormick Cultivators are made for all purposes where a one-horse cultivator is required. They are equipped with different attachments which enable the operator to do good cultivating in all kinds of crops.



Price, Plain\$3.00
Price, with Lever Expander..... 4.25

This cut represents our No. 37 Cultivator, for use in light, sandy soils. Is built on the same lines as our regular No. 1 Cultivator. Is fitted with wheel clamp expander. Opens to



20 inches and closes to 9 inches. This is our leader, and is sold at the

Special price.....\$2.75

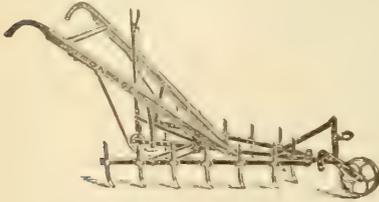
Iron Age Cultivator Steels

1 1/4 inches wide	9c
1 1/2 inches wide	9c
2 inches wide	10c
2 1/2 inches wide	10c
3 inches wide	10c
3 1/2 inches wide	12c
4 inches wide	14c

Farming Implements—Continued

Combined Harrow and Cultivator

Farmers in all parts of the country have found this tool to be "right" in every way, and it has always been very popular. It is extensively used in cultivating sugar beets.



Price, Plain\$4.75
 Price, with Lever Expander..... 5.75

The teeth are steel, diamond shaped, with a small cultivator point forged on one end. They are adjustable for depth and angle. For very close work, every other tooth (or as many as you please) can be quickly removed.

No. 104 Combined Horse Hoe and Cultivator

Price.....\$7.50

This new tool, light in weight, but exceeding strong, is fitted with sheet steel standards, lever wheel and an improved steel lever expander. We can recommend it as the very best thing in the way of a light, strong, one-horse cultivator and Horse Hoe,

and guarantee it to give entire satisfaction. If sold without the wheel, price \$5.75.



Shovel Plows—Genuine Malta

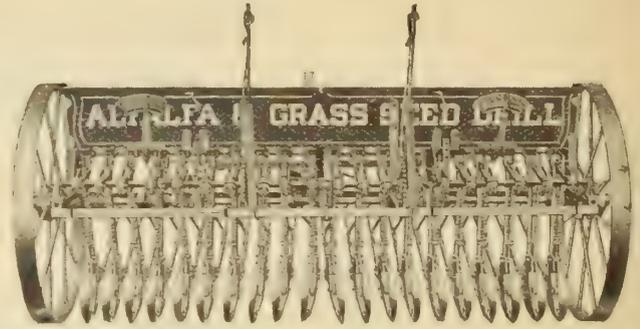
Steel Beam, Double Shovel.....\$3.00
 Steel Beam, Single Shovel..... 2.60

The Buckeye Alfalfa and Grass Seed Drill

The Buckeye can be taken into a "patchy" Alfalfa field. The bare spots can be economically seeded, using just enough



seed to properly do the work. It can also be used as a "renewer" and cultivator, working the growing plants and putting just a few seeds in the ground, thus avoiding the necessity of plowing up the field and losing seed, time and money.

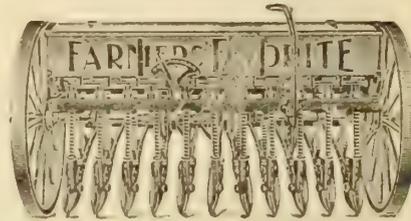


The Buckeye Alfalfa and Grass Seed Drill has 20 single discs, spaced four inches apart, giving a seeding width of 30 inches or 6 feet and 8 inches. These discs are provided with a closed seed boot, protected by a suitable open shield which precludes the possibility of the seed being interfered with by wind or trash, and conducts it to the bottom of the well made firm-bottomed seed bed, where germination takes place in the shortest possible time.

Bickford & Huffman, or Farmers' Favorite Grain Drill

Too well known to need much comment. Ask for special catalogue.

Both the grain and fertilizer are positive force feeds, and will sow with absolute regularity any kind of grain or fertilizer in good condition. The grass seeder is also a force feed, and can be used either in front or rear of the hoes; also quantity can be changed to any amount necessary. It is fastened on the frame and very low down, thus preventing the wind from blowing the seed away before reaching the ground. The fertilizer feed can be stopped or started at any time while the drill is in motion, which makes it convenient in case the operator does not wish to sow fertilizer while going over good ground.



8x8 Disc, with Grass Seeder.....\$85.00
 9x7 Disc, with Grass Seeder..... 90.00
 10x8 Disc, with Grass Seeder..... 95.00

B. & H. Spring Hoe Grain and Fertilizer Drills

8x8 Spg. Hoe, Grass Seeder attached..\$82.50
 9x7 Spg. Hoe, Grass Seeder attached.. 87.50
 10x8 Spg. Hoe, Grass Seeder attached.. 92.50

Fenders for Shovel Plows

Price, each50c

Triple Shovel Plows, or Go-Devil

Regular, Steel Beam\$3.75
 Full and complete line of polished steels for single, double, and triple shovel plows.
 Price, per pound10c

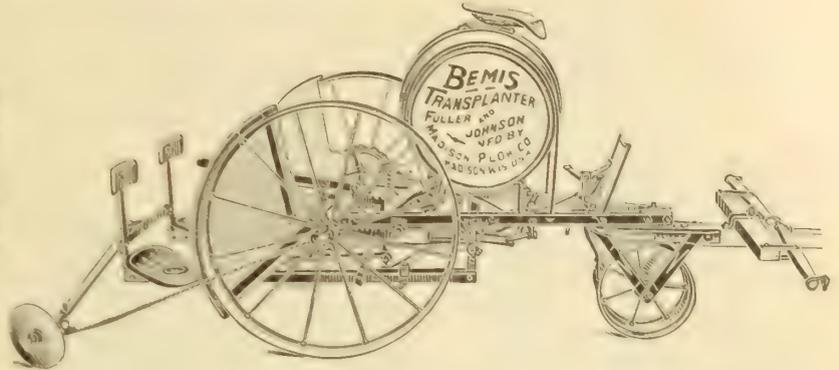
Farming Implements—Continued

Steel Frame Bemis Transplanter

Is the only practical machine for transplanting Tobacco, Cabbages, Sweet Potatoes, Tomatoes, Strawberries, Nursery Stock, etc., better than by hand. They start sooner, and mature more evenly.

Great saving in time and labor, great increase in yield per acre. Set your plants when ready—don't wait for rain. Each plant watered at the roots, covered with dry earth—no baking. Every feature necessary for every purpose, every adjustment desired. Perfect working qualities. Easily handled. Very light draft.

Price..... \$70.00

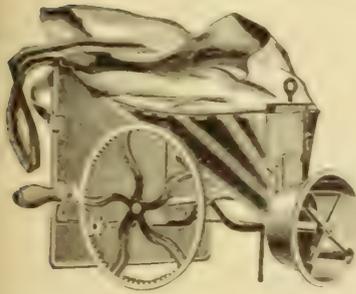


Broadcast Seed Sowers

CAHOON

This Sower is well made, frame being of malleable iron, hopper of steel, has brass discharger. Will sow Clover, Timothy, Millet, Oats, Wheat, Buckwheat, Barley, and Rye, with great accuracy. A full set of directions with each machine.

Price..... \$3.50



Cyclone

This is a first-class machine and will do equally well the same amount and kind of work as the Cahoon. Any one desiring a convenient, practical, and all around Grass Seeder, we cannot recommend the Columbian too highly.

Price..... \$1.50

Farmers' Favorite Broadcaster for Sowing Fertilizer, Lime, Ashes, Land Plaster and Chemicals

This Broadcast Fertilizer Sower is fully equipped for and adapted to sowing large quantities of fertilizer per acre. The hopper is of great capacity, mounted on large wheels, making easy draft; at the same time the arrangement of the hopper relative to the ground is such as to deposit the fertilizer just where it is wanted without danger of the wind blowing from one side to the other.



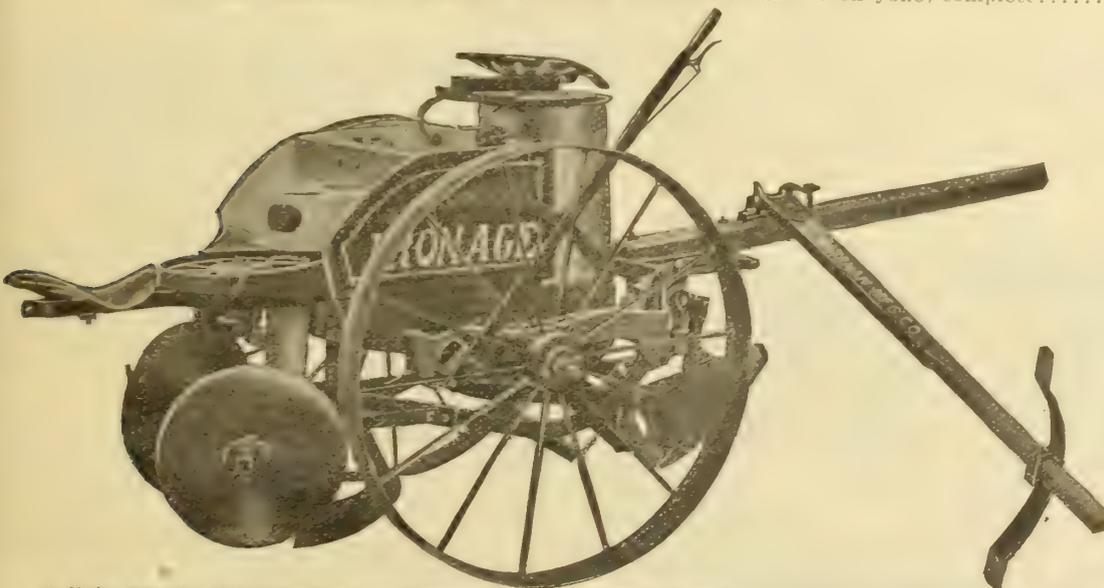
Price..... \$50.00

We have a full line of Grain Drill Points for all leading Drills; also Spiral Steel Tubes and Gun Tubes for all makes of Drills.

Potato Planters

Iron Age (Improved Robbins) Potato Planter

Price, with Fertilizer Attachment (includes whiffletrees and neck yoke) complete..... \$80.00



Its perfect work is marked by four things especially—while it handles all the seed automatically from hopper to seed spout, it does not injure a single piece—although a boy is necessary to make corrections, the net profit to you is far greater than if you planted with any other machine—no matter what distance apart you want to put the seed, you can do it and be sure there is a piece in every space and one only—although you sow fertilizer at the same time, none of it touches the seed.

A light weight, light draft, strong, compact potato planter with a record of many years perfect planting such as none other can point to. In localities where they are used at all they are used almost exclusively—as soon as a grower learns what the Iron Age has done for his neighbor, he wants one and gets it—if he speaks in time.

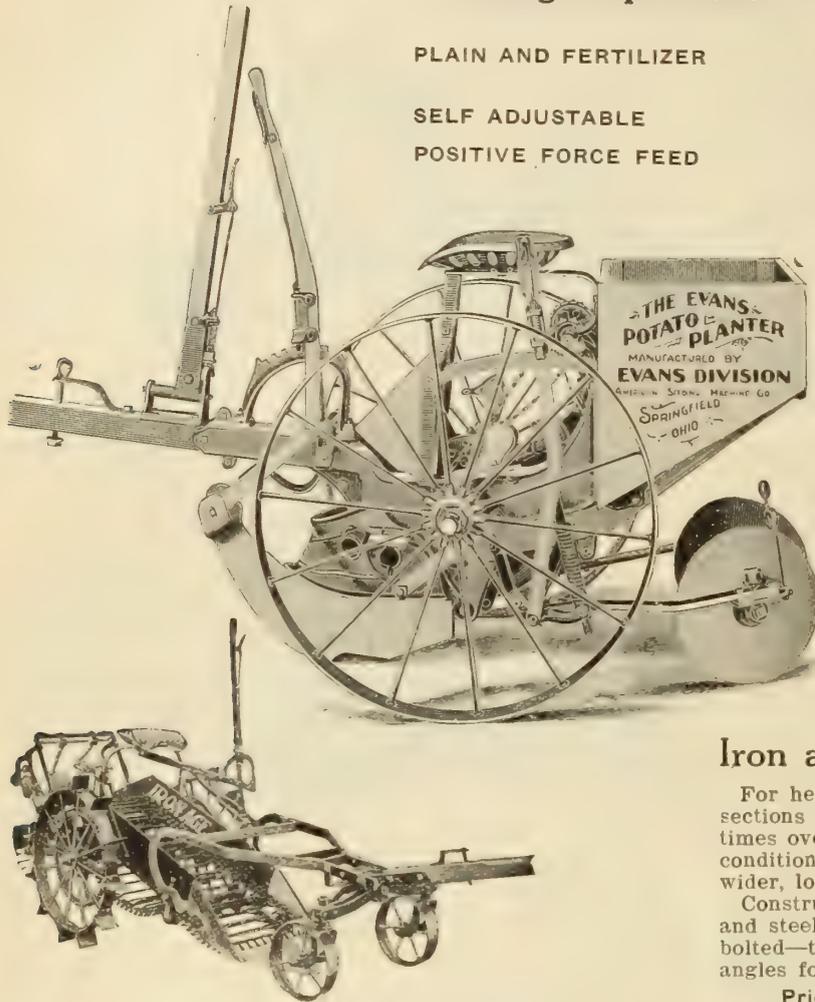
PRICES SUBJECT TO CHANGE WITHOUT NOTICE

Farming Implements—Continued

PLAIN AND FERTILIZER

SELF ADJUSTABLE

POSITIVE FORCE FEED



The Evans Potato Planter

The improvements on our Evans Potato Planter are of vital importance to potato growers. The Evans in its old form was acknowledged to be the most perfect potato planter in use. We were not content with "good enough." Our determination is to improve wherever improvement is possible. That has always been the policy of the Superior Drill Co., and always will be.

Among the improvements are the furnishing of two sets of Picker Arms instead of one; the double drive, which insures perfect working of planter on hill-side or level ground; dust-proof oilers for lubricating axle and covering disc bearings; the adjustable disc marker; also the improved design of furrow opener, which greatly aids in the lightness of draft and the making of a correct furrow.

The Evans Potato Planter is the most perfect planter on the market, because it is made better and will do more and better work with less labor, thereby producing larger and more profitable crops at a decreased expense to the owner.

In ease of operation the Evans is far in the lead. One person can operate it anywhere under any and all conditions of seeding, whether it be on hillside or level ground.

Price, complete, with Fertilizer Attachment, \$70.00

Iron age Wide Elevator Potato Digger

For heaviest conditions of vines, grass, and soil. In some sections of the country the land is heavy, vines are sometimes over 4 feet high, and grass is very troublesome. These conditions need a machine with great traction power and wider, long elevators. Such a machine is Iron Age.

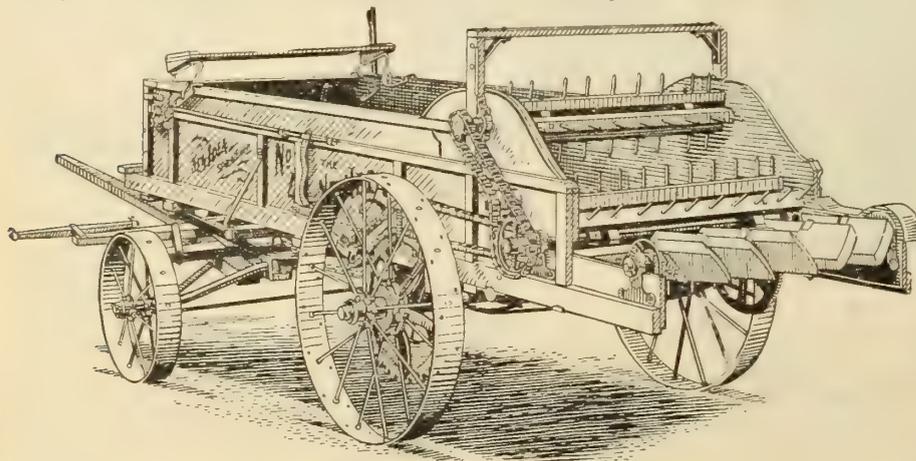
Construction: Built almost entirely of malleable castings and steel—strong, compact, carefully fitted and keeps tightly bolted—the heavy work does not rack it to pieces. Has steel angles for side bars.

Price upon application. Ask for Special Catalogue.

New Idea Manure Spreader

The New Idea does better work than any other make. It is the only spreader constructed with double beater, and it pulverizes the manure thoroughly and distributes the same evenly in a wide stream. The greatest argument in favor of the New Idea is to see it work. Drop us a card, and if there is one in your neighborhood we will tell you who has it so that you can look at it. It will track with the ordinary farm

wagon, which is a big point in its favor, and at the same time it spreads wider than the wide body spreaders. As stated above, the front wheels will turn under, making it a very short turn machine. If you are in the market for a Manure Spreader it will pay you to buy no other kind, because the New Idea will save you time and money.



In comparing the capacities of the New Idea Manure Spreaders with those of other makes, bear in mind that on account of your being able to round up the load on the New Idea Manure Spreaders, these machines will handle more manure, size by size, than any other Spreaders on the market.

DIMENSIONS

Front wheels 28 inches, with the hind wheels 40 inches. Equipped with two-horse hitch. Extras: Brake and three-horse hitch.

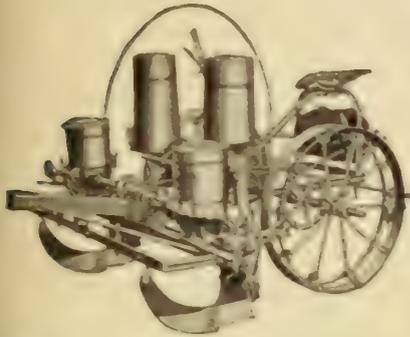
Prices of New Idea Machine Spreaders

75 bushel capacity, with three-horse hitch and Neck Yoke. \$135.00
Steel Distributors, extra. 6.00
Brake, additional 6.00

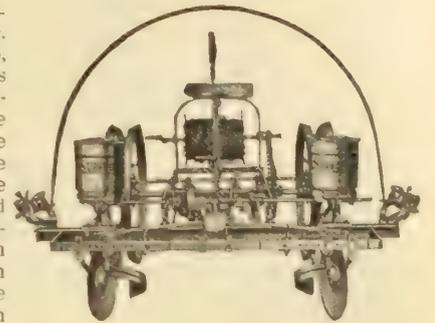
PRICES SUBJECT TO CHANGE WITHOUT NOTICE

Farming Implements—Continued

Superior Corn Planters

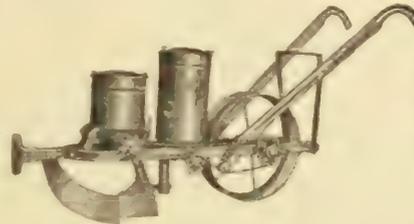


Every farmer who raises corn desires each succeeding year more corn from the same acreage. There are many contingencies which may, and do, effect results. All are agreed that much depends upon the seed, accuracy of planter, and soil conditions. The latter, of course, is entirely in the hands of the farmer, so also might we say of the seed, but the machine behind the team is the one proposition of which is demanded Jury Trial. The Superior Corn Planter has been thoroughly tried in all corn-raising sections, proving the worthiness of the name it bears. The quality went in before the name went on. The Superior Corn Planter possesses new features—good sensible helps for the user. Adjustable in width, in 2-inch steps, from 28 inches to 48 inches.



Price of complete Planter, with 80 rods of check-row wire and Fertilizer Attachment with Runners. . . . \$65.50
 Price, with 80 rods of check-row wire, without Fertilizer Attachment 50.50
 The above Planter with Discs instead of Runners, \$1 extra.
 Extra Check-Row Wire in 10, 20, 40, and 80 rod lengths, per rod 7c
 Corn Planter Runners, for all popular planters.
 Price, per pair for Superior Steel Runners . . . \$5.00
 Corn Planter Links for splicing check-row wire, per doz. . . . 25c

Superior One-Horse Model Corn Drill, with or without Fertilizer Attachment, suitable for field or sugar corn, peas, beans, etc. With Runners or Discs. With Fertilizer Attachment . . . \$12.50 Without Fertilizer Attachment . . . \$11.00



Corn King Manure Spreader

No machine is of more practical value to the farmer than an I. H. C. manure spreader, because it enables him to realize the full value of his barnyard manure, and thereby maintain the productivity of his soil. The usual methods of handling manure are wasteful and require a great deal of hard labor. A spreader saves the hardest part of the labor and most of the waste. It brings a tangible return in increased crops and improved condition of the soil, and is therefore a decidedly practical machine. If this country is to maintain its supremacy in agriculture, farmers must conserve the fertility of their soil. The liberal use of barnyard manure handled by means of a manure spreader is the one practical and economical method of accomplishing this result.

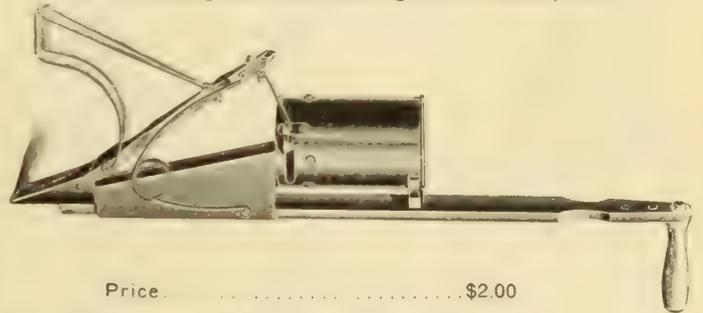
Made in the following sizes:

No. 5 \$135.00
 No. 6 140.00

Ask for Special Catalogue.

Hand Planters

For Planting and Re-Planting Corn, Beans, Etc.



Price \$2.00

McCormick Binder

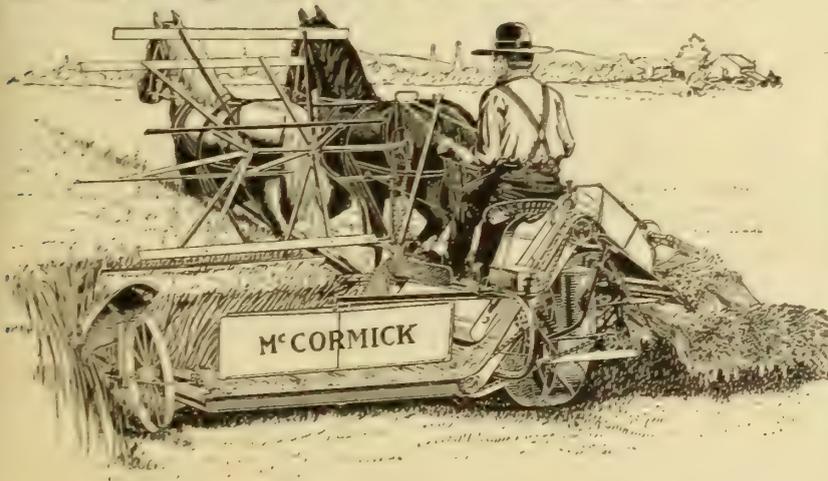
PRICES

6 ft. Cut, with bundle carrier and transport. . .
 7 ft. Cut, with bundle carrier and transport. . .
 8 ft. Cut, with bundle carrier, tongue truck, and transport. Prices upon application.

The McCormick Binder is the outgrowth of the first reaper which was invented in 1831, and has always been the standard of construction. The reason for this is that the machine has progressed with the times—it has been improved each year so that it is now a model of perfection. The McCormick Binder naturally has an excellent reputation because it has done splendid work for so many years in all countries of the world. Thousands of these machines are in use and each farmer who owns one appreciates the features which make it efficient.

When grain is down and tangled, the McCormick Binder will cut it successfully because the reel and the platform can be adjusted readily to meet the conditions. All bearings are accessible for oiling. The machine is easy to operate and light in draft, because it is equipped with ball and roller bearings, which minimize friction. The McCormick Binder is noted for its durability, which is a result of strong construction and the use of proper material.

MCCORMICK



PRICES SUBJECT TO CHANGE WITHOUT NOTICE

Farming Implements—Continued

McCormick Corn Binder

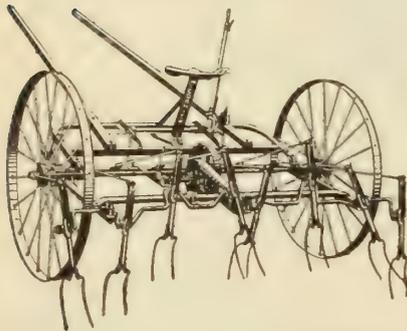
The McCormick Corn Binder will cut corn of all lengths. It will also work well in corn that is down, tangled, and lodged. This is possible because the machine is provided with convenient adjustments which enable the operator to raise and lower the gatherer arms, so that the fingers of the conveyor chains which extend to the points of the gatherer arms can grasp and elevate corn that is lying almost flat upon the ground.



Prices upon application.

The band shifting attachment also has a wide range of adjustment, and the bundle can be tied around the center even though corn be extremely long or short.

McCormick Hay Tedder



Tedded hay cures in a very short time, and for this reason the McCormick Hay Tedder is an invaluable machine for the hay grower. When it is used the farmer can handle the hay crop very quickly for the reason that hay can be tedded soon after it is cut.

The wheels, frame, and forks are made of steel, which insures a substantial construction. The machine is driven by gears. The gear wheel which is mounted on the center of the axle drives the crank shaft to which the fork-arms are attached. All the forks are therefore given the full driving force of both wheels and the motion of the forks is uniform and positive—the heaviest hay will not retard the forks.

- 6 Forks
- 8 Forks

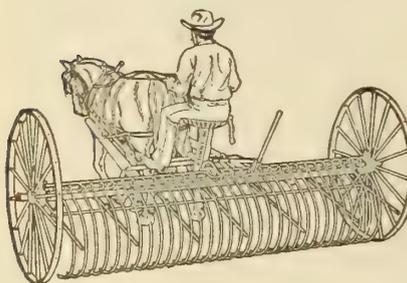
Prices upon application.

McCormick Hand Dump Rake

The McCormick Hand-Dump Rake is efficient in all conditions of hay and fields. The weight of the driver is utilized on this rake to help raise the teeth for dumping. Over-cleaners are used on this rake, which act in the same thorough manner as the under-cleaners on the self-dump rake. The advantages of using over-cleaners instead of under-cleaners on this rake is that the load is taken off the operator. Those who prefer the hand-dump rake will find that the McCormick is built correctly.

Price upon application.

McCormick Self-Dump Hay Rake



The best material is used in the construction of the McCormick Self-Dump Hay Rake, which is simple in both design and construction. The wheels have staggered spokes and a heavy 2-inch channel tire.

The teeth on the McCormick rakes are made of selected spring steel, thus having great strength and resiliency. The points of the teeth are so shaped that they will get all the hay without digging into the ground

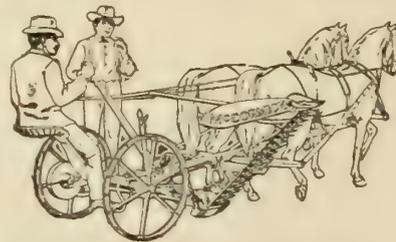
or picking up stones. Both the self-dump and hand-dump rakes can be operated with either one or two horses by simply adjusting the shafts. The wheels are fitted with removable hubs, which can be easily replaced at a small cost, thus practically renewing the wheel.

In a word, this rake is designed to have the maximum strength and rigidity with the lightest weight possible; and agriculturists will find that the McCormick Self-Dump Rake meets every requirement for gathering the hay into windrows.

Prices upon application.

- 8 ft., 20 Teeth, Self Dump.....
- 9 ft., 23 Teeth, Self Dump.....
- 10 ft., 26 Teeth, Self Dump.....

McCormick Vertical Lift Mower



The McCormick Vertical Lift Mower has been designed for cutting on rough and stumpy ground, where a plain lift mower could not be used to good advantage. This mower is a practical machine for all kinds of grass cutting. The cutter bar can be raised to a vertical position and lowered without stopping the team. When the bar is raised, the machine is thrown in and out of gear automatically. This feature permits the driver to cut close to a tree, stump, or rock, and save all the hay without loss or time, or inconvenience.

The McCormick Vertical Lift Mower will cut grass suc-horses, and it will do good work under conditions where an ordinary machine could not be used.

As an all-purpose machine, the McCormick Vertical Lift Mower is unsurpassed—it will do excellent work in uneven fields where there are stumps and stones, as well as in the level fields.

Prices upon application.

- 4½ ft. and 5 ft. Cut.....
- New Big Four, 6 ft. Cut.....
- New Big Four, 7 ft. Cut.....

McCormick Little Vertical Mower

The McCormick Little Vertical Mower has been designed to meet the demand for a mower of small capacity that can be pulled by one horse. It is adapted for mowing lawns, parks, orchards, and cemeteries, because it can be operated in places where a large two-horse machine could not go.

Prices upon application.

I H C HAY PRESSES

I H C Two-horse Pull Power Hay Press



Made in Three Sizes

- 14x18 in. bale chamber
- 16x18 in. bale chamber
- 17x22 in. bale chamber

Light draft, capacity and durability are the three main points to be considered in buying a pull power hay press. The I H C two-horse pull power press is made almost entirely of steel and is, therefore, remarkably strong without being excessively heavy or unwieldy.

The Pull Power Principle The Combined Leverage The Toggle Joint Plunger And the Self-Feeder are the principal features which in combination give a greater pressure in the bale chamber, and a larger capacity for the amount of power used than any other hay press.

Farming Implements—Continued

International Motor Hay Press

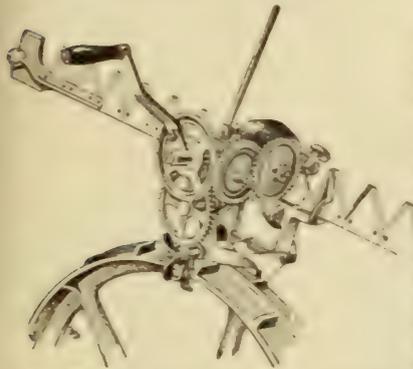
Made in Three Sizes

14x18 in. bale chamber, 3, 4, or 6-horse power I H C oil engine.
16x18 in. bale chamber, 4 or 6-horse power I H C oil engine.
17x22 in. bale chamber, 6-horse power I H C oil engine.

The International Motor Hay Press is constructed of the best materials, assembled and designed in such a way that convenience, efficiency and durability are combined. It is a self-contained outfit, having the bale chamber and engine connected and mounted together on substantial trucks. The power from the engine is transmitted through a heavy drive chain and power jack. This arrangement of the bale chamber and engine makes it a simple matter to move the press from place to place and to set it up for work. One team is all that is required to transport the whole outfit.

Ask for Special Catalogue and Prices.

McCormick Knife and Tool Grinder

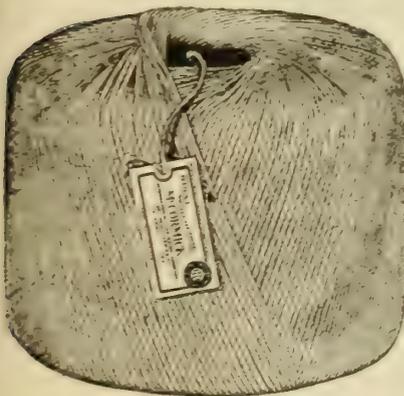


This device is convenient for use in the work shop or in the field, as it can be readily attached to a bench or mower wheel. Unless the knife be kept sharp, it is impossible to secure the best results with a mowing machine, and the McCormick knife grinder enables the farmer to always keep the knife sharp—and the work of sharpening requires considerably less time than

is possible with the ordinary grindstone. A cylindrical stone for grinding tools is furnished on special order. A stone for gumming saws can also be furnished on special order. When desired a foot power attachment will be supplied at a small additional cost. With wheel for grinding mower sections.

Prices upon application.

McCormick Binder Twine



It is well understood that good binder twine is essential to successful binding. The harvest season lasts only a few days and delays nearly always result in more or less loss. Binder twine that kinks and breaks is not worth hauling home, because it is not only a source of annoyance while harvesting the grain, but it also delays the work of shocking. When bound with inferior twine the bundles break open when they are pitched

to the wagon and stack, and with such bundles it is almost impossible to build a stack that will shed water. Uniform size and strength are the characteristic features of the McCormick binder twine. It will not kink and clog the knotter, or pull thin and break. The different brands of McCormick twine are Sisal, Standard, Manila, and Pure Manila.

Lowest market prices on application.

Claggett's Shock Carrier

This Shock Carrier is fully Guaranteed to do all we claim for it.



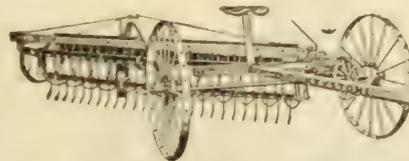
This machine is not new but has been in use a number of years, and has thoroughly done the work for which it was intended under the most trying weather conditions.

When the yield is heavy the machine will lift and transport a fifteen bushel shock of cured corn and on unloading will leave it standing as well or better than when in the field. It is nothing unusual to haul in from 25 to 35 standard bbls. of corn a day or as many as 20 large shocks of fodder. It is just as easy to load in a wind storm as in calm weather, and without any waste whatever.

Shocks of cured fodder up to 12 feet in diameter are lifted and transported with practically no effort on the part of the operator. Two shocks of smaller diameter may be loaded also.

Price, without Neck-Yoke and Double-Tree.....\$35.00

International Side Delivery Hay Rake

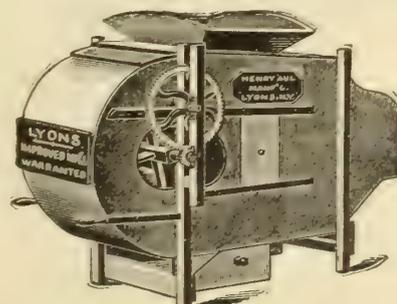


This is an all-metal rake, except the tongue. The frame is made of high-quality steel, and is very substantial. The crank shaft carries four forks, and rotates in

three bearings. The propelling power is transmitted from near the right front wheel to the center of the crank shaft by means of an efficient chain drive. Each fork is equipped with six tines, which, under ordinary conditions, are practically unbreakable. This rake will handle any growth of hay in any condition. It will not rope wet hay, but rather gives it a motion which facilitates drying. It will handle dry hay without knocking off the heads and leaves, which constitute a valuable part of the crop. It leaves a light, fluffy windrow, which is easily taken up by the loader or put into cocks for curing.

Prices upon application.

Improved Grain Fans



Auds complete, with necessary sieves for all forms of seed..\$22.00

Lyons', handmade, complete, with necessary sieves for all forms of seed..... \$25.00

Farming Implements—Continued

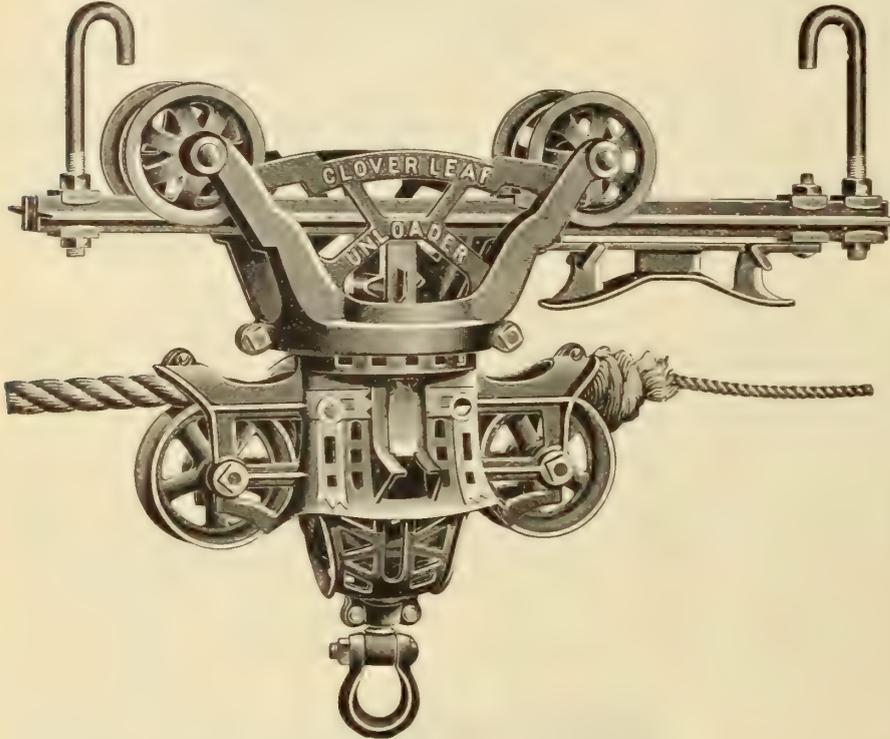
Machine Repairs

Sprocket Chains

- No. 25, per foot.....15c
- No. 32, per foot.....15c

- No. 35, per foot.....18c
- No. 42, per foot.....20c
- No. 45, per foot.....20c
- No. 55, per foot.....25c

Repairs for standard makes of Harvesting Machines kept in stock or promptly gotten on short notice.



Myers' Haying Tools

This cut represents the Celebrated Myers Clover Leaf Unloader for double-steel track. Is heavy and substantially made of malleable iron throughout. Is fitted with wide mouth to receive fork pulley when approaching from any direction. Has swinging fork pulley which relieves the carrier from strain when drawing hay over beams or into well-filled mow. None better.

Price of Unloader.....\$6.00

The patent double steel track for this carrier is made by placing two T steel rails together, held to place by the three-bolt clamps, thus making a track of the same strength throughout. No riveting. A wrench is the only tool needed to erect same.

Price per foot, including the splice irons.....13c

- Hanging Hooks, per doz.....\$1.25
- Rafter Brackets, per doz......75
- Knot Passing Pulley, each......40
- Floor Hooks, 5/8 inch, each......10
- Double Harpoon Fork, 25 in. tine, each. 1.75
- Double Harpoon Fork, 31 in. tine, each. 2.00
- Myers Lock Lever Fork, 30 in. tine, each 3.50
- Nellis' Single Harpoon Fork..... 3.00

Ask for Special Catalogue.

We carry a full line of best long-fiber Pure Manila Rope for use in Haying Outfits at lowest market prices.

Barn Door Hangers



Myers' "O. K. Stayon" flexible, covered, made with hard steel roller bearings.
Price, per pair.....\$1.00

MYERS' BARN DOOR TRACK

This track is extra heavy, made of special high carbon stiff steel, 3-16 x 1 1/4 inch.

Made in 4, 6, 8 and 10 foot lengths.

Price, per foot, including screws.....9c

Myers' Stay Rollers for the bottom of door, each....25c

Material Required for a Steel Track Outfit for Different Lengths of Barns.

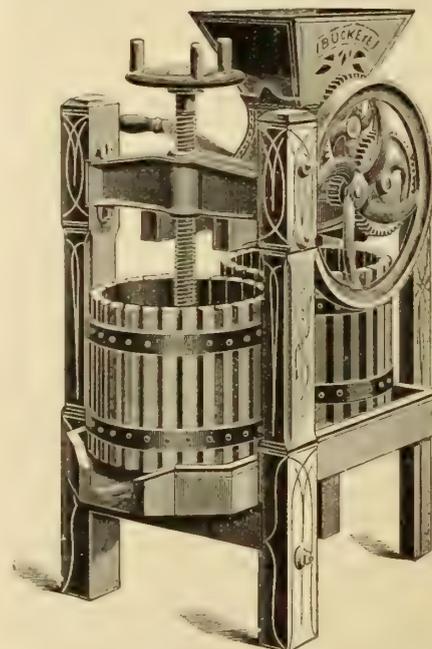
For a 40 ft. Barn—One Carrier, 40 feet of steel track, 21 hanging hooks, 21 rafter brackets, 5 knot passing pulleys, 1 R. H. Fork, 6 floor

hooks, 110 feet 13-16 inch manila rope, 40 feet 3/8 inch reverse rope.

For a 50 ft. Barn—One Carrier, 50 feet of steel track, 25 hanging hooks, 25 rafter brackets, 5 knot passing pulleys, 6 floor hooks, 130 feet 13-16 inch manila rope, 50 feet 3/8 inch reverse rope.

For a 60 ft. Barn—One Carrier, 60 feet of steel track, 31 hanging hooks, 31 rafter brackets, 5 knot passing pulleys, 6 floor hooks, 160 feet 13-16 inch manila rope, 60 feet 3/8 inch reverse rope.

Buckeye Cider Mills Senior



This is our largest size Mill, adapted for hand or power, with a detachable handle on either side. The top set of rolls first mash the fruit fine, and the bottom set grinds it thoroughly breaking all the cells so that the cider is entirely extracted.

Price..... \$20.00

"MEDIUM" DOUBLE CAGE HAND CIDER MILL

Similar to the Senior described above, but has one handle. Price..... \$16.00

"JUNIOR" DOUBLE CAGE HAND CIDER MILL

Built on same principle as Senior and Medium. Has one

handle. This is the smallest Double Cage Mill we handle. A first-class mill for family use.

Price..... \$12.50

Farming Implements—Continued

Fruit Press

This Fruit Press is operated easier and has less parts to take care of or get out of order than any other press on the market. It is cheaper than any other press, yet just as desirable, and will do the work equally as well as any other.

PRICES

4 quarts	\$3.50
6 quarts	4.00
8 quarts	4.50



Special Cider and Wine Mill

Especially adapted for grapes and fruits as well as apples. Price, with one cage and grinder..... \$9.50

Berry Presses

No. 1. WoodCage	\$4.50
No. 2. Wood Cage	5.50

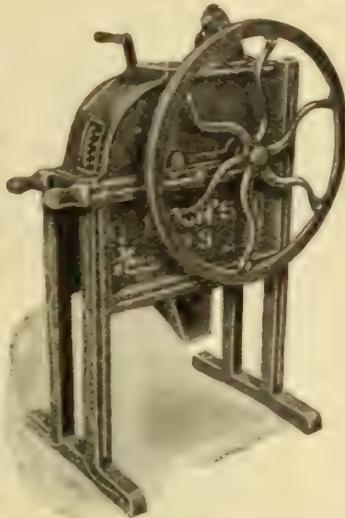
Corn Shellers

Our No. 3 One-Hopper Sheller, with cob separator and sieve, is one of the best hand shellers ever offered. Specially adapted to large corn.

Price..... \$8.00
Price, with Roller Bearings..... \$8.50

Our No. 7 Two-Hopper Sheller, with adjustable shaker, which separates the cob from the corn and chaff from the corn, made for hand and power, furnished with combined fly-wheel and 20-inch pulley.

Price..... \$15.00



Red Chief Hand Corn Sheller

A very convenient sheller for poultry yards. Can be fastened to box or barrel. Price..... \$1.50

International Feed Grinder

The International Feed Grinder is simple in construction and operation. It can be operated with a large or small amount of power—the capacity being determined by the amount of power used. The plates can be adjusted to grind fine or coarse.

The International Feed Grinder is built in two styles. One style is designed especially for grinding corn on the cob; however, it will also grind wheat, barley, oats, Kaffir corn, etc.

This style of mill is built in two sizes—a small size with 8-inch grinding plates, and a large size with 10-inch grinding plates. The other style is designed for grinding small grain only, and is especially desired by those wishing a high-speed mill that will grind small grain very rapidly. This style mill is built in one size only with 8-inch grinding plates.

6 inch	\$22.50
8 inch	25.00

Ask for Special Catalogue.

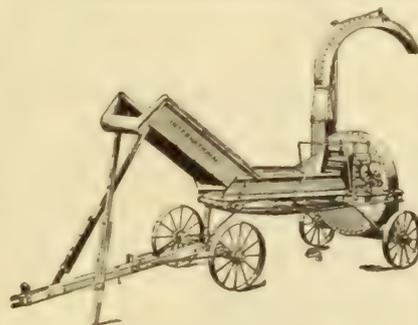


International Ensilage Cutters

These Cutters are strongly built, made of first-class material throughout, and are designed with a view of getting the best results with least power and strain on the working parts.

Ask for Special Catalogue and Prices.

The Special Catalogue will give you detailed information as to why you should buy an I H C Cutter.

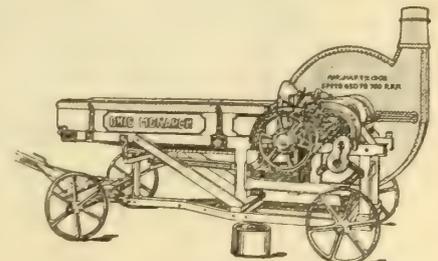


“Ohio” Monarch Self-Feed Silo Filler

Ranks at the head of the list of Ensilage Cutters.

Get a Monarch and the Silo question is easy.

Ask for a Special Catalogue giving different sizes, etc.



Feed Cutters—“Ohio” Hand Cutters

Are strongly constructed and light running, having minimum number of mechanical parts which are made of the best material.

No. 8 1/2 .....	.....
No. 10 1/2 .....	.....

No. 9, for hand or power, is heavily constructed and can be used for cutting fodder or ensilage or hay.

No. 11, with two knives, 11 inches long.

Prices upon application.

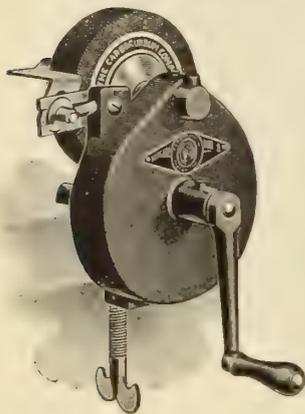
Farming Implements—Continued

“Ohio” Standard Feed and Ensilage Cutter No. 11

Equipped With Blower Elevator

The No. 11 Cutter has long been our most popular size for general farm use. It is adapted to cutting all kinds of dry feed as well as ensilage, is strongly and durably built, has large capacity, and requires but slight power to run. The pipe is 7 inches in diameter and is made of galvanized steel with standing seam on the outside running lengthwise, being very rigid. It is made in 4, 6 and 10 foot lengths, with 7-inch slip joints and a clamping band at each joint. The pipe connection at the fan case is a swivel joint which gives the pipe the proper angle for convenience and best results, and allows it to turn in any direction. Included with each machine is a

Carborundum Niagara Grinders



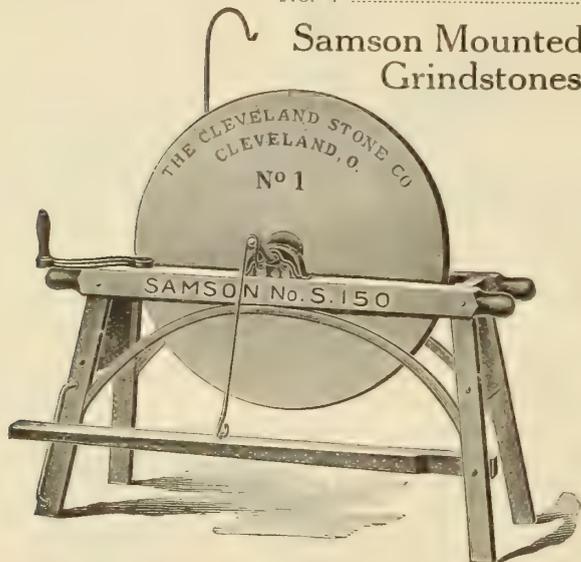
Carborundum Stones are made of Carborundum, the most marvelous abrasive the world has ever known. It is as hard and sharp as the diamond. The stones being manufactured, the uniformity of the grit, and cutting qualities, as well as absolute uniformity in hardness are insured.

The rapidity with which the work is accomplished, the satisfaction of having it promptly done, and the pleasure of having a stone sharp and clean, never glazed or filled, always ready for service, outweigh many times the slightly-increased expenditure for these stones.

Prices:

No. 1	\$2.50
No. 2	3.50
No. 3	5.00
No. 4	8.00

Samson Mounted Grindstones



This is a splendid stone for farm purposes. Frame made of hardwood; operated by one pedal.

No. 3, Stone about 18 inches diameter.....	\$4.00
No. 2, Stone about 22 inches diameter.....	4.50

THE AUTO GRINDSTONE

has a steel frame and is ball-bearing, and is operated with two pedals, making it very light running. Stone about 18 inches diameter.

Price.....\$6.00

We carry a full line of loose stones of all sizes. Price, 2 cents per pound.

Also a line of Grindstone Mountings.

hood or elbow which is to connect to upper end of pipe and convey the cut ensilage into the silo.

Set Pipe Nearly Perpendicular for Ensilage.

Dry Feed Can Be Blown in Any Direction.

No. 11, with two 11-inch knives, cuts 1/2, 1 and 2 in.....

No. 11, with two shredder blades, no knives.....

Prices upon application.

Above prices are for machines complete with Blower and Hood, but no pipe.

7-inch galvanized pipe in 4, 6 and 10 ft. lengths,

Cutting knives,

Shredder blades, interchangeable with knives,

Ask for Special Catalogue and Prices of larger sizes.

Prices upon application.

Family Grindstones

A very useful stone for the house. Mounted on malleable frame.

7 inch diameter	\$1.25
8 inch diameter	1.50

Emery Stones

This stone runs at very high speed and is suitable for use in shops or farm purposes for grinding edge tools.

Price

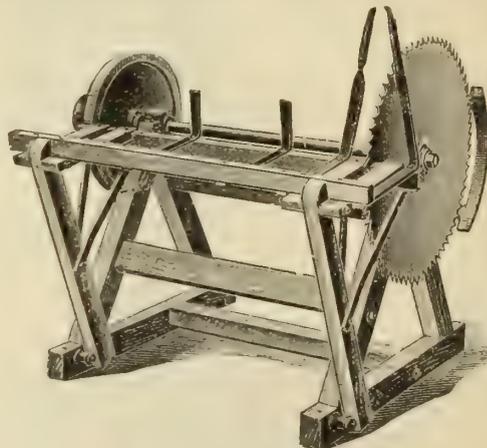
Wood and Pole Saws

The American “Clipper” Wood Saws are especially constructed for sawing poles or slabs, as well as cord wood. Have seasoned hardwood frames, carefully framed and butted strongly together. These saws have 1 7-16 inch polished steel mandrels, 52 inches long, with large collars and long babbitted boxes, 6 inch drive pulleys and extra heavy balance wheels. Will carry saws up to 30 inches in diameter.

Price, No. 4 complete for poles or slabs, with 24-inch

saw.....\$25.00

Price, No. 3, complete with 24-inch saw..... 23.50



Cross Cut Saws

Narrow American, made by Henry Disston.

Price, including handles, per foot.....35c

Comes in 4, 4 1/2, 5, 5 1/2 and 6 foot lengths.

Disston's Wide Cross-Cut Saws. Price on application.

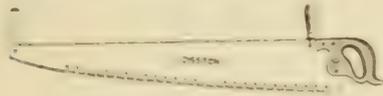
Due to the fluctuations of the market, with an upward tendency, we reserve the right to change any prices named in this catalogue. Prices named apply when the catalogue goes to press—January 1, 1917. All orders will be filled at prices prevailing at time order is received. Write for prices.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

Farming Implements—Continued

One-Man Cross Cut Saws

Henry Disston's Best Grade



- 3-foot length\$1.75
- 3½-foot length 2.00
- 4-foot length 2.50

Buck Saws

Disston's Wood Brace Frame, single rivet.

Price\$1.00

Hand Saws

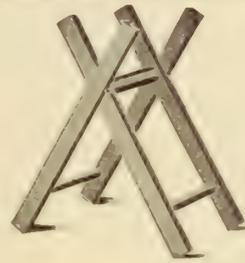


Disston's No. 7. An excellent saw for general purposes.

Price \$1.50

Disston's No. 7 Rip Saw. Price, \$1.75.

Beaver Brand Saws from \$1.00 to \$1.25.



Saw Bucks

A good hardwood folding Saw Buck.

Price50c

Corner Mangers

Made of best gray iron casting with inside flange. One of the best mangers in use; perfectly sanitary.

Price \$1.50

Square style 1.75

Wrought Hay Racks

Far superior to cast-iron racks, as frequently used.

Price \$1.50

PUMPS

Myers Force and Lift Pumps for Deep and Shallow Wells

Construction and Durability.

The material used in the construction of the Myers Pump is the best that can be bought for the purpose. The stand is made of the best cast iron and steel. The cylinders are seamless drawn brass or brass lined iron; the latter is always recommended where it can be used, as it combines wearing quality and strength. The valve seat is of glass, which is positively noncorrosive and will not harden the leather, a feature belonging absolutely to the Myers Pump, and without which no pump can be perfect. The check valve is of poppet style, which rises clear of the seat at each stroke of the pump, allowing it to clear itself perfectly; the old style hinge valve is out of date. Buckets and valves are made from the best oak tanned leather, all cut to an exact thickness and pressed dry by means of our patented process. The reason a great many pumps do not give satisfaction is because the manufacturer use cheap leather of an uneven thickness.

There is no reason why a pump will not give satisfaction and last for years if constructed as above.

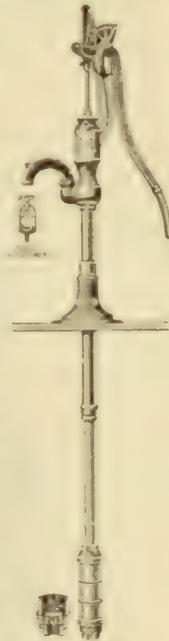


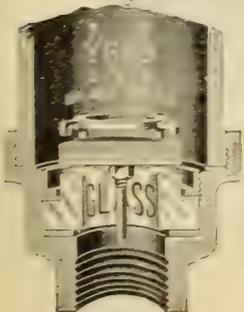
Fig. 1108

The Myers Ratchet Handle Force and Lift Pump

With Adjustable Base and Wrought Steel Handle Has Patent Glass

Valve Seat and Poppet Valve.

Fig. 1108. represents our new Lift Pump with cog gear or ratchet handle. This style handle is especially adapted to deep well work, owing to the advantage of the superior leverage with short fulcrum and long handle.



Price List, Represented by Fig. 1108
Fitted with Brass-Lined Cylinders and Glass Valve Seat—Four Foot Set Length.

No. R152—Capacity 440 gallons per hour. Has a 3-inch cylinder, tapped for 1¼-inch pipe.

Price for No. 152 Lift.....\$8.00

Price for No. 172 Force..... 9.00

The distance from the bolt under the handle to the piston-rod is 3 inches, with an 8-inch stroke, as against 5½ inches on the ordinary pump with 6-inch stroke.

The Myers Branch Pipe Force Pump

A Favorite and Reliable Anti-Freezing Force Pump

The pump is equipped with our improved glass valve seat, patent expansive plunger bucket and adjustable base plate. The air chamber is much larger than in any other pump, causing it to throw the most even flow of water from the spout and making it a superior pump for throwing water with hose. The large air chamber cushions the stream so perfectly that this pump has become a great favorite with our dealers.

Brass-lined cylinders; each pump furnished with hose attachment and strainer. With patent adjustable base and union spout.

For wells from 10 to 70 feet deep. Will go in a 5½-inch cased well.

No. R32 (Ratchet Head) complete.....\$21.00

For windmill head, add to list, 75c.

Myers' special steel sucker rod, per foot, 4c.

Price of pipe, 1¼ inch galvanized in and outside, fitted complete or any depth well, 12c per foot. We have a special pump man, who will attend to your wants and guarantee his work.

Myers Cog Gear Low-Down Force Tank Pump

Something Entirely New

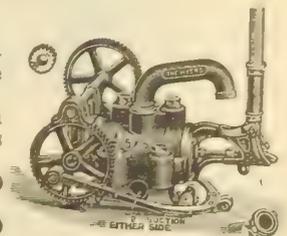
Capacity, 2,000 gallons per hour. These pumps are used for irrigating, filling tanks, watering the lawns, and many other purposes.

No. R470 has ratchet handle, with hose nipple; hose attachment has bond and strainer.

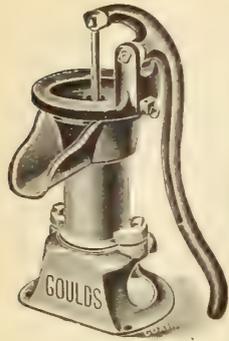
Price\$10.60

20 feet 2-inch Spiral Wire

Suction Hose 10.00



Pumps—Continued



Closed Top Pitcher Spout Pump

With Polished Cylinders

- No. 2, diameter of cylinder 3 in. . . . \$2.00
- No. 3, diameter of cylinder 3½ in. . . . 2.50
- Drive Well Points, 1¼ inch galvanized, 24 inches long. 2.00

connection with windmill or gasoline engine or other suitable power. It combines all the features required in a reliable 3-way cock pump in a neat design. It is made almost entirely of wrought iron, steel, and malleable. It is the easiest pump on the market to set, being light to handle and simple in construction.

Head Complete, with 3x14 inch brass-lined cylinder. . . \$16.00

Tubing and Miscellaneous Pump Parts

- 4x4 inches, 12 feet long and under, per foot. \$.14
- 4x4 inches, 12 feet long or over, per foot.15
- 6x6 inches, extension tubing, per foot.40
- 6x6 inches, 3 feet long, porcelain lined.3.00
- 6x6 inches, coupling and bands for 4x4 inch tubing.35

- Buckets, 3½ inch, each60c
- Buckets, 4 inch, each70c
- Buckets, 3 inch, each50c
- Handles, any size, 25c
- Handle Links, each25c
- Check Valves, each10c
- Iron Spouts, each 30c
- Splice Straps, per pair20c
- Sucker Rod, per ft. 3c
- Handle Brackets, each30c

The Myers Bulldozer Power Pump

With or Without Air Compressor

This pump is specially adapted for pumping against high pressure for use in connection with a pneumatic system or high gravity tank or for forcing long distances.

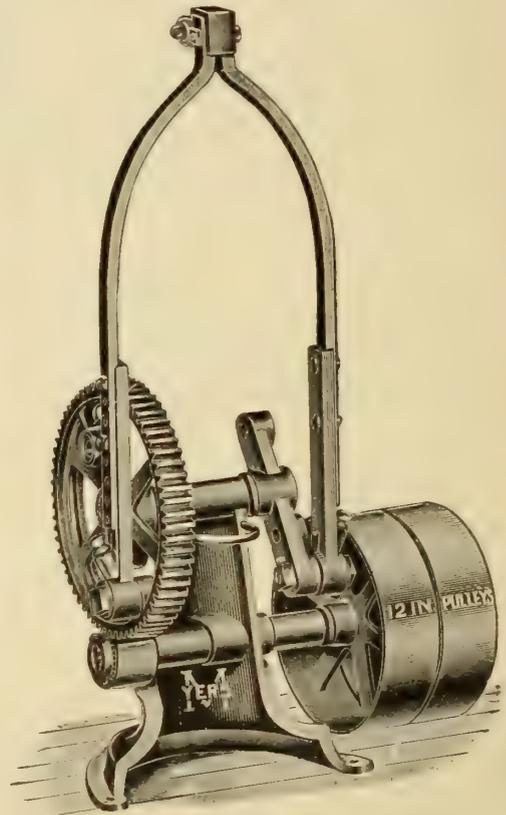
The cylinder is formed by the main body of the pump which is carefully bored and lined with heavy seamless drawn brass tubing. The gears are double, thereby reducing side strains, and are machined, insuring smooth-running. These pumps are made in three sizes:

- 2½x5 inch cylinder, 650 gallons capacity per hour.
- 3x5 inch cylinder, 900 gallons capacity per hour.
- 5x5 inch cylinder, 2,000 gallons capacity per hour.

Add for Air Compressor, \$12.50.

Prices upon application.

The Universal Pump-Jack



The Myers' Universal Pump Jack is designed to be used in connection with any ordinary windmill head pump without disarranging the pump or pipes in any manner. It is bolted to the floor and clamped to the pump base, making a most substantial job. We recommend this as being the strongest and most complete device of its kind.

Price. \$12.00

Wood Pumps

We sell the Buck-eye, which is conceded to be the best on the market. Made of spruce wood and not poplar, as many of the so-called spruce and cucumber wood pumps are made.

All Pumps are porcelain lined.

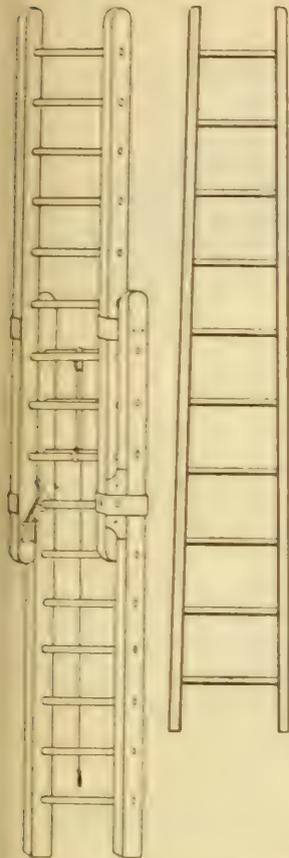
Prices and Dimension

Depth of Well.	6x6 in.	7x7 in.
10 ft.	\$6.00	\$7.75
12 ft.	6.75	8.00
15 ft.	7.00	8.25
18 ft.	7.75	9.00
20 ft.	8.00	9.25
23 ft.	8.50	10.50
25 ft.	9.00	10.75
28 ft.		12.50
30 ft.		12.75
33 ft.		13.75
35 ft.		15.50
40 ft.		17.50
45 ft.		20.00
50 ft.		22.25

Single Acting Windmill Pumps

This Myers Pump represents our most popular medium capacity pump for ordinary farm or house use, to be used in

PRICES SUBJECT TO CHANGE WITHOUT NOTICE



Ladders

Extension.—These ladders are light, strong, and stiff, being well built of the best material.
Price, per foot.....22c

Can furnish in 24, 28, 32, and 36 feet, extension.

Single of same material as extension.

Prices of Single

8 feet	\$1.50
10 feet	1.75
12 feet	2.00
14 feet	2.25
16 feet	2.50
20 feet	2.75

Paris Step Ladders

This is unquestionably the best step ladder made. The price is very little, if any, higher than the common kind.



4 feet	\$1.25
5 feet	1.50
6 feet	2.00
8 feet	2.50
10 feet	3.00

Rivetless Stock Trough

The only steel trough constructed without the use of rivets. Will not crack or burst on account of freezing. This trough is made of No. 12 gauge steel, curved in semi-circular form, with ends of cast iron fitted in each end of steel and held in place by steel bands instead of rivets. These bands are shrunk around the end edges of steel, binding it firmly to the flange on the end, thereby making a perfectly watertight joint.



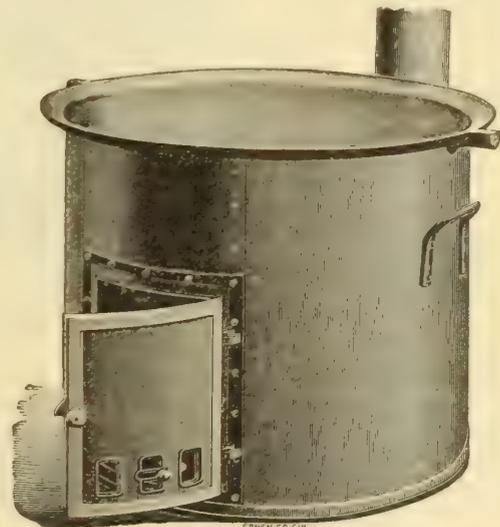
4 feet long.....	\$6.00
6 feet long.....	8.25
8 feet long.....	10.00

Cook Your Lime and Sulphur With a

Boiler and Feed Cooker

Heavy cold rolled steel furnace; extra large feed door; wrought iron handles, firmly riveted on Kettles, heavy cast iron. Door, frame and fire collar cast iron. Never buckles or warps from heat; designed to set on ground or brick foundation; especially adapted for cooking feed, rendering lard, making soap, scalding hogs, poultry, etc. Cast iron flues are constructed inside this, retaining heat and economizing in the fuel.

Also used for lime, sulphur, and salt.



33 gallon capacity.....	\$12.00
40 gallon capacity.....	13.50
53 gallon capacity.....	16.00

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

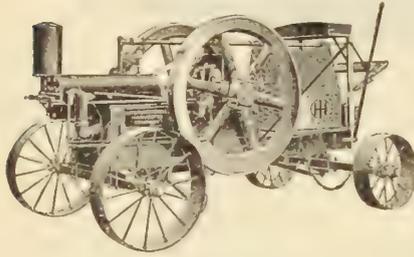
GASOLINE ENGINES

I H C Victor and Famous Gas and Gasoline Engines

Operated With Gasoline, Natural, Manufactured, or Producer Gas, Kerosene or Alcohol.

Vertical and Horizontal Types Stationary and Portable Water-Cooled and Air-Cooled 1 to 20 Horsepower Sawing, Spraying, Hoisting, and Pumping Outfits The Gasoline Engine as a Farm Power

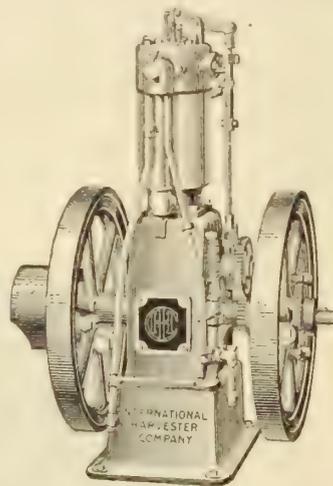
The Gasoline Engine is the most efficient and economical farm power. With a little intelligent attention, it will always do its duty and save money for the man who has work for it to do. It is absolutely safe, independent of the weather conditions, occupies a small space, and makes possible a centrally located farm power house. Owing to the superiority over other forms of power, a large number of farmers throughout the country have already purchased gasoline engines, but the larger number of possible purchasers is still to be supplied.



International Harvester Company Portable Gasoline Engines

4, 6, 8, 10, 12, 15 and 20 Horsepower

These portable engines have been designed to supply the demand for a reliable engine that could be easily transported from place to place. For running huskers and shredders, threshers, shellers, for pumping and other farm purposes, these engines are unexcelled. They are also ideal contractors' outfits for well drilling and stone crushing, pumping water out of sewers and lowlands, for operating temporary electric lighting plants, etc.



2 and 3 Horsepower

Victor one-cylinder vertical gasoline engines are made in 2 and 3 horsepower sizes. They are regularly equipped for using gasoline, but with slight alteration alcohol, natural or artificial gas may be used. These little engines are giving excellent satisfaction where a small power will answer. Every detail in their construction receives just as much careful attention as is given to the construction of the larger engines.

Victor 2 Horsepower Vertical Gasoline Engine

- 2 Horsepower, mounted on skids.....
- 3 Horsepower, mounted on skids.....

Prices upon application.

Famous One Horsepower Hopper Cooled Engine

This engine is mounted on substantial wood base and is made with all the good features of the larger engine, and is especially recommended for running pumps, churns, cream separators, cider mills, washing machines, and other small work.

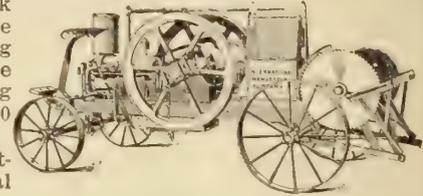
- Price, with Magnets\$50.00
- Price, with Magnets and Pump Jack..... 60.00

Famous Portable Sawing Outfits

Mounted on Steel Trucks

Famous steel truck sawing outfits are made in two styles—tilting table and sliding table—and in the following sizes: 3, 4, 6, 8, and 10 horsepower.

The 3 horsepower outfit includes a vertical engine, while the 6, 8 and 10 horsepower outfits include a horizontal engine



Tilting Table Sawing Outfits

This outfit includes the engine and accessories with a tilting table saw frame mounted on a substantial steel truck. The truck is the same for all three of outfits—3, 4 and 6 horsepower.

The saw is rightly mounted and well braced, so that it is practically as steady as if anchored to the ground. The safety of the operator is provided for by a steel guard over the saw.

Tilting table outfits are specially adapted for sawing cord wood. They may be easily transported to any desired location, and when the sawing is done may be quickly moved to another location.

Ask for Special Catalogue and prices.

HARNESS AND ACCESSORIES

Hand-Power Horse Clipping and Sheep Shearing Machines

Progressive, Up-to-Date Farmers and Horse Owners Everywhere Recognize the Advantages of Clipping Horses.

Stewart No. 1 Enclosed Type Clipping Machine

STEWART NO. 1 ENCLOSED TYPE CLIPPING MACHINE

The Only Ball-Bearing Clipping Machine

It is without exception, the most perfect clipping machine ever made. It runs practically without friction or wear.

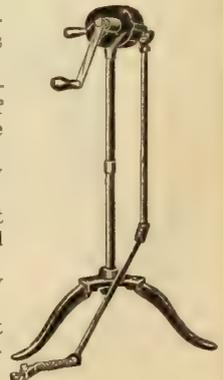
A slow turning of the handle is transformed by the ingenious mechanism of the gears to a tremendous speed in the knife.

It turns so easily that it is mere play to run it.

The entire machine is sturdy, compact and perfect in every detail of material and workmanship.

The price puts it within reach of every farmer and horse owner.

The gearing is all enclosed in a dust and dirt proof case, and runs in oil constantly.



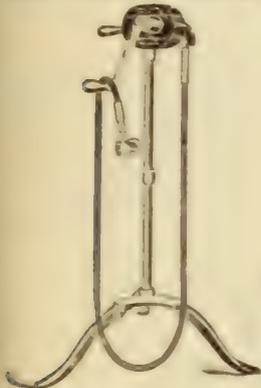
Price, complete, for horses.....\$7.50

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

Harness, Etc.—Continued

Sheep Shearing Attachment

We can furnish a Sheep Shearing Attachment for this machine. The attachment consists of the solid jointed shearing shaft, shearing handle, four combs and four cutters.



Price of the Attachment is... \$7.75
or
For the combined machine... 15.25

Knife Grinder Attachment

Price \$3.50
Simple to attach. Grind your own knives. We also grind knives for the above machine... 50c per pair



Single Harness

This harness is made of first-class stock, well stitched throughout, with wood hames well ironed; bridle, $\frac{3}{4}$ inch; traces, $1\frac{1}{2}$ inch; 5-inch saddle; suitable for one-horse farm wagon.

Price upon application.

Single Express Harness

Extra heavy brass trimmings; bridle, $\frac{3}{4}$ inch; traces, $1\frac{1}{2}$ inch, extra heavy; 4-inch saddle; made of best quality material, well constructed throughout.

Price upon application.

Single Express Harness SPECIAL VALUE

This is an unusually strong and well-made harness for heavy work. Extra heavy trimmings, $1\frac{3}{4}$ inch traces, and all other parts made extra strong to withstand heavy work.

Price upon application.

WOOLF'S SPECIAL

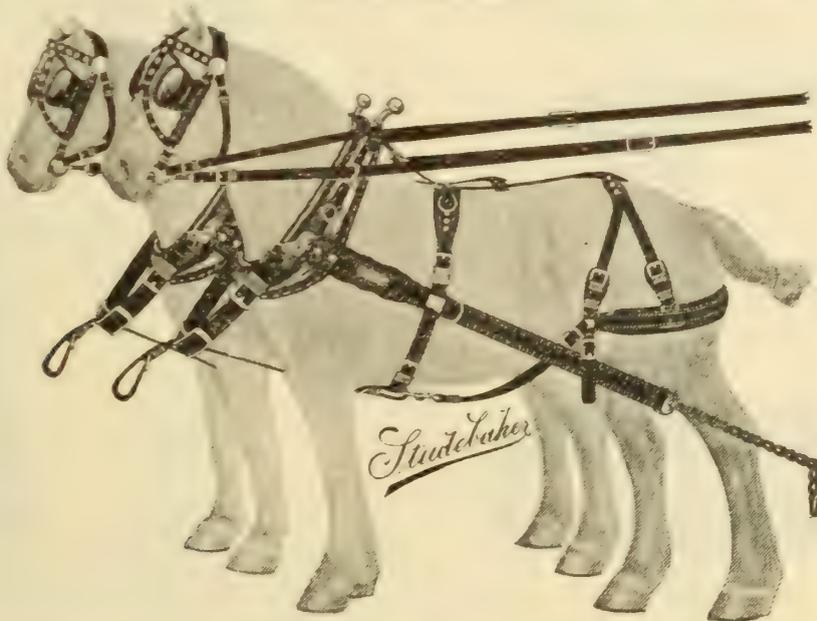
Studebaker Extra Heavy Double Team Harness

Made of the best quality oak-tanned leather, country finish. Bridals $\frac{3}{4}$ inches, with regular side checks. Flexible harness leather pads. Folded girths and collar martingale. Hames, best quality wood, heavily iron-bound, with breast chains. Traces, 2 inches, three rows of stitching, galvanized chains and hooks and swivels. Breeching, 3 inches double and

stitched with wave layer, split hip straps, padded rump pads, side backers. Mountings of X C metal.

Price complete, with best handmade Scotch collars, hair-faced and thong sewed, lines extra long, $1\frac{1}{2}$ inches wide, with choice of regular Washington team bridles or good bridles with patent-leather cup blinds, and breast chains.

Price upon application.



Our "Coon Special" harness is specially designed for those wanting a harness slightly lighter in weight than the Studebaker Extra Heavy Harness. The quality and general make-up of this harness is the same as that of the above harness and is equally as good value.

Price complete, with handmade Scotch collars, hair-faced and thong sewed, lines extra heavy, $1\frac{1}{2}$ inch wide, with choice of regular Washington team bridles or good bridles with patent-leather cup blind, and breast chains.

We carry in stock all grades of double work harness suitable for city or country use. Price upon application.

Complete Plow Harness

Our plow harness is of splendid grade and will give excellent service for the price asked.

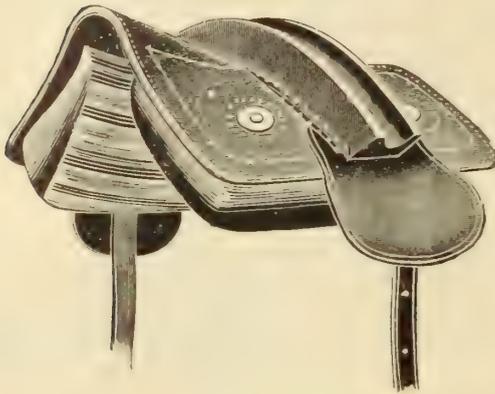
Price upon application.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

Harness, Etc.—Continued

Cart Harness

No. 20. Scotch Saddle



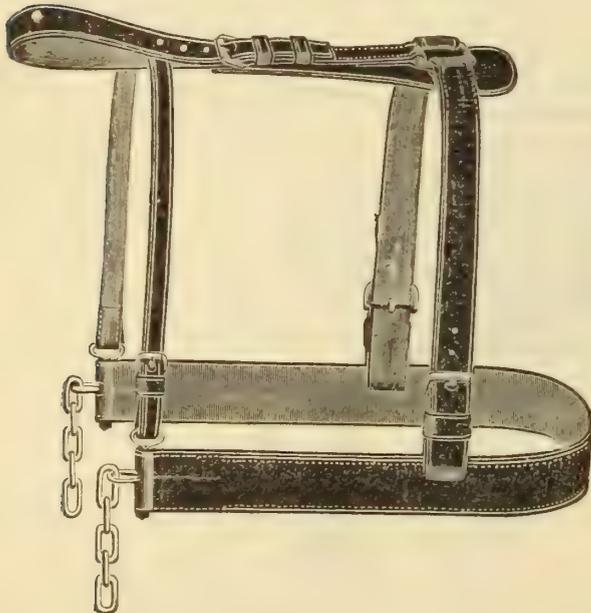
No. 20 Scotch Cart Saddle.

Duck lined, hair faced, double and stitched top, 1 3/4 inch leather girth, large tree.
Price upon application.

No. 22. Imitation Scotch Saddle

Same style as No. 20. Large tree, 1 5/8 inch leather girth.
Price upon application.

No. 13. Cart Britching



Three and a half inch double body, 5 ft. 2 1/4 inch Hip Straps, with safe back of buckle, padded rump, leather lined.
Price upon application.

Bridles

Washington Team Bridles, best, ea.....
Red Front Team Bridles, best, ea.....
Studebaker Team Bridles, best, ea.....
Lerch, Special Team Bridles, best, ea.....
Prices upon application.

Buggy Harness

Single Buggy Harness.—Bridle, 5/8 inch; traces, 1 1/2 inches; saddle, 3 inches; breast collar and breeching, folded, with straight lay; flat lines; X C mounting, with nicked hook and terrets; imitation hand stitched.

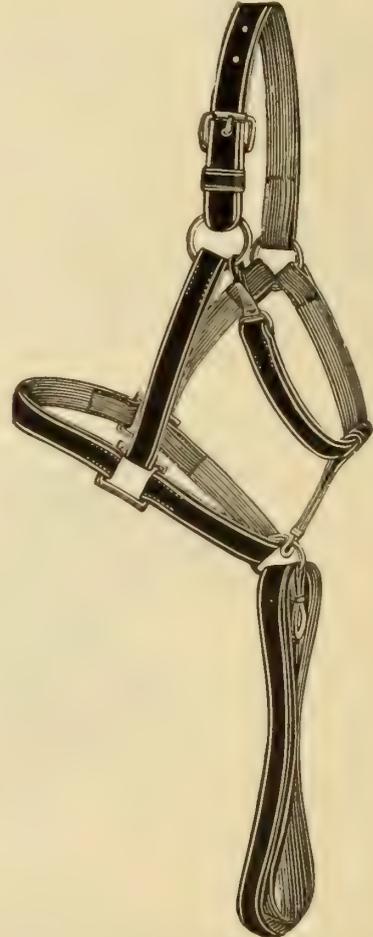
Price upon application.

Hand-Made Single Buggy Harness.—Bridle, 5/8 inch; traces, 1 1/2 inches; saddle, 3 inches, hand laced, leather lined; breast collar, 2 7/8 inches, V-shape, with 1 1/8 inch single leather trace attached; breeching, 1 1/2 inch single leather; flat lines; full nickel or imitation rubber mounting; hand stitched.

Price upon application.

Double Buggy Harness from \$25.00 to \$35.00.

We are in position to furnish everything good in the harness line at the lowest prices.



Leather Halter, 5 rings, made of fair leather, riveted... \$1.00
Leather Halter, 5 rings, made of fair leather, sewed... 1.50
Leather Halter, 5 rings, made of black leather, riveted... 1.50
Leather Halter, 5 rings, made of black leather, sewed... 2.00
Leather Halters, 5 rings, hand sewed, No. 1 leather, with wide strap... 2.50
Web Halters 40c
Rope Halters 15c
Rope Hitches 10c

Top Collar Pads

Felt 25c
Zinc 50c
Leather 60c
Sheet felt for Riding Saddles and Cart Saddle Pads. Size, 20 x 36 inches.
Breast Collar Pads for Buggy Harness; felt.

Harness, Etc.—Continued

Horse Collars



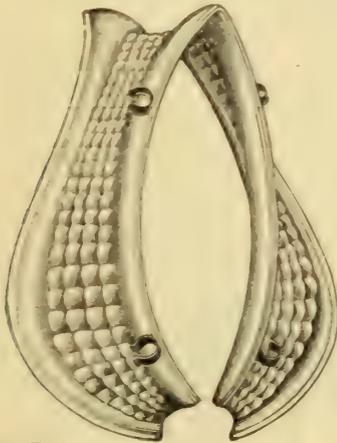
Draft.—Split leather rim and back; blacked tick face; patent fasteners, \$1.50.

No. 155.—Scotch.—Klip rim and back; extra lined tick face, all hand sewed, with thong; patent fasteners, \$3.00

Draft.—Hand made, hair faced, thong sewed, extra heavy; all leather; draft collar, \$4.00

Concord.—Kangaroo leather; wool faced; thong sewed; patent fasteners, \$5.00

Pads



Red Edge Collar Pad.....50c
Old Gold.....40c
Ask for price by the dozen.

Express Saddle Pads

Gray Felt, 4 inches.....35c
Gray Felt, 5 inches.....40c
Gray Felt, 6 inches.....40c
Gray Felt, 7 inches.....45c
Gray Felt, 8 inches.....50c

Buggy Harness Saddle Pads

From 20 to 50 cents each.

Hames

No. 21 Concord Hames, very heavily ironed, with hook or clip; brass ball top. Price, per pair, \$1.50.



No. 01.—Virginia Cart Hames.

Rock elm or ash wood, 1/4 inch stiff-bottom loops, 3/4 x 1/4 inch steel backs. Three mortise top loops. Heavy wrought steel hooks. Varnished. Polished irons. Size, 19 to 22 inches. Price, \$1.25; 22 to 24, \$1.75 per pair.

Root Hames

Loudon Patent, per pair.....75c
Loudon Tie.....50c

Back Bands

Folded Duck, Elbel's patent hook, 46 and 48 inches long, 5 inches wide. Price, 50c.

Krake's Padded Back Band, 46 inches long, 4 inches wide. Price, 50c.

Single web back band, 25c.

Back band webbing, 4 inches wide, per foot, 4c.

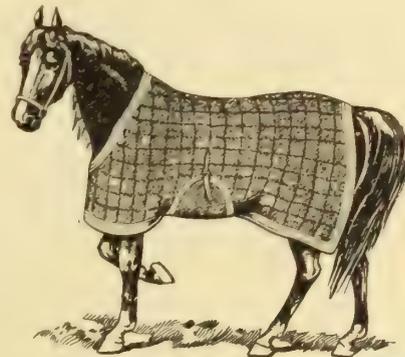
A full line of Whips and a general line of Harness accessories always in stock.

Storm Horse Covers

All covers have large hame leathers; line rings riveted on hame leathers; snap and rings at trace; strap and buckles at breast; line pocket at saddle, and can be used for double or single team. Four sizes: 5 feet and 5 feet 4 inches.

Black Oiled Sheeting, to neck.....\$2.50
Black Oiled Sheeting, to head.....2.75
Brown Duck, waterproofed, to neck.....3.25
Brown Duck, waterproofed, to head.....3.50
Duk-Bak, high-grade.....4.00

Horse Blankets



Shaped blankets, ranging in price from \$1.25 to \$5.00.
Square blankets, ranging in price from \$1.00 to \$6.00.

Rubber Blanket Aprons

This is a combination rain apron and Blanket Robe. The outside is Melodian Rubber Cloth and the inside is a heavy blanket lining and strictly waterproof.

Oiled Storm Fronts for Buggies, \$1.50.
48x56 inches.....\$2.50
Drill Storm Fronts for Wagons, 48x56. Price, \$1.50.

Harness, Etc.—Continued

Storm Coats

Terrapin Brand; full height for motormen, etc.; made in sizes Nos. 2, 1, 0, 00. Price, \$3.75.

Slicker Coats; yellow oiled duck. Price, \$1.50.

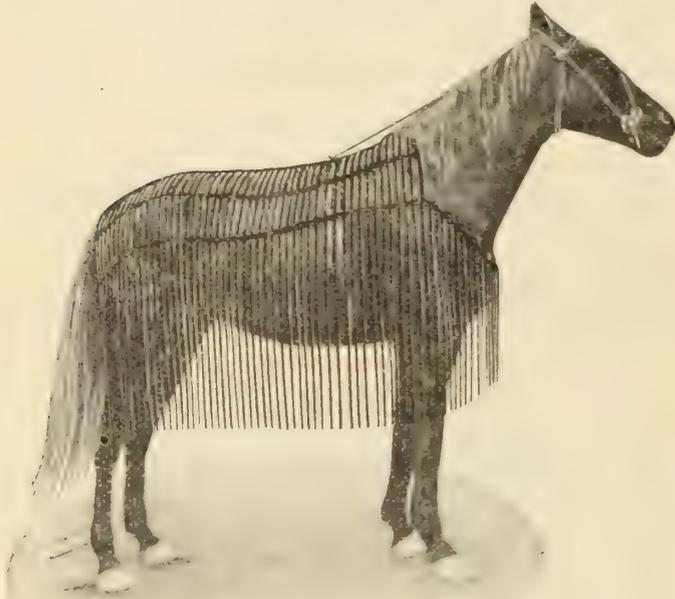
Slicker Pants; yellow oiled duck. Price, \$1.50 or \$2.50 per suit.

Oiled Drill Storm-Proof Hats, 50c each.

Plush Robes

Chase Newton, black or brown, size 48x60.....\$9.00
 Chase Plush Robe, size 48x60..... 5.00
 Plush Pieced Robe, size 48x60..... 4.50

Fly Nets



Yellow cord, extra heavy, 5 bars and 50 lashes.....\$1.25
 Black leather team nets, 5 bars and 50 lashes..... 2.25
 Black leather, extra heavy, 5 bars and long lashes..... 3.00
 Buggy nets, very fine quality, 5 bars and 60 lashes..... 3.00
 Buggy nets, very fine quality, 5 bars and 50 lashes..... 2.50

Nose Bags

Star Wood Bottom.—A good reliable bag for the money. Price...25c

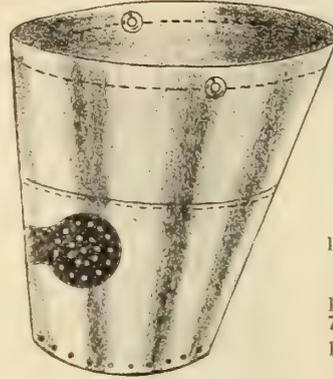
No. 7 Bag; made of 10-ounce duck, metal eyelets; very durable. Price, 75c.

“Patent Overdraw.”—Well made of heavy duck (no wasting of feed). Price, \$1.00.

The Williams Patent Side Wire Bag. Price, \$1.25.

“Woolf & Co.’s No. 8 Special.” This bag is especially well made of 12-ounce duck; has reinforced sides; leather ventilators, and sole leather bottom. Price, 85c.

Special prices in dozen lots.



Nose Bags—Cont.

Horse weights from 10 to 40 pounds, 4c per pound.

Rex Harness Riveter; indispensable on the farm. Price, 75c. Tubular rivets for same, per box, 10c

Curry Combs

No. 1400—All steel, closed back, 8-bar Comb; a most excellent value. Price, 25c.
 Reform Curry Comb; solid steel back. Price, 25c.
 Spring steel back, spring bar flexible. Price, 25c.
 No. 100—6 steel bar, opens back. Price, 10c.

Dandy, or Fibre Brushes

No. 56 Fibre 25c
 Handy horse, leather handle..... 25c
 Dandy steel brush, made of fine steel wire..... 75c

Bristle Horse Brushes

No. 23, leather back.....\$.25
 No. 100, leather back..... .60
 No. 55, leather back..... .75
 No. 600, leather back..... 1.00
 No. 65, leather back..... 1.25
 No. 750, leather back..... 1.50

Whitewash Brush

No. 2 Famous\$.25
 No. 40, Famous35
 No. 44, Famous50
 No. 2, Popular75
 No. 3, Popular 1.00
 No. 2, Leader 1.50
 No. 3, Leader 1.75
 Horse Muzzle. Made of galvanized steel wire. Price, 5c.
 Heavy Steel Wire galvanized, 10c.

Wagon Umbrellas



This cut represents our Big 6 Pattern Wagon Umbrella in Dark Blue. Spreads 6 feet; has eight 40 inch heavy steel tempered ribs. Pole 1½ inch; selected hardwood, equipped with patent malleable fixtures for wagons.

Blue, Green, or Tan, plain.....\$1.75
 With advertisement 1.25

Can be furnished in other colors.

LANTERNS

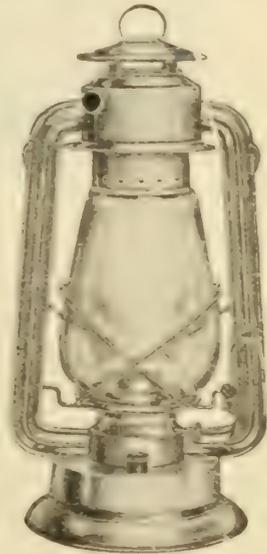
Wish to call your attention to the new Dietz "D-Lite" Lantern. It is a step forward in Cold Blast Lantern construction. It has distinct features of its own and we feel sure that after examining it you will say it is appropriately named.

Price \$1.00

- Dietz Victor Tubular Lantern, No. 0 \$.60
- Dietz Victor Tubular Lantern, No. 160
- Dietz Blizzard Dash Lantern, No. 1 1.25



Dietz Regulation Driving Lamp. conforms with District of Columbia requirement.....\$1.25



Horse Shoes and Blacksmith Tools

Standard, no better made. Prices on application.

- New Anchor Nails, 5 pound box.....\$.65
- Russell's Nails, 5 pound box..... .65
- Pincers, 12 inch regular steel..... .65
- Pincers, 14 inch "Heller Bros."..... 1.25
- Pincers, 16 inch "Heller Bros."..... 1.50
- Hammers, "Heller Bros." steel 12-ounce..... .75
- Hammers, "Heller Bros." steel, 17-ounce..... .75
- Rasps, "Heller Bros." 14 inch..... .50
- Rasps, "Heller Bros." 16 inch..... .65
- Knives, I. X. L., imported..... .50
- Knives, "Heller Bros."..... .50

FENCING

"Pittsburg Perfect."

PLAIN TOP LAWN FENCE.

Are made of the best material for fencing purposes. (Basic Open-Hearth Wire.)

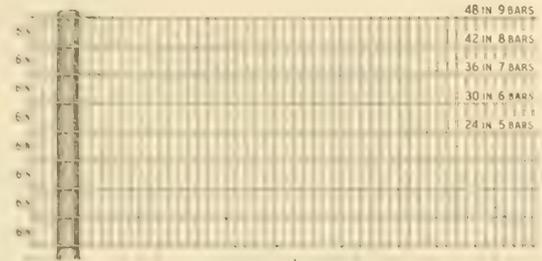
Have stays that will not slip, nor can they be moved out of place.

Have no slack wire to spoil the appearance as well as the efficiency.

We carry in stock 2 ft. high, 5 wires; 3 ft. high, 7 wires, and 4 ft. high, 9 wires.

Made with stay wires as large as the line wires.

Ask for special catalogue and prices.



Barbed Wire—Fully Galvanized

Cattle wire, two-point barb, 6 inches apart. Price, per 100 pounds,

Hog wire, four-point barbs, 3 inches apart. Price, per 100 pounds, Special price in quantities.

Star Barbed Wire, two-point, made of extra grade steel, 18 feet to the pound, 80 rod spools. Price, per spool.

Plain Wire, Very best quality, fully galvanized:

- Nos. 7, 8, 9, and 10..... per 100 lbs.
- Nos. 11, 12, 13, and 14..... per 100 lbs.

Two-Strand Twisted or Cable Wire. A standard fence wire, fully galvanized. Spools contain from 70 to 100 pounds. Price, per 100 pounds.

Price upon application.

Staples and Nails

For barbed wire, 1 inch and 1 1/4 inch.

For poultry netting, 3/4 inch.

Best quality steel wire nails. All sizes.

Barbed roofing Nails, inch long.

All the above at lowest market prices. It will pay you to ask us.

Poultry Netting—Galvanized After Weaving

No. 20 Wire.

Copyright by Wright & Colt n W. C. Co., 1899.



- 1 foot, 2 inch mesh, 150 lineal feet, per roll.....\$1.12 1/2
- 2 feet, 2 inch mesh, 150 lineal feet, per roll..... 2.25
- 3 feet, 2 inch mesh, 150 lineal feet, per roll..... 3.35
- 4 feet, 2 inch mesh, 150 lineal feet, per roll..... 4.50
- 5 feet, 2 inch mesh, 150 lineal feet, per roll..... 5.50
- 6 feet, 2 inch mesh, 150 lineal feet, per roll..... 6.50
- 1 foot, 1 inch mesh, 150 lineal feet, per roll..... 2.65
- 1 1/2 feet, 1 inch mesh, 150 lineal feet, per roll..... 3.98
- 2 feet, 1 inch mesh, 150 lineal feet, per roll..... 5.30
- 3 feet, 1 inch mesh, 150 lineal feet, per roll..... 7.96
- 4 feet, 1 inch mesh, 150 lineal feet, per roll..... 10.60

Bale Ties

- Single Loop, 14 gauge, 9 feet.....\$2.50
- Cross Head, 15 gauge, 9 feet..... 2.75

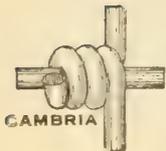
Can furnish other sizes.

Baling Wire.—Specially tested and annealed for baling purposes. Price, \$3.00 per 100 pounds.

Fencing—Continued

Cambria Fence

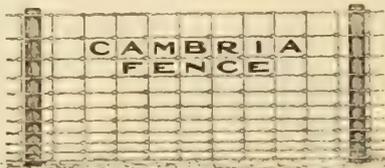
For Farm and Garden.
THE FLEXO JOINT.



The Flexo Joint embodies flexibility and simplicity in construction and insures a perfect and secure union of the horizontal, or stay wires, and the main or line wires, producing a fence that will readily conform to any ground surface.

TENSION CURVE.

The tension curve used in each strand wire of Cambria Fence is not merely a crimp or bend with sharp angles to injure the wire, but a triple curve true at every point of its arc. While apparently insignificant in itself the great number of these curves scientifically placed are of great benefit, and allows the fence to retain its normal position under all conditions, providing for expansion or contraction due to climatic change or any sudden or severe shock.



The steel used in this fence is carefully selected and naturally springy, while the tension curve gives an additional elasticity necessary for a good fence.

GALVANIZING.

The durability or lasting qualities of a fence are greatly increased by covering the wires with a coating of spelter (zinc). No matter how heavy the wires, or well constructed the fence, if it is not galvanized properly it means short life.

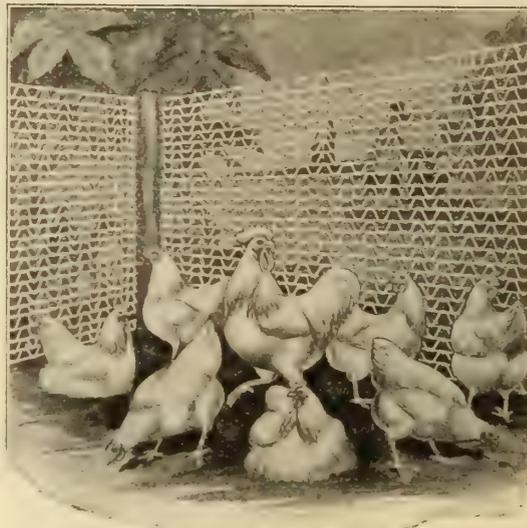
Cambria Fence is made not only of the strongest and most durable wire, but is galvanized by the hot process with a smooth and even coating of high-grade spelter (zinc) applied by men skilled in this particular branch of the wire business.

We claim our galvanizing is the heaviest, smoothest and most elastic, and will afford long protection from the elements. Special catalogue on application.

Fence Pliers

Button's Pliers, 10 inches..... .75
Fence Pliers, 12 inches..... \$1.00

U. S. Poultry Fence



Built on miniature scale of farm fence interwoven with parallel wires and hinge joints so it stretches to posts straight even and nice without buckling, bagging or sagging.

It's so stiff and satisfactory, it does not require top rail and base board or so many posts as old style netting.

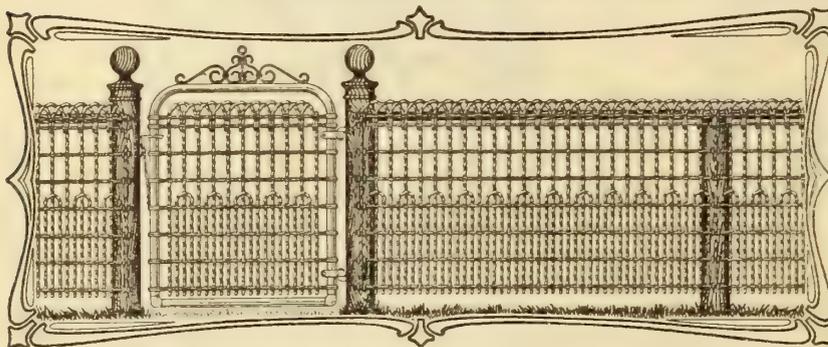
Guaranteed 5 to 6 times as strong and at least 100 per cent better in every way. All parallel wires are of even length and all mesh of uniform size. They can't be otherwise the way it's made.

Made in heights from 12 to 72 inches. Galvanized before or after weaving. Put up in 150 foot rolls.

It's not merely a substitute for old style netting. It's something much better. It's the strongest, cheapest, most sightly and best fence for the purpose yet invented.

1 ft., 2 in. mesh.....	\$1.25	6 ft., 2 in. mesh.....	\$7.00
1½ ft., 2 in. mesh.....	1.88	1 ft., 1 in. mesh.....	2.75
2 ft., 2 in. mesh.....	2.50	1½ ft., 1 in. mesh.....	4.13
3 ft., 2 in. mesh.....	3.75	2 ft., 1 in. mesh.....	5.50
4 ft., 2 in. mesh.....	5.00	3 ft., 1 in. mesh.....	8.25
5 ft., 2 in. mesh.....	6.00	4 ft., 1 in. mesh.....	11.00

WAUKEGAN-CYCLONE SANITARY FENCING



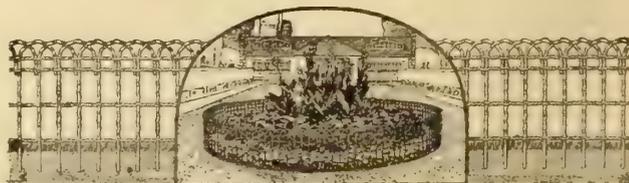
Style "F"

is our most popular, attractive and closest mesh sanitary fence—lets in fresh air and sunlight, protects flowers, gardens, lawns, and shrubs without obstructing the view. Picket's No. 9, heavily galvanized wire, spaced 1¾ inches at bottom, 2¾ inches at top.

Best heights are 36, 42 and 48 inch. Other heights up to 84 inches made to order.

PRICE PER LINEAL FOOT, STYLE "F."

36 inches, 10c; 42 inches, 12c; 3-foot gate to match, \$3.00.



Flower Bed Border

Fits any shape or size of flower bed, no posts necessary. Picket ends are left straight for inserting in the ground. Cut to any length required and the ends hooked together. Can be taken up and used from year to year.

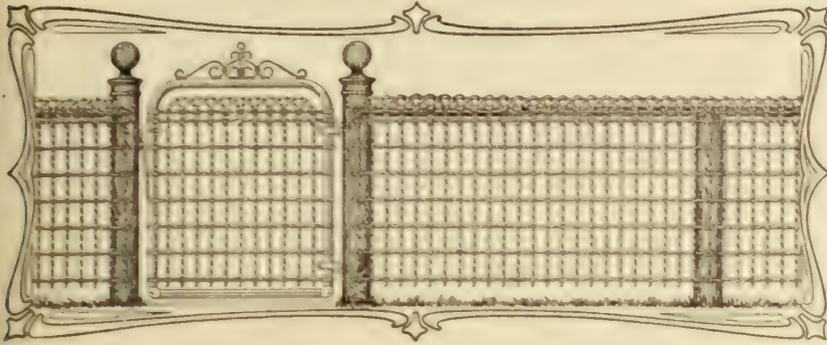
Made in two heights.

PRICE PER LINEAL FOOT

16 inches, 6c; 22 inches, 7c.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

Fencing—Continued



Style "L-Extra"

is exactly like style "F" above, except lower pickets are not used, giving spacing of $2\frac{3}{4}$ inches between pickets. Suitable for front or back yards anywhere.

Best heights are 36, 42 and 48 inch. Other heights up to 48 inches made to order.

PRICE PER LINEAL FOOT, STYLE "L-EXTRA"
 36 inches, 9c; 42 inches, 10c; 3-foot gate to match, \$3.50.

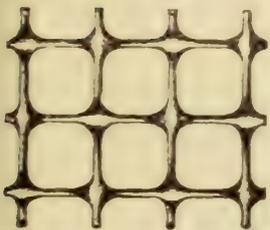
Cyclone Tubular-Steel Farm Gates

All Style "A" gates 3 feet wide and wider are provided with an adjustable truss-rod which effectually prevents any possible sagging of the gate.

On all single drive gates we use our latest improved malleable-sleeve square-bottom corners, which relieve the strain on tubing at corners and add great strength. A very important feature on large gates.

Height.	Opening.	Price.
42, 48, or 54 inches....	10 feet.....	\$7.00
42, 48, or 54 inches....	12 feet.....	8.00

Mesh Wire



Mesh Wire.—Best quality; galvanized after weaving; used largely in building corn cribs to make them rat proof, and also for sieves. Width 24 to 48 inches.

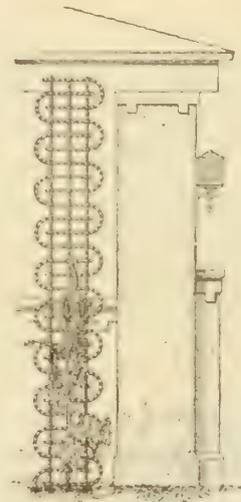
2x2 and 3x4 inch mesh, per square foot.....6c

4x4 inch mesh, per square foot..7c
 Special price in large quantities.

Wire Cloth for Screens



Keep out the flies, etc., and avoid sickness. Can furnish in any of the standard widths.
 Price on application.

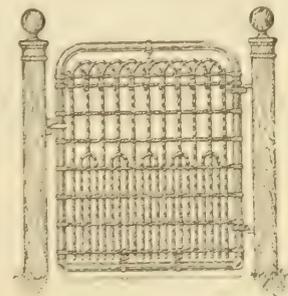


Single Trellis

Just the thing for climbing plants and flowers. Cut to any length to fit any porch, making most handsome inexpensive vine trellis.

Furnished in two widths.

Price per lineal foot, 18 inches, 6c; 24 inches, 7c.



Universal Walk Gate

Heavy, non-breakable, high-carbon, steel tubing frame, with close mesh, chicken-tight fabric. Hinges and latch furnished for wood posts.

Regular heights, 36, 42 and 48 inches.

Price for 3 foot opening, \$3.00.

MISCELLANEOUS

Tackle Blocks

Wood or Steel at Same Price.

3 inch single	.....\$ .35
3 inch double	..... .60
4 inch single	..... .40
4 inch double	..... .75
5 inch single	..... .50
5 inch double	..... .85
6 inch single	..... .60
6 inch double	..... 1.00
7 inch single	..... .65
7 inch double	..... 1.25
8 inch single	..... .75
8 inch double	..... 1.50
10 inch single	..... 1.35
10 inch double	..... 1.75
12 inch single	..... 1.75
12 inch double	..... 2.75

New Style Sugar Kettles

These kettles are also known as wash kettles, and are adapted for many purposes, but in particular for general use on the farm, and are made from the very best iron. They have smooth surfaces and each one is painted.

No. 3, actual capacity 15 gallons	.....\$3.00
No. 4, actual capacity 18½ gallons	..... 3.50
No. 5, actual capacity 21½ gallons	..... 4.00
No. 6, actual capacity 25½ gallons	..... 4.50
No. 7, actual capacity 29½ gallons	..... 5.25
No. 8, actual capacity 37 gallons	..... 7.50

The above prices include balls.

Manila, Sisal and Cotton Rope



Always on hand the best Manila, Sisal and Cotton Rope, in coils or by the piece, at prices consistent with quality. Prices on application.

Approximate length of Manila and Sisal Rope, per pound; ¾ diameter, 6 feet to pound; 13-16 diameter, 6 feet to pound; 7/8 diam-

eter, 4 feet 3 inches to pound.

We recommend 13-16 inch rope for hay forks.

Binder Twine. Prices on application.

Fodder Yarn

Have always on hand large quantities of the above. Prices on application.

Vegetable Twine and Cord

2-ply jute, vegetable cord.	Flax twine.
3-ply jute, vegetable cord.	Flax cord.
Tarred marlin.	
Wrapping twine, 3-ply.	

Axle Grease and Oils

Diamond, per box	.....\$ .05
Royal, per 25-pound bucket	..... .90
Mica, per box	..... .10
Mica, per 15-pound bucket	..... 1.25
Mica, per 25-pound bucket	..... 1.50
Frazer's, per box	..... .10
Frazer's, per 3-pound bucket	..... .25
Royal, by barrel or half barrel, prices upon application.	
Baum's Castorine, per pint	..... .25
Baum's Castorine, per quart	..... .50
Polarine Oil, 1-gallon can	..... .75
Polarine Oil, 5-gallon can	..... 2.50

Harness and Machine Oils

Commercial Neatsfoot, per gallon	..... .75
I X L Harness oil, per pint	..... .20
I X L Harness Oil, per quart	..... .35
I X L Harness Oil, per gallon	..... 1.00
Miller's Harness Dressing, per pint	..... .25
Miller's Harness Dressing, per quart	..... .50
(Gallon prices on Miller's does not include can.)	
Harness Soap, Miller's per pound	..... .25
Harness Soap, Miller's, per 5 pounds	..... .65
Harness Soap, Miller's, per 10 lbs.	..... 1.25
Castile Soap, pure imported, per lb.	..... .20
Hoof Packing, per box	..... .25
Harvester Oil, ½ gallon	..... .30
Harvester Oil, 1 gallon	..... .50
Harvester Oil, in bulk, per gallon	..... .40
Separator Oil, per gallon	..... .90
Gasoline Engine Oil, per gallon	..... .75



A good line of oil cans in stock.

Barrel Header

Improved patent steel screw\$1.50
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Brush and Briar Hooks



No. 380—Axe Handle Bush Hook\$1.00
No. 390—Two-Ring Bush Hook85
No. 393—Socket Briar, with knife on back	..... 1.25

Brooms

Stable, 16 inch, 6 row, Bass	..... .75
Stable, 16 inch, 6 row, Rattan	..... .75
Stable, 16 inch, 6 row, Bamboo	..... .50
Stable, 16 inch, 6 row, Bamboo, with scraper	..... .75
Stable, 14 inch, steel	..... .75
Warehouse, extra heavy	..... .75
Warehouse, extra heavy, Rattan center	..... .85

Corn Baskets

1 bushel, Bamboo, plain	.....\$ .50
1½ bushel, Bamboo, plain	..... .65
2 bushels, Bamboo, plain	..... .75
2½ bushels, Bamboo, plain	..... .90
3 bushels, Bamboo, plain	..... 1.00
1 bushel, Bamboo, iron bound	..... .65
1½ bushel, Bamboo, iron bound	..... .75
2 bushels, Bamboo, iron bound	..... .85
Market Baskets, 5c and 10c.	
¾ bushel stave baskets.	
1 bushel stave baskets.	
Prices on application.	
Potter Hand-made Baskets, split Bamboo.	
1 bushel size	..... 1.00
1½ bushel size	..... 1.25
2 bushel size	..... 1.50

Miscellaneous—Continued

Galvanized Steel Baskets

Corrugated, reinforced	\$1.25
Regular	.75

Special prices in dozen lots.

Picks, Mattocks and Grub Hoes

6 to 7, 7 to 8 and 8 to 9 lbs., Best Quality War, Steel Railroad Picks	\$.75
6 lb. Best Quality War Steel Mattocks	.75
4 lb. Best Refined Iron Grub Hoes (Steel Bit), each	.75

Bush Puller

A great labor saver. Do your grubbing with this tool. One man can do the work of five.



GET ONE of our patented bush pullers to do your grubbing. One man with this machine can do the work of five men. The greatest labor saver of the age.

Price\$5.00

Breast Chains

26 inch—5-16 inch, iron, double twist, tapered, stiff, pair	\$1.25
27 inch—Double slack, twist, pair	.90
26 inch—12-2, single slack, pair	.75
No. 46—Cart tug chains, 18-10-1, per pair	.40
No. 67—Fifth Chain—Round hook, ring and swivel, black made with stretchers also if desired, 10x $\frac{3}{8}$, with reg hook	3.00

Hay Knife

For Cutting Stacks or Ricks

Lightning	\$1.00
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Corn Barrel

White Oak, handmade, stamped	\$5.00
White Oak, handmade, unstamped	4.00
Crowbars, made of best tool steel, price per pound, 7c.	
Carried in regular, pinch, and ball tops.	

Single and Doubletrees

Wood, for plows, per set	\$2.00
Steel, for plows, per set	2.50
Steel, extra heavy, for plows, per set	4.00
Steel, extra heavy, for wagons, per set	6.50
Neck Yokes	1.00

Clips for Single and Double Trees.

Gasoline Torches

A very suitable light for picnics, camp meeting, shops, or where a strong light is needed, especially out doors. Price, \$1.25.

Screens

Coal. Well made of swede iron, 32 inches x 60 inches. $\frac{1}{2}$ inch, $\frac{5}{8}$ inch, $\frac{3}{4}$ inch, $\frac{7}{8}$ inch and 1 inch openings. Price \$9.00.

Sand Sieves

Sand Sieves. 28 in. x 54 in. 3-16 inch. $\frac{1}{4}$ inch. 5-16 inch, and $\frac{3}{8}$ inch. Price, \$6.00.

Shock Binders

A very necessary thing for binding corn, and fodder shocks.	
Smith's	\$1.50
"The Never Slip"	.25

Yokes

To prevent horses from jumping.	
Made of hard wood	.50
Made of steel	.60

Regular Iron Trace Chains

7-10-2, per pair	.90
7-12-2, per pair	1.00
7-14-2, per pair	1.20
7-16-2, per pair	1.40

Well Chains

Best Heavy galvanized steel, 12c per pound.

Cut Raw Hide Belt Lacing

$\frac{3}{8}$ inch, per 100 feet	\$2.25
$\frac{1}{2}$ inch, per 100 feet	2.75
$\frac{5}{8}$ inch, per 100 feet	3.50
$\frac{3}{4}$ inch, per 100 feet	4.50

Handles—Good Quality

Shovel, long	\$.25
Shovel, "D"	.25
Scoop, "D"	.25
Fork, 4 $\frac{1}{2}$ feet	.20
Fork, "D"	.25
Fork, 6 feet	.20
Rake and hoe	.15
Axe, handmade	.30
Axe, No. 1, machine	.20
Axe, No. 2, machine	.15
Axe, No. 3, machine	.10
Pick, No. 1	.20
Pick, No. 2	.15
Axe, No. 3, machine	.10
Hatchet and hammer handles, 5 and 10 cents each.	

Gem Ice Cream Freezers

This is the only double freezer of reputation made today. Freezes cream quickly. Size in quarts and prices each; 2 quarts, \$2.00; 3 quarts, \$2.25; 4 quarts, \$2.75; 6 quarts, \$3.25; 8 quarts, \$4.00; 10 quarts, \$5.00.

Ice Tongs—Made of Wrought Steel

No. 0	\$.75
No. 1	1.00

Ice Picks

Steel, wooden handle, 7 $\frac{1}{2}$ inches long	\$.10
Steel, wooden handle, with metal cap, 8 $\frac{3}{4}$ inches long	.15

Butcher Knives

Forschner's XXXX Brand, made of special Damascus Steel Every one warranted.

5 inches	.25
5 $\frac{1}{2}$ inches	.30
6 inches	.40
7 inches	.50
8 inches	.60
9 inches	.65
10 inches	.75
Forschner's 6 inch Boning Knife	.30
Forschner's 6 inch Skinning Knife	.35
Forschner's 7 inch Stitching Knife	.35
Forschner's Sharpening Steels, 8 inches	1.00
Forschner's Sharpening Steels, 10 inches	1.25
Lee's Sharpening Steels, 8 inches	.65
Lee's Sharpening Steels, 10 inches	.75
Joseph Rogers & Sons' best imported Sheffield knives:	
6 inches	.65
7 inches	.75
Paring Knives, 10 and 15 cents.	

Miscellaneous—Continued

Butcher or House Scales

Forschner's No. 1001. Has 8 inch porcelain dial, glass covered, round white enamel pan, nickel-plated boxes. German silver ring. Weighs 30 pounds by ounces. Price, \$7.00.

Forschner's No. 2001. Circular spring balance, with glass sash and white front, round white enamel pan, nickle plated. Weighs 30 pounds by ounces. Price, \$5.50.

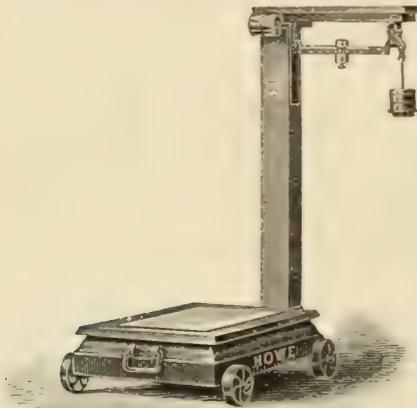
Chattillion's No. 134E. Round metal dial, steel pan, heavily tinned, 24 pounds by ounces. Price, \$3.00.

No. 682. Circular Spring, metal face, metal pan. Price, \$2.00.

Steelyard, or Scale Beams

200 pounds	.....	\$2.00
250 pounds	.....	2.25
300 pounds	.....	2.50
350 pounds	.....	2.75
400 pounds	.....	3.00
450 pounds	.....	3.25
500 pounds	.....	3.50

Platform Scales



We are agents for the Howe and Fairbanks Scales. Ask for prices on any size.

Hammers

Stone Sledges.—5 to 30 lbs. Price, 10 cents per pound.

Napping Hammers.—2½ and 3 pounds, 15 cents per pound.

Machinist Ball Pin Hammers:

12 ounces	.....	\$ .75
20 ounces	.....	.85
24 ounces	.....	1.00

Riveting Hammers:

4 ounces	.....	.40
7 ounces	.....	.45
9 ounces	.....	.50

Adz Eye Nail Hammers.

1 pound Cast Steel	.....	.75
1 pound Blued Steel	.....	.65
1 pound Nickled Steel	.....	1.00

Hatchets

Marvel No. 2, hand forged, half hatchet	.....	.65
Beaver No. 2, hand forged, half hatchet	.....	.75
Keen Kutter, half hatchet	.....	.90
Germantown, half hatchet	.....	.85
Lathing Hatchet, nickled steel	.....	.85

Barrel Hatchets:

Germantown, No. 285	.....	.85
Keen Kutter	.....	1.00

In addition to the above, we carry in stock a large line of Bolts, Nuts, Screws, Hinges, Knob Locks, Pad Locks, Cold Chisels, Punches, Cotter Keys, Squares, Monkey Wrenches, and numerous other small hardware.

Steel Traps

No. 0	.....	.15
No. 1	.....	.20
No. 2	.....	.25
No. 2, double spring	.....	.35

Special prices on dozen lots.

Jumbo Combination

Wire Stretcher and Safety Hoist



TWO PERFECT TOOLS IN ONE.

A Handy and Practical Labor Saving Combination.

As a wire stretcher it can't be beat—made of steel and malleable iron—ground fitted eccentrics that hold any wire—extra heavy chain long enough to fit the largest fence post.

For hoisting it comes in handy every day—changing wagon boxes—lifting stones—butchering, and wherever there is lifting to do.

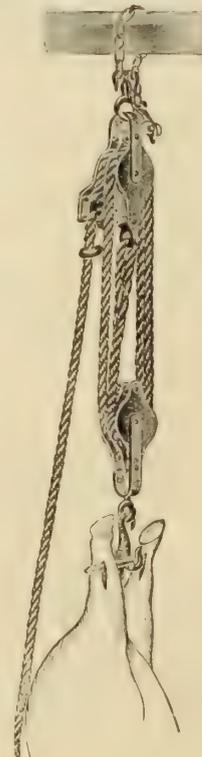
Locks automatically; heavier the load the better the grip.

Patented, adjustable lock shoe makes it safe and sure.

Last a life time—pays for itself on the first job.

Capacity, 1,000 pounds. Roped with one half inch pure Manila rope.

Price\$1.50



No. 2 Hoist, capacity 1,000, double	.....	\$1.50
No. 3 Hoist, capacity 1,500, triple	.....	2.25
No. 5 Hoist, capacity 2,500, double	.....	2.50
No. 6 Hoist, capacity 4,000, triple	.....	4.00

CONTRACTOR'S SUPPLIES

Syracuse Contractor's Plow



No. 1. Contactor's—Two or Four Horse

Weight with wheel, 200 pounds. Price, \$20.00.

Hard iron wearing parts. Extra heavy beam, share and strip. Will turn a furrow 5 to 9 inches deep. An excellent plow for general grading purposes.

Syracuse Pavement Plow

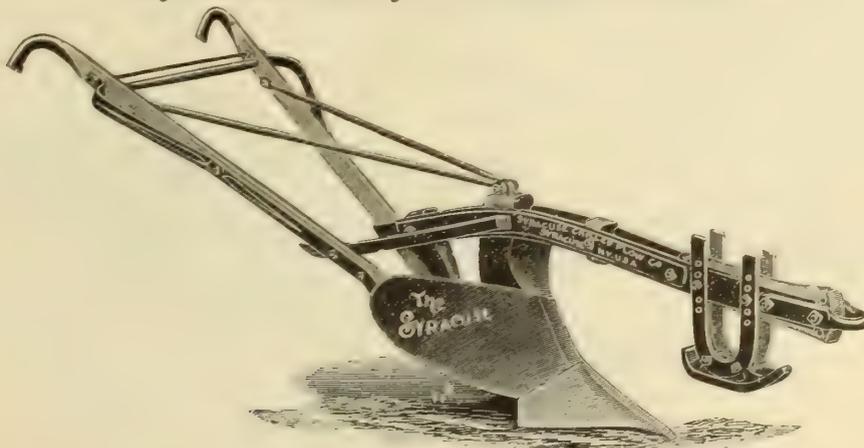


No. 98.—Four or Six Horse.

Weight, 280 pounds. Price, \$30.00.

Adjustable and double reversible crucible steel. Strongly built throughout. Specially adapted for tearing up cobblestones of Macadam pavement.

Syracuse Heavy Contractor's Plow



No. 99.—Four or Eight Horse.

Weight, with shoe, 310 pounds. Price, \$40.00.

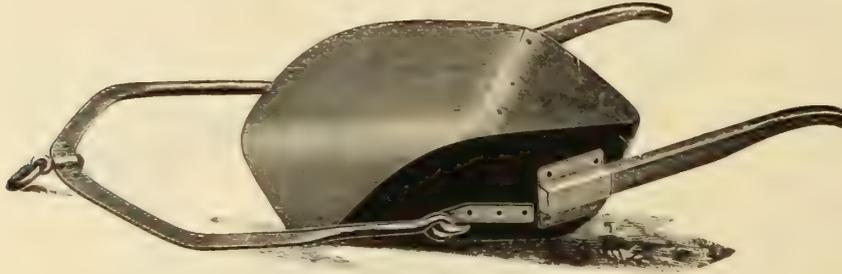
Steel truss beam. Steel moldboard and landside. Separate shin piece. Heavy overlaid wrought steel share. Slight turning capacity. Suitable for severe grading purposes in shale or hard pan.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

Contractor's Supplies—Continued

Syracuse Drag Scrapers

You cannot find better Scrapers at any price.



No. 3, 3 cubic feet, 85 pounds.....	\$7.00
No. 2, 5 cubic feet, 90 pounds.....	7.25
No. 1, 7 cubic feet, 98 pounds.....	7.50
Prices on Wheel Drag Scrapers upon application.	
Ask for prices and special catalogue on 4 wheel Warehouse Trucks.	

The Perfect Barrow

For conveying concrete, mortar, sand, gravel, cement, dirt, asphalt, etc.



Two Sizes

No. 75-A, 4 cubic feet, 72 pounds.....	\$5.00
The best end dump barrows made.	

Tubular Frame Solid Pressed Steel Tray Barrow

The top edge of all Syracuse Barrow trays is reinforced, preventing breaks or dents in dumping. All our barrows are securely braced, strong and durable. They have steel spoke wheels and legs provided with renewable iron shoes.

Wood Frame Solid Pressed Steel Tray Barrow With Steel Legs



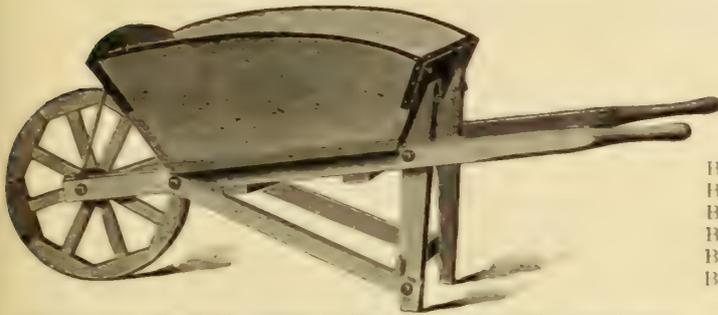
As Shown in Cut.

Price	\$4.00
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PRICES SUBJECT TO CHANGE WITHOUT NOTICE

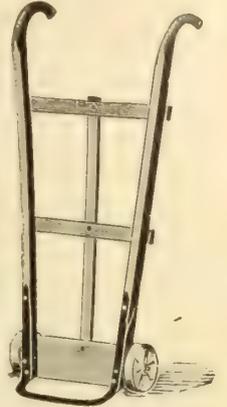
Contractor's Supplies—Continued

Coal and Mortar Barrow



Top is iron banded, strongly braced and bolted; has large capacity. Weight, 60 pounds.
 Price, with wood wheel.....\$3.00
 Price, with steel wheel 3.50

Two-Wheel Warehouse Truck



Bag Truck, as per cut.....\$3.00
 Box Truck, No. 1 5.00
 Box Truck, No. 2 6.00
 Box Truck, No. 3 7.00
 Barrel Truck, No. 2..... 7.00
 Barrel Truck, No. 3..... 8.00

Canal Barrows

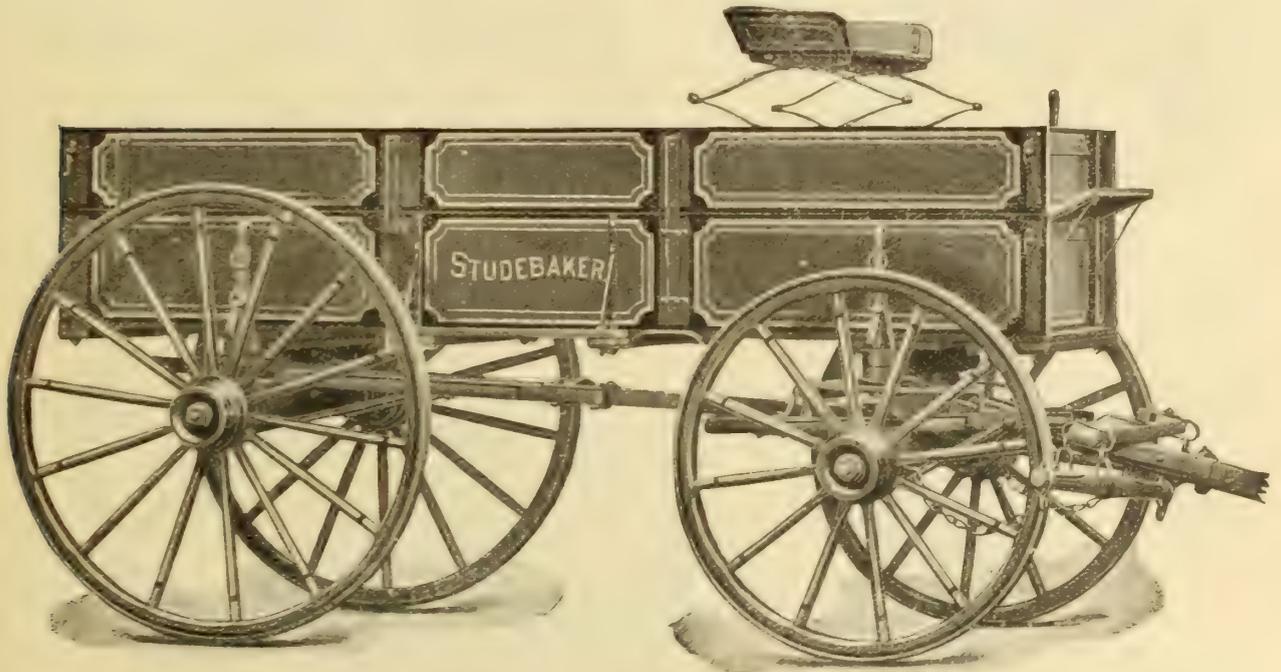
Wood frame and wood tray. Well bolted. Handles and legs of selected hardwood.
 With steel wheel\$2.25
 With wood wheel 2.00

Garden Barrows

This wheelbarrow is built of the best seasoned material. Frame built of hard wood. It is strong and roomy, and is adapted for the use of farmers. Painted red.
 No. 3 \$4.00
 No. 4 4.50

STUDEBAKER WAGONS

Quality Supreme



Standard Thimble Skein Wagon. Made In Steel Axle

Every piece of material that goes into a Studebaker wagon has the Studebaker reputation behind it.
 The house of Studebaker jealously guards the quality of the vehicle that bears its name.

Only the very finest materials is used, and at every turn inspectors are on the lookout.
 Every process of construction is under expert supervision—nothing anywhere is left to chance.

The Easiest Running and Longest Wearing Wagon Made

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

Wagons—Continued

Standard Thimble Skein Farm Wagon With Coach Tongue

Sizes of Skeins	Height of Wheels				Size of Tire	Dimensions of Box				Approximate		Wagon Complete with Brake	Gear Only with Brake
	Front		Hind			Lower Top		Length		Weight	Capacity			List Price	List Price
Inches	Ft.	In.	Ft.	In.	Inches	In.	In.	Ft.	In.	Pounds	Pounds	List Price	List Price
2¾x8	3	8	4	4	2 x7-16	12	8	10	0	850	3000	\$83.80	\$65.75
2¾x8	3	8	4	4	2½x7-16	12	8	10	0	850	3000	87.30	69.25
2¾x8	3	8	4	4	3 x3-8	12	8	10	0	850	3000	89.35	71.25
3 x9	3	8	4	6	2 x1-2	13	8	10	6	1000	4000	87.50	67.60
3 x9	3	8	4	6	2½x1-2	13	8	10	6	1000	4000	91.30	71.50
3 x9	3	8	4	6	3 x1-2	13	8	10	6	1000	4000	93.00	73.15
3¼x10	3	8	4	6	2 x5-8	14	10	10	6	1100	5000	91.50	71.10
3¼x10	3	8	4	6	3 x1-2	14	10	10	6	1100	5000	98.25	78.35
3½x11	3	8	4	6	2 x3-4	16	12	10	6	1250	6000	101.50	78.65

Steel Axle Farm Wagon

Axle in.	Hght. of Wbl. Front of Hind ft. in. ft. in.	Size of Tire in.	Dimension of Box Bot. Top Lgh. in. in. ft. in.				Wght. lbs.	Cap. lbs.	Price Com.
1½x9	3 8 4 6	2x5-8	13	8	10	6	1000	2500	\$88.50
1¾x10	3 8 4 6	2x5-8	14	10	10	6	1150	4000	97.50
2 x11	3 8 4 6	2x3-4	14	10	10	6	1300	5000	105.00

Special Maryland Pattern Linch Pin Steel Skein Gear With Truss Rods

3¾ inch Steel Skein Gear, 3 feet 8 inches between standards, 4x⅞ tire. Rear gear brake. Side brake.
Prices upon application.

Studebaker Junior

The Studebaker Junior is a substantially made miniature wagon, not a mere toy. It is one of the finest and strongest wagons of its kind in the market, and is built after the style of the regular Studebaker—oak frame, farm wagon gearing with bent hounds and adjustable reach, all parts strongly ironed and braced, welded tires, staggered spokes, hub boxes and caps, oak shafts (or pole if desired), handsomely painted. Body is 17x36, wheels 12x18 inches. The Studebaker Junior is suitable for use by the child alone or with a good sized dog, sheep or goat in the shafts.

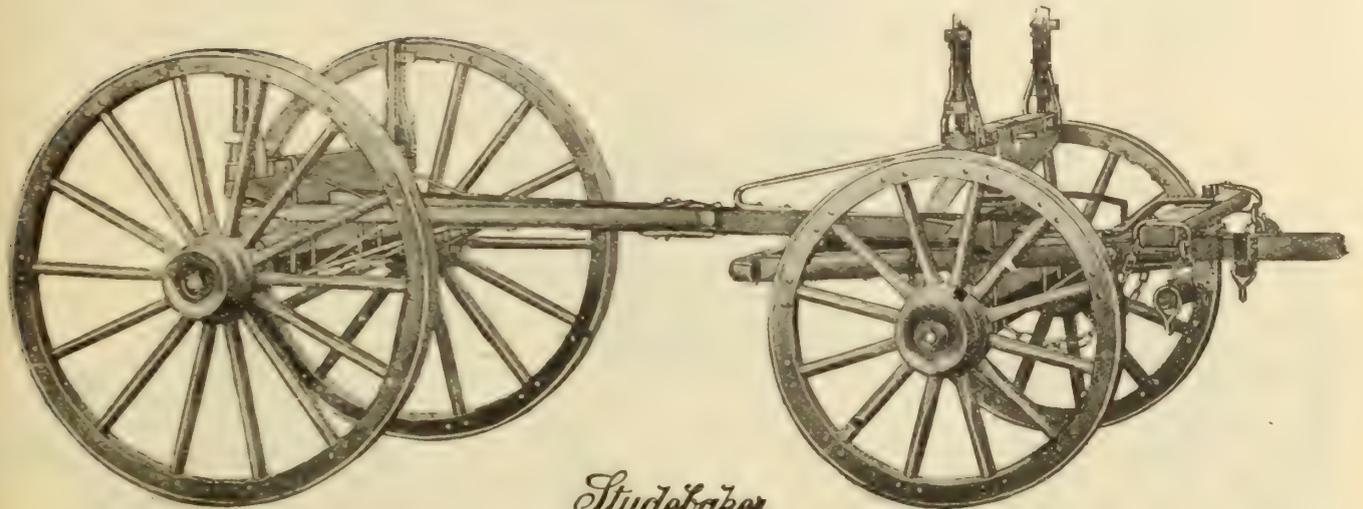
Price, with hand tongue.....\$7.50
Extra for shafts, \$1.00; goat pole, complete..... 2.00



The Studebaker Junior

Wagons—Continued

Cut-Under Teaming Gear Coach Tongue



Studebaker

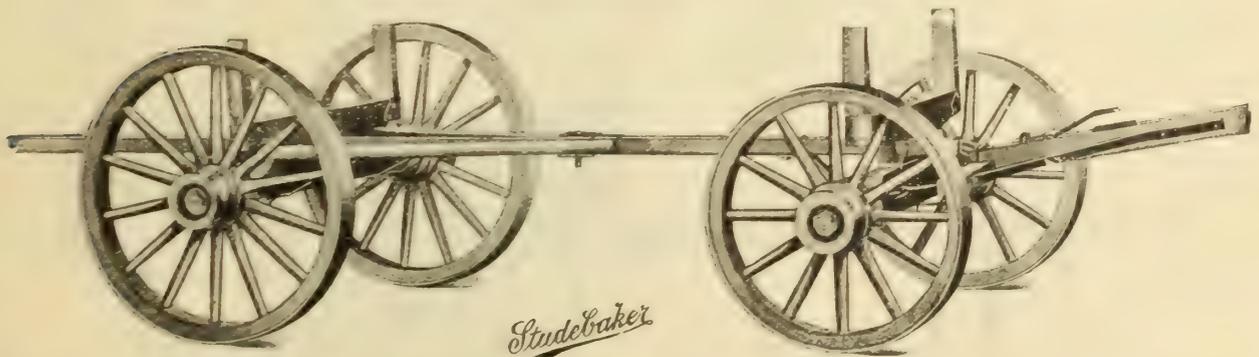
1¾x10 in. Solid Steel....3	1	4	3	2½x¾	1100	5000	\$ 90.00
2 x11 in. Solid Steel....3	1	4	3	3 x¾	1275	6000	100.00

Special Discount for Cash

(With Wood Wheels.)

Farmer's Handy Truck—Wide Track. Cast Skeins Only

Price, with double and single trees.....\$37.50 net



Studebaker

This truck is adapted to farm or orchard work, but can be utilized for transfer work by adding a suitable platform.

Reach is long enough for a 16 foot rack or bed. Bolsters have wrought iron sockets and removable wood standards.

Size of Cast Skein.	Height of Wheels.		Size of Tire.	Approximate	
	Front.	Hind.		Weight.	Capacity.
31-4x10 in.	30 in.	36 in.	4x¾ in.	680 lbs.	4000 lbs.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

Wagons—Continued

Studebaker Patent Improved Ideal Dump Wagon

The most complete and up-to-date dump wagon on the market.

Bed made of hardwood. Furnished with chain tongue. Complete with wings, whiffletrees and wrench. It has the oscillating fifth wheel, which will allow the front wheel on either side to drop into a depression in the roadway without disturbing the level of the body. Patent draft equalizing whiffletrees. Solid steel axles. Wood hub wheels, rims riveted each side of spoke. The dumping attachments are self-adjustable and easily operated.

The trap-doors—reinforce with a combination of steel plate and angle steel and swinging on four solid hinges—overlapping in center, with cleats on ends securing tight bed, will not leak sand, garbage, ashes, etc., along the street. Body ironed throughout for hard usage and rough work.

Extras: Brake. Steel lining. Steel and asbestos lining.



No.	Size of Steel Axles		Height of Wheels		Size of Tire		Approx. Capacity		Height from Ground to	
	Front	Hind	Front	Hind	Front	Hind	Weight	Stroke Meas.	Top of Bed	Top of Wings
8297	2 in.	2¼ in.	38 in.	50 in.	3½x5⅝ in.	3½x5⅝ in.	2520 lbs.	1½ cu. yds.	4 ft. 3½ in.	4 ft. 10 in.
8298	2½ in.	2¾ in.	38 in.	50 in.	3½x5⅝ in.	3½x¾ in.	2680 lbs.	2 cu. yds.	4 ft. 3½ in.	5 ft. 2½ in.

Ask for special catalogue and prices.

Studebaker Steel Axle Farm Cart

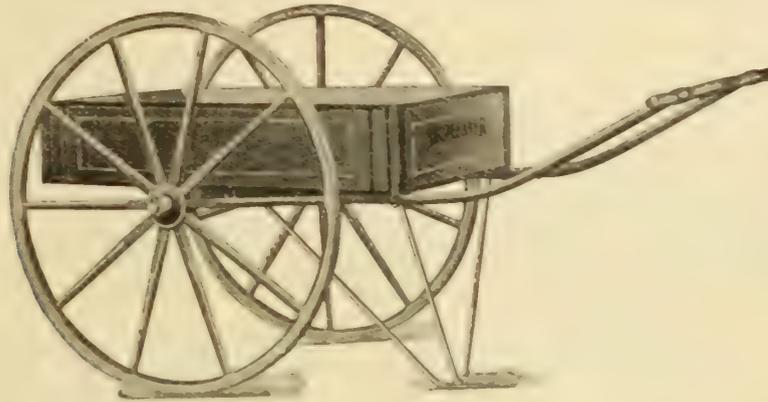


Size Axle	Height Wheels	Size Tire	Inside Dimensions of Bed			Approximate		Price.
			Lgth	Width	Depth	Wght	Capcty	
1½x9	4-6	3x½	5-10	36½	17	540	1700	\$50.00

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

Wagons—Continued

Studebaker Hand Carts



Our Mascot Cart

A good cart with springs and three wheels. A well made cart at the right price, \$8.50.

	Size of Axle	Outside Dimensions				Price
		Height of Box	Wheel Length	Width	Depth	
Small	2 1/16 in.	36 in.	40 in.	24 in.	8 in.	\$9.50
Large	3 1/16 in.	36 in.	50 in.	28 in.	9 in.	10.50

These carts are also made with third wheel and springs.

WAGONS AND PARTS

Studebaker Improved Sensible Bolster Springs



The above cut illustrates our Improved Sensible Double Bolster Springs, the most complete wagon springs on the market. One great point of superiority which they possess over all other bolster springs is that the half elliptic spring on each side of the bolster permits the box to set low down on the bolster and still leaves sufficient room for the proper working

of the springs. Another advantage of our bolster spring lies in the ease with which it can be removed, if desired, and fitted to another wagon.

We carry in stock a full line of parts for Studebaker and other wagons and carts.

Carry 1000 pounds, per set	.....	\$5.00
Carry 1500 pounds, per set	.....	5.50
Carry 2000 pounds, per set	.....	6.50
Carry 2500 pounds, per set	.....	7.50
Carry 3000 pounds, per set	.....	8.50
Carry 4000 pounds, per set	.....	9.00
Carry 5000 pounds, per set	.....	9.50

Woolf & Co.'s Farm and Contractor's Cart

With 5 and 6 inch tires; also extra heavy Contractors' Carts made specially to order when wanted. These carts are very strong heavily ironed, nicely painted striped and varnished.

Size of Axle.	Size of Tire.	Diameter of Wheels.	Price.
1½ inches	3 inches	4 ft. 10 in.	\$42.50
1½ inches	4 inches	4 ft. 10 in.	45.00
2 inches	3 inches	4 ft. 10 in.	47.00
2 inches	4 inches	4 ft. 10 in.	52.00

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

FERTILIZER

Baugh's Raw Bone Meal Warranted Pure

Guaranteed Minimum Analysis.

Total Phos. Acid, 21.50 per cent. Nitrogen, 3.70 per cent
Equiv. to Ammonia, 4.50.

This famous article, the corner-stone of our business, is precisely what its name indicates—nothing more, nothing less: just raw animal bones, finely ground. It is the best-known source of organic phosphoric acid.

Nothing excels Raw Bone Meal as a top dressing for meadows, pastures and lawns. The phosphoric acid of raw animal bones is not all immediately available, and for this reason bone meal is one of the safest and most economical manures that can be employed in fall or early spring. The effect of raw bone meal is plainly apparent upon grass land for years.

We guarantee each bag of Baugh's Raw Bone Meal—warranted pure, to be free from adulteration, under forfeiture of bill. It is finely ground, over one-half of it passing through a 50-mesh screen, which makes it worth to the consumer \$3 to \$5 per ton more than coarse ground bone.

Prices on application.

Woolf & Co.'s High Grade Truck Mixture

Guaranteed Minimum Analysis.

Available Phosphoric Acid, 8.00 per cent. Nitrogen, 2.47 per cent. Equivalent to Ammonia, 3.00 per cent. Potash, soluble in water, 3.00 per cent.

A complete, well-balanced fertilizer. One of our most valuable and efficient brands for gardening and trucking. Used for many years by large truckers in the South with the most satisfactory results, and we confidently recommend it for prompt action on early crops, for which it is especially made. It is preferred by many farmers and gardeners to the high-priced guano.

Woolf & Co.'s Special 10 per cent Po- tato Manure

Made under our special formula; pure animal base. We especially recommend this for Potatoes and other crops requiring a fertilizer with a high percentage of potash.

Guaranteed Analysis.

Avail. Phosphoric Acid	8.00
Nitrogen	1.65
Equivalent to Ammonia	2.00
Potash (Available)	10.00

Cannot furnish this year.

Prices on all fertilizers on application.

Truckers' Favorite

A complete well-balanced fertilizer. Most valuable for gardening and trucking.

Ammonia, 2 per cent. Phos. Acid, 8 per cent. Potash, actual, 2 per cent. Nitrogen, 1.65. Prices on application.

Wheat and Grass

This is one of the best spring fertilizers for grass or top dressing.

Analysis, 2 per cent Ammonia; 8 per cent Phosphoric Acid 1 per cent. Potash. Prices on application.

Kainit (German Potash Salts)

Actual Potash, 12 per cent.

Pure 10 per cent Peruvian Guano

Especially recommended for tobacco beds and as a top dressing for vegetables, etc. Prices on application.

Acid Phosphate

Guaranteed analysis, Phos. Acid 14 per cent, and 16 per cent. Prices on Application.

C. M. Woolf & Co.'s Special Brand Pure Raw Bone

Finely ground, which makes it act more quickly, thereby making it a very fine article for spring use.

Analysis: Ammonia 2.50 per cent. Phos. Acid, 20 per cent. Bone Phosphate, 50 per cent. Prices on application.

Woolf & Co.'s Corn and Oats Fertilizer

We recommend this specially prepared fertilizer for corn and oats. Its use will greatly increase the yield.

Guaranteed Analysis.

Ammonia	1.00
Avail. Phosphoric Acid	8.00
Potash (Available)	1.00

Prices on application.

Genuine Nova Scotia Land Plaster or Gypsum

Plaster should be kept on every farm and used freely on manure piles and compost heaps. It is estimated that half of the value of stable manure, as ordinarily kept, escapes by leaching and fermentation, but land plaster unites with and holds ammonia, and thus retains value that would otherwise be lost. It is advisable to use 1½ to 2 lbs. of Nova Scotia Land Plaster per day on the manure of each horse or cow, making the application at the time of cleaning the stable. Use 1¼ lbs. of plaster per day for each pig or sheep, and ¼ ounce per day for each fowl.

CHEMICALS, ETC.

Nitrate of Soda, Ammonia 18.50 per cent.
Muriate of Potash, sol in water, 48 per cent.
Sulphate Potash, Potash sol, in water, 48 per cent.
Ground Alum Salt, 160 pounds to bag.
Fine Salt, 200 pounds to bag.
Rock Salt.

European conditions make it impossible to furnish Potash or Potash Salts separately. It is also doubtful as to what per cent. of Potash can be furnished in mixed fertilizers and all analyses are subject to change without notice.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

ROOFING, FLOORING, Etc.



TRADE MARK REG. U.S. PAT. OFFICE.



RU-BER-OID ROOFING

Standard for Over Twenty Years

Ru-ber-Oid is the original prepared, finished-surface Roofing, and was for several years the only roofing of this character. Different from and superior to all other prepared roofing that Ru-ber-Oid compound or Gum, an exclusive combination of high-grade water-proof, acid and fire-resisting ingredients is used in its manufacture and in no other roofing.

That the first roofs of Ru-ber-Oid applied in 1892 are still giving satisfactory service is indisputable evidence of unequalled durability.

Ru-ber-Oid contains no rubber. It contains no tar. It contains no paper. It contains no asbestos. It is not an asphalt roofing.

Ru-ber-Oid is tasteless. It is odorless. It can be used on roofs from which drinking water is conserved.

Ru-ber-Oid is fire-resisting. Hot coals thrown on a roof of Ru-ber-Oid do not set fire to the fabric nor to the boarding underneath.

Ru-ber-Oid is a non-conductor of heat. It keeps the heat in in winter, and the heat out in summer.

Ru-ber-Oid will outlast tin, iron or shingles. It has outlasted its upwards of 300 imitations variously known as "rub-ber" roofing, "asphalt" roofing, "asbestos" roofings, roofing "old," etc., etc.

Ru-ber-Oid Accent on the "Ru," and always spelled with one B.

Ru-ber-Oid does not require painting when laid. No skilled labor is required to apply it. You need only observe the simple directions enclosed with each roll. We furnish without additional charge sufficient nails, caps and cement for laying under ordinary conditions. Any handy man can do the work.

Ask for special catalogue.

Put in rolls 36 inches wide, containing 108 square feet and 216 square feet.

Ka-lor-Oid (Colored Ru-ber-Oid Roofing) is manufactured in red, brown, and green, and is the only ready roofing to be had in permanent colors. These colors are impregnated into the fabric by a process of manufacture protected by U. S. and foreign patents. Ask for our free booklet on Ka-lor-Oid

Standard Ru-ber-Oid is furnished in four thicknesses. 1/2 ply for poultry houses, sheds, etc., 2 ply for Dwellings, Warehouses, Stores, etc. 1 ply for Barns, Outbuildings, etc. 3 ply for Factories, Foundries, etc.

1 ply, per 108 sq. feet, weight 35 lbs.....	\$2.25
2 ply, per 108 sq. feet, weight 45 lbs.....	3.00
3 ply, per 108 sq. feet, weight 55 lbs.....	3.75

These prices include caps, nails, and cement.

Ka-lor-Oid (Red Ru-ber-Oid) is furnished in medium weight at \$3 sq.; heavy weight at \$4 sq. A permanent roofing with a permanent color.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

Roofing, Flooring, Etc.—Continued

RU-BER-INE

(Registered in U. S. Patent Office.)

This is a carefully prepared paint for use on Ru-ber-Oid Roofing. It contains no tar or acid. Put up in ½ gallon, 1 gallon, 5 gallon, 10 gallon cans and ½ barrels and barrels, in Black, Red, Brown, and Green colors. One gallon of Ru-ber-ine will cover 200 square feet of Ru-ber-Oid Roofing.

Price, black color, gal, \$1.00. Prices on other colors on application. Special prices on larger quantities.

Zylex Roofing

A high grade ready-to-lay roofing, suitable for all classes of buildings.

Put up in one square rolls containing 108 square feet, including necessary fixtures. Complete directions for application, packed inside each roll.

1-ply Staco, containing 108 sq. ft., per roll.....	\$1.50
2-ply Staco, containing 108 sq. ft., per roll.....	1.75
3-ply Staco, containing 108 sq. ft., per roll.....	2.00

Tarred Roofing Paper

3-ply, containing 108 square feet.....	1.75
2-ply, containing 108 square feet.....	1.50
1-ply, containing 300 square feet.....	1.75

Lining or Sheathing Papers

Each Roll Contains 500 Square Feet.

20-pound .....	.50
30-pound .....	.75
40-pound	\$1.00

Pearl Sheathing, or Insulating Paper

Water, Acid and Gas Proof.

Price per roll, containing 500 square feet.....	\$1.25
NUBIAN VARNISH , for tarred or other surfaces, such as boilers, smoke-stacks, iron bridges, etc.	
1 gallon bucket	\$.40
2 gallon bucket .....	.75
5 gallon bucket	1.50
10 gallon bucket	2.50

FROST-PROOF CABBAGE PLANTS

These frost proof cabbage plants will stand a temperature of 8 to 10 degrees above zero without injury, the land freezing, or the plants being covered with ice, sleet or snow after they are planted will not injure them.

The top of the plant does not grow until regular spring weather opens up, but the roots grow from the time they are planted, and just as soon as spring weather appears, the plants grow very fast, maturing headed cabbage ten days to three weeks sooner than you can mature them from hot bed and cold frame plants. To get advantage of these plants they must be planted a month or six weeks earlier than you would plant home-grown plants. We can fill orders from December 1st to April 15th.

The plants will be somewhat wilted and have a hard, stunted appearance, which will be disappointing to persons who have never used these plants before. Regardless of appearance they will produce the crop results. We guarantee good order delivery.

Varieties: Early Jersey Wakefield, Charleston Large Wakefield, Succession and Early Flat Dutch.

Prices: By parcels post, postage paid 35 cts. per 100 any where. On larger quantities in Virginia, West Virginia, Maryland and District of Columbia 500 plants for \$1.25, 1,000 or more at \$2.20 per 1,000. For parcels post shipment, plants are packed 100, 200, 300, 400, 500 and 1,000.

By express, purchaser paying express charges, 500 for \$1.00. Lots of 1,000 to 4,000, \$1.50 per 1,000. 5,000 to 8,000, \$1.25 per 1,000. 10,000 or over, \$1.00 per 1,000. Packed for express shipment in lots of 500, 1,000 and 2,000.

Terms: Cash with order.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

CALENDAR OF MONTHLY OPERATIONS

WHAT TO PLANT AND WHEN TO PLANT FOR EACH MONTH IN THE YEAR.

Applies to sections same climate as Middle Virginia. For other sections allowance must be made, according as they are earlier or later. For instance, Charleston (S. C.) district, plans should be considered for two weeks earlier in Spring and two weeks later in the Fall.

January.

Prepare hot-beds and sow early cabbage, lettuce, radish, beet, cauliflower and onion. Top dress asparagus beds with manure, also give an application of salt or kainit. Cut poles and stakes for pole beans and peas. Sow pansy and other flower seeds in hot-beds for later transplanting. Send in your order for seeds early, so as to have them on hand at the proper time for sowing.

FOR THE FARM.—Top dress grass and clover fields or fall sown grain. If weather is open, use every opportunity to prepare land for Spring crops.

February.

Sow in hot-beds or cold frames early cabbage, cauliflower, beet, onion, radish; and in hot-beds sow egg plant, tomato and pepper. The last of the month sow in open ground early peas, spring kale, rhubarb and horse radish roots, beets, spinach, carrot, celery, radish and parsley. Set out asparagus roots, onion sets, and hardy lettuce plants. Early plantings of potatoes can be made. Hardy flower seeds can be forwarded either by sowing in hot-beds or in pots and boxes in the house for later transplanting. Sow Evergreen Lawn Grass.

FOR THE FARM.—Prepare plant beds and put in potato seed. Sow Canada field peas and oats, and towards end of month, grass and clover seeds can safely be put in. Sow dwarf essex rape for sheep grazing.

March.

This is the active month for sowing all kinds of hardy seeds, and the sooner most of them are sown the better. Sow garden peas for succession, cauliflower, early cabbage seed, onion, celery, spinach, leek, parsley, lettuce, radish, beet, asparagus, carrot, parsnip, salsify, corn salad, collards, kale, rhubarb and early turnip, etc. Under glass, sow tomato, pepper, and egg plant seed. Plant Irish potatoes, asparagus, and rhubarb, horse radish roots, onion sets, etc. Set out cauliflower, cabbage, onions, and lettuce plants, from hot-beds, after they have been hardened by leaving the glass open at night. Sow herbs in a warm border. Prepare melon, cucumber and squash hills for later planting. Sow the hardy kinds of flower seeds, as they will flower earlier. Sow lawn grass.

FOR THE FARM.—Sow winter and spring oats, Canada field peas with oats, clover, grass of all sorts, tobacco. Apply fertilizer as a top dressing to fall sown grain and grass and clover seeds. Plant artichokes for hogs. Sow dwarf essex rape.

April.

Plant early potatoes, sow cabbage, lettuce and tomato in open ground for succession. Sow beets, celery, carrot, salsify, parsnip, onion, radish, spring kale, early turnip, kohlrabi, corn salad, collards, nasturtiums and rhubarb, asparagus, globe artichoke, parsley, mangel wurzels and herbs. Put out cabbage plants, onion sets and asparagus roots; bed sweet potatoes; plant early corn, garden peas, snap beans, and late in the month cucumber, squash, watermelon and cantaloupe can be planted. Vine seeds are tender, so should the weather be cold or wet, defer planting till May. Lawn grass can also be sown any time this month, but the earlier the better. Sow hardy flower seeds, after the middle of the month the half hardy kinds can be sown, and dahlia, gladiolus and canna bulbs set out.

FOR THE FARM.—Sow spring oats, clover and grass seeds, but get them in early. Later in the month sow mangel wurzels for stock, plant corn, cotton, chufas, peanuts, etc.

May.

Most of the tender seeds can be sown this month. Asparagus seed can yet be sown, likewise carrot, salsify, parsley, beet, pole and snap beans, sugar corn, and tomato, radish, brussels sprouts, broccoli, corn salad, collards and nasturtiums. Plant black-eye peas, lima beans, squash, cucumber, watermelon, cantaloupe, okra and pumpkin. Late cabbage and cauliflower can be sown to make plants for setting out for fall. Set out tomato, pepper and strawberry plants.

FOR THE FARM.—Plant sugar beets and mangel wurzel for winter feeding. All the sorghums, millets and fodder plants can be sown; likewise cow peas, soja and navy beans. Chufas should be planted now, likewise corn, peanuts and cotton. Set out tobacco plants.

June.

Set out cabbage, tomato, egg-plant, pepper and sweet potato plants. Sow tomato for late crop, late cabbage and cauliflower for winter use. Plant collards, okra, watermelon, cantaloupe, cucumber, squash and pumpkin for late use, and radish, pole, navy and snap beans and sweet corn for succession. Plant late potatoes.

FOR THE FARM.—Sow the millets, cow peas, sorghum, soja beans, navy beans, and plant late corn.

July.

Plant snap beans for succession and sugar corn for late roasting ears. Set out late cabbage and celery plants for winter use. This is the best month to sow rutabagas, but they can also be sown in August. Sow collards, kohlrabi, lettuce, early turnips. Plant cucumbers for pickling and table, and late potatoes for winter use.

FOR THE FARM.—Sow German and Hungarian millet for hay or fodder corn in drills for ensilage or fodder. Cow Peas for hay or as a soil improver. Buckwheat can be sown for bees, as an improver of the soil, and for grain. Plant navy beans. Sow crimson clover at last working of corn or cotton. Sow dwarf essex rape for sheep and cattle grazing.

August.

Continue planting snap beans for the table and pickles. If any cabbage plants remain unplanted, put out at once; likewise celery plants. Sow Pritchett's cabbage and Big Boston lettuces for fall heading, likewise endive. Peas sown this month yield a good fall crop. Sow winter radish, endive, collards, parsley, spinach, kale, turnip, rutabaga and Spanish and Italian varieties of onions.

FOR THE FARM.—Crimson clover is one of the best crops grown, and should be sown on every vacant place. If it is not required for feed, it will improve the soil equal to manure when turned under. Rye and barley should be sown for fall and winter grazing and afterwards will make a crop of grain. Sow vetches and rape, and towards the end of the month grasses and clover seed and alfalfa can be safely put in.

September.

Sow lettuce, early cabbage, cauliflower and onion for transplanting in November. Sow cabbage late in the month. Put out onion sets. Sow winter radishes, spinach, turnips, mustard, corn salad, leek, parsley, kale and extra early peas. Dutch bulbs, hyacinths, tulips, etc., can be planted towards the end of this month. Sow our Evergreen Lawn Grass.

FOR THE FARM.—Sow Crimson Clover as early in the month as convenient, though any time during the month will do; it makes fine winter grazing and land will be greatly improved by growing this crop. Winter oats will do well sown this month, as they will get well rooted before winter. Sow all kinds of grass and clover seeds and winter and hairy vetches. Continue to sow barley and rye, as they are useful for winter grazing as well as for grain. Sow Dwarf Essex Rape for the pigs and cattle.

October.

Put out onion sets. Sow cabbage (early sorts), turnips for salad, kale, mustard, spinach, collard and lettuce. Towards end of the month set out cabbage and lettuce plants to stand out during the winter. Sow lawn grass seed. Fall seeding does better than spring seeding. Plant hyacinths, tulips, etc. Sow pansy seed in cold frames for spring plants. Plant strawberries.

FOR THE FARM.—All kinds of grass and clover seeds can be sown this month, but the earlier clover seed is put in the better. Sow wheat, oats, rye, barley, vetches and rape.

November.

Sow lettuce and early varieties of cabbage in cold frames. Set out cabbage, lettuce and strawberry plants. Plant out asparagus, rhubarb and horse radish roots. Lawn grass can yet be sown, but the earlier it is put in the better. Flowering bulbs can be put in this month.

FOR THE FARM.—Wheat, rye, barley, vetches, timothy and herd's grass can yet be sown, but the earlier they are put in the better. Sow Canada field peas. Rye makes a fine soiling and cover crop. Sow it liberally on all vacant lands.

December.

Cabbage and lettuce can be sown towards the end of the month in hot-beds or cold frames, and beets, radish and lettuce can be forced for winter use. The winter growing of lettuce in hot-beds usually proves very profitable and satisfactory. Plant Marrowfat Peas for market or garden use. Canada field peas can also be sown, but when seeded during the winter should be put in deeper than usual.

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Quantity and Seed Requisite to Produce a Given Number of Plants and Sow an Acre

	Quantity Per Acre.		Quantity Per Acre.
Artichoke, 1 oz. to 500 plants.....	6 oz.	Grass, Timothy	¼ bus.
Asparagus, 1 oz. to 800 plants.....	1 lb.	Hemp	½ bus.
Barley	2½ bus.	Kale, 1 oz. to 3,000 plants.....	4 oz.
Beans, dwarf, 1½ pts. to 100 feet of drill.....	1 bus.	Kohlrabi, 1-3 oz. to 100 feet of drill.....	4 lbs.
Beans, pole, 1½ pts. to 100 hills.....	1½ bus.	Leek, 1-3 oz. to 100 feet of drill.....	4 lbs.
Beet, garden, 1 oz. to 100 feet of drill.....	7 lbs.	Lettuce, ¼ oz. to 100 feet of drill.....	3 lbs.
Beet, Mangel, 1 oz. to 100 feet of drill.....	4 oz.	Martynia, ½ oz. to 100 feet of drill.....	4 lbs.
Broccoli, 1 oz. to 3,000 plants.....	4 oz.	Melon, Musk, 1 oz. to 100 hills.....	3 lbs.
Broom Corn	10 lbs.	Melon, Water, 4 oz. to 100 hills.....	3 lbs.
Brussels Sprouts, 1 oz. to 3,000 plants.....	4 oz.	Nasturtium, 2 oz. to 100 feet of drill.....	15 lbs.
Buckwheat	½ bus.	Oats	2 bus.
Cabbage, 1 oz. to 3,000 plants.....	4 oz.	Okra, 1½ oz. to 100 feet of drill.....	8 lbs.
Carrot, ¼ oz. to 100 feet of drill.....	2½ lbs.	Onion Seed, 1-3 oz. to 100 feet of drill.....	4 to 5 lbs.
Cauliflower, 1 oz. to 3,000 plants.....	4 oz.	Onion Seed for Sets	40 to 80 lbs.
Celery, 1 oz. to 15,000 plants.....	4 oz.	Onion Sets, 1 quart to 20 feet of drill.....	8 bus.
Clover, Alsike and White Dutch.....	6 lbs.	Parsnip, ¼ oz. to 100 feet of drill.....	3 lbs.
Clover, Lucerne, Large Red; Crimson Trefoil.....	8 lbs.	Parsley, ¼ oz. to 100 feet of drill.....	3 lbs.
Clover, Medium	12 lbs.	Peas, garden, 1 pint to 100 feet of drill.....	2 bus.
Collards, 1 oz. to 3,000 plants.....	4 oz.	Peas, field	2 bus.
Corn, sweet, ¼ pint to 100 hills.....	5 qts.	Pepper, 1 oz. to 1,500 plants.....	3 oz.
Cress, ½ oz. to 100 feet of drill.....	10 lbs.	Potatoes	8 bus.
Cucumber, 1 oz. to 100 hills.....	3 lbs.	Pumpkin, 1-3 qt. to 100 hills	3 to 4 lbs.
Eggplant, 1 oz. to 2,000 plants.....	4 oz.	Radish, 2-3 oz. to 100 feet of drill.....	10 to 12 lbs.
Endive, ¼ oz. to 100 feet of drill.....	4½ lbs.	Rye	1½ bus.
Flax, Broadcast	½ bus.	Salsify, ½ oz. to 100 feet of drill.....	8 lbs.
Garlic, bulbs, 1 lb. to 10. feet of drill.....	2 bus.	Spinach, ½ oz. to 100 feet of drill.....	8 lbs.
Gourd, 2 oz. to 100 hills.....	2 bus.	Summer Savory, 1 packet to 100 feet of drill.....	¾ lbs.
Grass, Blue, Kentucky	2 bus.	Squash, Summer, 4 oz. to 100 hills.....	3 lbs.
Grass, Blue, English	2 bus.	Squash, Winter, 8 oz. to 100 hills.....	3 lbs.
Grass, Hungarian and Millet.....	½ bus.	Tomato, 1 oz. to 2,500 plants.....	2 oz.
Grass, Mixed Lawn	3 to 5 bus.	Tobacco, 1 oz. to 5,000 plants.....	2 oz.
Grass, Orchard, Perennial Rye, Red Top, Fowl Meadow and Wood Meadow	bus. 2 bus.	Turnip, 1 oz. to 250 feet of drill.....	1½ lbs.
Grass, Red Top, Fancy Clean.....	8 to 10 lbs.	Vetches, with 1 bu. oats or ¾ bu. wheat	20 to 30 lbs.
		Wheat	1¼ bus.

Number of Plants and Trees to the Acre at Given Distance

Distance apart	No. plants						
12x 1 inches.....	522,720	24x24 inches.....	10,890	36x36 inches.....	4,840	60x60 inches.....	1,743
12x 3 ".....	174,240	30x 1 ".....	209,088	42x12 ".....	12,446	8x 1 foot.....	5,445
12x12 ".....	43,560	30x 6 ".....	34,848	42x24 ".....	6,223	8x 3 ".....	1,815
16x 1 ".....	392,040	30x12 ".....	17,424	42x36 ".....	4,148	8x 8 ".....	, 680
18x 1 ".....	348,480	30x16 ".....	13,068	48x12 ".....	10,890	10x 1 ".....	4,356
18x 3 ".....	116,160	30x20 ".....	10,454	48x18 ".....	7,790	10x 6 ".....	, 726
18x12 ".....	29,040	30x24 ".....	8,712	48x24 ".....	5,445	10x10 ".....	, 435
18x18 ".....	19,360	30x30 ".....	6,970	48x30 ".....	4,356	12x 1 ".....	3,630
20x 1 ".....	313,635	36x 3 ".....	58,080	48x36 ".....	3,630	12x 5 ".....	, 736
20x20 ".....	15,681	36x12 ".....	14,520	48x48 ".....	2,723	12x12 ".....	, 302
24x 1 ".....	261,360	36x18 ".....	9,680	60x36 ".....	2,901	16x 1 ".....	2,722
24x18 ".....	15,520	36x24 ".....	7,260	60x48 ".....	2,178	16x16 ".....	, 170

Weight of Various Articles per Bushel

	Pounds		Pounds
Apples	48	Malt	38
Apples, dried	22	Oats	32
Barley	48	Onions	54
Beans	60	Peaches dried	28
Blue Grass	14	Peas	60
Buckwheat	44	Rye	56
Broom Corn	46	Timothy Seed	45
Bran	20	Wheat	60
Clover Seed	60		
Corn, Shelled	56		
Corn, on ear	70		
Corn Meal	50		
Cranberries	40		
Flax Seed	56		
Hemp Seed	40		
Hungarian Grass Seed	48		
Irish Potatoes	60		

WEIGHT PER CUBIC FOOT

Hay well settled	4½
Corn on cob, in bin	22
Corn shelled, in bin	45
Wheat, in bin	48
Oats, in bin	25½
Potatoes, in bin	38½



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