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# Kendall & Whitney SEEDS

Agricultural Implements Gasoline Engines - - -Poultry and Dairy Supplies, Insecticides



# 1924-CATALOG-1924

Federal & Temple Sts., Portland, Me.

D. N. Shoernak \*\*.

# IMPORTANT TO CUSTOMERS

ORDER EARLY.—We would suggest that customers send us their orders as soon as possible after receiving this catalog, and thus avoid the rush of the planting season. It frequently happens that some articles are not in stock when orders are received. In such cases we forward such as are ready, and the balance as soon as possible.

STOCK SEED.—A large part of our seeds are grown for us on contract by special growers, from our own stock, and in locations best suited for their development. Others are secured from strictly reliable sources, and constant effort is made to secure only the best.

ADDRESS, ETC.-Give name of your post office, county and state, sign your name plainly; also specify means of conveyance preferred-whether by parcel post, express or freight.

FREE DELIVERY.—We will send by parcel post, to any part of the United States, all Vegetable and Flower Seeds quoted in this catalog at packet, ounce, quarter-pound and half-pound rates, free of expense to the purchaser, excepting heavy seeds such as Peas, Beans, Corn, Clover Seed, Seed Grain, Roots, etc. These are quoted at net prices at our store. Purchasers desiring these by mail are requested to remit an additional amount sufficient to cover postage, at parcel post rates according to zone. Allow two pounds in weight for each quart of Peas, Beans or Corn. Particular attention is invited to this, as, when omitted, the cost of postage will be deducted from the amount received.

SHIPPING.—We deliver free to Express, Railroad or Boat. All goods travel at the buyer's risk; our responsibility ceases when we take the carrier's receipt. If goods are damaged, so sign for them and enter claim with the carrier at once.

BAGS.—On orders for seed requiring bags the cloth bags are charged for at cost and if returned in good condition, charges prepaid, will be credited at price charged on all except wholesale orders.

REMITTANCES.—May be made by Express Money Order, Post Office Money Order or Bank Draft; if stamps or cash send in a Registered Letter. Parties having no account with us—who order goods without remittance—must furnish satisfactory references. Portland references preferred.

PRICES .- All prices are net without discount and subject to change without notice.

### :-: PARCEL POST RATES :-:

Packages must not exceed 84 inches in length and girth combined. 70 pounds is the limit of weight in the first, second and third zones. 50 pounds is the limit of weight in all other zones.

1st zone-5c. for first pound and 1c. for each additional pound or fraction.

000

- 2nd zone-5c. for first pound and 1c. for each additional pound or fraction.
- 3rd zone-6c. for first pound and 2c. for each additional pound or fraction.
- 4th zone-7c. for first pound and 4c. for each additional pound or fraction.
- 5th zone-8c. for first pound and 6c. for each additional pound or fraction.
- 6th zone-9c. for first pound and 8c. for each additional pound or fraction.
- 7th zone-11c. for first pound and 10c. for each additional pound or fraction.
  - 8th zone-12c. for first pound and 12c. for each additional pound or fraction.

Postage on seeds, bulbs, plants and roots of 8 ounces or less, to all zones, is 1c. for each two ounces. Postage on general merchandise of 4 ounces or less, to all zones, is 1c. an ounce.

### ALL CORRESPONDENCE ANSWERED PROMPTLY

Telephone Orders Given Immediate Attention. Call Portland 3953

While we exercise the greatest care to have all Stocks the best and most reliable, we do not give, and our employees are forbidden to give, any warranty, express or implied, as to description, quality, productiveness, or any other matter of any Seeds, Bulbs or Plants that we send out, and we will be in no way responsible for the crop. If the purchaser does not accept the goods on these terms, they must at once be returned—K. & W.

# **KENDALL & WHITNEY**





RICH, sandy loam is the best, although fair results may be obtained from any soil which may be made rich and friable. Results cannot be expected on barren sand, or hard clay soils, nor under trees.

As a soil which does not need enriching is seldom found, fertilizer of some sort is necessary. Well decomposed stable manure is best, but if not available, sheep manure, poultry manure or wood ashes are of great benefit. If commercial fertilizer is used it may be applied at the rate of four to twelve pounds to the

square rod, but must be thoroughly pulverized and mixed with the soil.

Good soil and sufficient fertilizer are not enough. The garden must be well plowed or spaded, using care, if the soil is a clay soil, that it is not too wet. When a handful of soil pressed into a ball may be easily crumbled again the conditions are right. After being plowed, the surface should be harrowed, or raked as fine as possible, and kept so until the seeds are planted.

With the soil prepared, the next thing is good seed, for no matter how well everything has been done, without good seed the result will not be a success. Do not forget that every season much good seed is lost because of lack of care in planting. Remember that, five things are necessary.

FIRST: A proper and constant degree of moisture. The soil should always be moist, never wet. To secure this cover the seed as soon as it is planted with well pulverized, freshly prepared earth, pressing it firmly over the seed. This firming of the soil is very important, as it brings the particles of earth into close contact with seeds and roots, prevents the drying out of the soil and facilitates quick growth. The best results are obtained in small gardens by laying a board on the row and then walking upon the board, or the back of the hoe may be used; but for truck farms and field crops a roller is equally satisfactory.

SECOND: A proper degree of heat, secured by sowing the seed when the temperature of the soil is most favorable to the germination of the seed of that particular plant. Too high a temperature is often as detrimental as one too low. The proper temperature for each sort may be learned from a careful study of the following pages and the experience of the most successful gardeners in your vicinity.

THIRD: Covering the seed to such a depth that while a uniform degree of heat and moisture is preserved the necessary air can readily reach the germinating seed, and the tiny stem push the forming leaves into the light and air. This depth will vary with different seeds and conditions of the soil and can be learned only from practical experience. In general, seeds of the size of the turnip should not be covered with more than half an inch of earth pressed down, while corn may be an inch, beans an inch to two inches and peas one to three inches deep.

FOURTH: Such a condition of soil that the ascending stem can easily penetrate it and the young roots speedily find suitable food. We can usually secure this by thorough preparation of the ground and taking care never to sow fine seeds when the ground is wet. Occasionally a heavy or long continued rain, followed by a bright sun, will so bake and crust the surface that it is impossible for the young plant to find its way through it, or a few days of strong wind will so dry the surface that the young plants will be killed. In such cases the only remedy is to plant again.

JUDICIOUS CULTIVATION: Not only should every weed be removed as soon as it appears, but the crust which forms after a rain should be broken up and the ground stirred as soon as it is dry enough to permit it. The more frequently and deeply the soil is stirred while the plants are young, the better; but as they develop and the roots occupy the ground, cultivation should be shallower until it becomes a mere stirring of the surface. The yield and quality of vegetables have often been decidedly lowered by injudiciously deep and close cultivation after the roots of the plants had fully occupied the ground. A very small garden, well cultivated and cared for, will give larger returns, in every way more satisfactory, than a much larger one poorly prepared and neglected.



# SEEDS IN PACKETS OR OUNCES ONLY.

The following may be selected from our catalog, at the prices named, and will be forwarded, postage free, to any part of the United States:

Purchasers remitting \$1.00 for seeds (in PACKETS OR OUNCES) may select additional seeds in packages or ounces to the amount of 25 cents.

Purchasers remitting \$2.00 for seeds (in PACKETS OR OUNCES) may select additional seeds in packages or ounces to the amount of 50 cents.

Purchasers remitting \$3.00 for seeds (in PACKETS OR OUNCES) may select additional seeds in packages or ounces to the amount of \$1.00.

Purchasers remitting \$4.00 for seeds (in PACKETS OR OUNCES) may select additional seeds in packages or ounces to the amount of \$1.50.

Purchasers remitting \$5.00 for seeds (in PACKETS OR OUNCES) may select additional seeds in packages or ounces to the amount of \$2.00.

Seeds ordered in quantities larger than one-ounce packages are not to be included in making up-the order, neither are plants or bulbs.

### SPECIAL TO MARKET GARDENERS.

To market gardeners and users of seed in large quantities we quote special prices. When asking quotations please state the amount of seed which will be needed.

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The extraordinary conditions of the past few years still prevail, and the continued unsettled state of affairs makes it almost impossible to publish a catalog with prices acceptable for any length of time. While we are holden to all our friends and customers to make the very best prices possible, yet we must reserve the right to increase these prices over the ones here printed should the times make it necessary, but we will be glad to REDUCE them should future conditions give us that privilege.

3

# A DESCRIPTIVE LIST OF FLOWER SEEDS.

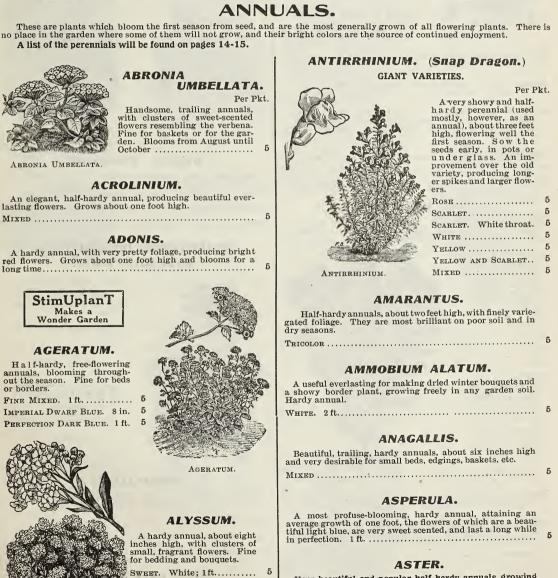
### General Directions for Cultivation.

A rich, sandy loam is best for most flowering plants.

It is best, except in the case of hardy annuals, to start the seeds in shallow boxes in the house and prick out and reset into another box so that the plants may be of good size and strong when ready to set in the garden.

When planted directly in the garden the soil should be fertilized and made very fine before sowing, and the plants afterward thinned out, or transplanted to stand from two to twelve inches apart according to the variety. Do not cover too deeply. As a general rule, for the larger seeds cover from one-fourth to one-half inch, and for the very fine seeds merely press them into the soil with a piece of board. After sowing seeds press the earth firmly over them to prevent their drying up. If the weather is dry, water frequently with a fine spray.

Flower Seeds Sent Free by Mail on Receipt of Price.



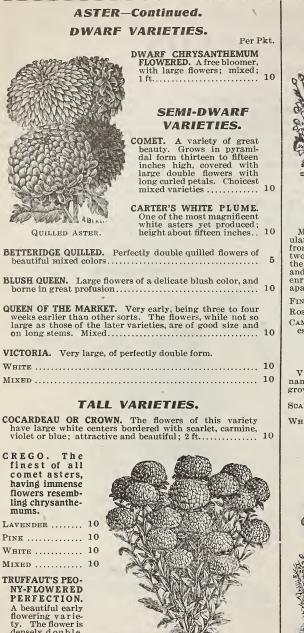
5

Very beautiful and popular half-hardy annuals, growing from ten to eighteen inches high. For profusion of flowers and richness of display, the asters are unrivalled. Sow the seed early in the spring, under glass or in pots in the house, and transplant into rich soil, about one foot apart.

TOM THUMB. Very dwarf;

white ....

ALYSSUM.





### BALSAM.

Most magnificent, pop-ular, half-hardy annuals, from one and one-half to two feet in height. Sow the seeds early in frames, and transplant to a well enriched border one foot apart.

FINE DOUBLE. Mixed .... 5 5 Rose-Flowered ..... CAMELIA-FLOWERED. Fin-5 est mixed.....

### **BACHELOR'S BUTTON.**

Per	Pkt.

A showy, hardy annual, about two feet high, suc- ceeding well in any soil. Set six inches apart.	
FINEST MIXED	5
DEEP BRIGHT BLUE	5
DOUBLE BLUE	10



DOUBLE BALSAM.

### **BEANS.** (Flowering.)

Valuable for use on trellises and arbors, being highly or-namental and free climbers; plants are of strong, quick growth, bearing large sprays of handsome flowers.

SCARLET RUNNER. Very ornamental, bright scarlet flowers 10

WHITE RUNNER. Similar to above, flowers being white .... 10

# BRACHYCOME IBERIDIFOLIA.

### (Swan River Daisy.)



Very pretty, free-flower-ing, dwarf-growing annu-al; well adapted to edg-ings, rustic baskets, or pot culture.

MIXED BLUE AND WHITE. 5 ½ ft.....



SWAN RIVER DAISY.

### **BROWALLIA**.

Handsome, profuse-blooming annual, covered with beautiful flowers during the summer and autumn months.

ELATA COERULEA. Blue; 1½ ft	5
ALBA. White; 1½ ft	5
FINE MIXED	5

### **BLUE LACE FLOWER.**

This pretty annual blooms freely from July to November. The blossoms are pale lavender, and are excellent for cut-ting, as they last a long time in water. Plants grow about eighteen inches high. Seed may be sown outdoors when the trees are in leaf..... 15

flowering varie-ty. The flower is densely double, and the petals so symmetrically incurved as to resemble a perfect

ball. Mixed col-ors; 2 ft. ..... 10 PEONY-FLOWERED PERFECTION ASTER.

OSTRICH FEATHER. Very large bloom, with long, fringe-

like petals, similar in shape to Japanese chrysanthemum. 10

SEMPLE'S BRANCHING. A superior and free-flowering class. The flowers are large, with graceful, wavy petals on long stems; excellent for cutting; 2 ft.

LAVENDER	10
Pink	10
CRIMSON	10
WHITE	10
PURPLE	
FINEST MIXED. All colors	10



CALENDULA.

### CALCEOLARIA.

Indispensable for the greenhouse or the flower garden. They succeed in any light, rich soil. Half-hardy perennials.

CHOICE MIXED VARIETIES .... 25



CANDYTUFT.

CRIMSON. Ounce 25c..... PURPLE. Ounce 25c..... WHITE. Ounce 25c..... FINEST MIXED. Ounce 25c.

### CANARY BIRD FLOWER.

A rapid-growing, delicate climber, reaching a height of from ten to fifteen feet. Bright yellow, fringed; ex-ceedingly beautiful foliage. Half-hardy annual.....

### CANNA.

Handsome foliage plants, growing from three to eight feet high. Highly ornamental on the lawn. Soak the seed in warm water for about twelve hours. Seeds should be sown early in a strong, moist heat.

FINEST MIXED .....

### CALENDULA.

Per Pkt. recention of the second secon

striped orange	5
ORANGE KING. Deepest orange	5
FINEST DOUBLE MIXED	5

CALCEOLARIA.

### CANDYTUFT.

A well-known, hardy an-nual, very useful for bed-ding and bouquets, and also for pot culture.

EMPRESS. Large trusses of pure white flowers; very handsome. Used for forcing. Ounce 40c..

5

LITTLE PRINCE. Large heads of pure white flow-ers. Plants about six inches high. Ounce 40c.

5 5 5 б 5



### CANARY BIRD FLOWER.

### CATCHELY.

5

5

A hardy annual, about one foot high; produces brilliant flowers in great profusion in early summer. MIXED ..... 

### CENTAUREA.

Silver-leaved	plants, fine for ribbon borders, baskets, etc.	
CANDIDISSIMA.	Thick foliage; ¾ ft.	10
GYMNOCARPA.	Graceful white foliage; ¾ ft	10



Per Pkt.

5

Well-known favorite, free-flowering plants for the green-house, which may be had in splendid bloom through the greater portion of the year, and from the richness and diver-sity of the colors are among the most valuable of our early spring flowers; succeed best in light, rich, free and open soil. Greenhouse perennial.

CARTI	ER'S BR	ILLIANT	PRIZE.	Choicest	varieties	 25
FINE	MIXED	VARIET	IES			 25

### CHRYSANTHEMUMS.

### ANNUAL. The annual chrysanthemums are free-blooming easily

grown plants. They have large, daisy-like flowers in a va- riety of brilliant colors and are fine for cutting.	
Double White	Ę
DOUBLE YELLOW	
DOUBLE MIXED	F



CLARKIA.

### COBAEA SCANDENS.

The most useful of climbers, on account of its rapid growth, fine foliage, and large, bell-shaped flowers, purple in col-or. In soving place the seeds edgewise and cover lightly.... 10



CLARKIA.

COBÆA SCANDENS.

### COCKSCOMB.

Very singular and attractive, half-hardy annuals, about two feet high. To perfect the flowers they should be sown in the hotbeds and transplanted into rich soil one foot apart. MIXED. Double ..... 10

5

### **COLEUS.**

One of the most popular foliage plants. Is very decora-tive in the flower border, and easily grown from seed, which frequently produces new and distinct varieties. NEW HYBRIDS. Mixed..... 15



MORNING GLORY.

CONVOLVULUS MAJOR.

### (Morning Glory.)

A well-known beautiful, climbing annual, suitable climbing annual, suitable for covering arbors, trel-lises, etc. Blooms from lises, etc. Bloom July until autumn.

FINE MIXED. Ounce 10c. 5

JAPANESE. Gigantic flow-ers, exquisite new col-ors, magnificent foliage. Finest mixed.....

Per Pkt.

5

5

5

Б



COREOPSIS.

### COSMOS.

Splendid flower for cutting purposes, plants growing five to seven feet high, which are beautiful masses of the most elegant masses of the most elegant foliage, with hundreds of large, showy blossoms. Both foliage and flowers are excellent for cutting. Sow seed early in spring and transplant to the gar-den in lung. den in June.

EARLY FLOWERING. Mixed colors ... 10 LADY LENNOX. Tall growing, late variety, with gigantic shell-pink flowers, borne on long stems.....

SCARLET ...



DAHLIA.

DRACOENA.

### ESCHSCHOLTZIA. (California Poppy.)

A very showy, hardy an-nual, about one foot high, blooming from June until September. Produces a brilliant effect; admirable for borders when grown in a mass.

ALBA. White	Б
CALIFORNICA. Yellow; orange center	5
MANDARIN. Orange and scarlet	5
FINEST SINGLE MIXED	5
CARTER'S CARMINE KING. A splendid new variety,	

atinui carminerose color.....10



COREOPSIS.

COSMOS.

10

### **CYPRUS VINE.**

One of the most popular of all summer climbers; flowers small, thickly set in a most beautiful dark-green foliage, forming a striking contrast. Tender annuals.



Beautiful, half-hardy annual, growing from two to three feet in height and producing very large flow-ers; continues in bloom from July until September. MIXED .....

ornamental-leaved plant, extensively used in Beautiful. vases and for house decoration. INDIVISA. Narrow, dark green foliage ..... 10

# Т

GOLDEN FEATHER. Prized for its yellow foliage .....

### GAILLARDIA.

Showy and universally-admired annual. Very beautiful; fine for bedding and bouquets. Flowers two to three inches across, blooming until late in the fall.

FINE MIXED ..... 5 

### GOURDS.

A valuable and highly interesting class of climbing plants. Tender annuals.

AFRICAN PIPE. The stem end used in making pipes	5
Bottle. Well known, bottle shaped	Б
HERCULES CLUB. Club shaped; very long	Б
New MINIATURE. Orange and green striped; one of the best	Б
ORANGE. Very ornamental, fruit resembling an orange	б
Powder Horn	5
FINE MIXED	Б

### GLOBE AMARANTH.

A tender annual, about two feet high, very ornamental in the garden. The flowers will retain their beauty for a long time if gathered and dried as soon as they are open. Start early in hotbeds, and transplant one foot apart in the border when the weather becomes warm.

MIXED .....



GLOXINIA.

StimUplanT Makes a Wonder Garden

GODETIA. Very attractive hardy annual of easy culture, about one foot kigh, flowering in July and August.

FINE MIXED .....

### **GLOXINIA.**

Greenhouse plants, pro-ducing richly colored and brilliant flowers. Greenhouse perennial.

CARTER'S INVINCIBLE PRIZE. Contains all the best self-colors, crimson, sapphire, purple, ruby, rose, blush violet and white, together with the most beautiful spotted or most beautiful spotted binds. marbled kinds.....

25

5



GODETIA.



ESCHSCHOLTZIA.

### FEVERFEW. (Pyrethrum.)

Per Pkt. Handsome, free-flowering, highly ornamental plants, pro-ducing a fine effect in the mixed flower and shrubbery bor-ders. Succeeds in any rich soil.

OUBLE	WHITE		<b>5</b>
LOIDEN	FEATHER	Prized for its vellow toliage	5

GREVILLEA ROBUSTA.		LANTANA.
Per Pk A very graceful decorative plant, with evergreen, fern- like foliage. Tender perennial	t. 5	Per I Highly valuable plants of vigorous growth and branch- ing habit, producing brilliantly-colored flowers constantly changing in hue. Very effective, either for pot culture or for bedding.
GYPSOPHILIA.		FINE MIXED
A free-flowering annual that should be in every garden, for it thrives abundantly, furnishing the loveliest material for bouquets. ELEGANS. Hardy annual; pure white	5	LARKSPUR. Very beautiful, showy annuals, producing dense spikes of flowers, which are very decorative, either in the garden or when cut for vases. Set ten inches apart. DWARF DOUBLE ROCKET. Finest mixed. 1 ft DOUBLE BRANCHING. Fine mixed. 2 ft
DOUBLE YELLOW	5	LAVENDED

DOUBLE WHITE	5	
DOUBLE SCARLET		
DOUBLE PURPLE	5	
DOUBLE FINE MIXED	5	

### **HELIOTROPE.**

well-known, half-A hardy perennial, particu-larly prized on account of its delightful fragrance. its It is well adapted for bedding or pot culture. Sow the seeds early in spring, in pots or in the hothouse, and transplant into the and transplant into the garden when the weather becomes warm.

FINEST MIXED. Dark varieties.....



HELIOTROPE.

5

5

Б

### HUMULUS. (Japan Hop.)

Rapid summer climber, resembling the common hop, but, being an annual, attains full perfection the first season. The foliage is luxuriant, making a dense covering. It is one of the best plants for covering verandas, trellises, etc., pro-ducing grateful shade and being very ornamental. Heat, drought and insects do not trouble it .....

### HYACINTH BEAN.

Tender, climbing annual, producing clusters of blue and white flowers; 10 ft. ... 5

### ICE PLANT.

A singular-looking, tender annual, with thick, fleshy leaves that have the appearance of being covered with crystals of ice. Start early in pots and transplant into light, sandy soil, in a warm situation.....

### **IPOMOEA.** (Moon Flower.)

The ipomœas are climbers of rapid growth and bear immense fragrant flowers of glistening white seven to eight inches across. The flowers open at sunset and close the next morning. To hasten germination soak seed in warm water a few hours. Flowers large, white ..... 10

### **KOCHIA TRICHOPHYLLA.** (Glowing Ball.)

This ornamental annual plant grows quickly from seed sown in the open ground, when the trees are coming out in leaf, and the plants are always of a rounded or globe-like form. The stems are clothed with slender, light green leaves. Early in the fall the ends of the shoots are set thickly with small, bright scarlet flowers, the bushy plants resembling balls of fire. The plants are equally showy planted singly to show the round ball-like form on all sides or grown in continuous rows or grown in continuous rows ....

Per	Pkt.

5

flowers, which are very decorative, either in the garden or when cut for vases. Set ten inches apart.	
DWARF DOUBLE ROCKET. Finest mixed. 1 ft	Б
DOUBLE BRANCHING. Fine mixed. 2 ft	5

### LAVENDER.

A shrubby plant, blossom of delightful fragrance...... 5

### LINUM. (Flowering Scarlet Flax.)

GRANDIFLORUM RUBRUM	. Brilliant,	dark	scarlet.	Hardy	
annual					b

### LOBELIA.

Most excellent and useful plants, free-flowering and of easy culture. Fine for borders, baskets, vases and window boxes.

GRACILIS. Fine for hanging baskets, vases, etc.; light blue; trailing	5
CRYSTAL PALACE. Compact; dark blue; excellent for edg- ing	
WHITE GEM. The best white variety for edging	Б
CARDINALIS LONG spikos bright scoulet former	10

### LOVE-LIES-BLEEDING.

A hardy annual, three to four feet high, with pendant spikes of blood-red flowers ..... 5

### LOVE-IN-A-MIST. (Nigilla.)

curious, hardy annual about one foot high, with finely cut leaves and singular flowers.

MIXED ..... 5 

### LUPINUS. (Lupine.)

This is a very interesting class of plants and of easy culthre, producing beautiful leaves and pea-shaped flowers, and should be more generally cultivated. The annual varieties may be sown out in the open in May and as plants grow thin out, leaving about twelve inches between the plants.

FINE MIXED. Annual 5

### MARVEL OF PERU. (Four O'clock.)

The old and well-known four o'clock. A beautiful plant, with flowers of various colors, making a fine summer hedge when set one foot apart. Grows two feet high.

5 FINE MIXED

### **MAURANDIA.**

An elegant, half-hardy, climbing plant, blooming the first season if sown early, and is well adapted to the conserva-tory or trellis work in the garden. Start early in pots, transplant when the weather becomes warm. Continues in bloom through the season.

BARCLAYANA. Rich violet flowers...... 10

MORNING GLORY. (See Convolvulus.)

Per Pkt.

5

5 5

5

5

5

### MARIGOLD.



Extremely showy, halfhardy annual, one to two feet high, well adapted to garden high, well adapted to garden culture, blooming profusely through the season. Set one foot apart. The African va-rieties are the taller in growth, and produce large self-colored blossoms. The French vari-eties are smaller, some of them being elegantly striped and spotted. The dwarf-growing kinds make extremely hand-some borders, remaining in full bloom until killed by frost.

### Double African.

MARIGOLD.

ORANGE PRINCE. Large deep orange flowers, very showy. About two and one-half feet high .....

LEMON QUEEN. Similar to the Orange Prince, except in color, which is lemon yellow.....

Double Mixed ......

### Dwarf French

DOUBLE MIXED.	About one foot high	5
---------------	---------------------	---

LEGION OF HONOR. Single, about nine inches high; golden yellow, with large spot of velvety crimson .....

### **MOURNING BRIDE.** (Scabiosa.)

These beautiful, hardy annuals are in great demand. They grow about two and one-half feet high and bloom from early in July without interruption until cut down by the frost. As a flower for cutting they are much in demand. The various shades are very charming, but are equally well adapted for borders or beds, where they display themselves very effectively. Seeds should be sown any time in the spring after danger of frost is past.

PURPLE	5
RED	5
WHITE	5
FINEST MIXED	5

### **MIGNONETTE.**

A well-known, hardy an. A well-known, hardy an-nual, universally grown and esteemed for its delicious fra-grance. Sow in light soil one-fourth inch deep and thin to six inches apart in the row.

### Mignonette, Sweet.

Large-flowered variety, very fragrant. Per ounce, 15c..... 5

### Allen's Defiance.

Spikes of immense size. sometimes growing under fa-vorable conditions twelve inches long. Are very fragrant and keep for a long time in **1**0 water ....



The finest variety for pot culture; of dwarf growth, with sweet-scented, red flowers .....

### White Pearl.

Flowers nearly white; a desirable variety.....



MIGNONETTE.

### MIGNONETTE-Continued.

Per Pkt.

### Gabriele.

A variety of dwarf pyramidal growth with large spikes of reddish flowers; fine for pots, or in the open ground ..... 5

### MIMULUS.

Handsome, profuse-blooming plants, with flowers of sin-gular form and brilliant colors, fine for greenhouse or shady situations. Blooms from seed the first year.

FINE MIXED ..... ..... 10

### MUSK PLANT.

Fine for hanging baskets. Color yellow. Sweet scented., 10

location.





NEMOPHILA

### NICOTIANA.

Deliciously fragrant flowers, very ornamental, of easy cultivation, excel-lent for cutting. Halfhardy annuals.

AFFINIS. White, very fragrant .....

YLVESTRIS. Plants of pyramidal growth, about four feet high. Flowers pure white and very fragrant ..... 10

SANDERAE. Branching habit; two feet. Strik-ingly beautiful plants. Blossoms brilliant car-mine-red; delicious fra-drance grance 10



StimUplanT Makes a

Wonder Garden

NEMOPHILA.

Charming hardy, low annu-al, producing an abundance of extremely delicate and beauti-ful flowers. Very useful for bedding or for pot culture. Sow early in pots and trans-plant into a cool, rather moist, location

INSIGNIS. Clear, bright blue. white center.....

FINEST MIXED .....

NICOTIANA.

### NOLANA.

Very pretty trailing, hardy annuals; fine for rocky hanging baskets or for bedding. Select light, rich soil. fine for rockwork, FINE MIXED .....

5

5

### **OXALIS.**

Elegant flowering plants, particularly adapted for th greenhouse or parlor, where they bloom in mid-winter.	е	
FINE MIXED VARIETIES	. 1	L

### **OENOTHERA.** (Evening Primrose.)

A half-hardy annual and perennial, about six inches high, bearing bright, showy flowers in white, pale yellow, rose, etc. Of the easiest culture.

MIXED	ANNUAL SORTS	 5
<b>MIXED</b>	PERENNIAL SORTS	 5



### NASTURTIUM.

One of the most popular flowers of the present time, and constantly growing in favor. Is a rapid climber, of easiest culture, bearing beautifully colored flowers in profusion until killed by frost. Hardy annual.

The "K. & W." Mixed Varieties, both Tall and Dwarf, cannot be surpassed for brilliancy and variety of color. The plants, for about three months in the year, produce a lavish profusion of bloom, even through the hottest weather, and a trial of them is sure to give great satisfaction.

### NASTURTIUM. (Tall.)

	Per Pkt.
CRIMSON	10
DUNNETT'S ORANGE. Pure orange	1ó
EDUARD OTTO. Brownish lilac	10
HEINEMANNI. Chocolate color	10
PEARL. Creamy white	10
PRINCE HENRY. Cream, spotted and tipped scarlet	10
REGELIANUM. Purplish violet	10
SCARLET.	10
SHELLINGHI. Yellow spotted	10
SCHEUCRIANUM. Straw colored, spotted brown	10
VESUVIUS. Salmon-rose; an exquisite shade	10
VON MOLTKE. Dark rose	10
Yellow	10

### "K. & W." Mixed Varieties.

1 lb.	½ lb.	1⁄4 lb.	1 oz.	Pkt.	
\$1.25	.70	.40	.15	.10	
		Cor	A HOMEON O	T C DITTO	

### NASTURTIUM-Continued.

### NASTURTIUM, (Dwarf.)

Per Pkt.

The dwarf improved varieties of nasturtium are among the most useful and beautiful of garden favorites for bedding, massing or ribboning. Hardy annuals.

BRONZE. Bronze-orange 10
CLOTH OF GOLD. Scarlet flowers and yellow foliage 10
CRIMSON 10
CRYSTAL PALACE GEM. Sulphur, maroon blotches 10
EMPRESS OF INDIA. Fiery crimson, dark foliage
GOLDEN KING. Rich, golden yellow
KING THEODORE. Deep crimson maroon, dark foliage 10
KING OF TOM THUMBS. Dark scarlet, dark leaves 10
LADY BIRD. Orange-yellow; suffused with red and a bright red blotch at the base of the petals
RUBY KING. Rich crimson rose 10
Scarlet
SPOTTED. Golden yellow, spotted garnet
YELLOW
LILLIPUT. The most dwarf of all nasturtiums. Of compact growth with the bloom in a beautiful mass above the foliage; fine for potting and bedding

### "K. & W." Mixed Varieties.

1 lb.	½ lb.	1⁄4 lb.	1 oz.	Pkt.
\$1.25	.70	.40	.15	.05

Collection of 6 pkts., 50

### SWEET PEAS.

Sweet peas are among the most desirable hardy annuals grown, being exceedingly beautiful and highly ornamental, and will grow and blossom well in any good garden soil. Select an open, sunny location, and sow as early as the ground can be worked in the spring, to enable the vines to get a good strong growth before the warm weather comes.

### CULTURE.

Early in spring make a trench three to four inches deep in rich, mellow soil, so arranged that no water can stand in it, and plant the seed in the bottom, covering at first only one inch deep. In soils at all heavy, or composed largely of clay, put about one inch of sand in the bottom of the trench and sow the seed on this, covering with more sand. Cover the row with a board to shed the rain and protect the soil from the hot sun, but remove this as soon as the young plants appear.

When the plants are two inches high, cultivate and as they grow gradually fill up the trench. When the plants are about five inches high it is desirable to furnish some support for the vines to run upon, preferably a wire netting firmly supported by stakes to prevent sagging, but strings or brush are often used with satisfactory results.

The roots should not be allowed to become too dry. Water applied thoroughly once or twice a week, preferably early in the morning or in the evening, is usually better than light sprinkling more frequently.

The blooms should be picked before they form pods or the plants will soon stop flowering.

INOCULATE, FOR BEST RESULTS, WITH NITROGEN FIXING BACTERIA. 20

### SWEET PEAS-Continued.

### SUPERB FLOWERED

# SPENCER VARIETIES.

The Waved or Spencer class represents a type of sweet pea the original of which, the Countess, is still the best and most pop-ular pink. They are strong growers, bear long stems and very large blossoms, with usually four blossoms to a stem. The standard is large, round, and fluted or wavy on the edges. The wings, too, are large and more or less wavy, but not so much so as the standard.

The following named varieties constitute a list of many of the following named varieties constitute a list of many of the finest strains produced, a majority being recommended by the National Sweet Pea Society. Dirt Or

	I LU.	01.
WHITE. DOBBLE'S NORA UNWIN. Very white	10	20
KING WHITE. Giant white; the largest white Spencer type WHITE SPENCER. Large pure white	10 10	20 20
PRIMROSE, CREAM OR IVORY. MRS. C. W. BREADMORE. Primrose, with rose edge	10	20
LIGHT PINK SHADES. APPLE BLOSSOM. Rosy pink, blended with light	10	20

APPLE BLOSSOM. Rosy pink, blended with light blush	10	-
COUNTESS. Fine pure, clear pink; very large	10	2
DEEP, BRIGHT PINK.		

DEEF, DRIGHT THAN	10	20
HEBE. Giant rosy pink	10	20
NEW MARION BEAVER. Finest shade of pink. Color salmon shell-pink on cream	10	20
Color salmon shell-place of crowner the	10	20
Rosabelle. Giant rosy pluk		
SUNSET. Bright rose	10	<b>20</b>
SUNSET. Bright rose		

10

10

10

10

10

10

10

10

10

10

10  $\mathbf{20}$ 

10

10

10

10

10

1/4 lb.

.70

20

20

20

20

 $\mathbf{20}$ 

20

20

20

 $\mathbf{20}$ 

20

 $\mathbf{20}$ 

20

 $\mathbf{20}$ 

20

20

ORANGE AND SALMON. BARBARA. Handsome large

SHADES OF RED.

EDGED.

salmon orange..... ILLUMINATOR. Salmon cerise

and orange .....

MELBA. Palesalmon.....

DOBBIE'S IMPROVED CRIMSON.

very large..... VERMILION BRILLIANT. Intense,

bright scarlet .....

BLUE PICOTEE. White, with

edge.....

ASTA OHN. Pinkish lavender ... FLORENCE NIGHTINGALE. Soft

bluish lavender..... DOBBIE'S ORCHARD. Large

mauve lavender.....

FLORA NORTON. Light blue ....

MRS. TOM JONES. Best of deep

blues .....

ple .....

MIXED VARIETIES .....

Chocolate, purple and white, striped.....

½ lb.

\$1.25

blue edge ..... DAINTY. White, with rose pink

LAVENDER SHADES.

SHADES OF BLUE.

SENATOR.

1 lb. \$2.25

PURPLE AND MAROON. ROYAL PURPLE. Rich, deep pur-

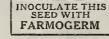
Finest crimson ..... KING EDWARD. Pure, deep red;

### SWEET PEAS-Continued.

### GRANDIFLORA TYPE.

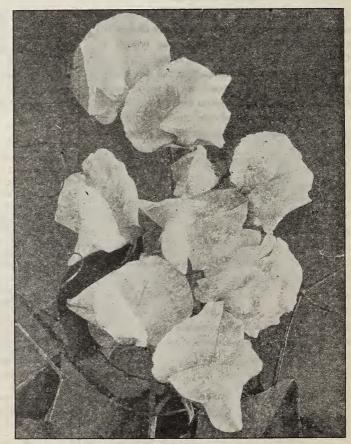
Owing to the increased demand for the Spencer sweet peas, and the fact that many of the named varieties of the Grandiflora type are one and the same, we have discontin-ued cataloging the named varieties of Grandiflora sweet peas and will list only the different colors, for which we will select what we consider the best.

	Pkt.	Oz.
WHITE	5	10
LIGHT PINK	5	10
DEEP, BRIGHT PINK	5	10
PINK AND WHITE	5	10
RED	5	10
LAVENDER	5	10
BLUE	5	10



"K. & W." CHOICE MIXED. This magnificent as-
sortment is a mixture of the finest varieties
produced, the flowers being of the largest sorts,
and so combined as to give the most delightful
harmony of colors. Fine mixed

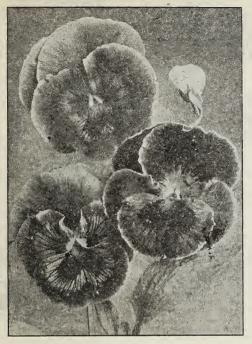
$\frac{1}{2}$ lb. $\frac{1}{4}$	lb.
.55 .	35



SWEET PEAS

10

CALIF and fring Rosy exte WHIT BALCO FINE



PANSY.

Per Pkt-

5

Good results may be obtained from sowing seed in May in a light, cool, but well-moistened soil, enriched with a slight amount of barnyard manure or fine ground bone. Sow seed in drills, covering them five times their diameter, and firm soil. Water once a day, except in very dry weather, when they may be watered twice a day. Seed will germinate in about two weeks and should not be allowed to dry out. A small covering of newspapers will prevent drying out. When plants are large enough to handle, they should be transplanted to a distance of one foot apart. Where greenhouse and cold frame facilities are at hand, seed may be sown in July or August and plants protected during winter.

"K. & W." EXTRA CHOICE MIXED. This is a mixture com- posed of the finest varieties of large flowering pansies and for years has been giving splendid satisfaction	10
Non PLUS ULTRA. A mixture of pansies designed for the buyer who wishes his beds of the finest colors and great- est variety possible	15
GIANT TRIMARDEAU. Very large flowers of the most varied colors. Mixed	10
MADAM PERROT. A new French strain. Flowers large size, in many colors, especially red, and nine shades	20
KING OF THE BLACKS. Velvety jet black	10
ODIER. Finest blotched.	10
BLUE. Beautiful light blue	10
YELLOW. Pure golden yellow	10
PURPLE. Dark, rich purple	10
WHITE. Pure white: dark eye	10

### **PASSION FLOWER.**

A splendid class of climbers, with curious flowers produced in great profusion; fine for conservatory or will answer for the garden, flowering freely during the autumn.

FINE MIXED ...... 10

### PERILLA NANKINENSIS.

An annual, growing from two to two and one-half feet; stranching, well covered with an ample foliage of a dark purple, almost black



### PETUNIA.

Per Pkt.

Favorite, hardy annuals, succeeding well in any rich soil. For the brilliancy and variety of their colors, their abundance of flowers and the long duration of their blooming period, they are indispensable in any garden.

	any garaon	
	DOUBLE FRINGED. Ex- tremely double, edges finely fringed, petals fluted and crinkled, unmatched by crum- pled velvet, which	
PETUNIA	the flowers resemble. 25 SINGLE FRINGED. Choicest fringed	
ORNIA GIANTS. A strain of inc	sorts 20	
luxuriance. The flowers are ged on the edges, and are enorm	exquisitely ruffled or	
MORN. Soft carmine-pink, wh ensively for borders, beds or roo		
E. Single, large, pure white	10	
NY BLUE. Indigo blue. Flow	ers very large 15	
MIXED. Single varieties		

### PHLOX DRUMMONDI.

The flowers are of extreme beauty, and are greatly admired by all. Their long duration in bloom, combined with their almost unequalled richness of color, make them invaluable in the general flower are a Hardy annuals.

Burden, Hurdy unnumber	
PURE WHITE	Ę
PURE DEEP SCARLET	Ę
Rose	ŧ
Yellow	Ę
CRIMSON	
FINEST MIXED. Ounce \$1.00.	Ę



### PHLOX.

### PINK. (Dianthus.)

One of the most popular flowers in cultivation, producing a great variety of brilliant colors and profusion of bloom.

HEDDEWIG1. Flowers very large, and of rich and brilliant color. Hardy annual... 10

CHINESE. Splendid double mixed 5

CARNATION "MARGUERITE". Very early, and when sown in the spring will bloom in July or August and continue until frost, or may be potted to bloom during the winter in the house. Many of the flowers are double, and are finely fringed and fragrant.

HEDDEWIGI PINK.

POPPY.



### ADMIRAL POPPY.

Brilliant and showy, hardy annual, growing freely in any garden soil. Sow as early in spring as the weather will permit at intervals for a succession. Barely cover seed; PRESS DOWN FIRMLY, and when up thin to six inches apart. 2 ft.

### DOUBLE FLOWERING VARIETIES.

Fer FK	. U
CARDINAL. Dark foliage, deeply cut; very double flowers. Color vivid scarlet	5
MIKADO. Double white, fringed flowers, crimson margins	5
WHITE SWAN. The acme of perfection in double poppies. The profusely produced blossoms are perfectly formed, and the purity of their color is beyond reproach 1	.0
PEONY FLOWERED. Mixed	5
CARNATION FLOWERED. Mixed	5

### SINGLE FLOWERING VARIETIES.

ADMIRAL. Single, peony-flowered variety. Glistening pure white, with scarlet band around the top; very handsome.	10
PEACOCK. Cup-shaped, crimson blossoms, with ring of black at the base of the petals; equally good for pots or borders.	
SHIRLEY. Beautiful strain of single mixed poppies; bright, delicate colors; fine for cutting	5
TULIP. Grows twelve to fourteen inches high, and produces	

### PORTULACA.

Very popular, low-growing, hardy annuals, making a most brilliant dis-play in the garden, and very suitable for borders or edg-ings. Sow early in

ings. Sowearly in warm, light, rich soil and thin plants to four inches.

SINGLE CRIMSON ...

SINGLE SCARLET ....

SINGLE WHITE ....

SINGLE YELLOW ....

SINGLE, ALL COL-ORS MIXED .....

DOUBLE FINEST MIXED..... 10

5

5

5

5

5



PORTULACA.

### **PRINCE'S FEATHER.**

Ornamental plants, with elegant plumes of rich colored flowers

LARGE FLOWERED	Crimson · 2 ft	5



### RHODANTHE.

### RICINUS. (Castor Bean.)

Plants with very orna-mental foliage and showy fruit and quite a tropical appearance. With other ornamental-leaved plants, that mecha c meet others they make a most attract-ive bed on the lawn, and are also desirable when grown as single specimens. Half-hardy annuals.

BARBONENSIS ARBOREUS. Beautiful, large green fo-liage ; 10 ft. ....

RICINUS.

SALPIGLOSSIS. Very beautiful, rich, half-

very beauting, rich, nan-hardy annuals, one and one-half feet high. Start early in the hotbed and transplant to light, warm, rich soil. Blooms from July to September.

FINE MIXED ..... 10

StimUplanT Makes a Wonder Garden

CAMBODGENSIS. Dark foliage ; black stem ; 9 ft. 5 SANGUINEUS. Scarlet fruited; 6 ft..... 5 ZANZIBARIENSIS. Immense, dark green foliage ; 12 ft..... 5 

5

### **ROSE CAMPION.**

The rose campion is perfectly hardy and very easily raised from seed. The flowers are produced on long stems, bloom-ing freely throughout the season.



### SALPIGLOSSIS.

### SALVIA.

Very ornamental, pro-ducing tall spikes of bril-liant flowers. Start early in hot beds and trans-plant two feet apart. Half-hardy annual.

SPLENDENS. Brilliant scarlet flowers ...... 10

BONFIRE. This variety is one of the finest salvia Is one of the nest salvia for bedding yet intro-duced. The plants grow into very compact oval bushes about two and one-half feet high, and produce long spikes of brilliant scarlet flowers. 10

### RHODANTHE.

Per Pkt.

A well-known everlast-ing; valuable for the deco-ration of the conservatory ration of the conservatory and flower garden; fine for bedding or ribboning. The flowers, if gathered when young, make valua-ble winter bouquets; suc-ceed best in a light, rich soil and a warm, sheltered situation. Half-hardy an-nual: 1½ ft. situation. H nual; 1½ ft.

FINE MIXED ..... 5





SALVIA.

Don Dirt

### SCHIZANTHUS.

1011.	
Tender annual, one to one and one-half feet high, bloom-	
ing from August to October. Fine for pot culture.	
FINE MIXED	5

### SENSITIVE PLANT.

A pretty, curious annual, being so sensitive that the leaves close together at the slightest touch ..... 5

### SMILAX.

A beautiful winter climb-A beautiful winter climb-ing plant, adapted to the conservatory. Nothing can excei this plant in be a uty of foliage and orange fragrance of the flower. Extensively used for bouquets and floral decorations of every de-scription. scription ..... 10

### STOCKS.

Half-hardy annual, producing splendid spikes of very rich and beautiful flowers of delightful fragrance. For early flower-ing sow early in the spring, in pots or in the hotbed, and transplant one foot apart. Blooms from June until October.

# STOCKS

### EARLY LARGE-FLOWERING WINTER STOCK.

BEAUTY OF NICE. ST				10
delicate flesh pink	• • • • • • • • • •		•••••	10
QUEEN ALEXANDRA.	New.	Rosy lilac.	Splendid	10

### CUT AND COME AGAIN.

F

DRESDEN PERPETUAL. Plants of robust growth and branching habit. If sown early commences blooming in June and continues until frost, producing flowers in September and October, when other varieties have faded. Fine for cutting.	
ALL COLORS MIXED	10
PRINCESS ALICE. White	10

### GIANT PERFECTION. Ten weeks stock.

WHITE. Ten weeks, double	10
PURPLE. Ten weeks, double	10
SCARLET. Ten weeks, double	10
Mixed. Ten weeks, double	10

### SUNFLOWER.

Well-known, showy plants; remarkable for their rapid and stately growth and the large size and brilliancy of their flowers.	
CALIFORNIA. Double, bright yellow flowers	Б
MAMMOTH RUSSIAN. Very large flowers; single	5
NEW MINIATURE. An improvement on the miniature.	

blooms are of a variety of shades, sizes and shapes of 5 petals...

### SWEET SULTAN.

Showy, hardy annual, one to two feet high, succeeding well in any soil. The beautiful, sweet-scented flowers are borne on long, stiff stems, making them well adapted for cutting.

INE	MIXED	

### TASSEL FLOWER.

Per Pkt.

VERBENA.

Well-known and uni-versally popular bed-ding plant, blooming all summer. Plants grown from seed are more healthy and make larger and hardi-or plants thon

er plants than those from cuttings. If sown in spring will flower quite early.

CANDIDISSIMA. Pure white..... 10 SCARLET DEFIANCE. Brightest scarlet.... 10

MAMMOTH FINEST 10

5

5

5

MIXED .....

A beautiful, half-hardy annual, with small, tassel-like flowers, blooming profusely from July to October.

SCARLET ..... .....δ

### THUNBERGIA.

Very ornamental, trailing, half-hardy annual, admirably adapted for trellis or rustic work, or for the conservatory.

FINE MIXED...... 10





VERBENA.

### **VISCARIA.**

Very pretty, profuse-flowering, half-hardy annual, produc-ing a fine effect in beds or mixed borders, and growing readily in any soil.

FINE MIXED .....

### WALLFLOWER.

Very fragrant and ornamental, suitable for background and amongst shrubbery. FINE MIXED .....



Charming, hardy annual, with delicate foliage and clusters of beautiful, bell-shaped flowers; fine for ribboning or mixed bor-dore if t ders; 1 ft.

5 FINE MIXED .....



5



WHITLAVIA.

### WILD CUCUMBER VINE.

A very rapid-growing climber which reaches a height of fifteen or twenty feet during the season. It is covered with clusters of white, sweet-scented flowers, followed by an abundance of ornamental prickly seed pods. It will quickly cover a trellis, pillar or an unsightly building, and will reproduce itself from self-sown seed every year. Soak seed over night in warm water. Hardy annual .....

WILD GARDEN SEED.	ZINNIA.
Per Pkt. A mixture composed of a large number of varieties of flower seeds. These are usually sown in a bed by them- selves	Per Pkt. A most splendid class of hardy annuals, and one of the finest summer flowering plants. The flowers are large, handsome, and in a very great variety of colors, blooming throughout the whole season. Start early in pots or under glass and transplant one foot apart. HAAGEANA. Double, orange; 1 ft

# HARDY PERENNIALS AND BIENNIALS.

This class of flowers is coming into increased favor each year. The seed may be sown in the spring, or later in July or August. If sown at the latter time, it is well to sow in a shaded, moist place, or to keep the ground shaded and well watered until the seed appears.

ALYSSUM. Per Pkt.	DELPHINIUM. (Larkspur.)
SAXATILE COMPACTA. Grows about nine inches high, pro- ducing a mass of golden yellow flowers	Per Pkt. One of the finest perennials, growing four feet high, and lasting a long time in flower. FORMOSUM. Blue with white eye
AQUILEGIA. (Columbine.)	DIANTHUS. (Pink.)
Grows about two feet high, blooming in May or June. MIXED	CARNATION. A magnificent class of popular flowers, very fragrant, and of rich and beautiful colors. Hardy peren- nial
A CARA	GYPSOPHILIA. (Baby's Breath.)
A BELLIS PERENNIS.	Delicate, mist-like flowers. Fine for bouquets. Grows two feet high.
(Double Daisy.)	PANICULATA. White. Blooms the first year, if sown early. 5
Fine for bordering. Set six inches apart.	and all
WHITE	MYOSOTES.
RED 10 MIXED 10	(Forget-Me-Not.)
S A RIVERSO	Low-growing plants, prefer- ring moist, shady places.
	VICTORIA. Dwarf, sky blue 5 MIXED
ALBLANC	MIXED
Double Daisy.	
CANTERBURY BELLS.	FORGET-ME-NOT.
Large, bell-shaped flow-	
ers, blooming in July. Grows two feet high.	HOLLYHOCK.
BLUE 10 WHITE	Showy perennials, about four to five feet high.
MIXED 10	Double Mixed. Extra
	choice10 Double Fine Mixed 5
CANTERBURY BELLS.	SINGLE MIXED
	Hollyhock.
DIGITALIS. (Foxglove.)	HONESTY.
This is a very ornamental biennial plant, almost three feet high. The racemes of thimble-shaped flowers are often two feet long.	A hardy biennial, two feet high, flowering the second year in May and June. The flowers are succeeded by singular semi-transparent seed vessels that are quite ornamental and
GLOXINIEAFLORA. Mixed. Spotted flower	may be kept for a long time 5

ų,

### PERENNIAL PHLOX.

Per Pkt. 

### PERENNIAL POPPY.

Blooms the first year from seed. Colors range ICELAND. from white to orange ..... 5 ORIENTAL. Very large bright scarlet flowers. Fine for borders and amongst shrubbery ..... 10

### **POLYANTHUS.**

Grows about one foot high, blooming in June and July ... 10

### SHASTA DAISY.

A hardy perennial, lasting in bloom for a long time. Flowers are white, and from one to four inches across...... 10



SWEET WILLIAM.

SW	EE		WILLIAM.	
One	of	the	most showy	

large trusses of flowers.	5
WHITE	5
PINK	. 5
Crimson	5
MIXED	5

### SWEET ROCKET.

Per Pkt.

Page

n early flowering perennial, about eighteen inches high, 5 with fragrant purple and white flowers ...

### **EVERLASTINGS.**

	~8~
These are flowers whose blossoms, if gathered when first opened and dried in shade, will keep bright for months.	
ACROLINIUM	4
Аммовіим	4
GLOBE AMARANTH	$\overline{7}$
HELICHRYSUM	8
RHODANTHE	13

### **CLIMBERS.**

FLOWERING BEANS	4
CANARY BIRD VINE	5
Cobæa Scandens	5
CYPRESS VINE	6
Gourds	6
HYACINTH BEAN	7
HUMULUS (Hop Vine)	7
MAURANDIA	8
MOON FLOWER	7
MORNING GLORY	5
NASTURTIUM	9
PASSION FLOWER	11
	9-10
THUNBERGIA	13
WILD CUCUMBER	13

# **VEGETABLE PLANTS.**

CELERY PLANTS-Ready June 1st to 15th. Golden Self-Blanching, White Plume. Boston Market,

CABBAGE PLANTS.

CAULIFLOWER PLANTS.

Ready May 15th to 20th.

Early summer varieties. Ready May 15th to 20th. For winter crop. Ready June 15th to 20th.

# TOMATO PLANTS-Ready May 15th to 20th.

Earliana, **Red Cross.** lewel. Table Queen. and other standard varieties. **Dwarf Champion**, John Baer. Perfection. Bonny Best,

RHUBARB ROOTS AND ASPARAGUS

One dozen in each box.

Ready in April.

# HARDY PLANTS AND SHRUBS.

These can be supplied on short notice. The demand for hardy perennials is continually on the increase, as they bloom year after year with only slight care.

# BEDDING PLANTS.

GERANIUMS in 3-inch and 4-inch pots.

CANNAS and FUSCHIAS in 4-inch pots. HELIOTROPE, CALENDULAS and LOBELIAS in 3-inch pots.

Potted plants and plants in baskets and boxes cannot be sent by mail.

# FLOWER SEEDLINGS.

Aster, Marigold, Pinks, Phlox, Petunia,

Snapdragon,

Stock. Zinnia, Pansies (choice strain) Verbenas.

ROOTS.

# SUMMER-FLOWERING BULBS.

### GLADIOLUS.

Plant in good garden soil, after the ground becomes warm in the spring, in full exposure to the sun. Set bulbs from 4 to 6 inches deep.

America. Soft pink. Per doz., 40c.; per 100, \$3.00.

Baron Hulot. Deep blue. Per doz., 85c.; per 100, \$6.50. Halley. Salmon pink with creamy blotch. Per doz., 50c.; per 100, \$3.50.

Ida Van. Salmon red. Per doz., 50c.; per 100, \$3.75. Mrs. Frank Pendleton. Very large, salmon pink. brilliant carmine blotch on throat. Per doz., 90c.; per 100, \$7.00.

Chicago White. Large white. Per doz., 70c.; per 100, \$5.50 Schwaben. Pure canary yellow. Per doz., 90c.; per 100, \$7.00.

Fine Mixed. Per doz., 35c.; per 100, \$2.50.

### CALADIUM ESCULENTUM.

Eight to ten inches in circumference. Each, 10c.; per doz., \$1.00. MADEIRA VINE.

Each, 5c.; per doz., 50c.

### GLOXINIAS.

Assorted Colors. Each, 30c.; per doz., \$3.25.

TUBEROSE.

Large bulbs. Each, 8c.; per doz., 75c.; per 100, \$5.50.

### LAWRENCE DAHLIAS.

Direct from the growers at Elmwood Dahlia Farm.

Selected for variety of color, and for form, size and perfection of bloom. All bulbs mossed and started, and ready for early flowering. Stock for shipment, May 15th to June 1st. Each, 20c.; per dozen, \$2.00.

Choice Imported Varieties.

Price on application.

Caladium and dahlias ordered by mail are subject to an extra charge of ten cents per dozen for postage. All other bulbs ordered by mail are subject to an extra charge of five cents per dozen for postage.



TULIP.

# **DUTCH BULBS.** FOR WINTER AND SPRING BLOOMING.

These bulbs are imported directly from Holland growers, from whom we have had bulbs for more than fifteen years, so we are assured of the quality. Our assortment will consist of hyacinths, tulips, narcissus and crocuses and will be ready for shipment about October 1st. Send for our bulb list giving directions for growing and prices. No class of plants is easier to grow successfully than these bulbs, so do not fail to enjoy their flowers during the winter and spring months.

# GENUINE CHINESE CINNAMON VINE.

# Most Beautiful, Most Fragrant and Easiest Grown of all Climbers. Once Planted, Will Grow a Lifetime.

Perfectly hardy, grows in sun or shade, wet or dry, indoors or out. No insect or blight ever troubles.

For windows, plant two on each side. For porches, plant eight to twelve inches apart, covering two inches and furnish twine support for the vines. Read this testimonial from Prof. W. H. Morse, Agricultural Chemist, Hartford, Conn.: "Your cinnamon vines were the marvel of the city. They were more wonderful, more pleasing and more fascinating than ever. Their sweet perfume captivates every heart."



Price, 10 cents each, \$1.00 per doz., postpaid.

# SWEEPSTAKES PEDIGREE SEED CORN

(Copyright 1915)

Has made and will continue to make lasting friends with every dairyman who wants to provide the very best food that he can place before his stock; also every farmer and stock raiser who wants to grow the very best beef, mutton and pork at the least possible cost, as he can produce 50 per cent. more food value per acre from SWEEPSTAKES PEDIGREE SEED CORN than from any other known kind or brand.

As an ensilage corn it has repeatedly yielded from 15 to 25 tons of ensilage to the acre. Nearly every stalk has two large ears, which add much to the value of the ensilage. The illustration on this page gives a good idea of the size of the stalk and has frequently been duplicated. Since we have been selling this corn our sales have increased year by year, which proves that those who want the best feel sure that they have found it in Sweepstakes.

All of our Sweepstakes Corn has been screened through a  $\frac{3}{8}$ -inch screen, which insures the user all large, vigorous kernels, which will germinate 90 per cent. or better.

To obtain the best results the corn should be planted in rows 3 feet apart, and 1 kernel in a hill, not nearer than 10 inches, which will require 12 quarts to the acre.

### SPECIAL OFFER.

In order that more farmers may learn that this corn is superior to any other ensilage corn, we are making a special offer. To any customers sending in an order for 5 bushels, we will send ½ bushel free of charge. Also, upon an order for 10 bushels we will send 1 bushel free of charge. By combining your neighbor's order with yours you can easily make up an order for these amounts. By doing this you will be doing them a favor, as well as getting your seed free.

You can rest assured of the seed we sell you. It is bred and grown by The Introducers and Owners of the Copyright Brand; sold only under copyright tag and sealed with a lead seal, both attached to their printed and copyright sacks. Buy none other.

We advise you to place your order imme-diately. 2 bushel sacks, XXX GRADE, §-inch screen, 90 per cent. germination or better, 1600 kernels or less to the quart, at \$10.00 per sack. Sold under the originator's gualantee of satisfaction.

OUR GUARANTEE OF SATISFACTION.—Plant our XXX SWEEPSTAKES PEDIGREE SEED CORN and after growing and feeding your product and noting a Com-parison of the amount of your receipts with the same month in any previous year and writing us what results you have obtained, and you are not fully satisfied that you have had full value, we will refill your order at \$3.00 per bushel, F. O. B. shipping or distribution point, cash with order before January 1, shipment in due season

INTERNATIONAL CONSOLIDATED RECORDI ASS'N Inc.

6 STALKS ONLY. 66 POUNDS. Prices subject to change without notice. (See note on page 2.)

EEP STAKES

HUBBARD

ORN

# VARIETIES OF ESPECIAL MERIT.

FULL MEASURE BEAN. You can judge of the productiveness by the name. The pods are green in color, long, straight and thick, making it a bean which is a ready seller in the market. We recommend everyone to try a few of these beans in their home garden.

Price: 1 lb., 40c.; 2 lbs., 75c.; 8 lbs., \$2.75.

KENTUCKY WONDER WAX POLE BEAN. This bean is similar to the Kentucky Wonder, which, on account of its

long pods and large yield, has become a favorite; The pods of this new bean are yellow, long, stringless and of finer quality than the green variety. For yielding continuously it cannot be surpassed.

### Price: 1 lb., 40c.; 2 lbs., 75c.; 8 lbs., \$2.75.

**EARLY WONDER BEET.** This variety combines all that is desired in a beet for early market or the home garden. It is one of the earliest beets, and on this account is excellent for late fall sowing. The almost perfect shape, deep red color, small top and fine flavor make it a ready seller, and a beet that, once tried, will be planted a second time.

### Price: Pkg., 10c.; oz., 20c.; 1-4 lb., 50c.; lb., \$2.00.

SUTTON'S PRIZE WINNER MANGEL. Sutton's Prize Winner is the heaviest cropping Yellow Globe Mangel in exist-

ence. The massive roots are of a deep globe shape, very clean in outline, with a single tap-root, and carry a comparatively small amount of foliage. This variety may be relied upon to yield a profitable return on practically every class of soil that is capable of growing Mangels, and when stored in good condition the roots keep sound until the following summer. Analysis has shown that the roots contain as much as 6.53 per cent. of sugar and 12.21 per cent. of dry matter, and as the weight of the crop far exceeds that of other varieties it will be seen that Sutton's Prize Winner produces the greatest amount of dry (or feeding) matter per acre of any Mangel. A yield of over forty-eight tons per acre has been obtained from this Mangel.

### Price: Pkg., 10c.; oz., 20c.; 1-4 lb., 50c.; lb., \$1.50.

COPENHAGAN MARKET CABBAGE.

This variety is the best of all the early cabbages. The heads are round, solid, short The plant grows compactly so that they

stemmed, weighing often ten pounds each. The plant grows compactly, so that they may be planted near together, thus securing a large yield to the acre.

### Price: Pkg., 10c.; oz., 40c.; 1-4 lb., \$1.50.

DANISH BALL HEAD CABBAGE. (Cape Elizabeth Grown.) Since the Danish Ball Head Cabbage was introduced it has become the most popular cabbage to raise for winter use. The head is

of good size and very solid. This particular strain is raised for us by one of the best growers at Cape Elizabeth. Nothing but the most perfect heads are used for seed purposes, and we feel that we can highly recommend this seed to those who wish the very best.

### Price: Pkg., 10c.; oz., 60c.; 1-4 lb., \$2.25.

CHARLEVOIX SWEET CORN. An early or intermediate sweet corn of particular merit. The ears are about seven inches long, usually twelve rowed, and when in condition to use are light creamy-yellow in color. It ripens a few days later than the Golden Bantam, but remains in condition longer. The grain is rather short, very sweet and tender, and of most excellent quality, being considered by many to be the best yellow sweet corn yet introduced.

### Price: Pkg., 10c.; 1-2 lb. 25c.; lb., 40c.

DE LUE'S GOLDEN GIANT SWEET CORN. Ears are much longer than the Golden Bantam, fourteen to sixteen rows, and the yield per acre is considerably more. Being equally early, of deeper color, and of excellent quality, it is highly recommended both for market gardeners and private gardens.

### Price: Pkg., 10c.; 1-2 lb., 25c.; lb., 40c.

**EXTRA EARLY DIGHTON SWEET CORN.** An extra early selection from Red Cob Cory, and considered to be the earliest sweet corn known. Stalks not quite four feet high; ears, usually two to the stalk, six to seven inches long, eight to ten rowed, grain white. Quality very good for so early a corn, and being first on the market makes it valuable for market gardeners.

### Price: Pkg., 10c.; 1-2 lb., 25c.; lb., 40c.

**EARLY HONEYSUCKLE CORN.** This is considered by the growers to be the earliest variety of sweet corn on the market. It is similar to the Mayflower corn, which has been so well liked, but because of being earlier is toking the place of that variety.

is taking the place of that variety. On account of its earliness and fine quality it is a splendid corn to raise for the early market and for the home garden.

Price: Pkg., 10c.; 1 lb., 30c.; 2 lbs., 55c.; 12 1-2 lbs., \$3.00.

**EARLY FORTUNE CUCUMBER.** We recommend the Early Fortune as one of the most desirable cucumbers on the market. The quality is excellent, and the flesh is thick, with few seeds. The dark green color and cylinder shape make it most attractive.

### Price: Pkg., 5c.; oz., 15c.; 1-4 lb., 50c.; lb., \$1.50.

WHITE WONDER CUCUMBER. This is a medium sized variety of good quality. The point that distinguishes it from other cucum-

bers is the color, which is white, making it very attractive. **Price:** Pkg., 10c.; oz., 20c.; 1-4 lb., 60c.; lb., \$2.00.

WOOD'S HYBRID CUCUMBER. The dark green color, which is retained for a long time after packing, combined with its earliness

and heavy yield, makes this a favorite both for the home and for market gardeners. The flesh is white and crisp and of superior quality.

### Price: Pkg., 10c.; oz., 20c.; 1-4 lb., 65c.; lb., \$2.25.

MAY KING LETTUCE. This is a recent variety which we recommend as of especial merit. It is very early and hardy, and may be planted inside, although it is at its best when grown outdoors. The head is of great size, solid, and very attractive in appearance. The outer leaves are yellowish green tinged with brown, while inside it is golden yellow.

### Price: Pkg., 10c.; oz., 20c.

**NEW YORK, OR WONDERFUL LETTUCE.** One of the best summer lettuces, as it is slow to run to seed and is a sure header under trying conditions. The outer leaves are green, the inner ones blanch to a creamy white, and are crisp and tender. Well worth a trial.

### Price: Pkg., 10c.; oz., 30c.

PEERLESS, OR ICE CREAM MELON. This is one of the best for growing in the North on account of its earliness. It is of medium size, rind thin, color light green, mottled, flesh bright scarlet, and very sweet. Price: Pkg., 5c.; oz., 15c.; 1-4 lb., 50c.

**BENDER'S SURPRISE MUSK MELON.** A new variety, which has become very popular in the East. It is medium early, of large size, and of superior keeping qualities. Color, flesh salmon.

Price: Pkg., 5c.; oz., 15c.; 1-4 lb., 50c.

CARTER'S EARLY EIGHT WEEKS PEA. This is a very hardy, vigorous growing

dwarf variety. It produces a rank foliage and is a splendid cropper. It more nearly fills the requirements of a large-podded. smooth pea than any other variety yet introduced. It is extra early, being several days in advance of all the early wrinkled varieties. It is of good quality, being far superior to the usual run of extra early sorts. The pod is of attractive shape and is filled with good-sized peas. For private garden use it is of exceptional merit.

Price: 1 lb., 45c.; 2 lbs., 85c.; 14 lbs., \$5.75.

To those who wish a large-podded early pea which does not grow as tall as the Gradus we recommend the Laxtonian. The LAXTONIAN PEA. vines are about eighteen inches high, make a vigorous growth, and the pods are well filled, averaging nine or ten peas to the pod, while the quality is the best.

### Price: 1 lb., 30c.; 2 lbs., 50c.; 14 lbs., \$3.00.

SCARLET TURNIP RADISH (White Tip). This is one of the most attractive radishes grown. In color it is a deep scarlet, with a white tip. In shape it is, as the name indicates, round, and, being early, combines all the qualities one wishes in a radish.

### Price: Pkg., 5c.; oz., 15c.; 1-4 lb., 45c.

JAPANESE ONION SETS (Yellow). To those who have had difficulty in raising

onions from seed, or who wish early onions, we would recommend their trying some of these new sets. For abundance of yield they surpass any other variety of sets and are also good keepers.

### Price: Lb., 35c.; pk., \$2.00.

This squash is so called from the color of the skin. BLUE HUBBARD SQUASH. In quality it is considered superior to the regular

Hubbard Squash and is bringing the best prices in the markets. The flesh is thick, dry, and of most excellent quality.

### Price: Pkg., 10c.; oz., 30c.; 1-4 lb., 50c.; lb., \$3.50.

For those wishing a squash for table use we are sure that DELICIOUS SOUASH.

the Delicious will prove to be the sort which they have been looking for. In size it is a little smaller than the Hubbard, skin green, and has un-usually thick flesh. It ripens earlier than the Hubbard and is also a good keeper, while the flavor is delicious.

### Price: Pkg., 5c.; oz., 15c.; 1-4 lb., 50c.; lb., \$1.75.

EARLY AVON TOMATO. The fruit of this new extra early variety is round, smooth, deep scarlet in color, and of good size for so

early a tomato. It is as early as the Earliana, and will yield more and better fruit. Price: Pkg., 10c.; oz., \$1.00.

**GULF STATE MARKET TOMATO.** Introduced at first to meet the demand for a tomato which could be shipped long distances, its many good qualities have made it popular with growers for local markets and for home gardens. The fruit is purplish pink, globe shaped, free from cracks, ripens uniformly, and is produced in great abundance. For earliness it is ahead of any other good purple tomato.

### Price: Pkg., 10c.; oz., \$1.00.

This is one of the very best varieties, both for the market gardener and for the home garden. The fruit is nearly JOHN BAER TOMATO. round, color scarlet, flesh smooth and firm. From all reports which we have received about this tomato we feel that we are safe in recommending it most highly.

Price: Pkg., 10c.; oz., 50c.; 1-4 lb., \$1.50.

SUTTON'S MAGNUM BONUM SWEDE TURNIP. Is without doubt the finest type of purple-top Swede turnip that can be grown for general purposes. Its feeding value is high, the roots containing 12.5% dry matter, and the yield per acre is very heavy.

Price: Pkg., 5c.; oz., 15c.; 1-4 lb., 50c.; lb., \$1.50.



STATE WHAT CROP YOU WANT THE NITRAGIN FOR



# A SEED and SOIL INOCULANT

# That Increases Crop Production and Greatly Improves the Soil.



Soil and crop experts agree that for best growth, and to put atmospheric nitrogen in the soil, it will pay all farmers to inoculate all legumes, even where they are at present successfully grown. The cost is trivial when compared with the profit it will bring you. Legumes are clovers. peas and beans, alfalfa, soy beans, vetches and other plants that grow their seeds in a pod. Their roots are the home of bacteria that draw fertility-building nitrogen from the air and store it in swellings on the roots, called nodules. These nodules not only feed nitrogen to the crop they are on, but rot away in the ground and supply valuable nitrogen to the soil for future bumper crops of corn, wheat, cotton, oats, fruits, etc.

### ECONOMICAL-EASY TO USE.

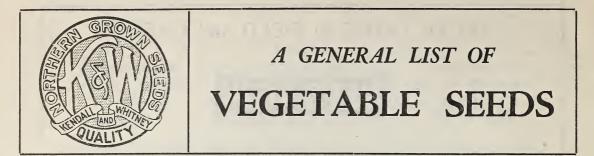
The 1-A size bottle will inoculate: Clovers 15 lbs., alfalfa 20 lbs., Canada field peas 100 lbs., vetch 60 lbs., soy beans 75 lbs.; other sizes in relative proportion. Place seed in a pile, fill bottle with water, add a little sugar, shake and moisten seeds; when dry, plant in usual way. This is infinitely easier, safer and better than the old, laborious soil transfer method.

We have a special composite culture for garden peas, beans and sweet peas; ask for No. 5, 50 cts., and you will insure large, luscious peas and beans, and abundant sweet pea blossoms of wonderful coloring.

When ordering, be sure to specify the kind of seed you wish to inoculate.

Prices: 1-acre size, \$1.00; 3-acre size, \$2.50; 12-acre size, \$9.00.

Roots like this mean bigger yieldsbetter soil. Full directions accompany each bottle. We recommend that you use Farmogerm.



We forward seeds by **Mail, Express or Freight** as the purchaser may wish. When ordered by mail, add postage for beans, corn and peas at the rate of six cents per pound to catalog prices, and for larger shipments by mail, see Parcel Post rates on page 2 of cover.

# VALUABLE TABLE FOR PLANTING.

NAME OF VEGETABLE.	WHEN TO PLANT.		DEPTH TO PLANT.	DISTANCE APART.	TIME OF MATURITY.
NAME OF VEGETABLE.	Hotbed.	Open Ground.	Inches.	Inches.	TIME OF MATURITI.
Asparagus		April or May	1	Transplant 12 x 36	3rd year from roots
Beans, Pole		May and June	2	Poles 36 x 36	August to frost
Beans, Dwarf		May to July	2	Thick drills, 24 apart	45 days
Beets		May to July	1	Thin to 5 x 15	50
Brussels Sprouts	March	May and June	1/2	Transplant 12 x 18	150 **
Cabbage, Early	March	April and May	1/2 1/2 1/2 1/2 1/2	Transplant 18 x 24	100 ''
Cabbage, Late		June	1/2	Transplant 24 x 36	100 "
Carrot		May and June	1/2	Thin to 5 x 15	100 "
Cauliflower	April	May and June	1/2	Transplant 24 x 36	100 "
Celery	March	May	Barely cover	Transplant $2 \ge 4$ , in flats	170 "
v			(1 Early	(Drills 10 x 30	
Sweet Corn		May to June	11/2 late	Drills 12 x 48	60 to 90 days
Cress		May to July		Thin to 3 x 12	40 days
Cucumber	March	May to July	14 1/2 14 1/2 14 1/2 1/2	Hills 48 x 48	50 to 75 days
Dandelion		May	I/	Thin to 6 x 12	Following spring
Egg Plant	April	June	1/2	Transplant 36 x 36	135 to 150 days
Endive		June to August	1/	Transplant 12 x 12	45 days
Kale		June to August	1/2	Transplant 12 x 18	150 "
Kohl Rabi		May to July	1/2	Thin to 6 x 18	110 "
Leek		April and May	1	Transplant 5 x 12	100 "
Lettuce	March	April to August	14 1	Transplant 12 x 12	25 to 60 days
Melons, Musk	April	May and June	1	Hills 60 x 60	120 days
Melons, Water		May and June	ī	Hills $96 \times 96$	110
Onion		April and May		Thin to 5 x 18	100 to 150 days
Parsley		April and May	1/2	Thin to 6 x 12	45 days
Parsnips		April and May	1/2	Thin to $5 \ge 18$	140
Peas		April to July	1/2 1/2 1/2 3	Thick rows, 24 apart	40 to 80 days
Pepper	March	June	1/2	Transplant 18 x 24	135 to 160 days
Potato		April to July	2 Early 5 Late	12 x 36	90 to 130 "
Pumpkin		June		Hills 48 x 72	115 days
Radish	March	April to Sept.	/2 1/	Thin to $2 \ge 12$	25 to 45 days
Salsify		Mav	/2 1/	Thin to $4 \ge 12$	Oct. through winter
Spinach	••••	April to July	1/2 1/2 1/4 1	Thick rows, 12 or 15 apart	30 to 40 days
Squash	• • • • • • • • •	June	1	Hills 48 x 72	60 to 130 "
Tomato	March	June	1	Transplant 36 x 36	100 to 150 ''
		Aprilto August		Thin to 4 x 18	60 to 75 "
Turnip	•••••	Aprilto August	/2	1 HIL 00 4 A 10	00 10 10

# ASPARAGUS.

Sow early in May, thinly, in rows one inch deep and two feet apart. The next season plant in drills, two inches deep and two feet apart, spreading the roots well out in ground thoroughly manured and trenched, at least two feet deep.

One ounce will produce about 200 plants; 4 to 5 pounds to the acre.

### **BEANS**—Dwarf or Bush.

A succession of sowings can be made from the first week in May until August. Plant in drills about two inches deep, and from eighteen inches to two feet apart, according to the richness of the soil; the poorer the soil the closer they can be planted; the plants should be about three inches apart. Frequent pickings insure a more prolonged bearing season. Avoid jerking the plant, as this frequently disturbs young feeding roots. Use the finger nails to sever the stems. Do not pick when bushes are wet, as this may cause blight and rust. For succession in the home garden plant thirty feet of row every other week up to August.

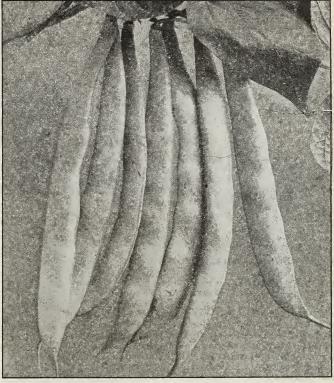
Two pounds are sufficient for 100 feet of drill; 90 pounds for one acre in drills.

Beans ordered by mail are subject to an extra charge of six cents per pound for postage. For larger shipments by mail, see rates on page 2 of cover.

### English Beans. Broad Windsor. Plant as early

in the spring as the ground can be worked, from two to four inches apart, in drills from twenty-four to thirty inches apart. As soon as the plants are in full blossom, and the lower pods begin to set, pinch off the tops; this will in-sure the filling of the pods and hasten the maturity of the seed.

1 lb. 2 lbs.



GREEN PODDED BUSH BEANS.

### ABBREVIATIONS.

Еу. М. Еу. М.	Extra early. Early. Medium early. Medium. Medium late.	R.		Green. Yellow. Mottled green. Mottled yellow.	No S. V. L. S. S. S. S.	No string. Very little string. String. Strong string.
L. •	Late.	5. 2.	Suddio Suon.			

Most flats become thick-flat and most thick-flats become semi-round as they near maturity.

VARIETY.	DESCRIPTION.				PRICE.				
		1	1		T.		1 lb.	2 lbs.	8 lbs.
Burpee's Bush Lima. For shell bean only	L.	F.		G.	S.		.35	.65	
Burpee's Stringless Green Pod. Extra fine quality.	Ex. Ey.	R.		G.	No	S.	.30	.50	\$1.75
Bountiful. Hardy	Ey.	T. ]	F.	G.	V.	L.S	30	.50	1.75
Full Measure. Handsome smooth pod. (See page 18)	Ey.	R.		G.	No	s.	.40		2.75
Dwarf Horticultural. Good quality, stringless				M. G.	No	S.	.30		1.75
Low's Champion. One of the best, either string or shell	Ey.	T. 1	F.	G.	No	s.	.30		1.75
Long Yellow Six Weeks	Ey.	T. 1	F.	G.	v.	L.S	30	.50	1.75
Improved Refugee. Fine quality, prolific, fine for can-					1				
ning	M. L.	R.		G.	No		.35		2.25
Brittle Wax. Fine, rather delicate	Ey.	R.		Y.	No		.30		1.75
Black Wax. Superior quality, prolific	Ey.	R.		Y.	No	S.	.30		
Currie's Rust-Proof Wax. Tender and good quality	Ey.	F.		Y.	No	S.	.30		1.75
Golden Wax, Improved	Ey.	<b>T.</b>	F.	Y.	No	S.	.30	.50	1.75
Golden Wax, Keeney's Rustless. Superior quality,					1				
almost rustless	Ey.	<b>T</b> . 1	F.	Υ.	No	S.	.30	.50	1.75
Sure Crop Stringless Wax. Extra quality, stands wet					1			c .	
weather well	Ey.	<b>T.</b>	F.	G.	No	S.	.30	.50	1.75
Wardwell's Kidney Wax. Vigorous grower, large					1				
yielder	Ey.	'T. ]	F.	G.	No	S.	30.	.50	1.75

**BEANS**-Continued.

### **Field Varieties**

Variety.	DESCRIPTION.			PRIC	ce.	
Jacob Cattle. Very prolific; fine for baking	M. L. Ey. Ey. Ex. Ey. Ey.	F. F. R. F. F.	G. G. G. G. G. G.	S. S. S. S. S. S. S. S. S. S. S. S. S. S.	1 lb.         2 lb           .20         .3           .20         .3           .20         .3           .20         .3           .20         .3           .20         .3           .20         .3           .20         .3           .20         .3           .20         .3           .20         .3           .20         .3           .20         .3	5 5 5 5 5 5 5 5

### **BEANS**—Pole or Running.

The planting of the various sorts of pole beans should be delayed a week or more after the first planting of the early dwarf sorts. They succeed best in sandy loam, which should be liberally enriched with short manure in the hills, which are formed, according to the variety, from three to four feet apart; from five to six seeds are planted in each hill, about two inches deep.

Two pounds will plant 150 hills ; 20 to 24 pounds to the acre.

VARIETY.	DESCRIPTION.				PRICE.			
Golden Cluster Wax. Good either as a shell or snap bean	F. R.	Y. G.	S. V.	L.	s.	1 lb. .35 .35	.60	\$2.25
with the second state of the second	R. T. F. F. F. F.	Y. G. G. G. G.	No S.	L. S.	S.	$.35 \\ .35 \\ .40$	$.60 \\ .60 \\ .75$	2.75 2.25 2.25 2.75 2.75
shell bean	T.F. R.	G. G.		L. L.				$2.25 \\ 2.25$

ALL BEANS-INOCULATE, FOR BEST RESULTS, WITH NITROGEN FIXING BACTERIA.

## BEET.

The best results are obtained on a deep, rich, sandy loam. For early use sow as soon as the ground will admit, in drills fourteen inches apart, and thin to four inches; for the main crop, sow the first week in May, and for winter use as late as June. The soil should be deeply manured and well cultivated. In lifting and storing the roots, care must be taken that they are not bruised.

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

CRIMSON GLOBE. A second early variety, remarkable for its smooth skin and	Pkt.	Oz.	¼ lb.	Lb.
fine shape	.05	.20	.50	\$1.25
Crosby's Egyptian. As early as the Egyptian, shape more round, flesh sweet			~ ~	
and tender.	.05	.20	.50	1.25
<b>DETROIT DARK RED.</b> Similar in shape to the Dewing's, of dark red color, with small tops. A favorite with market gardeners	05	.20	50	1.25
Dewing's Blood Turnip. Of fine form and flavor, blood red. A desirable variety	.00			
	.05	.20	.50	1.25
Dirigo Extra Early. A rich, blood-red beet of fine grain and flavor, earlier than			-	
the Egyptian or the Eclipse	.05	.20	.50	1.25
<b>Early Wonder.</b> A popular variety among market gardeners. It matures very rap- idly and is so uniform in growth that the crop can be lifted practically at one time	.10	.20	.60	2.00
<b>Eclipse.</b> This variety is about as early as the Egyptian, but larger and of finer quality; color, dark crimson	05	90	FO	1.05
	.05	.20		1.25
Edmand's Early Turnip. A variety of handsome round shape. The skin is				
deep blood red in color, the flesh very dark and exceedingly sweet and tender in				
quality	.05	.20	.50	1.25
Egyptian Blood Turnip. Very early and of rapid growth; color, deep crimson;				
of excellent quality	.05	.20	.50	1.25
Swiss Chard (Lucullus). The leaves of Swiss chard are used as greens, cooked				
in the same manner as spinach, and the large ribs are prepared like asparagus,				
in which manner they are delicious. The "Lucullus" is the largest and the best				
variety of Swiss chard	.05	.20	.50	1.25

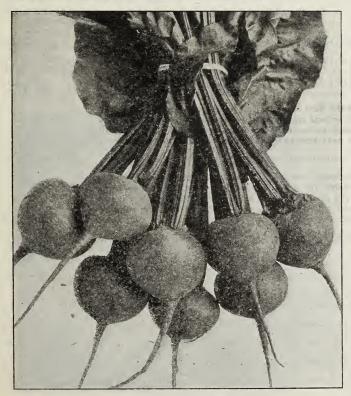
### **BEET**-Continued.

### Mangel-Wurzel and Sugar Beets.

These beets, which have for a long time been grown abroad by stock raisers and dairymen, can be used to advantage in place of some of the more expensive mill feeds, and should be planted much more extensively than they are. For poultry they furnish a valuable winter feed, much relished by the hens. From ten to fifteen tons can be raised on one acre.

Sow in May or June-5 pounds per acre.

Allen's Mammoth Long Red Mangel Wurzel. A variety producing roots of mammoth size		¼ lb. .30	
Golden Tankard Mangel Wurzel. Bright yellow; very productive	.05	.30 🚆	.75
Norbiton Giant Mangel Wurzel. Extra fine long red; very large.	.05	.30	.75
<b>Sludstrup Mangel Wurzel.</b> A Danish variety, richer in food value than other sorts. Roots are large, heavy and easy to harvest.	.05	.30	.75
Sutton's Prize Winner Mangel Wurzel. Considered to be the very best of the yellow Mangels. The massive roots are of a deep globe shape, very clean in outline, with a sin- gle tap-root, and carry a comparatively small amount of foliage. This variety may be relied upon to yield a profit- able return on practically every class of soil that is capable of growing Mangels, and when stored in good condition the roots keep sound until the following summer. (See page 18)	.10	.50	1.50
Lane's Imperial Sugar. A greatly improved variety of the White French Sugar.	.05	.30	1.00
White French Sugar. Largely cultivated for feeding stock	.05	.30	1.00



DETROIT DARK RED BEET. Prices subject to change without notice. (See note on page 2.)

# **BROCCOLI.**

ALLEN'S MAMMOTH LONG RED MANGEL

WURZEL.

Broccoli is nearly allied to the cauliflower, and may be regarded as a variety of that delicious vegetable. It is hardy and sure to head, but inferior in flavor. It succeeds best in deep, rich, moist soil and in cool weather. Seed should be sown at the same time and plants receive the same general culture as cabbage.

One ounce of seed will produce about 2,000 plants.

Purple Cape.	Heads P	kt. Oz.
greenish purple;	medi-	
um size and com	pact	10.60

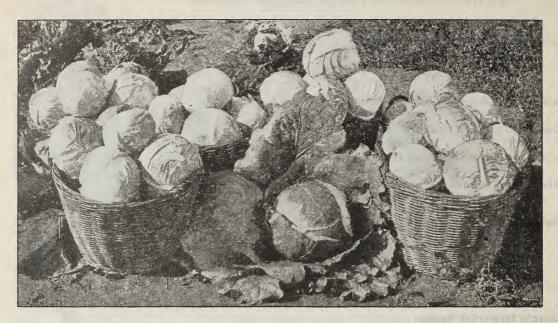
# BRUSSELS SPROUTS.

A species of the cabbage family, producing along the stem small sprouts like little cabbages. Grown in the same manner as winter cabbage.

One ounce of seed will produce about 2,500 plants.

Improved Long Island. A vari-	Pkt.	Oz.	¼ lb.
ety of excellent quality	.05	.50	\$1.50
	.05	.50	\$1.50

CABBAGE.



The cabbage is one of the most important vegetables, and some of its varieties are universally cultivated. The ground must be highly manured, deeply dug or plowed, and thoroughly worked, to insure good, fullsized heads. A heavy, moist and fresh loam is the most suitable. The early sorts should be sown very early in the spring in hotbeds, or later in the open ground. Eighteen inches by three feet apart is the common distance.

One ounce will produce about 3,000 plants; 4 to 5 ounces to the acre.

	Pkt.	Oz.	¼ lb.
All Seasons. Larger than Henderson's Early Summer, nearly as early; very solid and sure heading	.10	.35	\$1.20
<b>COPENHAGEN MARKET.</b> One of the best large, round head, early cabbages in cul- tivation, the type being thoroughly fixed and nearly all the heads maturing at the same time. The plant is short-stemmed; heads set near the ground, are very solid, with a small	.10	.40	1.55
core, and of fine quality. One of the very best early cabbages for market gardeners	.10	.40	1.00
Danish Ball Head. (Imported.) Heads round and solid. A good winter variety	.10	.40	1.50
<b>DANISH BALL HEAD.</b> (Cape Elizabeth grown.) A valuable, round, solid winter variety. Is a long keeper, and profitable for shipping, keeping long after other sorts have gone. This particular strain is the result of years of selection, and is in great demand by those who appreciate the best. The slight increase in price over the regular seed is more than offset by the increased yield	.10	.60	2.25
Early Jersey Wakefield. A standard early variety for home use or market. Heads somewhat pointed.	.10	.35	1.25
Henderson's Early Summer. One of the earliest of large cabbages, coming in but a few days later than the Wakefield; heads of large size, very solid and compact	.10	.35	1.25
Improved American Savoy. Very sweet and tender; good-sized, firm heads; very reliable and much esteemed for family use	.10	.35	1.25
Mammoth Red Rock. Used almost exclusively for pickling	.10	.35	1.25
Pe-Tsai (Chinese Cabbage). Grows similar to Cos lettuce	.10	.35	1.25
Premium Flat Dutch. A standard late variety	.10	.35	1.25
Stone-Mason Drumhead. One of the best for a main crop	.10	.40	1.50

# CARROT.

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, two to two and one-half feet apart, and for table use sow the smaller varieties in rows sixteen to eighteen inches apart. For early crops, cover one-half an inch deep and thin to three inches apart in the rows; for late, cover three-fourths of an inch deep and thin to four inches.

One ounce to 100 feet of drill; 3 to 4 pounds to the acre.

<b>Chantenay.</b> A choice variety; longer than	Pkt.	Oz.	¼ lb.	Lb.
the Scarlet Horn, and a little broader at the top	.05	.20	.50	\$1.50

**Danver's Half Long.** In form it is midway between the Long Orange and Scarlet Horn. The root is of a rich, dark orange color and grows very smooth. Very productive and keeps well .....

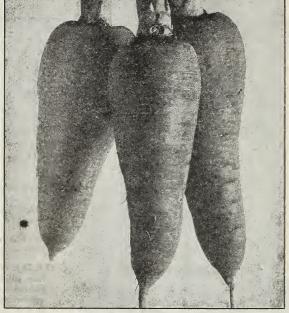
**Early French Forc**ing. The earliest variety; valuable for forcing .....

.05 .20 .50 1.50

.50

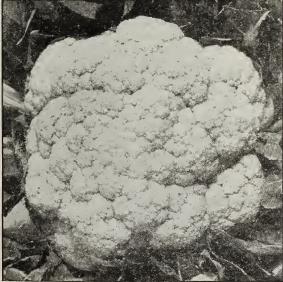
1.50

.05 .20



DANVER'S HALF LONG CARROT.

EARLY MARKET. A thick, stump-rooted early variety of brilliant color, broad at the top, gradually getting smaller towards the root, which is blunt. An excellent market sort ..... .05.20 .50 1.50**Hutchinson.** An improved strain similar to the Danver's, but of larger size. It is of excellent quality and in great favor with market gardeners, who find it a ready seller on account of its attractive appearance..... .10 .25.75 2.50Improved Long Orange. The best late variety. Roots of large size, heavy cropper; an excellent keeper. .05 .20 .50 1.50Large White Belgian. Large, long-rooted variety; valuable for feeding stock... .05 .20 .50 1.50Early, roots almost cylindrical, very smooth, and grows about six inches Nantes. long; the flesh is entirely red, very sweet, and almost entirely without a core.... .05 .20 .50 1.50**Oxheart.** Very thick



GILT EDGE CAULIFLOWER.grown largely for the market.Prices subject to change without notice.(See note on page 2.)

and short, fine grained and sweet... .05 .20 .50

### CAULIFLOWER.

Any soil that will grow early cabbages will grow cauliflower, as their requirements are almost similar, but as the product is more valuable, extra manuring and preparation of the soil will be well repaid. The seeds may be sown in the hotbed in March or April, and transplanted to open ground about the first of May.

One ounce will produce about 2,500 plants.

	Pkt.	Oz.
Carter's Autumn Giant.		
A large, late variety	.10	\$1.00
<b>Extra Early Dwarf Erfurt.</b>		
The earliest variety; large,		
compact heads, of fine quality	.15	2.50
GILT EDGE. Large, heavy sort.		
One of the best and surest of		
all the sorts now in cultivation	.15	2.75
Henderson's Early Snow-		
<b>ball.</b> One of the best early		
sorts. Very reliable and		
grown largely for the market.	.15	2.50

1.50



# CELERY.

To have celery early it should be sown in a hotbed, quite early in the spring, and when three inches high plant out in a well-prepared bed, which must be covered in frosty weather. For the principal crop sow early in the spring, very shallow in the seed bed, and when the plants are about six inches high transplant them six inches apart into trenches for blanching. Dig the trenches four feet apart, a foot wide and ten inches deep. Fill in five or six inches of well-rotted manure, and mix thoroughly half a spade deep with the earth at the bottom. The tops of the plants should be shortened before they are set. Earth up to blanch three or four times during their growth, taking care that no earth falls in the center of the plant.

One ounce of seed produces about 4,000 plants.

<b>Boston Market.</b> A favorite variety, re- markable for its tender, crisp and suc- culent stems, and its peculiarly mild flavor; keeps well	Pkt.		¼ lb. \$1.50
<b>Giant Pascal.</b> An easily blanched variety; superior for late use	.10	.50	1.50
<b>GOLDEN SELF-BLANCHING.</b> A fine solid variety of a beautiful waxy, golden color; very thick stalks of ex- cellent flavor; growth close, compact and of medium height	.10	.50	1.50
<b>GOLDEN SELF-BLANCHING CELERY.</b> <b>Henderson's White Plume.</b> Crisp, solid, and possessing a sweet, nutty flavor; requires very little labor in blanching. Very early and handsome.	.10	.50	1.50
<b>Winter Queen.</b> An excellent winter keeper, recommended especially to market gardeners. Grows a thick stalk and has a large heart. The color is creamy-white and very attractive.	.10	.50	1.50
Soup Celery. (Not for sowing.) Used for flavoring pickles, soups, etc	.05	.10	.30

....

# CHARD-Swiss (or Spinach Beet).

Swiss chard is sometimes called Sea Kale Beet. After once having used Swiss chard for greens we be-lieve your garden will always have at least a row of it, for it is delicious. The leaves are used as greens, and served like spinach. The mid-ribs may be cooked like asparagus. Cuttings may be made all summer, as it can be cut down to the ground and new shoots will soon spring up and make fast growth.

		Pkt.	Oz.	1/4 lb.	Lb.
Lucullus.	Largest and best variety	.05	.20	.50	\$1.25

### CHERVIL.

<b>Curled Chervil.</b>	An aromatic sweet herb.	The young	leaves are used in soups and	Pkt.	Oz.	¼ lb.
salads. Sow t	ninly in May, in drills half a	n inch deep,	one foot apart	.05	.25	.85

# CHICORY.

One ounce to 100 feet of drill.

	Used to mix with or as a substitute for coffee. The roots are taken			
up, washed, cut	t in small pieces and carefully dried before being used. Cultivation			
same as the car	erot	.05	.35	1.25

# **CORN**—Sweet.

The sweet or sugar varieties, being liable to rot in the cold, wet ground, should not be planted before the middle of May, and for a succession continue planting every two weeks until July, in rich, well ma-nured ground, in hills three feet apart each way, covering about an inch, and thin out to three plants to a hill, or plant in rows four feet apart, and to stand eight inches apart in the rows.

One pound to 125 hills; 20 pounds to the acre.

Corn ordered by mail is subject to an extra charge of six cents per pound for postage. For larger shipments by mail, see rates on page 2 of cover.

2.25

1 lb

.40

.40

1/2 lb.

.25

.25

### **CORN**-Continued.

### **Early Varieties.**

- Pkt. 1 lb. 2 lbs. 121 lbs. "K. & W." EARLY HONEY-SUCKLE. The earliest variety yet produced, being very tender and delicious. One of the best .10 .30 .55 \$3.00 for early market..... . . . . . . . . . EARLY MAYFLOWER. A very early variety, being from seven to ten days earlier than the Cory. Is a perfectly white corn, eight, ten and twelve rowed, very productive, and for so early a variety .10 .20 .35 is of excellent quality..... 2.00**Early Crosby.** An excellent early variety. The ears are five to six inches long and the grains are white, sweet and tender ..... .10 .20 .35 2.00 Golden Bantam. An early variety. The ears are medium size, but thickly set with delicious yellow kernels. The quality of this variety is superb, and it has
- **Delue's Golden Giant.** Larger Pkt. than Golden Bantam, equally early, and of fine quality. (See page 19). . .10 **Charlevoix.** A new variety, well



EARLY YELLOW FIELD CORN.

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	1 All		
0			
0		A April	
		1	An
	W. B.S. M. Marthante		

GOLDEN BANTAM SWEET CORN.

### Medium and Late Varieties.

Seymour's Sweet-Orange. Is Pkt. 1 lb. 2 lbs. 121 lbs. a most desirable second early or mid-season variety, growing vigorously from five to six feet in height, and producing an average of two good ears to a stalk. The ears are ready for use a few days later than those of Golden Bantam, and are from six to seven inches in length, with twelve to fourteen rows of deep, rather slen-.10 .25 .40 \$2.25 der grains of a light canary yellow Stowell's Evergreen. A late variety of excellent quality, remaining longer in the green state 2.00 than any other kind ..... .10 .20 .35

### **CORN**–Continued.

# FIELD AND ENSILAGE CORN.

(56 pounds to the bushel.)

<b>Early Yellow Canada.</b> The variety most widely grown in northern New England. An early eight-rowed flint corn with handsome ears and comparatively small cobs, filled to the tips with large, broad kernels		21bs.	
milde to the type with harge, broad herders		•=0	41.20
Longfellow. A fine field variety, similar to Yellow Canada, having very long ears, small cob and large kernel	.12	.20	1.25
<b>Eureka</b> ( <b>Ensilage</b> ). One of the tallest and best varieties of ensilage corn, producing a large amount of fodder to the acre			
<b>Improved Leaming</b> ( <b>Ensilage</b> ). An early, very productive variety. One of the best for ensilage; profitable as a green fodder			
<b>Red Cob</b> ( <b>Ensilage</b> ). A pure white corn. Is tender and juicy, has short joints, and grows to a great height, with an abundance of leaves		Pric	
<b>Early Sanford</b> ( <b>Ensilage</b> ). Very early; ears white; excellent for fodder and ensilage	ł	on	
<b>Sweepstakes</b> ( <b>Ensilage</b> ). We recommend this as the best ensilarge corn we know of, because of its earliness and the great amount of ensilage which it produces, as high as twenty to twenty-five tons to the acre. When many varieties of ensilage		applic	a-
corn are just beginning to form ears, Sweepstakes Corn shows good-sized ears. As all of our Sweepstakes corn has been run through a three-eighths inch screen, you get only large, plump kernels which test ninety per cent. germination, or better, and as twelve quarts of corn will plant an acre sufficiently thick to give the best results, the price of seeding an acre is not greatly more than if you used a cheaper corn, and		tion.	
the yield will be much larger. (See page 17)	J		

# **CRESS** (Peppergrass).

A well-known salad. Requires to be sown thickly and covered very slightly. Sow at frequent intervals to keep up a succession, as it soon runs to seed.

One ounce will sow about 100 feet of drill.

8

Extra Curled.	Very fine; may be cut two or three times			14 lb. \$.35
	A hardy perennial aquatic plant, growing in water along the margins	.10	.60	2.00

# **CUCUMBER.**

StimUplanT Makes a Wonder Garden

The cucumber is a tender annual, and therefore should not be planted or set out in the open air until there is a prospect of continued warm and pleasant weather. Cucumbers succeed best in warm, moist, rich, loamy ground. The hills should be four or five feet apart in each direction. When all danger from insects is passed, leave but three or four of the strongest plants in the hill.

One ounce to fifty hills; 2 pounds to the acre.

Boston Pickling. The finest variety to grow for pickles; yields large crops; short,		Oz.	¼_lb.	Lb.	
straight and dark green	.05	.15	.50	\$1.50	
<b>Cumberland.</b> A variety of the Improved White Spine type. Is a splendid table sort and excellent for pickling. Color, deep green, with white tip; flesh firm; very crisp and tender	.05	.15	.50	1.50	
<b>DAVIS PERFECT.</b> The cucumbers grow long and slim, sometimes measuring twelve inches in length. The color is a rich, dark, glossy green, which they hold until nearly ripe. Very tender and of fine flavor	.10	.20	.65	2.25	

### **CUCUMBER**-Continued.

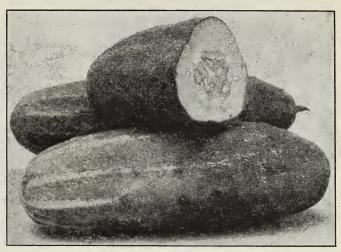
- **Early Frame.** An early standard variety, about five inches long. Pkt. Oz. ¼ lb. Lb. .05 .15 .50 \$1.50
- **Early Fortune.** A prime favorite with market growers because of its extra earliness and the fine deep green color which it holds long after picking. The shape is uniform and the quality all that could be desired.

Pkt.	Oz.	¼ lb.	Lb.
.05	.15	.50	\$1.50

Early Green Cluster. Grows in					
clusters;	early	and pr	oductive.		
Pkt.	Oz.	¼ lb.	Lb.		
.05	.15	.50	\$1.50		

Early Russian. The earliest variety.

Pkt.	Oz.	1/4 1b.	Lb.	
.05	.15	.50	\$1.50	



IMPROVED WHITE SPINE CUCUMBER.

Improved White Spine. Superior for table use; very productive; medium size, straight and well formed	.05	.15	.50	\$1.50
Japanese Climbing. Quick, strong growing vines, which may be trained upon a trellis or poles. Fruit from twelve to sixteen inches in length, skin dark green, flesh pure white, crisp and of fine flavor	.05	.15	.50	1.50
<b>Lemon.</b> A distinct type; nearly round, with the yellow and green markings and smooth skin of the lemon, while flesh is exceedingly tender, crisp and sweet	.10	.15	.50	1.50
Long Green. Long and crisp; a popular and reliable variety for pickling and table	.05	.15	.50	1.50
West India Gherkin. Small, prickly variety; grown exclusively for pickling	.10	.20	.60	2.00
White Wonder. A new variety. Very handsome, with ivory white fruit	.10	.20	.60	2.00
Wood's Early. A very attractive dark green cucumber, combining earliness and (See page 19)	.10	.20	.65	2.25



# DANDELION.

A hardy perennial plant, with broad, thick leaves, affording one of the earliest as well as one of the most healthful of spring greens. Sow as early as the weather will permit, in good, well-enriched soil, in rows twelve inches apart, covering seed one-fourth of an inch deep, the earth firmly pressed over the seed.

One ounce to 150 feet of drill; 1 pound will sow an acre.

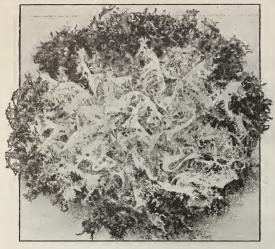
		Pkt.	Oz.	¼ lb.
	French Thick-			
Leaved.	The best variety	.10	.80	\$3.00

# EGG PLANT.

The egg plant will thrive well in any good garden soil. Sow in the hotbed and when two or three inches high prick out into pots, or rows two and one-half to three inches apart. When the weather will permit, transplant into good, rich soil, thirty inches apart each way.

One ounce will produce 1,000 plants.

	Pkt.	Qz.
New York Improved Large Purple. Most popular variety. The fruit is		
large, nearly round, dark purple and of excellent quality	.10	.65
<b>Pearl.</b> White: choice for ornamental	•10	.00
work	.10	.65



ENDIVE.

ENDIVE.

For early use, sow in May, scattering the seed thinly in drills ten inches apart, covering it lightly, and for a succession, every two or three weeks until midsummer. The plants must be blanched before using, which is accomplished by gathering the large outer leaves to a point at the top and tying them together.

One ounce will sow 150 feet of drill.

<b>Broad-Leaved Batavian.</b> (Escarolle.) Variety having wide, thick leaves, straight at the edges and curved toward the center. Color, dull green.	Pkt.		1/4 lb.
the center. Color, aun green.	.05	.20	. 10
<b>Green Curled.</b> Has very curly leaves, the outer edges being much indented and crested.			
An attractive plant and one of the best varieties	.05	.20	.75

# KALE (Borecole).

Sow early in May in a prepared bed, covering the seed lightly. Transplant in June, in rows three feet apart and two feet apart in row, and treat in the same manner as for cabbage. Kale is improved by a little frost, giving it a more delicate flavor.

### One ounce to 150 feet of drill.

# KOHL-RABI (Turnip-rooted Cabbage).

A vegetable intermediate between the cabbage and turnip. The edible part, the bulb, grows on a stalk a few inches above the ground. It is best cultivated by sowing the seeds in rows in May, June and July, according to latitude. Rows should be sixteen to eighteen inches apart and plants six inches apart in row.

One ounce will sow about 200 feet of drill.

Early Purple.	Differing from the white only in color, being of a bluish purple	.05	.25	.75
Early White.	Flesh white and tender. The best market sort	.05	.25	.75

### LEEK.

The leek is very hardy and easily cultivated. It succeeds best in a light, well-enriched soil. Sow as early in the spring as practicable, in drills one inch deep and one foot apart. When six or eight inches high they may be transplanted in rows ten inches apart each way, as deep as possible, that the neck, being covered, may be blanched.

One ounce of seed to 150 feet of drill.

# LETTUCE.

Lettuce thrives best in rich, moist ground. Sow the seeds in hotbeds in February or March, and transplant into a sheltered border with a southern exposure. For successive crops, sowing may be made in the open ground as early as spring opens and continue until July. Transplant or thin plants to stand eight to twelve inches apart

One ounce to 125 feet of drill.

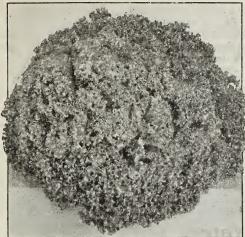


### MARTYNIA.

A strong-growing, hardy annual, with curious-shaped seed-pods, which, when young and tender, are highly prized for pickling. The pods are produced in great abundance and should be gathered when about half grown. Plant in May or June in rows two feet apart, making hills about a foot apart.

One ounce will plant 50 hills.

#### LETTUCE-Continued.



BOSTON CURLED LETTUCE.



TENNISBALL LETTUCE.

	Pkt.	Oz.	¼ lb.
Big Boston. Fine for forcing in cold frames, and for planting in open ground	.05	.15	.40
Boston Curled. A variety of great beauty and of very superior quality. Leaves		•10	110
beautifully curled, attractive on table	.05	.15	.40
Brown Dutch. A large, hardy variety	.05	.15	.40
Deacon. Large and very solid heads, crisp and tender	.05	.15	.40
Early Curled Silesia. Fine for summer use	.05	.15	.40
<b>Giant Crystal Head.</b> Outside leaves curled, with red edges; heads large and solid.	.05	.15	.40
Grand Rapids. This sort is the best and most popular loose-leaved lettuce, being of	.00	.10	.40
quick growth. Fine for greenhouse forcing and hardy	.05	.15	.40
<b>Hanson.</b> Heads very large, solid, tender, crisp and of fine flavor; color, beautiful green	.05	.10	.40
outside and white within	.05	.15	.40
Hittinger's Belmont Forcing. Larger than the White-Seeded Tennisball, nearly	.00	•10	.10
as early and of excellent quality; a choice strain for forcing	.10	.60	2.00
Iceberg. A large-heading variety; crisp and brittle, and color dark green, lightly tinged			
with brown on top of the head, leaves curled on the edges	.05	.15	.40
May King. Very early, medium size and tender; heads light green, with center leaves			
tinged with brown and with the hearts clear yellow	.10	.20	.75
Mignonette. Small, compact, creamy-yellow heads tinged outside with russet; of su-			
perior quality, sweet, crisp and tender, very early and hardy; excellent "all seasons"			
variety	.05	.15	.40
New York or Wonderful. This is one of the best summer lettuces. It resists the			
hot weather, is very slow to run to seed, and is a sure header under the most trying			
conditions. The outer leaves are of a green color; the inner ones blanch to a creamy white, crisp, tender, delicious and sweet. The heads often measure fifteen inches	.10	.30	.85
<b>Prize Head.</b> One of the very best loose-bunching or non-heading varieties. Color	.10	.00	.00
bright green tinged with brownish red; very curly and of remarkably fine flavor.			
Grows quickly and all except the outer row of leaves are very brittle. It is probably			
the most easily grown lettuce in cultivation	.05	.15	.40
Salamander. A fine summer lettuce. Is slow to run to seed, and will stand the			
drought and heat better than other varieties	.05	.15	.40
<b>Tennisball, Black-Seeded.</b> Popular for open-air culture; heads compact, crisp			
and tender	.05	.15	.40
Victoria Cabbage. Hardy and fine for early sowing	.05	.15	.40
White Paris Cos (Romaine.) A sort with long, narrow, upright leaves; does not	-		- 10
head, but when tied up blanches very easily	.05	.15	.40

#### **MELON-Musk.**

Melons thrive best in a moderately enriched, light soil. The hills should be six feet apart each way. After all danger of frost is past, plant twelve or fifteen seeds in each hill, and when well up thin out to three or four plants.

One ounce to 60 hills; 2 to 3 pounds for an acre.

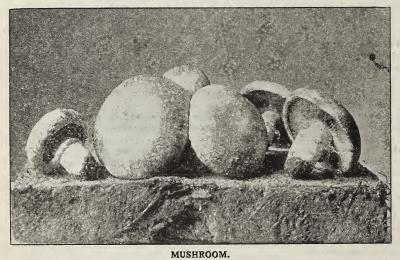
#### **MELON**—Continued.

	Pkt.	Oz.	¼ lb.
Banana. So called on account of its shape. Straw color; flesh a rich salmon	.05	.15	.50
<b>Bender's Surprise.</b> Very popular variety in the East. A very delicious, large, salmon-fleshed melon with superior shipping and keeping qualities. Medium early.	.10	.15	.50
<b>DELICIOUS GOLD LINED ROCKY FORD.</b> Of a fine, uniform shape, slightly oval; meat thick, green, and light gold toward center. A superior melon in flavor, and			
in every way	.10	.20	.75
Emeraid Gem. Medium size; flesh rich salmon, of delicious flavor and superior			
quality; early and prolific	.05	.15	.50
<b>HONEY DEW.</b> The delicious, honey-like flavor of this new melon met with instanta- neous public favor and created a sensation wherever used. The fruit is good size,			
weighing eight to ten pounds; light-colored, smooth skin; thick, light green flesh	.10	.20	.75
Large Round Yellow Cantaloupe. Flesh reddish-orange, sweet and of good			
flavor; an early and productive variety	.05	.15	.50
Large Yellow Musk. A very large variety, deeply ribbed and thickly netted; flesh			
salmon-yellow, thick and sweet	.05	.15	.50
Montreal. Large, round, netted; flesh thick and light green	.05	.15	.50
Rocky Ford. Flesh green; medium size; oval shaped	.05	.15	.50
Surprise. Very early; medium size; salmon colored; flesh of superior flavor	.05	.15	.50

#### **MELON-Water.**

Plant in hills eight feet apart and cultivate same as musk melon.

.05	.10	.35
.05	.15	.50
.05	.10	.35
		-
.05	.10	.35
.05	.10	-35
	.05 .05 .05	.05 .10



in a warm cellar or shed in winter, or in the open air in summer. Take partially dry, fresh horse manure and lay it in a heap to ferment; turn and mix it well every few days, and when well fermented it may be made into a bed, mixing it well together and beating or treading it firmly. Use a thermometer to thrust into the bed, and note the temperature. When the heat has partially subsided, leaving a temperature of 70° to 80°, put in the spawn, which may be inserted in pieces the size of a walnut, about two inches deep and six inches apart. After about two weeks, cover with fresh soil about two

By mail, add six cents per pound for postage, and for larger shipments by mail, see rates on page 2 of cover.

#### **MUSTARD.**

A pungent salad used with cress. The seed is used for flavoring pickles, etc. S rows and cut when two or three inches high. One ounce to 40 feet of drill.	sow in	May	thic	kly in
rows and cut when two or three inches high. One ounce to 40 feet of drill.	Pkt.	Oz.	¼ lb.	Lb.
Brown. More pungent in flavor than the white	.05	.15	.40	\$1.25
White London. Mild flavor. Best for salads	.05	.15	.40	1.25

Prices subject to change without notice. (See note on page 2.)

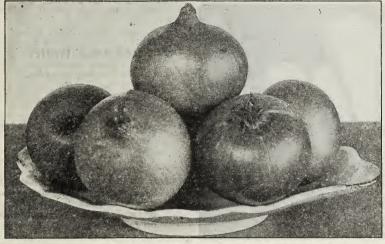
34

MUSHROOM SPAWN. Mushrooms may be grown

### **OKRA** (Gumbo).

Sow about the middle of May, when the ground is warm, in hills about three feet apart; cover seed onehalf inch and thin plants to three in a hill. Keep ground well hoed and earth up around plants to support them. Gather pods while young and tender. Excellent for soups, stews, etc., to which they impart a rich flavor. One ounce will sow 40 feet of drill. Pkt. Oz. ½ lb.

Improved Dwarf Green. An early dwarf and prolific variety, with thick green pods .05 .10



A good crop is impossible unless the soil is very rich and kept clean. Use well rotted manure freely, and get the crop in as soon as possible in the spring, no matter if the weather is cold and unpleasant. Sow in drills one foot apart and cover about one-third of an inch, treading or rolling after sowing, so that the hot, dry atmosphere may not dry up and destroy the sprouting seed. As soon as the plants can be seen in the rows give a shallow working, followed in a few days by another working as close to the plants as possi-ble, and after this a thorough hand weeding. Cultivate if possible once a week, and

ONION.

YELLOW GLOBE DANVERS ONION.

remove by hand any weeds that appear. As soon as the tops die and fall the bulbs may be pulled and placed in small windrows, turning often. Cut off the tops half an inch from the bulbs and store in crates under cover in a uniform temperature a little above freezing.

One ounce to 100 feet of drill; 5 pounds to the acre.

<b>Extra Early Red Globe.</b> Ten days earlier than the Wethersfield, of medium size and deep, rich color; an abundant producer and of good form and flavor, keeping well			¼ 1b. \$1.50	
<b>"K. &amp; W." YELLOW GLOBE DANVERS.</b> Extra choice seed, grown from bulbs especially and carefully selected as to shape; the most popular of all the yellow onions for market and home use. A heavy cropper, good keeper, and of fine, mild flavor. A profitable variety for market gardeners	10	40	1.25	4 50
Large Red Wethersfield. Large size, productive and a good keeper			1.00	
New Queen. A silver-skinned variety, of quick growth and remarkable keeping			1.00	
qualities	.10	.40	1.00	3.50
Prizetaker. Large, pale yellow skin; flesh white; mild flavor	.10	.40	1.00	3.50
White Portugal. A mild and desirable summer variety, flat in shape, extensively				
grown for pickling	.10	.40	1.00	3.50
Yellow Globe Danvers. Grown from selected stock. A standard variety	.05	.30	.75	2.50

#### **ONION SETS.**

Onion sets should be planted near the surface as early in the spring as the ground will permit, in drills about twelve inches apart and four inches in the rows. They produce a very early and profitable crop, and grow in any good soil.

Add six cents per pound if sent by mail, and for larger shipments by mail, see rates on page 2 of						
Japanese Onion Sets. This onion gives a greater yield than any onion set on the market,	1 lb.	8 lbs.				
besides being a good keeper and of fine flavor	.35	\$2.00				
White Onion Sets. Ready in April	.35	2.00				
Yellow Onion Sets. Ready in April	.30	1.75				
The larger quantities prices will be given an explication						

For larger quantities, prices will be given on application.

#### PARSLEY.

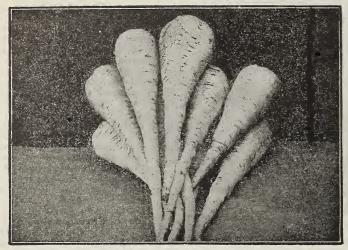
Prices subject to change without notice. (See note on page 2.)

.30

#### PARSNIP.

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

One ounce to 150 feet of drill; 5 pounds to the acre.



ABBOTT'S IMPROVED PARSNIP.

Abbott's Improved. Smooth and quite large; one of the best. Pkt, Oz. ¼ lb. Lb. .05 .15 .50 \$1.50

- Arlington Long White.Rootsvery long and smooth; one of the<br/>best for market gardeners.Pkt.Oz. ½ lb.Lb..05.15.50\$1.50
- Hollow Crown. Roots very long, growing mostly below the surface of the ground. Pkt. Oz. ½ lb. Lb. .05 .15 .50 \$1.50
- **THE DON.** A variety selected for handsome form, size, whiteness of skin and flesh, and solidity of texture. Specially recommended for market trade.

PKt.	Oz.	74 ID.	TD.
.05	.15	.50	\$1.50

#### PEAS.

Peas, for an early crop, should be sown as soon as the ground is in working condition. The soil for their reception should be light, dry and well sheltered. Mild manure has a beneficial effect, but for many of the varieties the soil cannot be too rich. For general crops, the ground should be well manured the previous year, which causes them to yield more abundantly. When grown as a market crop, peas are never staked, and are sown in single rows, two or three inches deep, and from two to three feet apart, according to the variety or strength of the soil. When grown in small quantities for private use, they are generally sown in double rows six or eight inches apart, and the tall varieties staked up by brush.

Extra Farly.

Two pounds will plant 75 to 100 feet of drill; from 84 to 112 pounds to the acre.

INOCULATE THIS SEED WITH FARMOGERM

Peas ordered by mail are subject to an extra charge of siz cents per pound for postage. For larger quantities by mail, see rates on page 2 of cover.

LAUA Larry.									
VARIETY.	Height of Vine.	Length of Pod.	Days to First Pick'g.	COLOR OF VINE.	SHAPE OF POD.	Qual- ity.	PRICE.		•
Blue Bantam Early Eight Weeks.	20	Inches. $4\frac{1}{2}$	77	Med. dark green	Pointed	Fine	1 lb. .30		14 lbs. \$3.00
(See page 20)	$\begin{array}{c} 14\\ 36\end{array}$	$\frac{3}{4}$			Med. pointed		$.45 \\ .30$		4.75 3.00
Gradus Laxtonian. (See page 20) Little Marvel	19	$egin{array}{c} 4 \\ 4rac{1}{2} \\ 3rac{1}{2} \end{array}$	$73 \\ 76 \\ 76 \\ 76$	Med. light green Med. dark green Med. dark green	Med. pointed Med. pointed Blunt		.30 .30 .30	.50	3.00
Marvelous Nott's Excelsior	18 15	3 <sup>3</sup> / <sub>4</sub>	73	Part med. dark green, part med. light green Med. light green	Blunt	Fine Fine	.30 .30	$.50 \\ .50$	$3.00 \\ 3.00$
Sutton's Excelsior Thomas Laxton	$\frac{18}{32}$		78 73	Med. dark green Med. light green	Blunt Med. pointed	Fine Fine	.30 .30	$.50 \\ .50$	$3.00 \\ 3.00$
World's Record	36	4	69	Med. light green	Med. pointed	Fine	.30	.50	3.00



Prices subject to change without notice. (See note on page 2.)

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#### PEAS-Continued.

### Second Early.

VARIETY.	Height of Vine.	Length of Pod.	Days to First Pick'g.	Color of Vine.	SHAPE OF POD.	Qual- ity.	PRICE.
Bliss' Everbearing Dwarf Telephone	Inches. 36 30	Inches. 3 $4\frac{3}{4}$	85	Light green Med. light green	Blunt Med. pointed	Fine Fine	1 lb. 2 lbs. 14 lbs. .30 .50 \$3.00 .30 .50 3.00

### General and Late Crop.

VARIETY.	Height of Vine.	Length of Pod.	Days to First Pick'g.	Color of Vine.	Shape of Pod.	Qual- ity.	PRICE.
		Inches.					1 lb. 2 lbs. 14 lbs.
Admiral Dewey		$4^{3}_{4}$	87	Dark green	Pointed	Fine	.30 .50 \$3.00
<b>Carter's Telephone</b>		-					
(improved dark pod)		$4\frac{1}{2}$	83	Dark green	Pointed	Fine	.30 .50 3.00
<b>Carter's Quite Content</b>	48	$4\frac{1}{2}$	83	Dark green	Pointed	Fine	.35 $.65$ $4.00$
<b>Champion of England</b>	60	$3\overline{2}$	85	Dark green	Blunt	Fine	.30 .50 3.00
Duke of Albany	60	$4\frac{1}{2}$	83	Med. green	Pointed	Fine	.30 .50 3.00
Mammoth Sugar (edible		-		0			
pods)	48	4	-95	Med.green	Med. pointed		.40 .75
Prince Edward	60	$4\frac{3}{4}$	85	Dark green	Pointed	Fine	.30 .50 3.00
Prodigious	65	$4\frac{3}{4}$	84	Dark green	Pointed	Fine	.30 .50 3.00
Yorkshire Hero	30	$3\frac{1}{2}$	85	Light green	Blunt	Fine	.30 .50 3.00

#### Field Varieties.

VARIETY.	Height of Vine.	Length of Pod.	Days to First Pick'g.	COLOR OF VINE.	SHAPE OF POD.	Qual- ity.	PRICE.	
Black - Eyed Marrow-		Inches.	-				15 lbs.	60 lbs.
fat White Canada White Marrowfat		$\frac{3\frac{1}{2}}{3}$ $\frac{3\frac{1}{2}}{3\frac{1}{2}}$	95	Light green Light green Light green	Blunt Blunt Blunt	Fine Poor Fine		\$9.00 5.00 9.00

#### PEPPER.

Grown largely for pickles. Sow in hotbeds early in April and transplant to the open ground when the weather is warm and settled. The rows should be two feet apart and the plants fifteen inches apart in the rows. Rich, warm, mellow soil.

One ounce of seed will produce about 2,000 plants.	Pkt.	Oz.
Large Bell. Large and mild flavor; ripens bright red. Used for stuffed peppers	.10	.50
Large Squash. Productive; much used for pickles	.10	.85
Long Red Cayenne. Bright red; very productive; the flesh very pungent	.10	.75
<b>Monstrous Sweet Spanish.</b> A very attractive, red, sweet pepper. The plants are about two and one-half feet high, upright, very compact, vigorous and productive. The fruits are very large and long, frequently seven inches in length and about two inches in diameter, with very thick, mild flesh of excellent quality. The color is deep green when fruit is young, rich red when ripe	.10	.85
Red Cherry. Small, round, smooth, glossy scarlet fruit	.10	.75
Sweet Mountain or Mammoth. Similar to the Bell, but larger	.10	.85

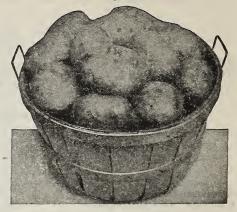
### POTATOES (Maine grown).

10 to 12 bushels, or about 4 barrels, sufficient for one acre. One peck will plant 75 hills.

Prices quoted on application.

**Early Rose.** The pioneer of all the improved varieties, still very popular and highly esteemed. **Extra Early White Rose.** As near perfection as any

- **Extra Early White Rose.** As near perfection as any white potato grown, and one of the most reliable for earliness, quality and productiveness. Is uniform in size and shape, being oblong, with roundish seed end and smooth surface. A grand general crop variety.
- **Gold Coin.** Tubers are of a desirable size, in form slightly oblong, rather broad and quite thick, skin smooth and of a light golden tint, sufficient to make them distinct from the white-skinned varieties; flesh pure white.
- **Improved Green Mountain.** (Certified.) Improved by careful selection of seed. In season it is medium; one of the best yielders and keeps well; color white, form round or oval, smooth skinned and a heavy yielder.
- Irish Cobbler. (Certified.) One of the most reliable of the early varieties. Cream-white color, vigorous grower, ripens uniformly and a good keeper.
- **Spaulding No. 4 Rose.** This is a late maturing, redskinned variety, and one of the best keepers. The potatoes are large, smooth and of excellent quality.

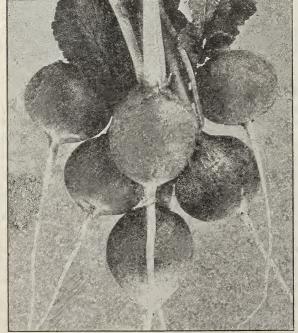


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### PUMPKIN.

Same cultivation as for cucumbers and melons. One ounce for 20 to 25 hills; 3 pounds for an acre.

one cancejer se to se hims, e pechacojer an acre.	PKt.	Oz.	74 10.	LD.
<b>Connecticut Field.</b> Large; used for stock	.05	.10	.35	\$1.00
<b>Mammoth King.</b> The best large pumpkin in use. Immense, globular shaped,				
flattened a little at the end. Skin reddish yellow in color, and flesh rich orange.				
This is unquestionably the best mammoth pumpkin, running very uniform in				
shape and color	.05	.15	.45	1.50
Mammoth Tours. Grows to enormous size, frequently weighing from 100 to 150				
pounds. Oblong in shape, and is mainly used for feeding stock.	.05	.15	.45	1.50
<b>Quaker Pie.</b> A creamy-white pear-shaped pumpkin of rich flavor and a good keeper	.05	.20	.60	2.00
Sugar or New England Pie. For making pies this variety cannot be excelled.				
The pumpkins are small, but very sweet, fine-grained and of the best quality	.05	.15	.40	1.25
Winter Luxury. Generally regarded as the finest quality pie pumpkin. Besides				
its high quality it is the best winter keeper of all. In size about nine or ten				
inches in diameter; skin is a beautiful deep orange yellow	.05	.20	.60	2.00



RADISH.

Radishes thrive best in a light, rich, sandy loam; heavy or clayey soils not only delay their maturity, but produce crops much inferior, both in appearance and flavor. For a successive supply, sow from the middle of April until September, at intervals of two or three weeks. For an early supply they may be sown in a hotbed in February.

One ounce for 100 feet of drill.

Cr	imson Giant	Pkt.	Oz.	¼ lb.	Lb.	
	Forcing. Rich					
	crimson color, flesh					
	white and solid, and of a mild and deli-					
	cious flavor. Grows					
	to a large size with-					
	out becoming pithy.					
	Excellent for forcing	.05	.15	.45	\$1.50	
Ea	rly Scarlet Globe.					
	Fine for forcing.					
	Shape roundish oval;					
	large; brilliant red;					
	flesh white, solid,	05		4.5	1 50	
	crisp and mild	.05	.15	.45	1.50	
Ea	rly Scarlet Tur-					
	nip (white tip).					
	Handsome bright					
	scarlet color, with	05	15	45	1 50	
	white tip	.05	.15	.45	1.50	
otice.	(See note on pa	age	2.)			

SCARLET TURNIP RADISH (white tip). Prices subject to change without notice

#### **RADISH**-Continued.



**RHUBARB.** 

Sow in driils eighteen inches apart and one inch deep. Thin out the plants to six inches apart. In the fall prepare the permanent bed by trenching two feet deep, mixing a liberal quantity of manure with the soil. Into this set the plants about five feet apart each way. The stalks should not be cut until the second year.

One ounc	e should give about 500 plants.	Pkt.	Oz.
Linnaeus.	Early, large, tender and of very fine quality	.05	.25

#### SPINACH.

For spring and summer use, sow in drills one foot apart and one inch deep, as early as the ground can be worked, and every two weeks for a succession. For winter and early spring use, sow in September in well manured ground; cover with straw on the approach of severe cold weather. The New Zealand spinach, which requires more room, may be started from seed early in spring to give greens during the heat of summer.

One ounce to 50 feet of drill; 10 to 12 pounds per acre.	Pkt.	Oz.	¼ lb.	Lb.
Fall or Winter. One of the hardiest for fall planting	.05	.10	.25	\$.75
Long Standing. Dark green; the longest standing before going to seed	.05	.10	.25	.75
<b>New Zealand.</b> Of branching habit; makes a very large plant, which stands drouth well. Leaves thick and fleshy, enduring the entire summer	.10	.15	.50	1.75
<b>Round Thick-Leaved.</b> A valuable variety, with thick, dark green leaves; long standing and hardy	.05	.10	.25	.75
Savoy-Leaved-Bioomsdale. Large, curled and wrinkled leaves; fine market sort. Especially recommended for market gardeners	.05	.10	.25	.75

Market gardeners, and others using large quantities, are requested to write for special quotations.

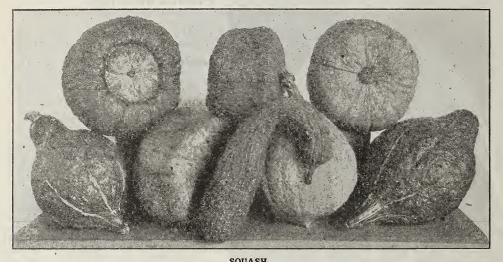
### SALSIFY (Oyster Plant).

Commonly called vegetable oyster. Used stewed, boiled or fried. When cooked has an oyster flavor.				
Sow early in drills fifteen inches apart; cover the seeds with fine soil, an inch and a h	alf deep.			
One ounce to fifty feet of drill.	Pkt.	Oz.	¼ lb.	
Mammoth Sandwich Island	10	.30	\$1.00	

### SQUASH.

Any good, rich soil is adapted to the growth of the Squash. They only thrive well in a warm temperature, as all the varieties are tender annuals, and the seed should not be sown in the spring until all danger from frost is past and the ground is warm and thoroughly settled. The hills for bush varieties should be about six feet apart; for running sorts, ten feet. Leave two plants to a hill.

Running varieties, 1 ounce to 20 hills; 4 pounds per acre. Bush varieties, 1 ounce to 50 hills; 2 pounds per acre.



SQUASH.		-		
Boston Marrow. A much esteemed variety; a good keeper and of excellent flavor	Pkt. .05		<sup>1</sup> / <sub>4</sub> lb. .50	
<b>Delicious.</b> In color it closely follows the Hubbard, and in thickness of flesh it surpasses nearly every variety. No squash compares with it in fineness and compactness of grain, dryness and sweetness and richness of flavor. It is a fall and winter	·	ø		
squash, but does not acquire its best qualities until winter	.05	.15	.50	1.75
<b>Early Prolific Marrow.</b> For fall and winter use this is a very desirable sort. Is of excellent quality and keeps well. Color brilliant orange red	.05	.15	.50	1.25
<b>Hubbard.</b> Standard winter squash, a general favorite and grown more extensively than any other late variety. Color dark green, shell extremely hard, flesh dry,	<u>م</u>		*0	
fine grained and sweet; excellent keeper	.05	.15	.50	1.75
Hubbard, Blue. Hard shell, light blue in color, thick meat, dry and fine quality.				
Favorite winter sort	.10	.30	\$1.00	3.50
Hubbard, Golden. Similar to Green Hubbard, of a rich orange-red color, and of				
fine flavor	.05	.15	.50	1.75
Hubbard, Warted. Dark green color, shell hard and warted; good keeper	.05	.15	.50	1.75
<b>Mammoth Chili.</b> Grows to a large size, often weighing over two hundred pounds;				
excellent for stock	.05	.15	.50	1.75
Pike's Peak or Sibley. A vigorous, prolific old standard; oval shape, tapering at				
blossom end, skin dark green. The flesh, of very superior quality, is light yellow		.15	.50	1.75
Summer Crookneck. Early, productive and of good quality; color orange yellow	.05	.15	,40	1.50
Yellow Bush Scalloped. An early market variety; excellent for shipping	.05	.10	.30	1.00

#### TOMATO.

This vegetable is one of the most important of all garden products. They thrive best in a warm, light, rich soil. For early plants, sow about the first week in March in a hotbed, or in boxes or pots in a warm window. When the plants are about two inches high, set four inches apart in boxes three inches deep, or pot singly. If again transplanted before setting out, the plants will be still more stocky. Set out in the open ground about the first of June, four feet apart each way, using a shovelful of rotted manure in each hill. One ounce will produce about 2,000 plants.

Bonny Best. Color an intense scarlet. It is roundish and slightly flattened at stem	Pkt.	Oz.	¼ lb.
end. Early, prolific and uniform in shape and size	.05	.35	\$1.00
Chalk's Early Jewel. A fine second early tomato, about ten days later than Earli-			
ana. Fruit large size and fine flavor. The plants are compact and strong; one of			
the best for shipping and the home garden	.05	.35	1.00
<b>Dwarf Champion.</b> Dwarf variety; fruit medium size, resembling the Acme in color	.05	.35	1.00
<b>Dwarf Stone.</b> The largest fruited of the dwarf varieties, the fruit being of a bright			
scarlet, and growing in clusters; flesh very solid, firm and smooth	.05	.35	1.00

#### **TOMATOES**-Continued.

- EARLIANA. The earliest large tomato. Pkt. Its large size, handsome shape, beautiful red color, and fine quality are unsur-passed by any of the best early and medium sorts.
- Early Avon. Earlier than Earliana. Of fine quality, fruit round, bright scarlet,
- and borne in clusters. (See page 20).. Gulf State Market. Prized by market gardeners who wish to ship long distances, but also a favorite for the local market and home garden. This tomato produces abundantly large, round, purplish-pink tomatoes, smooth and earlier than most of the purple varieties..

John Baer. An early variety. Smooth, solid fruit, brilliant red in color.....

New Stone. Fruit very large and deep, bright scarlet, smooth, ripening evenly to the stem without a crack; exceedingly solid and firm-fleshed, of the finest quality .. . . . . . . . . . . . .

Red Cherry. A small, early variety, size and shape of a cherry; for pickling ....

.05 .35 1.00

.05

Scarlet Globe. Brilliant scarlet, ripens evenly, is smooth, round, a vigorous grower, and a most desirable table and canning variety ... .05 .35 1.00 .35 1.00

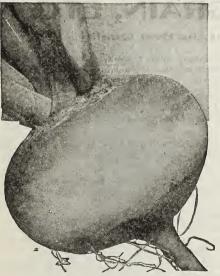
TOBACCO.

.35

1.00

One ounce is sufficient for an acre.

Connecticut Seed Leaf. One of the best varieties. The leaves are of good width and length and grow closely on the stalk..... .05 .30 \$1.00



Turnips thrive best in rich, sandy, gravelly soil. The earliest varieties can be sown as soon as the ground can be worked, either in drills or broadcast. For a succession sow at intervals of a fortnight until the last week in July for the fall and main crops. To keep the roots fresh during the winter, they may be placed in a cool, dry cellar and buried with dry sand. One ounce for 150 feet of drill; 1 1-2 to 2 pounds in drill or 2 1-2 to 3 pounds broadcast to the acre.

TURNIP.

	Early White Six Weeks. Pure	Pkt.	Oz.	¼ lb.	Lb.
	white; very early				
	Golden Ball. A rapid grower of ex-				
	cellent flavor; bright yellow, good				
	keeper, and a superior table variety.	.05	.15	.40	1.00
	Purple-Top Milan. The earliest		•••	•••	1.00
	variety in cultivation. Flesh white,				
	hard, and of excellent quality	.05	.20	.60	2.00
	Purple-Top Sfrap Leaf. Excellent	.00			2.00
	variety for main crop, equally good				
	for spring or fall sowing; white flesh	05	15	40	1.00
	Purple-Top White Globe. Globu-	.00	.10	• <b>1</b> 0	1.00
	lar shape, handsome and of superior				
	quality, either for the table or stock.				
	It is a heavy producer, early and a				
A Draw M	good keeper. The flesh is white and				
	skin white, with purple at portion				
PURPLE-TOP WHITE GLOBE.		05	15	40	1 00
Sweet Common White smeet and a near	which grows above the ground				
Sweet German. White, sweet and a good					
Yellow Aberdeen. An excellent hardy w	ariety, keeping well through the winter.	.05	.19	.40	1.00
Ruta Raga	a or Swede Turnip.				
Carter's Imperial Hardy Swede. A:					
being larger, the flesh firmer, and an exc					1.00
Skirving's Purple-Top. A standard va		.05	.15	.40	1.00
Sutton's Magnum Bonum (purple-to)					
that can be grown for general nurnoses	as it not only yields a great weight ner				

Sutton's Magnum Bonum (purplethat can be grown for general purposes, as it not only yields a great weight per acre, but the crop remains sound for an unusually long time. The feeding value is very high, analysis showing the roots to contain 12.5 per cent. of dry matter... .10 .20 .50

Prices subject to change without notice. (See note on page 2.)

Oz. ¼ lb. .05 .35 \$1.00 \$1.00 .10 .10 1.00 .10 .50 1.50

1.50



EARLIANA TOMATO.

41

### SWEET AND MEDICINAL HERBS.

Sow in spring, in shallow drills, one foot apart and when well up thin out or transplant to a proper distance apart.

Pkt

	Pkt.
Anise. Annual	
Balm. Perennial	
Basil, Sweet. Annual	
Caraway. Biennial	
Catnip. Perennial	
Coriander. Annual	
Dill. Biennial	

	TTTO
Fennel, Sweet. Perennial	.05
Horehound. Perennial	.05
Hyssop. Perennial	.05
Lavender. Perennial	.05
Marjoram, Sweet. Annual	.05
Mint	.10

Rue. Perennial Saffron. Annual Sage. Annual	
	.08
Sage. Annual	.0
	.10
Summer Savory. Annual	.0
Thyme. Perennial	.03
Wormwood. Perennial	.05

Pkt

## **GRASS SEED AND CLOVER.**

Timothy. The most popular grass to sow for hay.

**Red Top.** Succeeds in almost any situation. Fine for lawns or to sow with timothy for hay.

Kentucky Blue Grass. One of the best grasses for pastures and lawns.

Orchard Grass. A valuable grass for pasture and also for hay.

Red Clover. Used both in mixtures for hay and for pasture.

Alsike Clover, More hardy than red clover and succeeding well where the ground is low and wet. White Clover. Used largely for lawns and in pasture mixtures.

Crimson Clover. An annual clover used for plowing under to enrich the soil.

## FORAGE SEEDS, GRAIN, ETC.

At the Lowest Market Rates and of the Best Quality.

**Barley** (Chevalier). A two-rowed variety. Head a little longer than the six-rowed varieties and the grain larger, plump, extra heavy and in favorable seasons nearly white. On account of its attractive appearance and fine quality, the grain brings the highest price, and is also extensively grown for green fodder.

**Buckwheat (Japanese).** The most desirable variety. If sown at the same time as the Silver Hull it will ripen earlier and yield nearly double the amount. It is of much stronger growth than the common buckwheat and the kernels are fully twice the size.

Millet (Japanese Barnyard). Succeeds in almost any ordinary soil, and may be sown from the middle of May to the first of July. Is distinct from other varieties. Enormous crop, and is excellent, either green or cured, for hay. Exceedingly popular as a forage plant.

**Millet (Hungarian).** Probably used more than any other millet for fodder during the summer months. Remains green when almost all other vegetation has dried up. It is one of the very best plants for green fodder or for ensilage; makes hay of good quality.

**Soudan Grass.** A new annual forage crop. Soudan grass is a drought-resistant hay crop of great merit. In dry sections it yields more forage than millet, and the hay is relished by stock of all kinds. After the ground has become warm, seed may be sown broadcast at the rate of from 16 to 24 pounds per acre; if planted in drills 18 to 24 inches apart, from 4 to 6 pounds per acre will be sufficient.

**Storm King Oats.** This oat is a heavy cropper, the grain is short, plump, thin skinned and of high feeding value. The straw is very strong so that it stands severe weather.

**Oats** (Swedish Regenerated). One of the most productive varieties of oats ever introduced. The straw is very firm, stiff and elastic and does not readily lodge. Early and ripens uniformly. The kernel is large and plump, with a thin hull, and of fine general appearance.

**Rosen Rye** (Winter). Produces a strong, vigorous straw and stools to a remarkable degree. The grain is large, plump, heavy and of beautiful color, commanding a premium on the market over other grains. Owing to its vigorous stooling property less seed is required, the practice being about  $1\frac{1}{2}$  bushels per acre. At the State Experimental Farm in Michigan, for a number of years, the average yield has been 41.3 bushels per acre, of an exceptionally high quality of grain, and 46 bushels per acre is not an unusual yield.

**Rye** (Spring). For a catch crop this is best for sowing in the spring, as a crop may be obtained by later sowing than any other grain, although it does not yield as heavily as the winter rye.

#### FORAGE SEEDS, GRAINS, ETC.-Continued.

**Marquis Wheat (Spring).** A variety produced by scientific cross-breeding of the hard Calcutta and frost resisting Red Fife variety. First introduced by the Central Experiment Station in Ottawa, Canada, and has since rapidly displaced many other varieties in the Northwest and in Canada. In appearance Marquis wheat is similar to Red Fife, but the heads as a rule are heavier and the stalks shorter, making it less likely to lodge. The kernel is flinty, a little darker red and more plump than Fife. It is beardless, having smooth yellow chaff, but its most valuable feature lies in its earliness, as it matures a week or ten days earlier than the Red Fife. Thrashing reports from the Northwest indicate yields of 40 to 50 bushels per acre; weight, 64 to 66 pounds per measured bushel, and they report it to be of the highest milling quality. Not in many years has such a valuable variety been introduced. Our stock is of the highest purity and germination. Farmers who planted Marquis wheat in New England last season had most satisfactory returns.

Write for quotations on all grain and grass seeds.

#### "New Era" Cow Peas.

The seed resembles a small brown bean in appearance, and is one of the best varieties to sow, as it is extremely early, a good cropper, and produces more seed pods than most other kinds. A very valuable forage plant. Sow at the rate of  $1\frac{1}{2}$  bushels per acre.

Write for price.

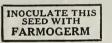
#### Early English Dwarf Essex Rape.

Superior to any other variety offered.

A forage plant of great merit, easily grown in any locality, and one of the most satisfactory quick-growing crops, especially for sheep.

As a fattening food for sheep, cattle, calves or pigs, it is without a rival in point of cheapness, is hardy, withstands drought, and will produce a crop in any soil. The seed may be sown from May to July, 10 to 12 pounds per acre.

Per lb., 20 cts. Per 100 lbs., \$18.00.





VETCHES.

#### Vetches or Tares.

**Spring Vetches.** Highly valuable for soiling or for green manuring. Sometimes grown with oats for mowing and feeding to stock. Use 120 to 180 pounds to the acre broadcast, or 60 to 120 pounds in drills.

Per lb., 12 cts. Per 100 lbs., \$10.00.

Winter Vetches. Also called Sand Vetch, or Hairy Vetch. Recommended for fall sowing with rye, which serves as a support. It is perfectly hardy in all parts of the country, can be harvested or plowed under and the ground used for the usual spring crop. Sow 60 pounds of the seed per acre, together with ½ bushel of rye.

Per lb., 22 cts. Per 100 lbs., \$20 00.

#### Soja Beans.

Produce an enormous crop of both vines and pods. Valuable as a forage crop, and for fertilizing the soil, also for pasturing, feeding as green fodder, and for silo purposes. Sow ½ bushel to the acre.

Write for price.

INOCULATE THIS SEED WITH FARMOGERM

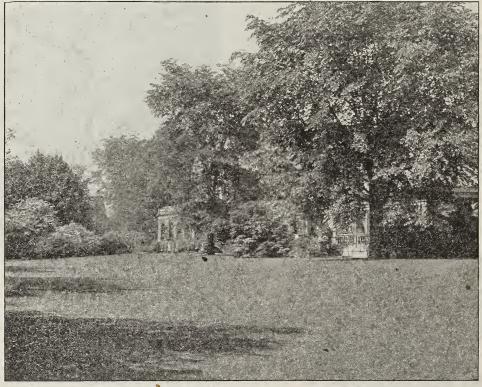
SOJA OR SOY BEANS.

ALL LEGUMES-INOCULATE, FOR BEST RESULTS, WITH NITROGEN FIXING BACTERIA.

## "K. & W." LAWN GRASS SEED.

The essentials for a fine lawn are: First, a rich, well-drained soil; second, careful preparation of the ground, making it as fine and smooth and mellow as possible; third, a wise selection of seeds; fourth, sowing at such a time as to give the young plants a chance to become well established before being subjected to very dry or cold weather or to the direct rays of the hot summer sun. However much care is bestowed on the soil and seed, no lawn will be beautiful without frequent mowing and rolling. Too much care cannot be bestowed upon the selection of grasses, as some varieties are the most luxuriant in spring, others in summer, others again in autumn, and a combination of the proper sorts is required for a perfect, carpet-like lawn. It may be planted early in spring or fall and should be sown at the rate of seventy-five pounds per acre. If sown in the spring, sow as early as possible, making the surface wery fine and smooth, then raking it over and sowing the seed just before a rain, which if the surface has just been raked, will cover the seed sufficiently. For fall seeding, sow before the autumn rains and early enough to enable the young grass to become well established before very cold weather, when a light dressing of manure should be given. Weight per bushel about 25 pounds.

Many low priced grass seed mixtures weigh only fourteen pounds per bushel. This indicates either a good proportion of chaff or some of the real good varieties in the rough state, not properly cleansed so as to leave only the vital part and less of the chaff or shell—in other words, so many less seeds to the quart or pound that will germinate and grow real grass.



1 lb. to 300 square feet. 75 lbs. per acre. PRICES:

1 lb., 40c.; 5 lbs., \$1.90; 10 lbs., \$3.70; 25 lbs., \$8.75.

### FAIR GREEN MIXTURE. Price—Per lb., 45c.; per 100 lbs., \$41.00.

Frice—Per lb., 45c.; per 100 lbs., \$41.00.

PUTTING GREEN MIXTURE.

Price-Per lb., 80c.; per 100 lbs., \$75.00.

If sent by mail, add six cents per pound for postage, and for larger shipments by mail, see parcel post rates on page 2 of cover.

## **BOOKS ON RURAL TOPICS.**

All books sent postpaid on receipt of price.

Agri	icul	ture.
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Agriculture.	Management and Feeding of Sheep \$2.50
Farmers' Cyclopedia of Agriculture \$4.50	Swine in America
The Right Use of Lime in Soil Improvement 1.25	Practical Manuals for Vegetable and
The Young Farmer: Some Things He Should Know 2.00	Flower Garden.
Study of Corn	Garden Guide \$1.10
Farm Grasses of the U.S 1.75	
Soils 1.75	
Farm Manures 2.00	Mushroom Growing 2.00
	Vegetable Forcing 2.50
Fruit Growing.	Milady's House Plants
Principles and Practice of Pruning \$2.50	Peas and Pea Culture
Modern Fruit Marketing 1.75	The Potato 1.00
American Fruit Culturist 3.50	Celery Culture
Home Fruit Grower 1.10	Bean Culture
American Apple Orchard 1.75	Asparagus
Dairying and Live Stock.	New Onion Culture
	Tomato Culture
The Business of Dairying \$1.75	Cabbage, Cauliflower and Allied Vegetables
First Lessons in Dairying	Sweet Corn 100
Questions and Answers on Butter Making	
Cheese Making 2.25	Poultry Books.
Farmers' Cyclopedia of Live Stock 5.50	The Mating and Breeding of Poultry \$2.50
Farm Dairying 2.00	Poultry Breeding and Management 2.00
First Principles of Feeding Farm Animals 2.00	A Living from Eggs and Poultry 1.40

### VALUABLE TABLE SHOWING THE QUANTITY OF SEED USUALLY SOWN UPON AN ACRE.

Lbs. per bu	sh.	Lbs. per bu	ish.
Alfalfa	20 lbs.	Onion Sets, in drills	6 to 12 bu.
Barley (broadcast)48	2 to 3 bu.	Orchard Grass 14	3 bu.
Beans, Dwarf, in drills60	90 lbs.	Parsnip, in drills	5 lbs.
Beans, Pole, in hills60	20 to 25 lbs.	Peas, smooth (field varieties), broadcast60	180 lbs.
Beets, Mangel Wurzel	5 lbs.	Peas, wrinkled, in drills	70 lbs.
Beets, Table, in drills	6 lbs.	Perennial Rye Grass24	$2\frac{1}{2}$ to 3 bu.
Buckwheat48	1 bu.	Potatoes (cut tubers)60	10 to 12 bu.
Cabbage, in beds to transplant	4 to 5 oz.	Pumpkin, in hills	3 lbs.
Carrot, in drills	3 to 4 lbs.	Radish, in drills	8 to 10 lbs.
Clover, Alsike60	10 lbs.	Red Top (recleaned)about 32	6 to 8 lbs.
Clover, Crimson60	20 lbs.	Rhode Island Bent, chaff seed10	3 bu.
Clover, Red	15 to 20 lbs.	Rhode Island Bent (fancy recleaned)40	20 lbs.
Clover, White	8 to 10 lbs.	Rough Stalked Meadow 14	2½ to 3 bu.
Corn, for fodder, in drills	70 to 84 lbs.	Rye, broadcast	1½ to 2 bu.
Corn, Sweet, in hills	15 lbs.	Sage, in drills	8 to 10 lbs.
Creeping Bent20	3 bu. 🔋	Sheep Fescue12	$2\frac{1}{2}$ to 3 bu.
Crested Dogstail	1½ to 2 bu.	Spinach, in drills	10 to 12 lbs.
Cucumber, in hills	2 lbs.	Squash (bush varieties), in hills	$2\frac{1}{2}$ lbs.
English Rye Grass24	3 bu.	Squash (running varieties), in hills	4 lbs.
Fine-leaved Fescue	35 lbs.	Soudan Grass (broadcast)	16 to 24 lbs.
Hard Fescue	30 lbs.	Sweet Vernal (annual)10	2 bu. 2 bu.
Hungarian	1 bu.	Sweet Vernal (perennial)10	2 bu. 2 bu.
Italian Rye Grass	$2\frac{1}{2}$ to 3 bu.	Tall Fescue	4 to 5 bu.
Kentucky Blue Grass14	3 bu.	Tail Meadow Oat Grass	<sup>4</sup> / <sub>2</sub> bu.
Lawn Grass	3 bu.	Tobacco	1 oz.
Meadow Fescue	2 bu.	Topacco	4 07.
Melon, Musk, in hills	3 bu. 2 to 3 lbs.	Turnip, broadcast	21/2 to 3 lbs.
Melon, Water, in hills	4 to 5 lbs.	Turnip, broadcast	1½ to 2 lbs.
Millet, German	4 to 5 10s. 1 bu.	Various Leaved Fescue	30 lbs.
Millet, Japaneseabout 40	25 lbs.	Verches	(See page 43.)
Oats. broadcast	2 to 3 bu.	Wheat, broadcast	11/2 to 2 bu.
Onion, in drills	5 lbs.	Wood Meadow	2 to 21/2 bu.
Onion, in arms	0108.	in obu meauon	

### QUANTITY OF SEEDS REQUIRED FOR A GIVEN NUMBER OF HILLS OR LENGTH OF DRILLS.

Asparagus	1 ounce	50 feet of drill	Melon, Musk	1 ounce	60 hills
Beet	1 ounce	50 feet of drill	Mustard	1 ounce	40 feet of drill
Beans, Dwarf	2 pounds	100 feet of drill	Okra	1 ounce	40 feet of drill
Beans, Pole	2 pounds	150 hills	Onion	1 ounce	100 feet of drill
Carrot	1 ounce	100 feet of drill	Onion sets	1 pound · · · ·	50 feet of drill
Celery	1 ounce	100 feet of drill	Parsley	1 ounce	150 feet of drill
Corn. Sweet	1 pound	125 hills	Parsnip	1 ounce ····	150 feet of drill
Cress	1 ounce	100 feet of drill	Peas	2 pounds	75 to 100 feet of drill .
Cucumber	1 ounce	50 hills	Pumpkin	1 ounce	20 to 25 hills
Dandelion	1 ounce	150 feet of drill	Radish	1 ounce	100 feet of drill
Kale	1 ounce	150 feet of drill	Salsify	1 ounce	50 feet of drill
Kohlrabi	1 ounce	200 feet of drill	Spinach	1 ounce	50 feet of drill
Leek	1 ounce ····	150 feet of drill	Squash, bush variety	1 ounce	50 hills
Lettuce	1 ounce	125 feet of drill	Squash, running variety	1 ounce	15 hills
Martynia	1 ounce	50 hills	Turnip	1 ounce	150 feet of drill
Melon, Water	1 ounce	30 hills			

Prices subject to change without notice. (See note on page 2.)





#### INSECTICIDE and FUNGICIDE COMBINED PFRFECT SPRAY MATERIALS IN TABLET FORM SAFE-ECONOMICAL-CONVENIENT

Never before has the gardener and plant grower had the advantage of a combined insecticide and fungicide in tablet form. It eliminates much of the danger and risk which come to children, birds and stock from the ordinary loose powders and poisons.

#### Use Complete Spray and Reduce Spraying Costs

When you apply insecticide and fungicide in one operation you save much time, labor and money. There is a saving in amount of materials used and an elimination of waste of unused portions when you use tablets and get a uniform solution always.

#### Spray-Tabs Are Accurate

These tablets are made carefully according to an exact formula and there is no variation or guesswork. They are great protection for roses, flowers and shrubs.

#### Easy to Use

Five SPRAY-TABS to a pint of water makes the correct solution for spraying vegetables and truck crops such as potatoes, beets, beans and similar hardy plants. For tomatoes, vine crops and other tender vegetables use four tablets to a pint of water.

If the solution is applied at intervals of ten days or two weeks during the first half of crop life much injury by leaf-chewing insects and fungi will be avoided.

SPRAY-TABS are packed in one size-30 cts.

STIM- U-PLANT

#### PLANT STIMULANT TABLET

#### An All-the-Year Fertilizer for Garden and House Plants

Growers of fine flowers, shrubs and vegetables for the best markets and for exhibition fertilize and stimulate them frequently, a little at a time. An excellent fertilizer for this purpose is Stim-U-planT, an odorless, highly concentrated plant-food, in tablet form, with guaranteed chemical analysis of 11 per cent. nitrogen, 12 per cent. phosphoric acid, 15 per cent. potash. The proportions are accurate, there is no wasted filler, and in this form you apply plantfood exactly when and where and as needed.

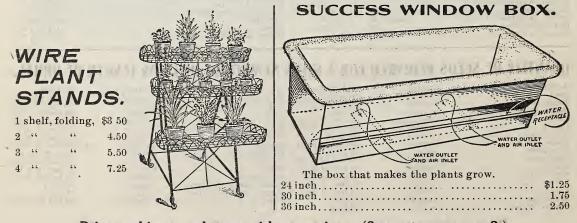
#### Make Your Garden a Wonder Garden

These tablets increase production, heighten color and improve quality immediately. Many professional and amateur growers use them extensively all the year round—from early spring until late fall outdoors, during the winter for pot plants, hothouse benches, etc. They are as fine for evergreens and other trees as for all garden and potted plants.

#### Easy to Use

Simply insert tablets in soil near plants, or dissolve in water at the rate of four tablets to the gallon and apply as liquid manure. Complete directions with every package.

Order Stim-U-planT tablets with your seed and plant order. Price, trial size, 15 cts., small size, 25 cts., 100 tablets, 75 cts., 1,000, \$3.50.





Prices subject to change without notice. (See note on page 2.)

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## FERTILIZERS.

#### ASHES.

Unleached, hard wood ashes, put up in 100 lb. bags. Especially valuable for lawns.

#### SHEEP MANURE.

A pure, natural manure, and a most nutritious food for plants. Its effect is immediate and lasting. It is clean to handle, and is the best of all manures for mixing with the soil for greenhouse plants. As a lawn top-dressing it is unequalled. For mixing with soil, take one part of manure to six parts soil. For making a liquid, take one pound manure to five gallons of water, which can be used with safety daily if necessary.

### AGRICULTURAL LIME.

#### LIME AN ESSENTIAL.

The government experiment stations have thoroughly established the fact that lime is a vital element in the soil.

Mr. Jacob S. Lipman, Director of the New Jersey Agricultural Experiment Stations, in a recent circular said, "All productive soils contain fairly large amounts of lime." "When the porportion of lime falls below a certain limit the crop yields begin to diminish." Continuing, the same circular says, "The defects introduced by lack of lime may be classified as follows: .

1. The humus, animal manures and green manures no longer decay properly, and the crops fail to secure a sufficient amount of nitrogen.

2. The desirable bacteria, especially those which form nodules on the roots of clover, alfalfa, and other legumes, gradually disappear.

3. Commercial fertilizers undergo undesirable changes.

4. The development of plants is directly hindered by a sour condition of the soil.

5. In heavy soils the establishment of a proper tilth becomes more difficult.

#### WHAT WILL LIME DO?

1. Furnish much needed plant food.

2. Render available certain forms of plant food, especially compounds containing potash, phosphoric acid and ammonia.

3. Correct acidity.

4. Promote the decomposition of organic matter by encouraging the growth and activity of micro-organisms.

5. Promote the growth of organisms that gather nitrogen from the air.

6. Improve the physical texture of the soil. The use of lime for this purpose is one of its most important functions, largely because the improved texture enables the soil to withstand drought better. Lime makes a clay soil friable, less likely to bake, and easier to work. Upon a sandy soil the effect is opposite. The coarse particles are cemented together and the capacity of the soil to hold water is increased.

Price, 100 lb. bags, \$1.00; ton, \$13.00.

#### BORDEAUX LIME.

Prepared expressly for use in making Bordeaux Mixture; is finely powdered and ready for immediate use.

Price, 100 lb. bags, \$1.25.

### LAND PLASTER.

Scientists have recently discovered that some crops contain more than forty times as much sulphur as was formerly believed to be the case. The average soil is lacking in sulphur. Land Plaster supplies sulphur in a form readily available, and also furnishes calcium, a very important element. It greatly benefits peas, beans, cabbage, turnips, potatoes and onions. To use around the stable as a deodorizer, and to absorb the ammonia, it is of great value.

For garden crops use from 400 to 800 lbs. per acre, and for field crops about half this amount.

Price, 100 lbs., \$1.25; ton, \$20.00.

#### BOWKER'S FERTILIZERS.

See page 49.

#### BRADLEY'S FERTILIZERS.

See page 50.

### AGRICULTURAL CHEMICALS.

Nitrate of Soda. 18.23 per cent. ammonia.

Sulphate of Ammonia. 24.50 per cent. ammonia.

Muriate of Potash. 48 per cent. actual potash.

Sulphate of Potash. 48 per cent. actual potash.

- **Ground Tankage.** 6 per cent. ammonia, 30 per cent. bone phosphate of lime.
- Ground Tankage. 9 per cent. ammonia, 20 per cent. bone phosphate of lime.

Plain Superphosphate or Acid Phosphate. 16 per cent. phosphoric acid.

Special Ground Bone. 2.5 per cent. ammonia, 50 per cent. bone phosphate of lime.

As prices on chemicals change frequently, please write for prices, stating kind and amount desired.

## BOWKER'S FERTILIZERS AND STOCKBRIDGE MANURES.



Used four hundred pounds Bowker's Fertilizer and raised over fifteen tons of squash.

### "FOR THE LAND'S SAKE" use Bowker's Fertilizers and Stockbridge Manures.

We are still selling the old original Stockbridge Potato and Vegetable Manure, containing 10% potash. That is the brand that has produced the largest crop of potatoes ever recorded.

### KENDALL & WHITNEY, Agents, - - Portland



479 1-4 Bushels Per Acre on Bradley's Fertilizer. First Prize Boys' Potato Club of Maine.

## FEED YOUR CROPS AS YOU FEED YOUR STOCK

Modern stock rations which rightly balance the digestible proteins, carbohydrates and fats have revolutionized profits in live stock. They have produced more milk, more beef, more pork, more fat, more eggs.

You know it-every farmer does.

# **BRADLEY'S FERTILIZERS**

Supply plant food rations rightly balanced for your crops. They produce more corn, more potatoes, more truck, more money. They save labor and enable you to keep more stock.

A full stock of these standard fertilizers constantly on hand

-including-

XL Superphosphate of Lime 3-9-2	Corn Phosphate 2-8-2
Northland Potato Grower 4-8-4	Acid Phosphate 0-16-0
Potato Manure 3-8-4	Blood, Bone and Potash 5-8-7
Complete Manure for Top-D	ressing Grain and Grass 6-6-4
Complete Manure for Po	tatoes and Vegetables 4-8-7
Also Agricultural Chemical	ls and Agricultural Limestone

KENDALL & WHITNEY, Agents,

Portland

### PLANT STICKS.

From one and one-half to six feet in length, used for sup-

11/	faat	painted													er doz. \$.30	I	Per 100. \$2.00
172	reet,	painteu	giec.	u.,	••	•••	•••	•••	•••	•••	••	••	•••	•••			
2													• • •		.50		3.50
21/0	**	66	4.6												.65		5.00
3	**	- 66	4.6												.95		7.00
4	6.6	* *	* *												1.50		11.00
5	6.6	44	**												2.10	17	16.00
6	**	**	66							•••					2.35		18.00

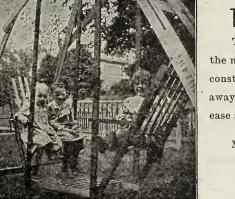
FOLDING LAWN SETTEE. Made from hard wood and finished in varnish and vermilion, or green.

Price, \$2.50.



We carry a complete assortment, manufactured from selected hard wood, handsomely painted and varnished.

\$2.50 to \$6.00 per set.



BARTLETT.

## THE' WESTFIELD LAWN SWING.

This swing easily takes precedence over all others in the market. It is made of hard wood, well finished, and so constructed that it may be readily folded together when put away for the winter. Any child can operate it with perfect ease and safety.

Made in two sizes, two passenger and four passenger.

Prices quoted on application.

TROWBRIDGE'S GRAFTING WAX.

The finest quality made, put up in neat packages with directions for use. 1 lb. packages, 45c.;  $\frac{1}{2}$  lb. packages, 25c.;  $\frac{1}{4}$  lb. packages, 15c. By mail, 6c. per lb. extra.

### BLAKE'S GRAFTING WAX.

Will not run in hot weather.

1 lb. packages, 45c.; ½ lb. packages, 25c.; ¼ lb. packages, 15c. By mail, 6c. per lb. extra. BEESWAX. 50c. per lb. By mail, 6c. per lb. extra.

## TOMATO AND PLANT SUPPORT.

Designed especially to protect tomatoes, peonies, and small shrubs and tall growing plants.

### THE BARTLETT.

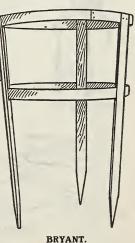
MADE FROM HARD WOOD, WITH WIRE HOOPS. Price, 35 cents each; \$3.50 per dozen.

### THE BRYANT.

MADE OF HARD WOOD STANDARDS AND WOOD HOOPS.

Price, 20 cents each; \$1.75 per dozen.

Prices subject to change without notice. (See note on page 2.)



### 51

QUALITY HAND TOOLS AND SUNDRIES.



Galvanized Iron Basket.

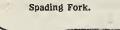


Turf Edger.



4 Tined Hay Fork.





3 Tined Hay Fork.

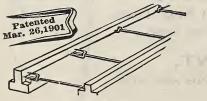


Manure Fork.





Garden Line Reel.



Glazing Point.

Acnarada

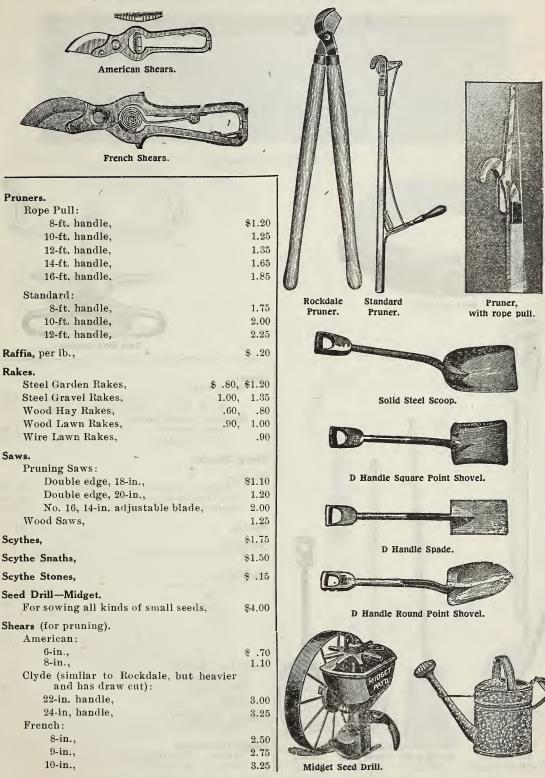
Asparagus Knife.

Asparagus Knives,			\$.35
		@1 FO	
Axes,		φ1.90,	\$2.00
Axle Grease.		1 16	9 lba
Mica,		1 lb. \$.20	3 lbs. \$.50
		2 qts. \$ .75	4 qts.
Snowflake,	\$ .45	\$ .75	\$1.25
Balls, Ox. Brass, each,		\$ .10 to	\$ .25
Bars, Crow. Solid cast steel, lb.,			\$ .12
Baskets. See page 67.			
Border Shears.			
9-in., with wheel,			\$6.00
9-in., no wheel,			5.50
Bouquet Holders.			
Iron, tulip shaped:		~	
Small,			\$ .45
Medium,			.55 .70
Large, Red Earthenware,			.10
neu Earthenware,			.10
Brackets. Flower Pot, one and two	pot,	\$ .45	\$ .55
Brooms. House and Stable,		\$ .75	\$1.45
Brushes.			
Bottle, each,		\$ .45 to	
•Dust, each,		.60 to	
Floor, each,		1.40 to	
Scrub, each,		.25 to	
Stove, each,		.35 to	
Window, each, Wire Caterpillar,		.65 to	.50
whe Caterphiai,		-	.00
Bull Leaders.		00 00 L	
Long wood handle, each,		\$3.00 t	5 \$4.50
Bull Rings.			
Copper,		\$ .35 to	\$ .40
Edging Knives.			
D Handle,			\$1.25
Long Straight Handle,			1.20
Forks. Hay Forks, 3 tine, 13-in.,	14-in., 18	5-in. tin	e,
Manuna Faulta 4 ting 5 th	ino eti-		, \$1.70 2.00
Manure Forks, 4 tine, 5 ti Spading Forks, 4 tine,	ine, o tine	e, 1.50	, 2.00 1.65
Fruit Pickers. Wire, without pole,			\$ .60
Garden Lines, 50 ft.,			\$.50
Garden Line Reels,			\$2.00
tratica (See note on :	nage 2	)	

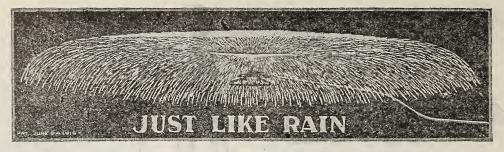




### QUALITY HAND TOOLS AND SUNDRIES-Continued.



QUALITY HAND TOOLS AND SUNDRIES-Continued.



EVEN SPREAD SPRINKLER.



Ring Sprinkler.





Shears.	
McKenney:	
No. 1, 23-in., cuts up to 1 in. diam.,	\$4.50
No. 2, 30-in., cuts up to 11 in. diam.,	6.00
Rockdale, wood handle:	
26-in. handle,	1.50
41-in. handle,	1.90
Sheep Shears,	\$1.50
Sheep Shears,	ψ1.00
Shovels.	
D Handle, Square or Round Point,	\$1.40
Long Handle, Square or Round Point,	1.40
Maynard Socket Shovel, all styles,	2.00
Spades,	\$1.35
6	
Sprayers.	@ 60
Tin or Galvanized Iron, - \$.35 to	φ.00
Sprinklers.	
Galvanized Iron:	
4-qt.,	\$.75
6-qt.,	.80
8-qt.,	.85
10 qt.,	1.00
12-qt.,	1.15
16-qt.,	1.40
1,	
Sprinklers—Lawn.	
Even Spread,	\$2.50
Rain King,	3.50
Ring,	.85
Stalan Son page 51	
Stakes. See page 51. (For supporting plants.)	
(For supporting plants.)	
Supports, Tomato.	
Bartlett. See page 51.	

Bryant. See page 51.

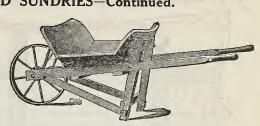
### QUALITY HAND TOOLS AND SUNDRIES-Continued.



GARDEN BARROW.



STEEL TUBULAR CANAL BARROW.



CANAL BARROW.



Excelsior Weeder.

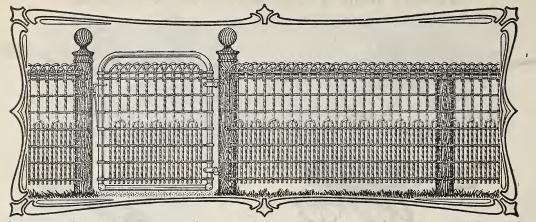
Jimmy Weeder.

Post

Spoon.

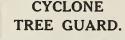
hermometers.	@ FO	ø
Dairy,	\$.50	
Hotbed, wood frame with brass point, Incubator,	2.00	
incubator,	1.00	
ellises.	and all the	
Bow pattern. See page 47.		
Fan pattern. See page 47.	_	
Veranda pattern. See page 47.	0	
Wire. See page 58.		
wels.	1.	
Heavy, 6-in.,	\$.20	
Ladies', 6-in.,	ψ.20 .15	
Regular, 6-in.,	.15	
Solid steel, 6-in.,	.70	
Solid steel, 7-in.,	.75	A YP
ne.	()	
Cotton, ball,	\$.10	
Hard, ball,	.45	
Soft, ball,	.20	
Tarred Lath Yarn, lb.,	.25	Heseltine Weeder. Jimmy Weed
eeders.		
Excelsior,	\$ .20	
Heseltine,	.30	HANDIEST
Jimmy,	.25	TOOL LANGS
Lang,	.25	
Midget,	.40	. EARTH
Norcross, 3 tooth,	.75	Lang Weeder.
Norcross, 5 tooth,	1.00	Lang & Weeder,
neelbarrows.		
Canal Barrow,	\$ 6.00	
Canal Barrow, all steel,	10.50	
Canal Barrow, steel tray,	9.00	
Garden Barrow, medium,	7.50	-LINDER DRG. IN
Garden Barrow, large,	8.00	Garden Trowel.
Prices subject to change		

WAUKEGAN-CYCLONE SANITARY WIRE FENCING.



Style "F" fabric shown above on ordinary wood posts opens up the yard to fresh air and sunlight, creates healthy playgrounds out of unsanitary back yards and makes gardens, flower beds, lawns, etc., possible. Pickets are all No. 9 heavily galvanized wire, spaced  $2\frac{7}{8}$  inches apart at top,  $1\frac{3}{8}$  at bottom, making fence absolutely chicken proof.

STYLE "F" FABRIC, Three Sizes, 36, 42 and 48 inches high.



Furnished with spiral spring, ready for setting up by clasping hooked ends.

Protects the tree without shading, rubbing or bruising the bark.

Made 6 feet high, of heavily galvanized wire.

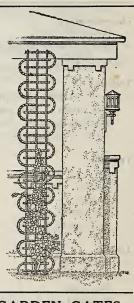
9 inches in diameter.

### CYCLONE SINGLE TRELLIS.

The most practical trellis made for climbing vines and flowers.

Easily placed in position. Cut to any length. Can be used for years, making an extra, low priced trellis that adds to the beauty of porch and home.

18 inches in width.





Affords ample protection against dogs, cats, chickens, etc., besides keeping children from running over flower beds. Fits any shape or size of flower bed. No posts necessary. Picket ends are left straight for inserting in the ground. Pickets No. 9, cables No. 13 heavily galvanized wire.

Two sizes, 16 and 22 inches high.



Also on 8, 10, 12, 14 and 16 foot Farm Gates.

Price on application,

## PENNSYLVANIA QUALITY LAWN MOWERS.

#### Buy a lawn mower once; not one every year.

Your first purchase can be your last, if you choose the mower that lasts. "Pennsylvania" **Quality** Lawn Mowers are made to give the longest and most efficient service, even under the hardest usage and the most extraordinary working conditions.

Most professional gardeners choose "Pennsylvania" **Quality** Mowers because they run easiest, cut cleanest, last longer and require the least care and attention during their long life.

Their economy in comparison to ordinary mowers is striking. Just divide the first cost of a "Pennsylvania" **Quality** Mower over the long years of work, and compare it to the cost of any other mower covering the short period of two or three years' possible use, to say nothing of the frequent sharpening and repair bills of the ordinary mower.

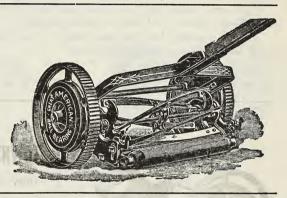
**Self-Sharpening.** -A feature exclusive to "Pennsylvania" **Quality** Mowers is the self-sharpening, crucible tool steel blades. All the revolving blades, as well as the stationary blades, are of same steel as is used for finest tools requiring keenest cutting edges.

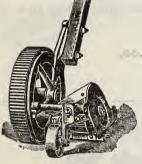
### Great American Ball Bearing.

This machine is one of the most popular of the line and consequently is more imitated than any other lawn mower manufactured. **Raised edge**, **self-sharpening** lower knife, highest grade ball bearings, smooth running, are special features.

10-inch driving wheels. 5 blades.

Sizes.	Prices.
15-inch	
17-inch	22.00
17-inch	24.50
21-inch	27.00





### Pennsylvania B. B. Under Cut Trimmer.

This machine is the only one to successfully replace the use of hand shears. The slanting side plate and conical cylinder make it possible to cut all the grass left by the regular style of lawn mower. The unique construction of the **Under Cut Trimmer** permits cutting, not only close up to a wall, fence, trees, etc., but it will get the grass **under** a fence or rock-cut base of tombstones, house foundations, and other places hitherto out of reach of anything but hand shears. For cemeteries it has the special advantages of not **marking** or **smudging** the stones, as the side plate does not come in contact with the stone above the grass line.

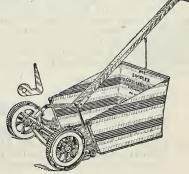
#### Price, \$12.00.

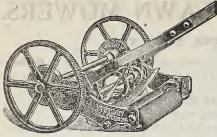
## "Nox All" Grass Catchers.

Will fit any mower made. Instantly attached and detached. Canvas body, galvanized iron bottom, combining strength with lightness.

#### Price.

No. 1, for 12, 14 and 16-inch mowers	\$1.10	and a
No. 2, for 16, 18 and 20-inch mowers	1.25	





## TOWNSEND'S "VICTORY" LAWN MOWER.

Constructed with ball bearings, of the very highest grade. Triple gear, entirely closed, and a removable cutter bar, which, by loosening four small screws, may be rolled out of the machine for sharpening without disturbing the frame.

Width of Cut.	14-in.	16-in.	18-in.	20-in.	22-in.	24-in.
Net price:	\$19.50	\$21.25	\$23.50	\$25.25	\$27.00	\$29.00

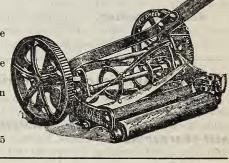
## TOWNSEND'S "SPIDER" LAWN MOWER.

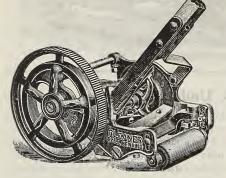
Like the "Victory," the "Spider" runs and cuts with ease and rapidity.

It is light, strong, and finely made and adjusted, and is one of the best *medium priced* lawn mowers ever offered.

Is ball bearing, has nine-inch wheels, four-bladed, open wiper, and a simple and easy adjustment.

Width of Cut. Net price: 14-in. \$15.25 16-in. \$16.75 18-in. 20-in. \$18.25 \$19.75





## TOWNSEND'S "GLEANER" LAWN TRIMMER.

Does what lawn mowers leave undone. Trims and edges the lawn with remarkable speed and perfection. 9-inch wheel, ball bearing; 4 steel blades, 8-inch cut. Strictly high grade in every particular.

Price, \$10.00.

### COLDWELL'S MODEL "L" POWER MOWER. (With the Fuller & Johnson Motor.) A SMALL MOWER OF LARGE CAPACITY.

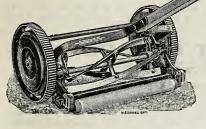
The Coldwell Model "L" Motor Lawn Mower and Roller, twenty-five inch cut, has been designed with a view of combining the extreme flexibility of the hand lawn mower with the large cutting capacity, rolling feature and other advantages and conveniences which can be obtained only with a motor mower.

This mower is adapted for use on private lawns, parks, cemeteries, public grounds and for fine cutting on tennis courts and bowling greens.

#### SPECIFICATIONS.

Width of cut, 25 inches. Diameter of revolving cutter, 6 inches. Number of blades, 5. Diameter of drive roller, 8 inches. Adjustment for height of cut,  $\frac{3}{8}$  to 2 inches. Normal cutting speed,  $2\frac{1}{2}$  miles per hour. Cutting capacity, 6 acres per day. Fuel consumption, 1 gallon per day. Climbing ability, extreme grades. Weight, 335 pounds. Motor, Fuller & Johnson. Horse power (S. A. E.), 3<sup>1</sup>/<sub>2</sub>. Dixie magneto. Schebler carburetor.





#### 8-INCH WHEELS.

#### THE COMBINED POINTS ARE PRICE, SIMPLICITY, DURABILITY, UTILITY.

Width of Cut. 14-inch	Net Price. . \$7.25	
16-inch	8.25	
18-inch	. 8.75	

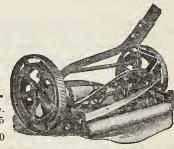
## SPEEDY LAWN MOWER.

9-inch wheels, with raised rim.

Four-blade cutting reel.

Dust-proof ball bearings.

,	Durable and easy running.
Width of Cut.	Net Price.
16-inch	\$11.25
18-inch	



## LAWN AND DANDELION RAKE.



This rake is designed especially for use on lawns, being so constructed, with teeth shaped like saw teeth, that it will not tear the grass roots and will destroy dandelions by cutting off the blossoms before the seed forms.

Price, \$1.00.

**GOODWIN GRASS SHEAR.** 

(It's a Good One.)

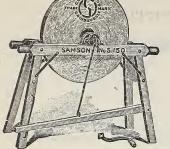
#### THE FIRST REAL GRASS SHEAR.

The arrangement of the handles in a perpendicular plane, allowing the use of the hand in a free and natural manner, is of prime importance. In using the old type of shear with handles and blades in the same or horizontal plane, the hand and wrist are strained and distorted. This new shear has greater leverage, consequently more power, quicker action; the blades are mechanically held, so the grass cannot slip between without being cut, nor can the blades slip apart. These are very disagreeable features in various old styles of grass shears now on the market.



#### Price, \$1.75.

## **GRINDSTONES.** SAMSON, MOUNTED.



Frame of hard wood, securely bolted together, and fitted with both treadle and crank. The stones are of fine quality, from 22 inches to 26 inches in diameter.

#### THE HARVEST KING POWER **GRINDSTONE.** FOR FARM USE.

The frame is of heavy angle steel 1 1-4" x 1 1-4" x 3-16" strongly braced, is equipped regularly with our standard high grade selected Cleveland grindstone  $24'' \ge 2''$ , a 5-8'' shaft,  $12'' \ge 2 \cdot 3 \cdot 8''$  pulley and heavy steel roller bearings, hand crank and drip cup.

Weight, with regular equipment, about 125 lbs.

### EMPIRE.

The Empire Ball Bearing Power Grindstone is a heavier stone than the Harvest King. The frame and trough are cast iron and the stone is 24 inches in diameter and from two to three and one-half inches thick. It is equipped with a 12" pulley, but turns so easily that it may be turned by hand if desired.

Weight, complete, about 225 lbs.

#### We also carry a line of UNMOUNTED STONES.

from 18 to 30 inches in diameter,

also

Scythe Stones of Various Kinds and Grindstone Fixtures.

Write for prices.

### DUNHAM WATER BALLAST LAWN ROLLERS.

ALL IN ONE (A Light Machine for the Soft, Wet Spring Lawn A Heavy Machine for the Dry, Hard Summer Lawn A Heavier Machine for Walks, Drives, Tennis Courts

GUARANTEED.

Winter frost and spring thaw heave and crack the sod. Tender grass roots are cut off from subsoil base of supplies-are exposed to death from sun and air. Only light weight roller pressure will properly reset them. Summer sun and wind quickly dry out the top soil. Perfection in shallow growing plant life then depends on the capillary action maintained only by frequent heavy weight rollings. The luxuriant stand of grass which follows intelligently applied rollings is in itself death to weeds. The roller so disturbs moles, ants and similar enemies of the lawn that they soon migrate to other fields. The rolled lawn is the smooth lawn—easy to mow. It's the soft, springy turf of deep green—the best on the street. Try the ROLLER MEDICINE—it's better, cheaper and quicker than watering.

#### GENERAL DESCRIPTION.

Dunham Water Ballast Lawn Rollers have steel handles, roller bearings, acetylene welded drums with anti-turf-tearing, rounded edges. The most efficient and easiest running roller made.

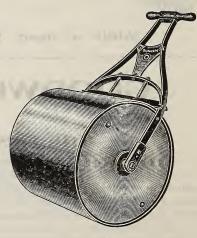
Catalog	No. of	Diameter of	Width of	Rolling	Weight	Weight Filled with
Ento.	Drums.	Drums.	Drums.	Width.	Empty.	Water.
1824	1	$18\frac{1}{4}$ in.	$23\frac{1}{4}$ in.	23¼ in.	76 lbs.	274 lbs.
2424	- 1	$23\frac{1}{4}$ in.	$23\frac{1}{4}$ in.	$23rac{1}{4}$ in.	$94\frac{1}{2}$ lbs.	418 lbs.

## LAWN RAKES.

Wood Bow Rakes-Three bow, 28 teeth, 90 cents each.

Steel Bow Rakes-Three bow, 28 teeth, \$1.00 each.

Wire Rakes-24 teeth, 90 cents each.



### CLOUGH'S ADJUSTABLE SIEVE.

In offering this adjustable sieve to farmers and others, we know that they will find it useful and valuable for separating foul seeds from grain, and sifting out the small grain, thereby getting the most vigorous kernels for seed; also for cleaning and sorting beans, peas, etc.



Price, \$3.00.

## SURE-GRIP GLUE.

#### THE GLUE WITH A GRIP.

It grips wood like iron, without the aid of clamps or tying. It sets quickly, and it is a positive fact that clamps are needed only to bring the several parts together; Sure-Grip will hold them there. Sure-Grip Glue is not affected by atmospheric conditions or dry heat, and will not crystallize as most glues do.

You have no doubt noticed how chairs and tables become loose and wobbly in the home or office. This is because the glue has become crystallized and is usually caused by dry heat or atmospheric conditions. Dry heat or atmospheric conditions will not affect Sure-Grip Glue, and any furniture or wood work glued with Sure-Grip, according to directions, will stay glued and will not become loose or wobbly.

Price, 25 cents a can.

## HERCULES COLD SODER.

"THE METAL MENDER."

#### A Semi-Liquid in Handy Tubes for Easy Mending.

#### Simple, Economical to Use.

Hercules Cold Soder will mend any leak, hole or crack in metal without heat or acid. It is not a welder, however, and will not hold two separate pieces of metal together.

Hercules Cold Soder is guaranteed to mend holes, cracks in aluminum, granite ware, tin, galvanized ware, brass, iron, lead, gas, steam and water pipes. Makes any pipe joint tight. Stops leaks or cracks in auto cylinders, gas tanks, etc.

Price, 25 cents the tube.

#### BARREL HEADER.

This is the most simple laborsaving machine ever invented for heading up barrels, and is used extensively for heading up apples, fish and other merchandise.



CARRIAGE JACKS.



STORE AND BAG TRUCKS. MADE OF HARD WOOD AND WELL IRONED. RUBBER TIRED WHEEL for hotel use.

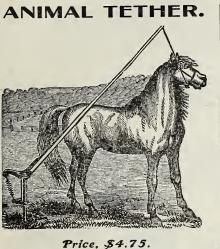


Price (1-inch screw). \$2.25. Price. \$2.25 to \$4.50. Price. \$4.00 to \$10.00. Prices subject to change without notice. (See note on page 2.)











#### WHEN YOU THINK OF GLAZING THINK OF PUTTIUM.



日路

#### At Last-A Glazing Cement You Can Buy with Confidence.

A Scientific Formula—You will find no tar in Puttium. Its basic ingredients are the pur-est Maxican asphalt combined with just the proper proportion of Gilsonite and high quality Canadian asbestos fibre. Its formula embodies the use of only high-grade materials and scientific mixing, giving to PUTTIUM the elasticity so vitally essential. Puttium expands and contracts with all extremes of temperature and weather. It will not run in summer or freeze in winter. It will not crack, peel or break. Never becoming brittle, it is easy to remove with a putty knife when necessary. Gray Puttium—By eliminating the asphalt base of Black Puttium and using instead specially-treated non-volatile oils, heat resisting gums and high-grade imported pigments, the demand for gray glazing cement has been met with Gray Puttium. Containing in addition the correct amount of a shestos fibre. this superior gray cement is ideally suited to all kinds of

specially-treated non-volatile oils, near resisting guins and high-grade imported pigments, the demand for gray glazing cement has been met with Gray Puttium. Containing in addition the correct amount of asbestos fibre, this superior gray cement is ideally suited to all kinds of glazing work and is especially recommended for bedding glass. PUTTIUM, in black or gray, is sold in steel drums and cans of various capacities. A gal-lon will glaze from 350 to 400 running feet of sash bar.

#### PRICE LIST (per gallon).

\$1.25

1.25

1.35

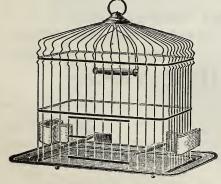
1.40

1.50

1.60

#### GRAY PUTTIUM.

Bbl., 60 gals	\$2.05
Bbl., 38 gals	2.05
Can, 20 gals	2.15
Can, 10 gals	2.20
Can, 5 gals	2.30
Can, 1 gal	2.50
4	2100



BLACK PUTTIUM.

Bbl., 60 gals.....

Can, 1 gal.....

Bbl., 38 gals.....

Can, 20 gals.....

Can, 10 gals..... Can, 5 gals.....

## BIRD CAGES, SEEDS AND SUPPLIES.

#### Brass and Japan Bird Cages,

#### Parrot and Squirrel Cages.

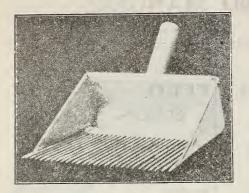
CANARY SEED, RAPE, MILLET, HEMP, RICE, SUNFLOWER AND CUTTLE FISH

Prepared Mixed Canary Seed.

GRAVEL, SONG RESTORER. PARROT FOOD AND MOCKINGBIRD FOOD.

Cage Springs, Cups, Hooks, Ladder Chains and Wire Guard Cloth.

## **BLUEBERRY PICKER**



This picker is made from the best quality of heavy tin, and fitted with points made from highest tempered steel spring wire. The points are thoroughly soldered, making a very substantial and convenient picker.

Made in the following sizes:

18	point,							\$2.35
20	66						•	2.50
24	66				•			2.65
26	65			• 10			•	3.00
28	66	•	•		•	•	•	3.05
30	66		•	•		•	•	3.15

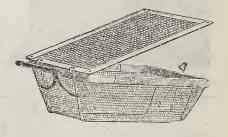
The following sizes are more heavily constructed, with handle inside, and with higher back.

		,	C			
32	point,					\$3.25
34	* 66 <sup>*</sup>					3.50
36	66			•	• *	3.65

## CORN POPPERS.

Firm and well braced popper with detachable handle, and with wire guards to protect bottom of popper from wear.

		PRICE.	
1	quart,	25c. 2 quart,	40c.
1	1-2 quart,	30c. 4 quart,	70c.
		8 quart (factory size), \$4.25.	



## POPPING CORN.

White Rice. Both shelled and on the cob.

Little Buster. Something new. Pops without any hard center. Try it and convince yourself it is the best you ever ate.



In sets of 1, 2, 4, 8 and 16 quart sizes. Price per set, \$3.50.



## WEATHER VANES.

All our vanes are made of copper and gilded with 23-carat gold leaf that will remain bright for years. The vanes include iron spire with steel spindle, points of the compass and gilded balls and letters. **Descriptive Circular and Price List on application.** 



One of the smoothest, strongest and best baskets for farmers and grocers. Made in every size from ¼ bushel to 4 bushels. Write for auotations.





## HIGH GRADE SCREEN DOORS AND WINDOW SCREENS.

**OUR SCREEN DOORS** are square mortised and tenoned joints throughout; making the strongest and best construction possible.

The wire cloth is placed on the screen door by special machinery, which stretches the cloth drumhead tight. The wire cloth is pressed into a groove in the wood and covered with a flush beaded moulding mitered at corners, which prevents the cloth from becoming loose and baggy.



#### Adjustable Window Screens.

#### The "Hummer"

guaranteed to have perfect adjustment. Wire cloth is securely fastened to frame and covered with moulding. Material used is best hard wood, finished in oil, both sides alike.

The "Sherwood" Screen is an all-metal frame made of pressed steel. The wire cloth is drawn tightly and locked securely in the





A specially treated cotton fabric of fine mesh. Keeps out all drafts, dust, rain and snow, but permits a constant circulation of fresh air. The frame is of hard wood, adjustable to fit any ordinary window opening.

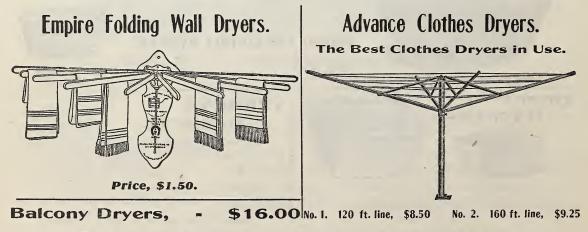
 No.
 93.
 9 in. high, extends 23 to 37 in. wide,
 \$ .60

 No.
 94.
 9 in. high, extends 29 to 49 in. wide,
 .70

 No. 153.
 15 in. high, extends 23 to 37 in. wide,
 .75

 No. 154.
 15 in. high, extends 29 to 49 in. wide,
 .90







# "K. & W." SANITARY SWEEPING COMPOUND.

Can be used on carpets, rugs, linoleums, mattings, tile and wood floors; is economical, non-inflammable, and absorbs the dust, thereby preventing the scattering of disease germs.

This powder is mixed by machinery only, and is composed of a special wood pulp combined with absorber and silica, which gives it its cleansing property. There is no sand used, the grit which is noticeable being silica. The oil of cedar, which is used as a distin-fectant, is one of the best known to medical science. This powder always runs uniform, will cover a large area, and its use is recommended in every home, public building, store and factory.

PRICE.

\$2.25

Special quotations on large quantities.

3.75

# O'CEDAR POLISH

AND DUSTLESS MOP.

The one perfect polish for pianos, automobiles, furniture, hard wood floors, and all waxed, varnished and polished surfaces, as it will not gum, and aside from its high lustre it is a dust allayer, a labor saver, and clean and sanitary in every particular.

50 pound keg,

100 pound keg,

	( 4 oz. bottle, .									\$ .30	
Price	12 oz. bottle, .	•	•		•		•			.60	and the second s
	Quart can, .	•			•				•	1.25	
O Ceuar,	Half gallon can,				•	•				2.00	dh
	(One gallon can,							•		3.00	
	Price O'Cedar Mons	No	3 (triange	lar)	\$1.75.	No.4	(triand	rular)	\$1 25		

# **BROOMS, BRUSHES AND DUSTERS,**

AND A LARGE VARIETY OF WOODEN WARE OF ALL KINDS.

#### STONE WARE. ALL SIZES OF 20th CENTURY Stone Pork Barrels, Butter Pots, Bean Pots, Preserve Jars, BARREL PUMP. Jugs and Churns. Write for Price List. FOR VINEGAR. Made from Bean Pot. chemicalized wood and is strictly noncorrodible; does away with the slow, leaky faucet; will pump the liquid at the slightest stroke of the piston.

Price, \$2.25.

Pork Barrel.

Butter Pot.



# THE NATIONAL

#### ROTARY ASH SIFTER.

In galvanized iron case. No dust. Works easily, quickly and well.

Will fit 18-inch iron can or flour barrel.

Price, \$3.25.

#### THE "LOWELL" ASH SIFTER.

This is an **all wire** sifter, sifting the ashes through the sides as well as the bottom.

Price, 90 cents.

# GALVANIZED IRON ASH BARRELS.

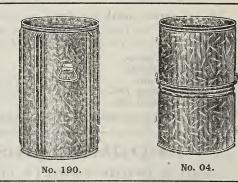
THE FAVORITE ASH SIFTER.

Wooden rim, with heavy wire bottom.

Price, 65 cents.

Solid, heavy barrels. No danger from hot ashes.

Price,	No.	0400,	17	ж	26,					\$2.65
66	66	04,	17	x	26,				•	3.00
66	66	0190,	18	ж	26,	ribbed	1, .			4.00
66	66	190,	18	x	26,	extra	heavy	y ribb	oed,	5.25
66	66	Spiral	Ri	Ь,	18 :	x 24,				6.50



	(	JALV		LED IR	ON	0			PAILS. from	1	0
	10 c	quart	,		\$ .40		Galva	anize	ed Iron.	1	
A REPORT OF THE	12	66			.45	No.	<b>000, 3</b> <sup>1</sup> / <sub>4</sub>	gal.,	\$1.0	0	
	14 16	66			.50 .55	66	<b>02,</b> $6\frac{1}{2}$	<b>66</b>	1.6	0	
	10	66	extra	heavy,	.60	66	$03, 8\frac{1}{2}$		- 1.8	5	
	12	66	66	66	.65	66	04, 9	66	2.0	2	
	14	66	66	66	.70	66	40, $6\frac{1}{4}$		2.7	5	
	16	66	66	66	.80	4.	50, $9\frac{3}{4}$	66	3.2	5	

No. 515,

" 516,

" 517.

" 518,

" 166.

" 176.

" 186,

" 156, heavy, .80

66

" 1.05



G	ALVA	NIZED
I	RON	TUBS.
	With w	ringer
	attach	ment.
No.	11,	\$1.10
6.6	22,	1.25
66	33,	1.45
AF	leelers,	.65
B	66	.70
0	66	.80

#### Galvanized Iron Coal Hods.

\$.50

.55

.60

.65

.85

.90

(Tre	
	2-3

#### RICHMOND "HIGH SPEED" WASHER.

The **Tub** is made of selected Virginia white cedar, the best wood known to man for resisting the action of water. Will not rot or become water-soaked, and will outlast several pine tubs such as are regularly used on other washing machines.

The **Hoops** are heavy galvanized hoops, so strong they cannot break, and the tub being larger at the bottom they cannot fall off.

The **Dolly**, with its smooth pins, turning back and forth, surges the clothes through the hot, soapy water against the corrugated sides and bottom of the tub, removing every particle of dirt.

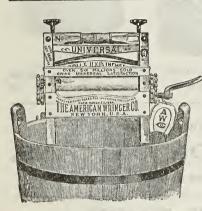
The Roller Bearings and the large fly wheel make the High Speed so easy to turn that a ten-year-old child can run it and do a large washing in a short space of time.

Price, \$18.00.

#### MAJESTIC ROTARY WASHER.

This is made of the same high grade materials as the above, and very similar in construction, but being turned direct by a handle on the fly wheel it does not work at so high a speed, although doing equally good work.

Price, \$14.00.



#### Best Known and Largest Seller. Made either with regular bearings, ball bearings, or with enclosed gears.

CLOTHES WRINGERS.

TUB WRINGERS. Universal, Rival, Superior,

Daisy.

BENCH WRINGERS. Universal, Rival. Write for prices.



HIGH SPEED.

# WHITE'S



Hotel Size.

#### Patent Mop Wringers.

Will quickly wring a mop perfectly dry, without touching mop with hands.

The wringer may be instantly attached to the pail and quickly removed.

Always place the wringer on the opposite side of pail from the bail.

Use mop made of any material desired. A short, thick mop is generally best liked, and is the best wrung by the wringer.

Price,	Family	Size,	\$2.25
	Hotel	**	3.75
••	No. 14,	all steel,	3.25



Family Size.



# GALVANIZED IRON OIL CANS, holding from one to ten gallons each. "K. & W." OIL TANKS.

For use where a considerable quantity of oil is kept. These tanks are fitted with a pump, and are safe, convenient and durable.

Price,	60-gallon	tank,	•	•	•	\$12.50
66	110-gallon	tank,				22.00

COTTON GLOVES.

P	ri	ce	

No. 871, 14 oz	28c.	per	pair.
No. 42K, 8 oz.	20c.	"	"
No. 641, 10 oz	25c.	6 6	**
Jersey, No. 1	25c.	"	"
Jersey, No. 3	25c.	"	"
Gauntlet, Leather Palm, No. 18	50c.	"	"
Mittens, No. 320	25c		"
Mittens, Leather Palm, No. 280	50c.	"	""



DINNER PAILS.

Made from good quality polished tin, complete with pie tray and cup, with seamless outside cover.

Price, 90c. each.

Prices subject to change without notice. (See note on page 2.)

72





NO. 2. MEDIUM FAMILY SIZE.

Chops rapidly and without mashing, and in pieces as fine or coarse as wanted, all kinds of meat, fish, fruits, eggs, bread and vegetables.

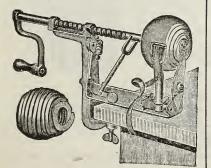
PRICE.

No. (	) (ca	pacity	$1\frac{1}{2}$	lbs.	per min.	), \$1.85
No.	1	"	2	"	"	2.25
No.	2	"	$2\frac{1}{2}$	"	"	2.75
No.	3	"	3	"		3.50

# APPLE PARERS.



NO. 98. Price, \$1.00



GENUINE WHITE MOUNTAIN PARER, CORER AND SLICER. Price, 75 cents.

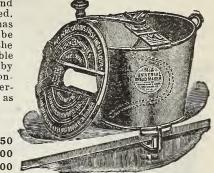
#### THE UNIVERSAL THREE-MINUTE BREAD MAKER.

Bread Maker, Mixer, Kneader and Raiser Combined,

Made of heavy tin and sheet steel. All parts tinned. No housekeeper who has once used it will ever be content to go back to the old, laborious, disagreeable way of making bread by hand. Very simple in construction. A child can operate it. As easily cleaned as a tin pail.

#### PRICE.

No. 2	(2	loaves),	\$2.50
No. 4	(2	to 6 loaves),	3.00
No. 8	(4	to 10 loaves),	4.00



#### Lightning Butter Making Machine.

Designed especially for the purpose of merging milk and butter, making about two pounds of table butter from one pound of butter and one pint of milk. This is accomplished easily and quickly by the peculiarly shaped metal dasher. The propeller-like motion creates a tremendous agitation, mixing the butter and milk thoroughly in about a minute. Being made entirely of metal and glass, this machine is easily and thoroughly cleaned, making it perfectly sanitary in every respect. \$1.50



PRICE-No. 1	(to make	1	1b.	of butter),	
No. 2	·	<b>2</b>	"	"	
No. 3	66	4	- 6	"	
No. 4	66	6	"	6 6	

# "PII GRIM" Refrigerators and Ice Chests.

Thoroughly con-structed from hard wood and beautifully finished. Cleanable and perfectly sanitary. The economy of ice is a very important consideration, and the consumption of ice will be much smaller in our refrigerators than in many others, and at the same time insure a low and even temperature and perfect circulation of cold, dry air.

> Send for **Illustrated** Catalog and Price List.



2.00 2.50 3.00

## ICE CREAM FREEZERS. "WHITE MOUNTAIN."

Perfected by the introduction of an important feature of a **double self-adjusting wood scraping bar** attached to the duplex dasher. By means of this device the **actual time** of freezing cream has been very materially reduced.



The cut shows the construction and position of the mechanism of the White Mountain Freezer. The can moves from right to left, the outside beater moves from left to right, scrapes with its wooden bars the frozen cream from the can and throws it toward the center, where it is met by the floats of the inside beater moving in an opposite direction and returned to the inside surface of the can to be refrozen. The triple motion thus induced keeps the cream constantly moving and insures every particle being smoothly and evenly frozen.

PRICES.											
Junior, \$	2.00	4 quart	, \$ 5.50	12 quart,	\$14.35						
l quart,	3.25	6 "	7.00	15 "	16.00						
2 "	3.75	8 "	9.00	20 "	20.75						
3 "	4.50 1	.0 ""	12.00	25 "	26.60						

#### "WHITE MOUNTAIN" POWER FREEZERS.

#### Sizes 15, 20, 25 and 40 quarts.

The platform and stand are cast iron, nicely galvanized to prevent rust. When in use, the gear frame is fastened by latch bolt and thumb screw; when released it can be swung to either side, so tub and can may be removed. Equipped with either pulley or fly wheel, a good power machine is produced. The pulley is  $15\frac{3}{4} \times 4\frac{1}{4}$ , and the freezer should be operated at a speed of seventy-five revolutions per minute.

Prices on application.

#### "ALASKA."

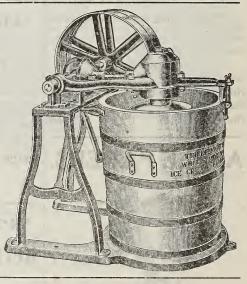


The only freezer having the Perpetual Motion Aerating Spoon Dasher, with its spoon-shaped floats, open in the center like mixing spoons, which aerates, stirs and beats the mixture rapidly and thoroughly.

The cut also shows the new device attached to the under part of the gear frame or crossbar, which effectually protects the gearing and can cover from salt and ice.

#### PRICES.

l quart,	\$2.65	8 quart,	\$ 7.40
2 "	3.10	10 "	9.70
3 "	3.70	12 "	12.60
4 "	4.50	15 "	15.30
6 "	5.70	20 "	19.35



#### NEW STANDARD.

A heavy, durable, all steel double action freezer that clamps to the table, thus requiring no effort to hold it in place. There is no wood to shrink and no cast iron to break, and having only three parts. it is easily put together. The twin spiral motion thoroughly mixes the cream while freezing, making an unusually smooth cream with a minimum of time, labor and ice.



One size (2 qts.). Price, \$1.85; by mail, \$2.00

#### FREEZER CLAMP OR HOLDER.

A perfect device for holding the freezer firm and steady. Easily adjusted to the tub by means of thumb nuts. Price, 2 to 10 quarts, 35 cents; 12 to 25 quarts, 55 cents.

An Illustrated Catalog of Power and Fly Wheel Freezers, Repairs, and Tubs and Cans for Packing Purposes furnished on application.

# **AUTO-WHEEL COASTERS.**

#### Some Features.

Disc wheel, rubber tire. Self-contained non-friction roller bearing. Auto-type hub caps concealing cotter pins. Reinforced steel axles. New rear braces and hound support brace add strength and insure safety.

Each coaster comes equipped with special hub cap wrench.

Order by name only.

"AUTO-WHEEL."

# SKIS.

#### NORTHLAND AND OXFORD SKIS.

Made just right for every kind of canning—hot pack, cold pack, or steam pressure. Indispensable for steam pressure work, as they stand long boiling and any temperature.

Made  $2\frac{1}{4}$ -inch inside diameter by 10/32 flange cut 12 to the inch as approved by the U. S. Department of Agriculture. They fit all popular styles of fruit jars.

Also "K. & W." White Lightning, "K. & W." Red Combination (Wide Mouth and Mason). Manufactured from highest grade rubber, and attractively packed in handsome colored containers.



For covering jelly. Per lb., 15 cents.

Children's.

4 feet to 8 feet.



All Genuine "Lightning" Fruit-Jars Bear Trade-Mark"Lightning

# JELLY TUMBLERS.

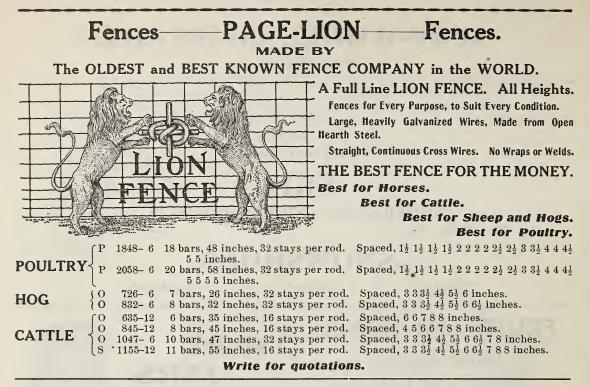


BEST QUALITY CLEAR GLASS.

1 1-3 pint, packed 27 dozen to the barrel.

Prices subject to change without notice. (See note on page 2.)

Pine, Maple, Ash.



# Excelsior Poultry and Rabbit Fence.

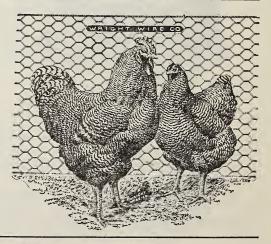
Similar to the Page fence, but of lighter wire. All wires are No. 19 gauge hard drawn tough steel, standing the highest breaking strain used in any fencing. The selvages consist of double No. 19 wires.

# GALVANIZED HEX MESH POULTRY NETTING.

Made from No. 20 selected steel wire, galvanized *after* weaving. Made in 2-inch and 1-inch mesh, and of a superior, smooth finish.

This netting is put up in rolls containing 150 running feet each and in the following heights, 1 foot,  $1\frac{1}{2}$  feet, 2 feet, 3 feet, 4 feet, 5 feet, 6 feet.

Write for prices.



# W. S. Straight Line Poultry Fence.

This type of fencing is used for exactly the same purposes as Hex Mesh Poultry Netting. As it is made with one set of wires running parallel it can be easily stretched between posts and can be used without rails or boards at top and bottom and does not sag. The horizontal wires are woven with a slight curve to allow for stretching in the process of erection and also to meet the contraction caused by weather. Galvanized after weaving.

Standard widths 12 inches to 72 inches inclusive, and standard length rolls of 150 linear feet each, in two sizes only, 2-inch mesh and 1-inch mesh. The 2-inch mesh is made from No. 18 horizontal wires and No. 20 cross wires; the 1-inch mesh from No. 19 horizontal wires and No. 21 cross wires.

#### Write for prices.

# The Standard Cyphers Incubator.

Hot Air Incubators Made in One Style-Four Different Sizes.

No. 0, 70 egg,	•	•	•	\$33.00	No. 2, 244 egg,			\$56.00
No. 1, 144 "	•	•	•	42.00	No. 3, 390 "	•	•	69.00

You can travel from Maine to California, and from Alaska to Florida-throughout the world, for that matter—and wherever you find successful poultry keepers you will find the Standard Cyphers.

The Standard Cyphers meets every practical demand that can be made upon it. Of course, it can't be sold at an extremely low price. It costs more in the factory than a good many machines retail for, and you can depend upon it that every added cent of cost is put there because it is needed; because this great incubator cannot be produced without it.

Remember—none of the cost of the Standard Cyphers Incubator goes to pay for ornaments, fancy hardware or unnecessary parts. It is a plain, substantial, durable machine for hatching eggs—just that and nothing more. It is **chock-full** of incubator efficiency and it is sold as low as that kind of an incubator can be sold.

If you are considering poultry raising as a money-making business, the price you pay for an incubator is of secondary importance. The incubator that brings out strong, vigorous, livable chicks and that can be depended upon to take care of itself to the fullest extent -such an incubator is cheap at any price.

And yet the standard Cyphers costs only a little, if any, more than inferior machines of the same capacity.

#### Write for descriptive catalogue.



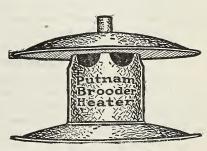
STANDARD CYPHERS INCUBATOR. (Made in four sizes.)

Illustration shows No. 1 Incubator, having 144 egg capacity.

# PUTNAM BROODER HEATER.

By using this heater one can make at home a brooder suitable for from 35 to 60 chicks at very little expense. The materials used to make it are one shoe box, one-sixth yard of oilcloth and one Putnum Brooder Heater. A 14-year-old boy can build one in an hour with no tools but saw and hammer. This brooder will accommodate from 25 to 60 chicks and will take better care of them than any brooder made, no matter how elaborate or expensive. The heater requires filling but once a week and no further attention in the meantime. Guaranteed to give satisfaction.

Price only \$4.75 postpaid.



THE BROODER HEATER.



#### LITTLE PUTNAM STOVE.

This stove may be used with any style poultry fountain to warm the water in cold weather. It is made of galvanized iron, is nine inches in diameter and four inches high. The oil tank holds oil enough to burn three weeks without refilling. It is fireproof and non-explosive and if tipped over will go out.

#### Price, \$2.50.

# QUEEN INCUBATORS.



-rest with your incubator. A poor, cheap, makeshift means small profits. A good incubator will pay the extra cost, the first hatch and make the poultry business a pleasure.



-will help build up your bank account, by bringing of high percentage hatches, of the Big, Strong kind of chicks that Live and Thrive and make you proud of your flock.

We sell the Queen because we cannot afford to trifle with your good will and because we know there won't be any annoying complaints about them. Come in and get an incubator book and see how the Queen operates.

							•		
					PRICE	s.			
No,	2,	135	eggs,	-	-	-	-	- \$	37.50
No.	3,	180	eggs,	-		-	· -	-	44.50
No.	4,	275	eggs,	-	-	-	-	-	57.75
No.	5,	400	eggs,		-	-	-	-	68.00
No.	25,	600	eggs,	-	-	-	-	- 3	103.00
No.	45,	100	0 eggs,		-	-	-	- :	157.00

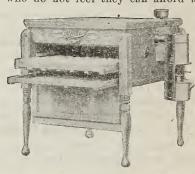
QUEEN.

#### STYLE K.

This line was gotten out to supply a demand for a moderate priced machine by those who do not feel they can afford a

Standard Queen, and is superior to any machine of its class. It is constructed of redwood, has copper heating system, regular Queen regulator, but having no air space between the double walls is more easily affected by extremes of temperature than the Standard Queen.

No. 22, 220 eggs,



\$36.50

#### **Proper Insulation.**

The Queen is doubly insulated. First we use double walls of California redwood, forming a dead air space. Second, corrugated strawboard is used between the wooden walls. Proper insulation adds considerable expense to the manufacturing cost. However, it is an absolute requirement of a good incubator.

#### **Queen Hot Water Heating.**

The Queen system of hot water heating prevents the drying-out tendencies found in hot air incubators and provides a soft, uniform heat over every part of the egg chamber—a heat that is most natural for the hatching eggs. The circulation of water through the radiator prevents any moisture being added or taken away from the eggs. When it becomes necessary to remove the lamp, the hot water circulating through the radiator maintains an even heat within the egg chamber without the slightest variation.

#### **Built of California Redwood.**

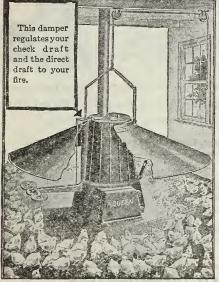
The Queen is the only incubator that carries out the double redwood wall construction all around, and provides a double wall front, in the way of two separate doors. The outer door is a solid panel of redwood that is hinged entirely independent of the inner door and is fastened with a sash lock that draws it tight, thus making the loss of heat impossible.

The inner door is also of redwood construction, containing a panel of glass the full length and height of the egg chamber.

Redwood does not absorb the odor from the hatching eggs. Cheaper woods, and pasteboard lining in iron and tin machines, retain the odors, to weaken and kill the hatching chick.

Queen incubators are not cheap, but they are cheap in the long run. They will be turning out good hatches years after the cheap machines have been junked.

# QUEEN BROODERS.



The Queen Colony Brooder is a new and improved design of brooder stove. It is made of highest quality iron castings that will wear and last indefinitely.

There are no drafts on the smoke pipe of the Queen. The check rests on top of the stove and opens outward when fire is too warm, thus giving a gentle inflow of air to retard the heat. While the opening of the draft to increase the fire is located at the top of the stove, it opens into the fire at the base through an opening extending down the side to the bottom. This feeds the draft into the fire from underneath with no opening below the hover.

As will be seen from the illustration, the check and draft lids are cast together and operated together. Thus, when the fire is too hot, the wafer expands and closes the draft and opens the check, both at the same time. When it is too cool, the wafer contracts and closes the check and opens the draft. This keeps an even heat all the time, both night and day, in cold weather or warm, and does it automatically. You don't have to pay any attention to it whatsoever. Just set the regulator for the proper temperature at the start of the season—it will do the rest.

#### SUPERIOR QUEEN GRATE.

The grate in the Queen stove is the rocker type and strikes the fire at four points. This is far superior to any draw center or shaker grate, because it cleans the fire thoroughly, and by striking at four points will break up and remove all clinkers.

#### COLLAPSIBLE HOVER.

The hover used on Queen stoves is collapsible and made of four pieces of galvanized iron. This hover comes knocked down, with holes punched and stove bolts attached, ready for putting together. By being collapsible, it enables you to save room when storing, and lessens the danger of damage when not in use.

#### BURNS ANY KIND OF FUEL.

The Queen stove burns any kind of fuel with equally satisfactory results. We recommend chestnut sizes in all kinds of fuel, and hard or soft coal, coke, charcoal or briquettes burn equally well. Of course, hard coal will not cause the pipe to become dirty as quickly as the others, but it will give no better heat.

No. 1-600 chick size, \$23.00. No. 2-1200 chick size, \$28.00.

Price includes chimney pipe, chimney cap and damper.

# WISHBONE BROODERS. VALVELESS, OIL-BURNING, BLUE-FLAME.

The Wishbone has been enthusiastically welcomed by poultrymen all over the country. They appreciate the fact that it is the most satisfactory brooder ever marketed. The Wishbone Valveless Brooder is as simple to operate as a good cook stove. It consists of only four main parts—the tank, the burner, the oil pipe and the hover.

When you want to light the brooder you turn the adjusting handle and touch a match to the burner. A hot blue flame shoots right up. No priming. No pre-heating.

The oil flows down the big half-inch oil pipe as surely and continuously as it would flow through a funnel. And there isn't a valve or thermostat or strainer in the entire brooder to go wrong or start trouble. The Wishbone is the only valveless brooder.

#### WHAT IT COSTS.

No. 22-50-100 chicks (with 22-inch canopy),	\$1
No. 32-350 chicks (with 32-inch canopy),	1
<b>No. 42-500 chicks</b> (with 42-inch canopy),	1
No. 52-1000 chicks (with 52-inch canopy),	2

510.00 16.00 19.00 22.00





There is no doubt as to the advantages of caponizing. The operation is very simple, and with a "Triumph" Caponizing Set it can be performed with safety and thoroughness. Price, per set, \$3.00.

#### X-Ray Egg Tester.

Is made of galvanized iron and consists of a central cylinder or lamp flue 54 inches high, with an outside diameter of  $2\frac{5}{8}$  inches at the base and  $2\frac{3}{8}$ inches at the top. It is designed for use on an ordinary



X-Ray Egg Tester. hand lamp, and fits over any style of burner with a diameter approximating that of the tester.

Price, 40 cents; postpaid, 45 cents.

#### WILDER MOISTURE GAUGE FOR INCUBATORS.

This instrument is designed to meet the demand of the practical poultryman for a simple, direct reading gauge which will enable him to keep the amount of moisture in his incubator as near as possible to a desired point.

By noting the position of the mercury column, the operator can tell at a glance whether to increase or decrease this amount.

Price, \$1.25.



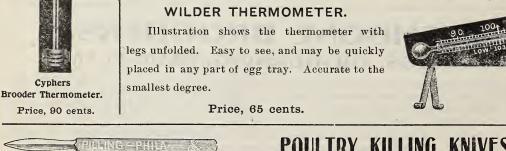
#### HIGH GRADE TESTED THERMOMETERS.

The price of incubator thermometers does not include the wire hanger. Wire hangers will be supplied at ten cents extra for each thermometer. In ordering wire hangers, be sure to state size of your incubator and year manufactured. If machine has no packer's slip bearing date of manufacture, send description of machine. This is important.

When ordering brooder thermometers, name the style of brooder in which it is intended to be used.



Cyphers Incubator Thermometer. Price, \$1.00.



# POULTRY KILLING KNIVES.

Every poultry raiser should have one of our killing knives. They are made of finely tempered instrument steel, with nickeled handle. Sent, postpaid, on receipt of price.

ANGULAR POULTRY KILLING KNIFE.

FRENCH POULTRY KILLING KNIFE.

ANGULAR POULTRY KILLER

Cyphers

Angle blade, 50c.; French, straight blade, 50c.





# Successful Poultrymen Use Pratts Poultry Preparations

# Profils Pourity Profils Regulator The Regulator

# For Health and Eggs Pratts Poultry Regulator

has no equal. It is the world's original poultry regulator and has been the standard for over 50 years. It is a natural tonic supplying numerous health necessities required by heavy laying hens. Tones up system, regulates bowels aids digestion, sharpens appetite, wards off disease and increases vitality. Use it the year round for breeders, layers and growing stock.



prati

Reg.U.S.Pat.Off

25c., 50c., \$1.10 packages; 12 lb. pail, \$1.65; 25 lb. pail, \$3.00; 100 lb. drum, \$10.00.



# Pratts Powdered Lice Killer

is powerful, economical, non-poisonous and non-irritating. For use on poultry, in dustbaths, nests, etc. Rids poultry of all ages, dogs, cats, horses, cattle, hogs and sheep of lice, ticks and other insect pests. Can also be used on vines, plants and flowers.

In sifter top cans at 25c. and 50c.

# Cleanliness Means Poultry Health Pratts Poultry Disinfectant

insures poultry health. It is a cheap, powerful, non-poisonous disinfectant. Spray it about poultry houses, roosts, dropping boards, nests and wherever a strong disinfectant is needed. A deodorizer, germicide and liquid lice killer. Effective in the treatment of roup, cold and contagious diseases.

Quart, 55c.; half-gallon, 90c.; gallon, \$1.50.

#### Save Your Birds from Heavy Roup Losses



# Pratts Roup Tablets

Use it as a treatment or a preventive. A simple, powerful remedy with a long record of success in the treatment of colds, roup, diphtheria, catarrh, etc. Guaranteed to give satisfaction or your money back. 25c. and 50c. packages.

TS 51 YEAR OF SERVICE

# Raise all Your Baby Chicks-Pratts Buttermilk Baby Chick Food

This original "baby food for baby chicks" has taken all the guess, worry and loss out of raising baby chicks. Made of sweet, wholesome, purest ingredients in the most modern poultry feed mill in America and mechanically predigested, it is life insurance for chicks. Millions of pounds of



Reg.U.S.Pat.Of

# Pratts Buttermilk Baby Chick Food



are used annually by successful poultrymen all over the world. Use it for your chicks for the first month or six weeks and watch results. Every ounce is full of bone, muscle, feather and health builders. Chicks grow strong, uniform, vigorous and sturdy, and are free from leg weakness, pasting up and digestive troubles. You'll pay for the food in the chicks you'll save.

Beware of imitations, there are none so good. Pratts is

guaranteed to raise every livable chick. Equally good for young turkeys, guineas, ducks, pheasants and game birds. A perfect "baby food" for young fowls.

25c. and 50c. packages and 14, 25, 50 and 100-lb. bags.



For birds that are "off their feed," out of condition or need bracing for the show, use

# Pratts. Condition Tablets

Keep them on hand always. 25c. and 50c. boxes.

Scaly leg is unsightly and contagious.

**Pratts** Scaly-Leg Ointment Will cure it in a few days. 30c. and 60c. a box.





For "rattling" or "whistling" in the throat,

Pratts Bronchitis Tablets

furnish quick relief. 25c. and 50c. a box.

PRATTS 51의 YEAR OF SERVICE

# Pratts Preparations mean Health Poultry Health means Profit



The most destructive of all chick diseases can be prevented by the use of

# Pratts, White Diarrhea Tablets

in the drinking water for the first couple of weeks. Proven by years of success, it will save you many dollars and chicks. Guaranteed. 25c. and 50c. packages.

"Sorehead" or Chicken-Pox is dangerous contagious and kills thousands of valuable fowls.

#### Pratts, Sore-Head Chicken Pox Preparation

is a safe, sure and powerful article for the successful treatment of this disease. Keep this standard preparation constantly on hand so you can treat your hens promptly.

30c. and 60c. packages.



Don't lose chicks because of "gapes." Use

# Pratts, Gape Compound

an effective, easy remedy that will prevent further losses and save the sick chicks. Try it.

25c. and 50c. packages.

Pratts F

SPECIAL

Reg.U.S.Pat.Of

Red mites, fleas, lice, blue bugs, ticks and other blood-sucking vermin cannot exist where

# Pratts, Red Mite Special

is used. Paint or sprayed around the poultry house, on nests, roosts, etc., it is sure death to all mites and lice. Powerful, efficient, lasting. Use it where others have failed. It will surprise you.

50c. a quart; 90c a  $\frac{1}{2}$  gallon; \$1.50 a gallon.

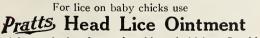


For indigestion, sour crop, diarrhea and bowel troubles commonly called "CHOLERA"

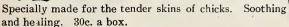
# Pratts Special Compound

gives quick, effective relief. Easy to use. Certain in action. Guaranteed.

25c. and 50c. packages.



PRATTS 515 YEAR OF SERVIC



# Pratts Handy Chart of Poultry Diseases

#### BRAIN—Congestion of Dizziness Staggering Twisting head

I wisting head Use Pratts Poultry Regulator.

#### BRONCHITIS

Difficult breathing Whistling or rattling in throat. Use Pratts Bronchitis Tablets.

#### CANKER

Cheesy patches in throat Use Pratts Poultry Disinfectant.

#### CHICKEN POX OR "SOREHEAD"

Scabs or sores on head and comb Use Pratts Sore-head Chicken Pox Preparation.

#### "CHOLERA"

A term applied to bowel and digestive troubles Use Pratts Special Compound.

#### COLDS

Watery or swollen eyes Nasal discharge Sneezing Use Pratts Roup Tablets.

#### DEPLUMING MITE Patches bare of feathers

Use Pratts Lice Salve.

#### DIPHTHERIA Similar to roup Gray patches in throat Fever Use Roup Tablets.

DIARRHEA Use Pratts Special Compound.

#### GAPES (in chicks) Gasping, choking, coughing Red, thread like worms in windpipe Use Pratts Gape Compound.

INDIGESTION Watering at mouth Darkened comb Use Pratts Special Compound. LEG WEAKNESS (in chicks) Too high brooder-heat Improper food Use Pratts Baby Chick Food.

#### LIVER DISEASES

Listlessness Darkened comb Use Pratts Poultry Regulator.

"PASTING UP" (in chicks) Chilling Improper feeding Use Pratts Baby Chick Food

#### "PIP"

Cough Hardened tongue Use Pratts Condition Tablets

#### RHEUMATISM

Lameness Swollen joints Use Pratts Liniment

#### ROUP

Nasal discharge Foul odor Swollen eyes and face Use Pratts Roup Tablets.

SCALY LEGS Scaly, rough legs Use Pratts "Scaly" Leg Ointment.

#### VENT GLEET

Sore vent Offensive discharge Use Pratts Poultry Disinfectant.

#### WHITE DIARRHEA (in chicks)

Sleepy, droopy Short backs, long heads Use Pratts White Diarrhea Tablets

LICE

PRATTS 51ET YEAR OF SERVIC

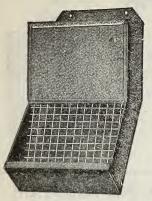
Restless, picking Shaking heads Unthriftiness Use Pratts Powdered Lice Killer or Pratts Lice Ointment

Reg.U.S.Pat.Off

RED MITES Pale combs, weakness Loss of weight Use Pratts Red Mite Special.

#### SEXTON DRY FEED HOPPER.

This hopper is arranged to hang on the



OPEN.

wall the desired distance from floor and never need be removed from the wall to be refilled. It is impossible to waste any feed, as the pan at the bottom takes any feed that may be picked out, and the last crumb can be used, therefore saving any waste. The body being covered keeps feed dust proof and clean, and is always dry. Body made of galvanized iron and the grating is of round galvanized wire, preventing the poultry from cutting their bills. The lower cover is so arranged that it is held up by locking the top cover of hopper over same, and by raising the top cover the lower cover will fall in place. Simple in construction, easily operated and absolutely "rat" and "mouse" proof. Made in three sizes,

Price—No. 5, 24 quarts capacity, No. 1, 12 quarts capacity, No. 2, 3 quarts capacity, 1.10 SE STONS DRI TLED HOPPER

CLOSED.

# NORWICH AUTOMATIC FEEDER.

"FILL THE HOPPER AND THE BIRDS DO THE REST."

Fill the hopper with any dry grain feed, or any mixture of dry grain feed, and the revolving bait bar with cracked corn. Stand the Norwich Automatic Feeder anywhere in the yard, pen or house, and put any kind of litter under machine. Adjust valve to feed desired quantity. Adjust legs for required height. Every kernel of grain put in the hopper will go to the flock. Nothing will be lost from any cause. The exercise given by the action of the machine is just sufficient to keep the flock in perfect condition; a few days' trial will show the breeder that the flock will be bright and alert, and with a total absence of dull, stupid or drooping appearance.



Price-No. 1, 8-quart hopper, weight 14 lbs., No. 2, 14-quart hopper, weight 15 lbs., No. 3, 20-quart hopper, weight 20 lbs.,



#### GRIT AND SHELL BOX.

Made of best grade galvanized iron, in two sizes only. Has three compartments, for grit, oyster shell and charcoal. Cover lid on a slant prevents fowls roosting on the box and keeps contents clean. Made also in a larger size for a dry food hopper.

ice-Small,	\$1.00
Large,	1.15





\$5.00

5.50

6.50

FELKER DRY MASH FEEDER.

Made in two sizes, No. 12 and No. 24—No. 12, for a small colony of fowl or growing chickens, No. 24, a practical dry mash feeder for fowl. They cannot clog. They are dirt and rat proof, and are protected from waste by an especially designed grid. Should be hung on the wall by two nails, as high as the fowl can reach with ease. These Dry Mash Feeders are designed to give the consumer a feeder that in every way is practical, at a very reasonable price.

No. 12,			\$.75
No. 24,	 -	•	1.15

# POULTRY DRINKING FOUNTAINS. WALL FOUNTAIN.

The construction of these fountains prevents the water from getting dirty and full of litter. A galvanized iron hood keeps foreign matter from dropping into the water, yet allows fowls to drink readily. They are very convenient to handle, and can be hung up on the wall above the floor, the back of the can being flat. They will not break by freezing.



Price-1 gallon, 90c.; 2 gallons, \$1.25.



Top section slides into bottom section.

The latest and most practical sanitary fountain on the market. This is a double fount. Keeps the water clean and pure. Easy to fill; easy to care for. Made in two sizes.

			Pric	е.		
1	gallon,					\$1.15
2	gallons,	•		•	•	1.40

#### THE TWIN DUPLEX FOUNTAIN.

Made like the Duplex with the exception of having two openings for the fowls to drink. **Price.** 

5 gallons. \$3.25

NORWICH AUTOMATIC AIR The ever p for auti pure, f try hou and all to con the way quires in thry practic ted w remove

ever placed on the market for automatically supplying pure, fresh water in the poultry house. It is a physical and absolute impossibility to contaminate or pollute the water supply, and requires cleaning about once in three months only. Is practically frost proof. Fitted with detachable cup, removable oil chamber, heat generator, etc.

Made in one size only, 5 gallons capacity.

Complete with burner base.

Price. burner base, \$6.00 2 gallons, \$1.65

# **IDEAL SANITARY POULTRY DRINKING FOUNTAIN.**

The simplest, handiest and most practical fountain made. Keeps water the right temperature all the year. Has no lamps to trim and valves to get out of order. Saves time, labor and worry, and costs nothing to run. The open pan or drinking fountain gave to poultry only stale or filthy water, which was too warm in summer and too cold in winter. These conditions led us to devise a fountain in which water could be kept pure and clean and of desired temperature in any climate.

The fountain is made of galvanized iron, and is similar in construction to the fireless cooker, being packed with a non-conducting material to retain the temperature of the water.

Size. 2 gallon 3 gallon 5 gallon Extreme Height. 15½ inches 17 inches 20 inches Diameter. 13 inches 14 inches 16 inches Weight. 15 pounds 20 pounds 25 pounds





# MOE'S WALL FOUNTAIN, NO. 74.

A large capacity fountain, holding 5 gallons, made of heavy galvanized iron. Similar in style to the Peerless fountain. **Price, \$1.95.** 





# DOUBLE CLINCH LEG BANDS CUTS SHOW EXACT LENGTH

# COLORED SPIRAL CELLULOID LEG BANDS.

Will identify birds as far as one can distinguish colors. Indestructible and can be slipped on and off like a key ring.

Red, white, blue, amber, green, black, pink, ruby. Price, 85 cents per hundred.

# LEADER LEG BANDS.

These are flat, colored aluminum bands with the figures in black on the colored ground, and are adjustable to any size fowl.

Price, \$1.25 per 100.

WATER GLASS.

Saves Money and Helps Keep Down the High Cost of Living.

Put your eggs down in the spring when they are cheap and keep them fresh for winter use. One gallon makes sufficient solution for fifty dozen. Do not trust eggs to water glass of inferior strength.

PRICE.

1 pt., 15 cts.; 1 qt., 25 cts.; 1 gal., 75 cts.

Buy eggs when cheap. Store them with

# EGG-ASH

and leave them to use when

#### EGGS ARE HIGH.

This is a powder, conforming to pure food requirements, and is very convenient to use. One package is sufficient for 25 dozen eggs.

Price, 50 cents.

Prices subject to change without notice. (See note on page 2.)

A BIG SELLER.

Made of aluminum, with large raised numbers.

These bands are neat, easily applied, and cannot come off by accident.

In ordering state what breed they are for, and what letters or numbers you wish put on them. No. 3 is the size most generally used for poultry.

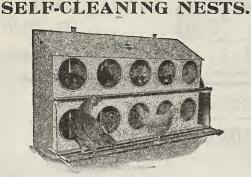
Stock constantly on hand, packed in boxes of 100, numbering from 1 to 100.

Price. 85 cents per hundred.

# JAMESWAY MAKES POULTRY PAY. BABY CHICK WATERER. GRAVITY WATERER.

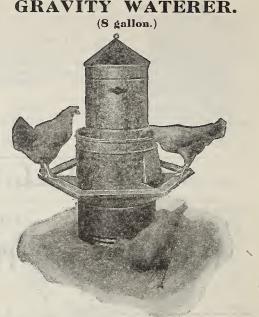


Built of heavy steel sheets. Easily washed and thoroughly cleaned by removing water pan below. Pan detachable for cleaning and filling. Capacity  $1\frac{1}{2}$  gallons for 100 chicks or less for twentyfour hours. **Price**, \$1.40.



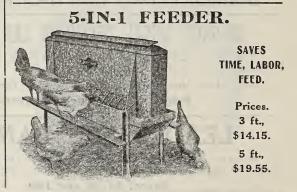
Built of steel sheets with inclined top, preventing hens from roosting above. Back of nest open, making cleaning easy. No harboring place for lice. Perches swing up against face of nest section. Made in 3, 6, 10 nest sections, with  $9\frac{1}{4}$ -inch hole. 6 nest size in stock. Other sizes can be ordered.

	Pri	ces.	
3 nest size,	\$5.25	10 nest size	\$11.85
6 nest size,	8,45		
Traps	for nests, 4	O cents extra	each.



The drinking pan extends all the way around the waterer, providing room for from 12 to 15 hens to drink at a time. Lamp burns for one hundred hours without refilling.

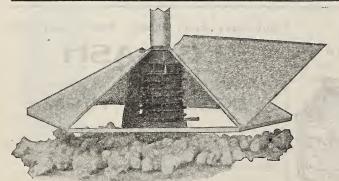
Price-With stand, \$11.45; without stand, \$8.95.



## JAMESWAY BROODER STOVE.

Large coal capacity; 60-inch hover capacity 1,000 chicks. Has many special features. Write for circular.

> Price, \$31.50. Funnel extra.





#### EGG-O-HATCH.

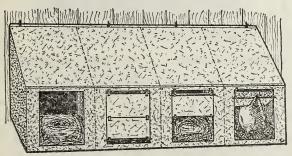
#### FOR BETTERING THE INCUBATOR HATCH. Strengthens the Chick and Weakens the Shell.

The most serious problem confronting the poultryman is the percentage of strong, livable chicks that he will receive at hatching time and the percentage that will appear as "dead in the shell." Incubator hatching is different from hen hatching, with eggs of various age and hardness of shell, less frequent shifting or turning and excessive feeding of meat, grain, etc., to breeding stock. Poor hatches are not so often the fault of the incubator as of the eggs. A weak chick in a hard, tough shell has little chance to emerge from the shell, but if you have, at hatching time, strong chicks and weak, porous shells, they will not only hatch better but will grow and thrive better after hatching. To save the shell-bound chicks, use "Egg-O-Hatch."

Price, 50 cents.



# "SAVE-ALL" LAYING AND TRAP NESTS.



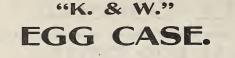
.

These nests are furnished with and without the trap doors. By using a trap door you can get an accurate check on your hens, and for setting hens. When the trap doors are not needed, they can be unhooked at the top. Then it is an open nest. Made entirely of heavy galvanized iron. Is absolutely sanitary. There is no place for mites and lice to hide, and the hen is not disturbed, so she is willing to do her part. They are very easy to clean, being hung at the top to the wall by the use of staples, and having no backs, it is only necessary, in cleaning them, to take hold at bottom of front and pull upward, so that the contents will fall out at back on to the floor.

Note the sloping top. It is impossible for the hens to roost upon it. The trap door never fails; another hen get in. There are no catches, no springs, on latches—nothing to get out of order. It is just up-to-date. Made in two sizes only.

No. 22-16.—48 inches long, 13 inches deep, front 10 inches high, back 19 inches high. Has four nests 12 inches wide. Weight, crated, 25 pounds. Shipped knocked down. Made with and without trap doors. No. 22-17.—Same dimensions as above, except that it is 94 inches long, with eight nests. Weight, crated, 60 pounds. Shipped knocked down. Made with or without trap doors.

Price-Four nest size, complete, \$6.00; eight nest size, complete, \$10.60.



The most popular Egg Case in the market and used largely by shippers of eggs.

#### PRICES COMPLETE.

8	dozei	n	 	\$1.10
15	66		 	1.85
30	66	•••••	 	2.35
49	. 66		 	2.85



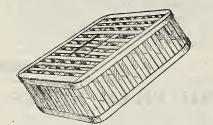
# IRON BAND EGG CASE.



A new egg case, which, although on the market for only a comparatively short time, is already being used in over five hundred New England towns and cities. This case is approved by the general office of the American Railway Express Company, which highly recommends the cup filler used in the case. No cushions are required. When ready to ship the fastening is such that an iron strap extends completely around both ends of the case, and it is this feature which gives it the name and makes it the most durable case on the market.

15 dozen	 \$2.60
30 "	 3.00

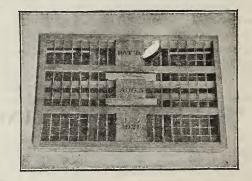
# NEWFIELD POULTRY SHIPPING CRATE.



Made of green elm, then thoroughly dried. Its round corners prevent injury and loss by crowding, so frequent in square cornered crates.

Price, \$2.50.

# FOLDING CRATE.



Strongest crate made.

e. Saves space; saves freight. Price, \$2.75.

# EGG CASE CUSHIONS.

These cushions are made of excelsior, eleven inches square and about one-half inch thick, for use in either fifteen or thirty dozen egg cases, to prevent the eggs from being broken in shipment.

Price, \$2.00 per hundred.

# "STERLINGWORTH" FISH FOOD.

A pure food, prepared especially for feeding goldfish, etc. Price: Natural Food, 15 cents per package; Wafer Food, 15 cents per package.

#### "K. & W." ROOFING.

IN MEDIUM AND HEAVY SINGLE SQUARE ROLLS. ELASTIC AND DURABLE.

FEELS LIKE RUBBER.

LOOKS LIKE RUBBER.

BETTER THAN RUBBER.

CONTAINS NO TAR.

Large headed nails, cement and directions for laying packed in center of roll.

Write for quotations.

# DOUBLE QUICK GRAIN SPROUTER.



Outside cypress case insulated to retain heat. Inside galvanized steel grain chamber. Lamp heat passes up between the walls. Utilizes all the heat and saves in oil. May be used in zero temperatures. The water pan above the lamp creates the vapor that bathes the grain in warm moisture, thus producing the highly edible vapor-bath sprouts. Fitted with drain tube for overflow, well ventilated, has glass doors to "green" the sprouts, removable top, etc. Grain trays made of one piece galvanized sheet steel without rivets or solder.

PRICES.

No.	24,		3-4	bu.,	75	to	100	hens,	\$18.00
No.	40,	1	1-4	bu.,	125	to	175	hens,	24.00
No.	80,	2	1-2	bu.,	250	to	325	hens,	36.00
No.	160,	5		bu.,	500	to	600	hens,	49.00
No.	256,	8		bu.,	800	to	1000	hens,	72.00

Furnished with lamp, thermometer, directions.

# PREMIUM METAL SECTIONAL SPROUTER.

Constructed of galvanized sheet steel reinforced by an outside cypress framework. The Premium incorporates all the essentials of a vapor-bath sprouter such as heater, vapor pan, glass doors, etc. The Premium is designed to be used where temperature does not run much below freezing. It is built on the sectional plan; add sections as it is desired to increase the capacity. Small base holds ½ bushel and each small section ½ bushel. Large base holds 1½ bushels and each large section 1 bushel.



PRICES.

Small Base, 1-2 bu., 50 hens, Each Small Section, 1-2 bu., \$10.00 5.00

Large Base, 1 1-2 bu., 150 hens, Each Large Section, 1 bu.,

\$18.00 7.00

Furnished with lamp, thermometer, directions. Shipments made direct from factory by freight prepaid.

#### THE COLLINS SPROUTER. Why It Will Earn You Money.



It will make hens lay when eggs bring high prices. And to get eggs at that time you must make conditions like those of springtime, when the hens lay naturally. In the spring there is always plenty of fresh green grass, but you can furnish winter green feed at small cost. which is quite as palatable and even more nourishing. Sprouted oats will "make the hens sing." It will give you better hatches, is invaluable in the breed ing pen. It furnishes much needed green feed for baby chicks.

8 pans,  $11 \ge 15$  in., weight 14 lbs.

Price, \$4.00.

#### ECONOMY OATS SPROUTER.

The Natural Process for Sprouting.

Contains five sprouting pans and one drip pan 16 x 17 inches. Iron rack is 35 inches high.

By feeding sprouted oats through the winter, egg production can be kept up to a much larger degree than otherwise.



Price, \$7.25.



Strongly made of heavy wire, and very durable. Fastens to the wall with two heavy screws. Easily kept clean. No harbor for vermin.

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



#### PHILADELPHIA POULTRY MARKER.



Do you keep a record of chickens? There is no better or quicker way than by marking, as many different marks can be made by

punching web between the toes. Made in two sizes. Price, 25 cents.

#### PERFECT CHICKEN PUNCH.



Chicks may be marked as soon as hatched without injury.

Price, 25 cents.

# LEE'S LICE KILLER.

A liquid preparation having all the killing properties of any powder or dip; besides, the *vapor* that it gives off is destructive to insect life, though harmless to fowl. It permeates every crack and crevice of the poultry house and all the hiding places of vermin and destroys them.

#### Price.

1 qt., 60c.; 1-2 gal., 90c.; 1 gal., \$1.60.

#### LAMBERT'S DEATH TO LICE POWDER. FOR FOWLS, CHICKENS AND ANIMALS. DIRECTIONS.

we to the skin especially under the wings and a

Work the powder well down to the skin, especially under the wings and around the neck. Dust setting hens thoroughly. Scatter about a teaspoonful of the powder in the nest material.

For Lice on Young Chicks.—Rub small quantities of the powder into the down on the head, neck and back. Then brush the powder out.

Price: 15 oz. pkg., 25c.; 3 lb. pkg., 50c.; 6 1-4 lb. pkg., \$1.00.

# FIGHT MITES WITH MALOX.

The gray or red mite, which lives by sucking the blood of domestic fowls, leaves them after satisfying its hunger and hides in the cracks and crevices of the building. The way to kill them—kill them all—is by spraying the interior of the building with Malox.

The mite breeds in the filth and droppings, its eggs hatch in two days, and in less than a week the newly hatched mites are themselves laying eggs. In a short time the poultry house is literally swarming with mites; they attack the hens voraciously, and unless they are exterminated immediately the hens cease to be productive.

Malox Kills Every Mite It Touches—and It Touches Them All If Properly Used. Price: 1 qt. cans, 50c.

More work out of your horses, more milk from your cows, fatter hogs-these are a few of the benefits that come from using

#### PRATTS ANIMAL REGULATOR.

This is the original and pioneer stock regulator of America. Tested thoroughly for nearly half a century, its worth is known and recognized by stock owners the world over. Always sold on a guarantee that it will satisfy you or your money back.

> 25c., 50c. and \$1.00. 12 lb. pails, \$2.15; 25 lb. pails, \$3.40.



In packages, 30 cents, 60 cents, \$1.20; in pails, \$4.00.

## GRAYLAWN FARM. LOUSE-CHASE.

NO MORE LICE.—Absolutely kills the lice on your cattle, swine, poultry, horses and sheep. Satisfaction guaranteed or money back. Used and recommended by state colleges and thousands of breeders. Safe, easy and economical to use.

Price, \$1.00 per large package; 50 cents per small package.

#### SCAB-CHASE.

MANGE, ITCH.—Scabies and other parasite skin diseases of all farm animals, poultry, dogs and cats can be quickly and positively cured with Graylawn Farm Scab-Chase, or it does not cost you a cent. Safe, easy and economical to use.

Price, 75 cents and \$1.50 per package.

#### FLEA-CHASE.

**DOGS, CATS, PETS.**—Are too intimate to allow them to become flea infested. For their health and comfort, as well as your own, use Graylawn Farm Flea-Chase to exterminate the vermin. It is entirely safe, easy and economical to use. Money back if it fails.

Liberal package, 60 cents.

# THE TOWNSEND WIRE STRETCHER.



The Townsend Wire Stretcher is made with a wooden lever or handle three feet in length, to which is attached malleable iron pinchers, into which are riveted corrugated steel grips; warranted not to slip. It is a substantial and very durable implement.

Price, \$2.00.

Prices subject to change without notice. (See note on page 2.)

PRATTS ANIMAL REGULA

# CARBOLA. Better Than Whitewash.

Makes Work Easier,

Saves Time, Labor and Money,

#### Gives Better Results.



Carbola is both a paint and powerful disinfectant in one. Much easier to apply, gives better results and costs less than whitewash and disinfectants. Just mix Carbola powder with water and it's ready to use. No waiting or straining. Does not spoil if left standing in pail. Does not clog sprayer. **Does not peel or flake.** Powerful disinfectant—keeps its strength on wall. The dry powder is highly recommended as a lice powder.

Trial package, 30 cents. 5 pounds (5 gal.), \$ .75 20 pounds (20 gal.), \$2.50 10 pounds (10 gal.), 1.25 50 pounds (50 gal.), 5.00 200-pound bags, \$18.00.

# SULPHUR FUMIGATING CANDLE.

The candle is made from pure, high grade sulphur, and has a circular wick, which, when once lighted, stays lighted. Is especially useful to poultrymen in ridding poultry houses of insect pests, as the vapor from it penetrates crevices not reached by other means.

In circular tin box, price, 15 cents.



# CHICKEN FEED CUTTER.

INVALUABLE TO POULTRY RAISERS.



This is a highly efficient machine for cutting clover, hay or other feed into extremely short lengths. It is made with three knives,  $6\frac{1}{4}$  inches long, and a self-feeding comb roller, which straightens the feed as it is presented to the knives, making a more uniform length of cut. It cuts very rapidly, being one of the fastest machines of its size. Cuts 1-4, 7-16 and 3-4 inches.

Price on application.

#### SHIPPING BOXES.

#### For Day Old Chicks.

These chick boxes are made of a staunch grade of corrugated fibre board and when assembled will support heavy pressure without collapse. These boxes conform to International Baby Chick Association specifications in size, shape and interior arrangement. Each compartment carries twentyfive chicks without crowding. The 100 chick size has but four separate pieces—the box, the cover and two crossed partitions; the 50 chick size has a single partition, and the 25 chick size consists of box and cover only. The boxes are always shipped knocked down flat. The separate parts are accurately cut and scored for quick set-up.

25 chick, 20c.; 50 chick, 30c.; 100 chick, 40c.

BLATCHFORD'S CALF MEAL

# "Good to the last drop"

Just the thing to raise your calves right from birth.

The Complete Milk-Equal

Then sell your milk and get the benefit of the high creamery prices.

#### No more scouring calves.

It is absolutely the only milk-substitute that contains all the elements necessary for rapid and healthy growth, and the only calf meal that is thoroughly cooked and prepared for digestion. Will push calves forward better and quicker than any other food.

Sold in 100, 50 and 25 pound bags

100 pounds makes 100 gallons of Complete Milk-Substitute

# FROM SOW TO PASTURE

Wean your little pigs easily, safely and cheaply on

#### Blatchford's Pig Meal

From Pig-hood to Pork-age it gives big bone and solid flesh. Prevents loss of growth and vitality during the critical weaning period, and always makes the runts catch up.

Sold in 100, 50 and 25 pound bags

# BLATCHFORD'S MILK MASH

#### Saves Your Baby Chicks and Ducklings

Contains just the right combination of milk, milk substitutes, meat and grains necessary for the best results. Prevents bowel trouble, leg weakness and white diarrhea. It should be every chick's first feed. It carries them safely through the dangerous first three months. Raises 95 per cent. of every hatch. Five pounds per chick will do it.

#### GROWS-MATURES-FATTENS

Sold in 100, 25 and 10 pound bags and in 4 pound trial cartons

# NORTH STAR WOOL FAT.

#### An Antiseptic Compound for Horses and Cattle.

Made from the natural fat of sheep wool and powerful antiseptics, and having a beneficial action different from other fat or grease preparations, it penetrates the skin and is absorbed by the tissues, carrying with it the healing, germ-destroying antiseptics with which it is incorporated, at the same time feeding, nourishing and building up new tissue to replace that destroyed by injury or disease. One of the best applications for barbed wire cuts, cracked hoofs, thrush, mud fever, wounds, collar galls, sore teats and sores of every kind.

Price, 50 cents and \$1.00 per can.



# PRAY'S PATENT ICE PLOW.

This plow is especially designed to meet the demand for a cheap and efficient ice cutter for farmers and dairymen. It will cut from 20 to 40 tons an hour, cutting the ice blocks of uniform size, which saves much labor when packing.

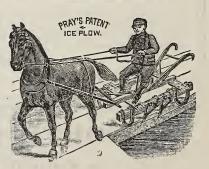
The extra weight of the rider holds the plow to its work and allows the horse to be hitched much closer to the plow—an advantage where the pond is small and all the ice needed from the edge of the pond.

It is the only plow that can be successfully used by one person. The draft back of runners omits the necessity of leader or rider.

- It is the only plow that has an adjustable tooth.
- It is the only plow that works with runners.
- It turns easier at the end of the row than any other plow.
- It cuts ice with more economy on a small pond than any other plow.
- A horse and one man can cut as much ice as ten men with saws.
- Upon a shallow pond where a saw cannot be used this plow is indispensable.

WARRANTED TO WORK AS REPRESENTED.

Price, Four-Tooth Plow, \$20.00; Six-Tooth Plow, \$25.50; Eight-Tooth Plow, \$30.50.



# THE MOST PROFITABLE MACHINE ON THE FARM IS A DE LAVAL CREAM SEPARATOR.

#### Skims Cleanest, Has Largest Capacity, Turns Easiest, Is Easiest to Wash and Lasts the Longest.

No other machine or implement used on the farm receives anywhere near such constant use as a cream separator, nor is there any other farm machine or equipment with which quality of work means so much and first cost so little.

Twice a day—730 times a year—your separator either saves cream or wastes it. A separator that runs hard, gets out of order, or is not easy to wash is a constant bother, and it takes only a little loss of cream at each separation to amount to more in the course of the year than you originally paid for the machine.

It pays to buy a reliable separator. That is why practically all of the cream separators used in creameries and milk plants the world over are De Lavals. Many of the biggest and most successful dairymen are De Laval users. Experience has taught them that the De Laval is one of the best and most economical cream separators.

If you have two or more cows you need a separator, and you cannot do better than to select the separator that unprejudiced judges all over the world have chosen as the best.



We will be glad to mail you a catalog and quote prices. All sizes constantly in stock.



#### MASSEY-HARRIS No. 6 CREAM SEPARATOR. AN AID TO PROFITABLE DAIRYING.

#### BUILT IN SEVERAL SIZES.

Even the smallest globules of butter fat are saved when separating with this machine. It has an improved bowl which gives practically perfect separation regardless of the temperature of the milk or of the density of the cream that is being run. Indeed, so closely does it skim, it is not at all unusual to find less than one hundredth of one per cent. of butter fat in the skim milk and oftentimes it is difficult to detect even a trace.

The gears are held in positive alignment by a one-piece frame and have diagonal teeth cut from the solid by special automatic machines which make them absolutely correct as to pitch and mesh. For the worm wheel, phosphor-bronze, a metal which develops very little friction when running in contact with steel, is used. An efficient splash system of oiling keeps the gears well lubricated.

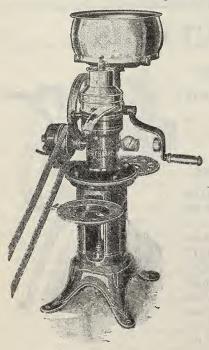
Both the spindle and the bowl are made as separate pieces and are so designed that the latter can be removed without disturbing the former. This construction facilitates the washing of the bowl in that you do not have to handle the spindle with it, and besides, when returning it there is no chance of springing the spindle and getting the bowl out of balance or of damaging the worm or worm gear.

All of the weight of the spindle, the bowl and the milk being separated, is carried on a steel ball on which the spindle stands and which is mounted in a phospher-bronze bearing. A simple adjustment is provided in the bearing for regulating the height of the bowl and a removable, hardened steel toe which can easily be replaced if it should ever become worn is fitted into the lower end of the spindle. As the steel ball revolves when the spindle turns, friction and wear are minimized. A bell indicator enables the operator to know whether or not he is turning the machine at the correct number of revolutions per minute.

The smooth running of the bowl is always assured, as no matter



whether you are just starting the machine or are letting it slow



Equipped with the Governor Pulley for Power Use.

#### down the swaying motion incident to the slower speeds is absorbed by a spring cushion bearing, which keeps the spindle from getting out of line. Consequently, the milk is always distributed over the surfaces of the discs so evenly, the flow of the cream is never retarded by skim-milk flooding its course and the effectiveness of the separation is preserved.

In the main, the bowl consists of a steel case containing a specially designed split wing having six V-shaped openings and a series of skimming discs. The whole milk enters at the top and passes into the split wing through which it is distributed over the discs so uniformly that their entire surface is utilized.

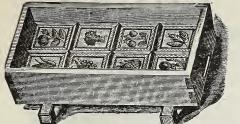
#### NEW GOVERNOR PULLEY FOR MASSEY-HARRIS No. 6 CREAM SEPARATOR.

This new governor pulley has been developed to provide a reliable means of driving the Massey-Harris cream separator by power and is exclusively a Massey-Harris feature. It absolutely governs and controls the speed at which the separator turns irrespective of the rate at which the pulley on the engine revolves. Indeed, it will instantly take care of any variation in speed on the part of the engine or motor within a range of 800 to 1400 revolutions per min-ute and keep the speed of the separator uniform and at the correct rate for the best results.

The principle is that of the automobile planetary transmission disc clutch, the governing being done by a regulator working in connection with a series of multiple fibre discs, and so positive is the action, once the pulley is set, it will hold an unvarying speed almost indefinitely. When the engine stops the pulley will let the separator run down and it need not be removed to turn the machine by hand. A sensitive and reliable speed indicator is a part of each outfit.

#### Prices on application.

#### COMBINATION BUTTER MOULDS.



These moulds are expressly designed to meet the demand for strictly first-class, hand-carved designs.

The cut here shown represents No. 6, which holds two pounds, and is divided into eight ¼-pound cakes.

Prints engraved to order, with ordinary designs, initials or monogram, without extra charge, excepting that, should more than six letters be wanted on each cake, a charge ot five cents per letter will be made for each letter in excess. Prices quoted on application for spe-

No. of Prints.	No. of Cakes.	Capacity in Pounds.
2	4	2
3	4	2
4	4	1
5	4	1
6	8	2
10	24	1 1/2
20A	4	2

	ciai or comp	nicated design	ns or lettering.	
з.	Capacity of Each Cake in Ounces.	Dimensions of Moulds in Inches.	Dimensions of Each Cake.	Price.
	8	11 x 334	334 x 234	\$6.50
	8	12 x 3	3 x 3	6.50
	4	$4\frac{1}{2} \ge 5$	$2\frac{1}{4} \times 2\frac{1}{2}$	5.75
	4	$10 \times 2\frac{1}{2}$	$2\frac{1}{2} \ge 2\frac{1}{2}$	6.50
	4	$-10 \times 4\frac{1}{2}$	$2\frac{1}{4} \ge 2\frac{1}{2}$	7.50
	1	10 x 4	$1\frac{1}{4} \times 1\frac{1}{3}$	9.25
	8	11 x $4\frac{1}{2}$	31/2 x 21/2	6.50

**BLANCHARD BUTTER MOULDS.** 

1-2 lb., two 1-4 lb. prints, 75c.; 1 lb., four 1-4 lb. prints, 85c.; 2 lbs., eight 1-4 lb. prints, \$1.35.

If engraved with initials, or any hand carving, add to the REGULAR PRICE 25 cents for each cake so engraved.



#### BUTTER CARRIERS.



These carriers are made of spruce and white wood and are very strong and durable, with trays so arranged that the butter is not marred in the least in handling. The ice box is made of metal, and has two compartments, the top for ice and the bottom for the water as the ice melts, so that the ice is melted by air alone, thereby lasting much longer than if the ice rested in the water.

Each carrier is filled with long trays, and the capacity given is for prints of the standard creamery size.

Size.	No. Trays.				Wit	hout Ic	e Box.	-	Price.
12 lbs.	4	$10\frac{1}{4} \times 7\frac{3}{8}$	inches,	15	inches	deep,	inside	measure	 \$3.75
24 ''	4	$10\frac{1}{4} \ge 14\frac{5}{8}$		٠.	"		"	66	 4.00
32 "	4	$10\frac{1}{4} \times 18\frac{1}{2}$	66	"	66	66	"	66	 4.25
40 "	5	$10\frac{1}{4} \ge 18\frac{1}{2}$	61	"	"	66	"	66	 5.00
48 "	6	$10\frac{1}{4} \ge 18\frac{1}{2}$	"	"		"	"	66	 5.50

Price, complete, with both long trays, and ice box and short trays for summer use. 24 lbs. (holding 16 lbs. butter, with ice attachment), \$5.75.

32 lbs. (holding 24 lbs. butter, with ice attachment), \$6.00.

40 lbs. (holding 32 lbs. butter, with ice attachment), \$6.75. 48 lbs. (holding 40 lbs. butter, with ice attachment), \$7.25.

The 12 lb. carrier, being very small, cannot be fitted with ice box.

# THE BELLE CHURN. ONE OF THE BEST BARREL CHURNS MADE.

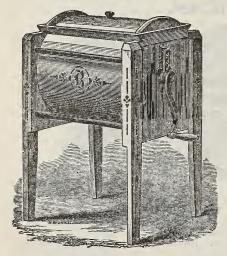
This churn is made in the most thorough manner and of kiln-dried white oak. It will last for years. The principle is concussion and not friction—has no floats or paddles inside. It is easily operated and easily cleaned. Perfect in construction, and having no parts liable to break or get out of order, it fully meets the requirements of large or small dairies. Be sure and get a churn large enough so that it will not be necessary to fill over half full, less is better, if you wish good work.

Single and double pulleys and pulley shafts can be furnished if desired to run by power.

No. (	), (	5 gallor	n, churns	from	1	to	3	gals.	crean	n	\$ 6.75
No. 1	1, 10	э ч	"	"	1	to	5		"		7.50
No. 2	2, 1	5	"	66	1	to	7	**	" "		8.50
No. 8	3, 20	) "	"	6.5	<b>2</b>	to	9	"	"		9.25
No. 4	4, 23	5	46	66	<b>2</b>	to	12		66		11.75
No. 8	5, 3	5 "	66	66	3	to	16	"	66		13.50
No. 6	3, 6	0 "	- 16	٠ د	6	to	22	"	"		23.50



# THE BLANCHARD CHURN.



The following are the leading merits of the BLANCHARD CHURN:

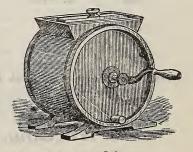
Perfect quality of all materials used. Excellency of manufacture. Simplicity of construction, having no cog wheels or gearing. Durability. Ease of operation. The action of the dasher is such as to cause agitation of the cream by creating currents, and not by beating or by friction of the cream, which may injure the grain of the butter. Facility in removing the dasher and getting at the butter. Ease of cleaning, the form of construction making the inside without any inaccessible or invisible angles or corners.

No. 3, f	or up	to abo	ut 2 g	allo	ns of crea	am	\$10.00
No. 4,							
No. 5,	66	"	6	66	٤ د		12.50
No. 6,	"		12	66			
No. 7,	66		16	"			19.00

# CYLINDER CHURN.

A favorite style of churn which has been in use for many years.

7	<b>N</b> 0.	1,	capacity	$2\frac{1}{4}$	gallons		Price. \$4.00
]	No.	2,	"	4	"		4.75
1	No.	• 3,	"	7			5.75
1	No.	4,		$10\frac{1}{2}$		·····	6.25



Drico



# THE WATERS BUTTER WORKER.

Practical, efficient, durable. It combines more advantages than any other. The tray is removable and thus takes the place of the butter bowl.

Will work butter in any condition satisfactorily. Made in sizes to suit any dairy or factory.

Size No.	Length of Tray.	Width of Tray.	Capacity.	Price.	Size No.	Length of Tray.	Width of Tray.	Capacity.	Price
0.	27 in.	<b>^</b> 14 in.	1 to 15 lbs.	\$20.50	3.	39 in.	20 in.	5 to 50 lbs.	\$23.50
1.	36 in.	15 in.	5 to 30 lbs.	21.50	4.	48 in.	22 in.	10 to 75 lbs.	24.00
2.	36 in.	18 in.	5 to 40 lbs.	22.75					

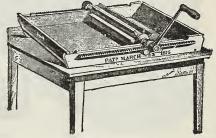
# **Reid's Patent Butter Worker.**

These machines are all built of the best material.

The iron part is galvanized, preventing rust.

No.	Size.	Depth Inside.	Capacity.	Price.
1.	23 x 36 in.	$2\frac{1}{2}$ in.	50 lbs.	\$15.50
2.	20 x 36 in.	$2\frac{1}{2}$ in.	30 lbs.	13.50
3.	17 x 27 in.	$2\frac{1}{2}$ in.	20 lbs,	12.75
4.	14 x 23 in.	$2\overline{\frac{1}{2}}$ in.	10 lbs.	11.50

Three pounds can be worked in any of the above machines, as well as a larger quantity. In buying a worker you should choose a size that will work the largest quantity that you will be likely to want to work at a time.



# DIETZ LANTERNS AND DRIVING LAMPS.



Since Dietz introduced the original tubular lantern, nearly a half century ago, notwithstanding the fact that many inferior imitations have appeared, these manufacturers still enjoy the reputation of having the **largest output of lanterns of any concern in the world**, the goods holding their place by reason of their absolute merit, for they fill to perfection every require-

ment for which a lantern or lamp may be intended.

That it may not be forgotten that "Dietz" lanterns are "different" from a host of others, each lantern of the Dietz standard pattern will be tagged with a yellow quality tag bearing the Dietz trade-mark.



We have in stock a full line of all the leading patterns. Prices furnished on application.



# Milk or Cream Bottles.

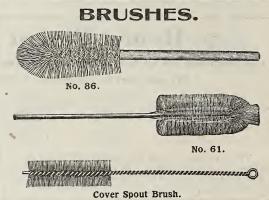
Refuse to receive milk in any other than **Glass Bottles,** as it is the only way by which you can get milk that is **sweet** and **pure** and that has not come in contact with the numberless street odors, flies, and many other undesirable influences.

THE "COMMON SENSE" Bottle, capped by a strong, clean paper cap, is the BEST, as it can be washed absolutely CLEAN, and no taint is possible in milk put up in these bottles.

1-2	Pint,	Common	Sense,	\$.65
1	Pint,	Common	Sense,	.80
1	Quart	t, Commo	n Sense,	1.00

Made in two sizes—No. 1 taking a cap 1% in. diameter, and No. 2 a cap 1% in. diameter.

Special prices on five or ten gross lots.



We are in a position to furnish the best kind of brushes for dairy use, and recommend especially our line of can, separator and bottle brushes.

Bottle Brushes	45c.	and 70c.
Test Bottle		10c.
Milk Can.		60c.
Separator		25c.

Separator Bowl	50c.
Separator Tube	20c.
Separator Cover Spouts	20c.

#### Special prices for large quantities.

## **BOTTLE BOXES.**

For carrying bottles on the delivery trucks. Made of hard wood with wire divisions. One quart size holds twelve bottles, one pint size holds twenty bottles.

Price, \$2.00 each.



# The "Facile" Improved Babcock Milk Tester.

The "Facile" Tester has taken the lead over all other Babcock machines, not only among creameries and cheese factories, but in State Experiment Stations and Dairy Schools. Several attempts have been



made to copy the machine, but so far nothing has been produced embodying all of its desirable features, and it remains to-day the leading Babcock machine.

Prices include full set of glassware, comprising test bottles, pipette and acid measure; also test bottle brush and bottle of acid.

6 bottles, \$18.00 | 10 bottles, \$20.00 8 bottles, 19.00 12 bottles, 22.00



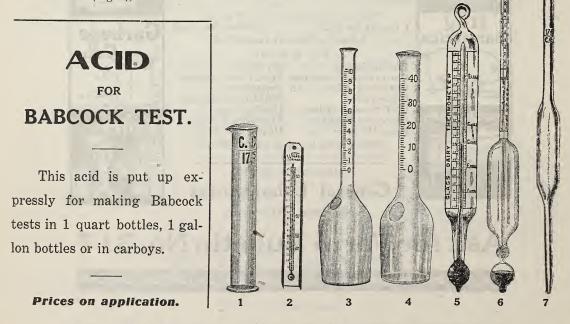
# The "Facile" Junior Babcock Milk Tester.

This tester is similar to the above, but does not have the bottles inclosed in the metal case.

# **GLASSWARE FOR BABCOCK TEST.**

Each.

Lactometer (Fig. 6), for testing quality of milk, \$	.75
Floating Dairy Thermometer (Fig. 5),	.50
Flange Dairy Thermometer (Fig. 2),	.50
Babcock Test Bottles (for milk), 10 to 25% (Fig. 3),	.35
Babcock Test Bottles (for cream), 30 to 50% (Fig. 4),	.40
Pipettes (Fig. 7),	.25
Acid Measures (Fig. 1).	.25





## MILK BOTTLE CAPS.

No. 1,  $1\frac{7}{8}$  in. diameter, plain or printed caps, 58c. per 1,000. In cases of 5,000, \$2.75 per case.

No. 2, 1<sup>§</sup>/<sub>3</sub> in. diameter, and No. 3, 1<sup>§</sup>/<sub>4</sub> in. diameter, plain or printed caps, 56c. per 1,000.

In cases of 5,000, \$2.65 per case.

Special price on barrels containing 50,000 caps.

Caps with lip, 2c. per 1,000 extra. Caps with special printing made to order.

### WYANDOTTE DAIRYMEN'S CLEANSER AND CLEANER.

A powder especially compounded for use in the dairy and creamery for washing all dairy utensils, glass and tin ware, in a most satisfactory and sanitary manner. The use of this powder means absolute cleanliness.

Price, 5 lb. bags, 40c.; 80 lb. kegs, \$5.33; 280 lb. barrels, \$15.16.

## WELLS & RICHARDSON CO.'S Dandelion Brand Butter Color. PURELY VEGETABLE.

Will not become rancid. Will not color the buttermilk. Gives a bright June color. Always gives satisfaction.

PRICE.

Small size,	to color	about	375 pounds	\$ .35
Medium size	"	66	750 pounds	.65
Large size,	66	66	1875 pounds	1.00
Cans, 1 gallon			•••••••••••••••••••••••••••••••••••••••	4.50

### HANSEN'S DANISH RENNET TABLETS. FOR CHEESE MAKING.

Always of the same strength, entirely preservable, separates the cheese matter completely, and gives the greatest quantity possible.

#### PRICE.

Package of 25 tablets, 75c.; can of 200 tablets, \$5.50.

### HANSEN'S DANISH BUTTER COLOR.



The Most Uniform, the Purest and the Most Natural Shade.

Made with the finest imported vegetable oil.

To butter makers desiring a pure, vegetable butter color, we do not hesitate to recommend Hansen's Danish as unquestionably the best in every respect.

Its high quality has never been approached by any competing preparations, and many shippers of the finest butter demand its exclusive use by their butter makers.

#### PRICE LIST.

Small size,	to color	about	400 pounds	\$ .35
Medium size,	**		1000 pounds	.65
Large size,	"	6.4	2000 pounds	1.10
Cans, 1 gallor	n			4.50



### THE HORNE VERTICAL CAN STRAINER.

Is warranted to filter milk free from the slightest trace of sediment as fast as poured.

The milk begins to filter quickly and evenly in all directions the instant it is poured, and because of the vertical construction and large filtering area of the strainer there is no back pressure; consequently all foreign matter is caught on the vertical ides, and not forced into the milk.

Made of heavy charcoal tin, all inside joints thoroughly soldered and no angles for accumulation of filth.

Price of strainer, complete..... Price of filtering flannels, each .....



\$3.00

.25

# MILK CANS.

We can furnish tin, wood stopper Milk Cans, in any style, size or quantity; also 20 quart and 40 quart Shipping Cans, with either tin stopper or lock cover. The parts of all our Shipping Cans are made of steel and heavily tinned by the hand-dipping process after they are formed.

#### Prices furnished on application.



 6 Gallon Cream Pail, like cut,
 .
 .
 .
 .
 3.25 "

 10 Gallon Cream Pail, like cut,
 .
 .
 .
 .
 .
 5.00 "

 "K. & W." Creamery Can,
 .
 .
 .
 .
 .
 .
 2.50 "

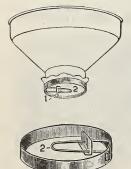
## The Horne Seamless Strainer

and

## Seamless Adjustable Ring.

#### Patent applied for.

Give us outside dimensions of your strainer (see 1 and 2), including the Dr. Clark strainer, and we will guarantee to double its straining capacity with no danger of the material slipping for reasons explained below.



We warrant milk to strain 100% faster than by any other strainer when wire mesh or perforated disks are used. Why? Because these perforated metals take up more than 50% of the straining surface. The entire surface of the Horne strainer is unobstructed, which makes the tremendous difference in its straining capacity. To use absorbent cotton, use with cheese cloth and thoroughly scald the cloth or throw the whole away. Filtering flannels 7 x 7 are more reliable and fully equal in results to absorbent cotton and are washable. To make the highest grade milk use the flannels 12 x 12 or 18 x 18 and form into a loose pocket and lock with the adjustable ring. This large area filters the milk evenly over a surface of several hundred square inches and removes every trace of fine sediment, leaving the milk absolutely clean. (Two thicknesses may be used if desired.)

Flannels scalded and ironed will last for several weeks. By this process we warrant milk to filter as fast as can be poured by any number of milkers and give the most satisfactory results. Try the strainer in different ways and see which is best adapted to your wants. Place the ring over straining material and move the slide (1) until material is firmly gripped, making an absolute lock.

Price No. 1, 4 cross 14 quart,	\$3.25	Filtering flannel	s, 7 x 7,	\$ .50 per	dozen
"No. 2, "12 "	3.00		12 x 12,	1.50 "	"
Strainer to fit 10 quart can, ·	3.00		18 x 18,	2.00 "	66
Adjustable ring warranted to fit your strainer	, .75	300 sterilized cot	ton pads,		2.00

## **CHAMPION MILK GOOLER AND AERATOR.**

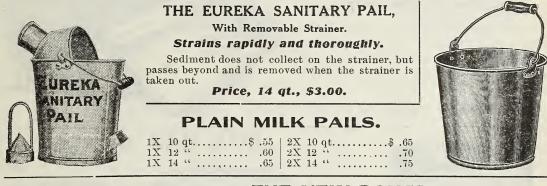
A perfect aerator, removing all flavors arising from excessive cabbage, turnip or silo rations.

A complete deodorizer, removing the animal heat or cowy taste and all odors arising from the absorption by the milk of stable or other unpleasant gases.

A thorough cooler, reducing the temperature of the milk in one minute nearly to the temperature of the cooling medium.

It is equally well adapted to the use of any cooling medium, either running water, ice water, or, if a very low temperature is not required, ordinary well or spring water.

No.	Capacity of Milk Receiver.	. Size of Dairy.	Takes Care of.	Price.
2.	18 quarts	10 to $25$ cows	3 milkers	\$ 9.50
3.	34 ''	25 to 50 ''	5 "	11.25
4.	52 ''	50 to 100 ''	8 "	14.00





### THE NEW DOVER SANITARY MILK PAIL. THE BEST MILKING PAIL ON THE MARKET.

Note the guard, which absolutely prevents dirt from falling from the rounded breast into the pail.

The body is in one piece, has only one seam, and the pail is made of extra heavy high grade charcoal tin plates. Every seam and crevice is smoothly soldered inside and outside, preventing dirt collection and making cleaning easy.

Many dairymen do not like to pour from a pail on the side which they milk in, on account of more or less dirt and dust which is apt to be on that side of the pail. Always pour from the Dover pail in the following manner. Have the pail opening face you; grip bottom of pail under said opening and pour over the top of the breast; the guard on the breast acts as lip.

Price, \$3.00.

## **Pioneer Brand Parchment Butter Paper.**

Guaranteed to contain no oil, grease, paraffine or wax.



Are you getting the best price for your butter? Try wrapping it in Pioneer Butter Paper, which completely protects it from all injurious odors, preserves the delicious flavor, and prevents the prints from becoming damaged in handling.

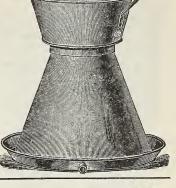
WE RECOMMEND.—Before you wrap butter, wet parchment thoroughly in clean, pure water, add salt if you prefer. It means better wrapping; it means better protection.



**PRINTED PAPER.**—Printed to comply with the law requiring the weight of the butter to be marked on the container. SOLD IN PACKAGES ONLY. Price, 35c. per pound.

Package, 7 x 9 (1-2 pound size), 5 pounds; 9 x 12 (1 pound size), 7 pounds. Price, plain paper, 30c. per pound.

Write for quotations for large quantities and for printing special designs. Prices subject to change without notice. (See note on page 2.)



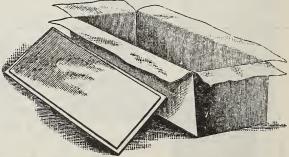


## Improved Oblong Butter Box.

#### With Parchment Lining.

The box holds five pounds of packed butter is nearly brick shaped, flaring so the butter will turn out, and is in the best possible shape to cut up for the table in square-like prints, and free from waste.

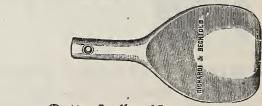
Price, \$1.85 per crate of 12 boxes.







Price, 8 qt., 95c.; 4 qt., 70c.



Butter Ladles. 15c.



Creased Butter Spades, 15c.



Plain Butter Spades, 12c.

Made of heavy corrugated pasteboard, holding four one-pound prints.

Price, each, 10c.; per doz., \$1.00.

LAMBERT

PARCEL POST BUTTER BOXES.

\$1.40 per 100.

\$12.50 per 1.000.

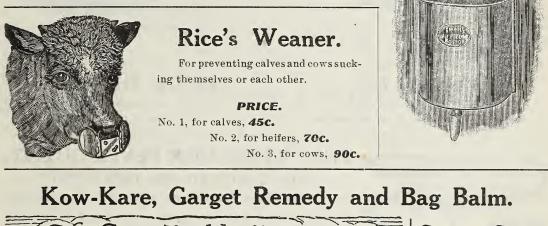
Price.

6.6

## SMALL'S CALF FEEDER.

This is a device by which the calf may be fed away from its dam, and with any mixture of milk (or whatever else is healthful and desirable), with convenience and in the natural way, with that admixture of saliva which does not occur when calves drink from a pail.

Price, \$3.75. Extra nipples, 25c. each.



The Cow's Health - First of All To think of the milk yield first and the cow's health afterward is putting the cart before the horse. Many "poor milkers" only need to have their systems working properly to become good producers. KOW-KURE, the great cow medicine, makes cows healthy and keeps them healthy. Working on the digestive and genital organs, it is a prompt, sure remedy for Abortion, Barrenness, Retained Afterbirth, Scouring, Lost Appetite and Bunches. Try KOW-KURE; druggists and feed dealers sell it-55c and \$1.10 packages. Write for "The Home Cow Doctor," free. DAIRY ASSOCIATION CO., Lyndonville, Vt.

KON-KUR

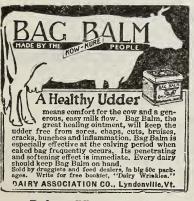
Price, Kow-Kare 60c. and \$1.25 per can.

## Grange Garget Remedy.



Positively cures garget without in any way injuring the cow.

Price, 60c. per can.



Price, 55c. per can.

## **COW'S RELIEF.**

A standard remedy among dairymen, A sure relief for caked udder, and will keep bag and teats free from soreness.

PRICE. 50c. and \$1.00 per can.



Prices subject to change without notice. (See note o

(See note on page 2.)







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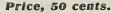
50 cents.

### PILLING HARD RUBBER TEAT PLUG.

Especially designed for two purposes. First, to prevent dropping of milk in cows where there is relaxation of the little muscle at the end of the teat and consequent leakage of milk; and secondly, to dilate the canal of the teat above the muscle in cases where hard milking is due to contraction of this part of the canal.

Price.







HOLE FOR TAPE

For drawing milk from cows with sore or obstructed teats. Made from white metal, in  $2\frac{1}{2}$  and  $3\frac{1}{2}$  inch lengths, heavily plated with pure silver and warranted equal to solid silver ones in every respect, at about one-fourth the cost.

#### Price, 25 cents.





tin dial,

# Fairbanks Platform Scale.

No. 147.

66

66

Capacity, 500 lbs. by 1-2 lb. Platform, 16 by 25 inches.

This is a convenient scale for weighing cans of milk, hay, grain, etc. Being mounted on wheels, it is easily moved from place to place. It is fitted with brass arrow tip, double beam, both beams being graduated alike. Tare may be taken up on the lower beam. Equipped with set-screw poise for locking in place. May be had also with single beam.

Write for prices.

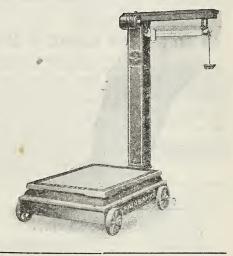


Rat corn kills rats, mice, gophers, prairie dogs, squirrels and other rodents, without odors. Mummifies them and they simply dry up. Is not a deadly poison, therefore can be used without danger to human beings. Keep away from fowl.

Prices, 25c., 50c. and \$1.00 per can.

By mail, 30c., 55c. and \$1.05.

Prices subject to change without notice. (See note on page 2.)





Red Wing Powder, in the round bellows, 10c. and 25c.

By mail, 15c. and 30c.

4.50



of

The Sherwin-Williams line of Insecticides and Fungicides is the most complete line on the market to-day. Their spraying materials are recognized as standard everywhere. The following brief descriptions are necessarily very general, but we will be pleased to give full information on request. When you are ready to spray it will pay you to see us.

SHERWIN-WILLIAMS PRODUCTS

INSECTICIDES

Quality. S-W DRY POWDERED ARSENATE OF LEAD.



One of the oldest and most effective insecticides on the market, and can be used for spraying all kinds of fruit with perfect safety. Contains from 30 to 33 per cent, arsenic oxide thoroughly in combination with lead and less than one per cent. water soluble arsenic. This means unquestionable effectiveness without danger of burning foliage. S-W Arsenate of Lead is extremely fluffy, there-

fore covers more foliage and stays in suspension longer than most leads on the market. Can also be dusted. For general spraying 1 to 1½ pounds to 50 gallons of water will be found very effective.

### S-W DRY POWDERED ARSENATE OF CALCIUM.



nate of Calcium. U 50 gallons of water.

Especially valuable as a spray to control the "potato bug" and many other chewing insects of vegetable crops. Contains more than 40 per cent. of arsenic oxide, and therefore has a killing efficiency surpassed only by Paris Green. It is more effective and economical than Sodium Arsenate as a potato spray. Considered by the United States Department of Agriculture as a high-grade Arse-Use at the rate of  $\frac{3}{4}$  to 1 pound to

lcium. Use at the rate of  $\frac{3}{4}$  to 1 poun of water.



### S-W PARIS GREEN.

One of the oldest and most reliable Paris Greens on the market. Its high quality is recognized everywhere, and many years of use have proven its efficiency. Very light and fluffy, insuring good suspension in the spray tank and thorough covering of the foliage. Contains approximately 56 per cent. arsenious oxide and less water soluble arsenic oxide than is allowed by the law, so careful-

is allowed by the law, so carefully combined that danger of burning is reduced to a minimum. In using Paris Green conditions vary greatly, but for general purposes 1 to 3 pounds to 50 gallons of water is very satisfactory.

#### S-W FUNGI BORDO.



A well-balanced dry Bordeaux mixture containing 50 per cent. of blue vitriol and 50 per cent. of lime. It is the only well-balanced Bordeaux prepared mixture on the market. It will not deteriorate and will give effective results.

Fungi Bordo will prevent potato blight, apple scab and other fungous diseases controlled by Bordeaux mixture.

To produce a 3-3-50 Bordeaux mixture use 6 pounds to 50 gallons of water; for a 4-4-50 formula use 8 pounds to each 50 gallons of water.



### S-W DRY LIME-SULFUR.

The original Dry Lime-Sulfur and the only one that has been thoroughly tested and approved by state experiment stations. It is also used by many of the largest fruit growers in New England. Protected by U. S. Patent No. 1,254,908.

S-W Dry Lime-Sulfur is 33 degrees Beaume Lime-Sulfur Solution with the water extracted. Its use eliminates all losses due to leakage and freezing. Handling and freight costs are reduced 80 per cent.

For dormant spraying on apples, pears, plums, and cherries, use from 12, to 15 pounds to each 50 gallons of water. For summer spraying of apples and pears, use 3 to 4 pounds to each 50 gallons of water. As a summer spray on plums and cherries, use 3 pounds to each 50 gallons of water. Use the customary proportion of Dry Arsenate of Lead.

Prices quoted on complete line on application.

### KAYSO Spreads the Spray and Makes It Stay.



len spray

Kayso gives complete coverage of Lime Sulfur or Bordeaux on opening buds, unfolding leaves and blossoms. This means the greatest protection against scab, brown rot or other fungous infection. It causes the spray to dry quickly in a durable coating and enables the orchardist to get the greatest benefit from sprays that are applied in rainy weather; makes the delayed dormant spray of Lime Sulfur and Nicotine Sulfate of highest effectiveness against aphids, psylla, red bug and thrips, because it spreads the Nicotine and makes it stick; greatly retards chemical reaction between Lime Sulfur and Arsenate of Lead; makes Nicotine Sulfate really effective when combined with Arsenate of Lead, for it liberates the Nicotine and spreads it over the insects; makes the spray cover smooth bark in a durable coating and spreads it into cracks and crevices where San Jose scale and similar pests seek protection.

POTATO GROWERS: Kayso will spread your sprays and make them stick, rain or shine.

Use 1 pound to 100 gallons of sprav mixture.

100 lb. sack, 20c. per lb.; 50 lb. sack, 21c. per lb.; 10 lb. sack, 23c. per lb.; trial size can, 25c.

## BUG DEATH.

The insecticide which contains no arsenic or Paris Green and is the one insecticide on the market absolutely harmless to animal life, which will kill the bugs and insects, protect the life of the leaves and plants, increase the yield, insure highest quality and promote the vigor of the plant or tree.

1 pound package (is provided with a sifter top, making it easy to distribute contents on to plants or vines)	\$ 20
to distribute contents on to plants of vines)	φ.20
3 pound package	.40
5 pound package	.60
12 1-2 pound package	1.50
100 pound keg	8.50



## **BUG DEATH ALPHA.**

#### A NON-ARSENICAL INSECTICIDE AND FUNGICIDE FOR MANY PLANT EATING AND SUCKING INSECTS.

For sucking insects, lice, aphis, flea beetles and fungus this preparation is offered with full confidence in its protective as well as destructive power. There is no place where it can work injury, its sole mission being to protect and save. For the currant worm, the flae beetle, the rose or tree aphis, as well as other forms, its destructive power is assured. The housewife will here find the ideal agent to use for the health of all house plants, and the greenhouse worker be assured security from all necessity for using any of the arsenical preparations; the orchardist find here the ideal dust for his trees, carefully mixed, ready for use; the gardener be insured against attacks from those pests and diseases which so often work serious injury.

12 ounce package, 20 cents; 80 pound drum, \$8.50.



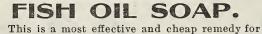
## "BLACK LEAF 40."

To Destroy Green and Rosy Apple Aphis, Woolly Aphis, Cabbage Aphis, Lice on Fruit Trees, Shrubs, and on Garden and Sweet Peas, and All Forms of Soft-bodied Sucking Insects, without Injury to Foliage, Spray with

### "BLACK LEAF 40," SULPHATE OF NICOTINE.

"Black Leaf 40" is highly recommended by experiment stations and spraying experts throughout the entire United States. Owing to the large dilution, neither foliage nor fruit is stained. Also "Black Leaf 40" is perfectly soluble in water—no clogging of nozzles.

Price: 10 lb. can, \$13.50 (makes 1,600 to 2,000 gallons for spraying tree lice, with the addition of 2% distillate oil emulsion; or 1,000 gallons for spraying green and woolly aphis, with the addition of three or four pounds of any good laundry soap to each 100 gallons of water); 2 lb. can, \$3.75; 1-2 lb. can, \$1.25; 1 oz. package, 35c.



This is a most effective and cheap remedy for destroying San Jose scale, oyster shell scale, plant lice and sucking insects on trees, shrubs, plants, vines, rose bushes, etc.

Price, 1 lb. box, 35c.

## NICO-FUME (Liquid).

A highly refined tobacco extract, containing 40% "free" nicotine, which may be used **both** for spraying and for fumigating.

Price, 1-4 lb. can, 75c.; 1 lb. can, \$2.25; 4 lb. can, \$8.00; 8 lb. can, \$15.00.

## APHINE.

Not a cure-all, but a specific remedy for sapsucking insects infesting plant life, such as green, black or white fly, thrips, red spider, mealy bug and soft scales.

Price, 1-4 pt., 25c.; 1-2 pt., 40c.; 1 pt., 65c.; 1 qt., \$1.00; 1 gal., \$3.00.

## HELLEBORE.

Will be found satisfactory for use against rose slugs, currant worms, cabbage worms and many other leaf-eating insects, where a milder poison than Paris Green or Arsenate of Lead is desired.

Price, 1-2 lb., 30c.; 1 lb, 55c.

### GYPSY MOTH CREOSOTE.

This creosote is prepared especially for painting the gypsy moth egg clusters, so as to destroy the eggs before they hatch.

Price, 1 qt., 50c.; 1 gal., \$1.25.

### **KEROSENE EMULSION.**

A valuable remedy against scale, plant lice, etc.

PRICE.

Pint can	\$ .30
Quart can	.50
Gallon can	1.25

Tobacco Dust.—Price, 1 lb. package, 20c.; in bulk, 10c. per lb. Tobacco Stams Price \$2.00 per 100 lbs

Tobacco Stems.—Price, \$2.00 per 100 lbs.

## **Dolge Weed Killer.**



### BORDEAUX MIXTURE.

Bordeaux Mixture is a preventive of potato blight, potato rot, mildew, leaf blight of shrubs and fruit trees, and, in fact, for all fungoid diseases. Apply as a fine spray to all parts of the plants liable to be affected.

#### PRICE.

Qt., 50c.; gal., \$1.25; 5-gal. cans, \$5.50.

### STERLINGWORTH ANTI CROW CORN OIL.

#### PROTECTS NEWLY PLANTED CORN FROM CROWS.

Dip a stick into a can of Sterlingworth Anti Crow Corn Oil and stir it around in a peck of corn until the corn is darkened a little, then expose it to the sun until dry, so it will run through a seeder, or you can mix a gallon of Sterlingworth Anti Crow Corn Oil with two gallons of hot water and add the corn while stirring. The oil will give it a thin crowprotecting coat, which is the easiest and cheapest way of protecting your newly planted corn from crows and blackbirds. Price, pint, 35 cents.

### TREE TANGLEFOOT.

A safeguard for trees against the gypsy moth, canker worm, and all climbing insect pests. It should be applied before the foliage appears, a continuous band two inches in width being put around the trunk of the trees three or four feet from the ground. One pound will make a band seven to nine feet long. Perfectly harmless to the trunk (unless where the trees are very young and the bark thin and tender, in which case bind manila paper around the trunk before applying Tanglefoot) and remains sticky during hot, cold or wet weather.

Price: 1 lb. can, 60c.; 5 lb. can, \$2.75; 10 lb. can, \$5.25; 20 lb. can, \$8.00; 25 lb. can, \$11.00.

### **INSECT-BAN TREE TAPE.**

#### PROTECTS FRUIT AND ORNAMENTAL TREES

From Caterpillars, Worms, Insects and all Crawling Pests.

A tape saturated with a powerful Insect Re-pellant. The shield protects the tape from the weather. No caterpillar, worm or insect can pass it. Not injurious to man, bird, animal, or any lung-breathing organism.

Shipped in rolls. The user cuts to suit and bands the tree trunk.

LASTS A SEASON-PROTECTS FOR A SEASON. Price, 30 foot roll, \$1.50.

SHEEP A highly concentrated non-poisonous liquid for sheep-washing purposes, killing ticks and lice, curing scab and promoting the growth of wool and flesh. Used also for cattle, horses, pigs, fowls, dogs, etc. A protector of sown seed from birds, slugs and "smut." Does not require heating nor any preparation—simply add cold water and it is ready for use. Easily applied and always effective.

Price: 1 qt. can, 75c.; 2 qt. can, \$1.25; per gallon, \$2.00.





DIP.

Mix smooth, creamy Pyrox with clear water and spray your potatoes and other vegetables. It kills bugs, prevents fungus, and invigorates the foliage, thereby often substantially increasing the crop-it is a triple duty spray. Pyrox is no experiment. It has been used by farmers and gardeners for twenty-three years, and is now better than ever.

Prices- 1 lb. size,		\$.50	50 lb. size,		\$11.25
5 lb. size,		1.75	100 lb. size,		18.00
10 lb. size,		3.00	300 lb. size,		51.00
25 lb. size,		6.25			

The Money-Maker.

The Pyrox Spray Guide contains valuable information. Be sure to ask for it when you order.

#### NIAGARA DUSTING MATERIAL. STANDARD MIXTURES.

Code No.	Name.	Principal Ingredients.	Cost Per Cwt.	General Use.
134	Sulfodust	Dusting Sulphur with special spreader and sticker	<b>\$3.75</b> (in bags)	For apple scab, brown rot, etc. Standard fruit dust fungicide, also used on citrus for rust mite and red spider.
125	85-15	Sulphur and Lead Arsenate	<b>\$7.80</b> (in bags)	For calyx dust on apples, for cod- ling moths, strawberry weevil and other chewing insects.
206	A-1 Mixture	High percentage of quickly vola- tile Nicotine fumes. 3 per cent. actual 100 per cent. Nicotine	<b>\$16.50</b> (in metal drums)	For aphids, red bugs, pear psylla, etc. The best contact dust for sucking insects, both out doors and greenhouse.
207	A-2 Mixture	High percentage of quickly volatile Nicotine fumes. 1.25 per cent. actual 100 per cent. Nicotine	\$12.75 (in metal drums)	For red bug and other sucking in- sects. Not so active as A-1-Mix- ture.
141	Special 68	Dehydrated Copper Sulphate, Lime and Lead Arsenate	\$9.00 (in metal drums)	For apples, grapes and pecans. Copper fungicide and poison.
188	D-25 Mixture	Dehydrated Copper Sulphate 25 per cent., Lime and Filler	<b>\$8.80</b> (in metal drums)	For potato dusting, used where severe blight conditions prevail. Copper fungicide only.
189	D-20 Mixture	Dehydrated Copper Sulphate 20 per cent., Calcium Arsenate (poison) 20 per cent., Lime and Filler		For potato bugs and blight.

Prices on packages of less than 100 lbs. as follows: 50 lbs. add 1 1-2 cents per pound; 25 lbs. add 2 cents per pound Prices subject to change without notice. (See note on page 2.)

## KNOX-OUT FLY SPRAY.

### MADE TO FIT THE FARMER'S NEED.

Knocks Out Flies.

Protects Cows All Day.

Clean-Safe-Economical.

NO BAD ODOR TO TAINT MILK.

Price, per gallon, \$1.50.

## STANDARD FLY AND GERM KILLER.



Standard Fly and Germ Killer is a liquid preparation to protect cattle, horses, hogs and poultry from the torture of flies and other pests and vermin. It is a disinfectant and germicide.

#### OUR GUARANTEE ON EVERY CAN.

We guarantee that Standard Fly and Germ Killer will kill flies on cows

and keep them off all day, and kill cattle lice; also mites in the poultry house, if used according to directions. If it does not do as we claim, return the can and purchase price will be refunded. The value of a fly spray lies in its ability to keep the flies off all day. It will not gum or blister and will not discolor the hair or taint the milk.

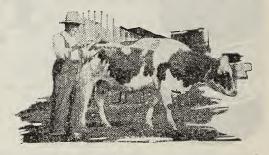
Increase the flow of milk by using Standard Fly and Germ Killer.

Increase the egg production by using Standard Fly and Germ Killer.

Price, per gallon, \$1.25.

## SHERWIN-WILLIAMS FLY-SPRAY.

**Keeps Flies off Cattle and Horses.** 



Will protect horses and cattle from annoyance of flies, lice, tick and other vermin.

Fly-Spray increases milk yield and will not gum the hair. It is also effective for use in poultry houses.

Fly-Spray is absolutely harmless and application should be made as often as necessary.

Put up in one and five-gallon cans and barrels.

#### Price, per gallon, \$1.25.

## CREONOID. LICE DESTROYER AND COW SPRAY.



A most efficient spray to protect cattle and horses from flies. Antiseptic and non-poisonous. Used in hen houses to kill lice.

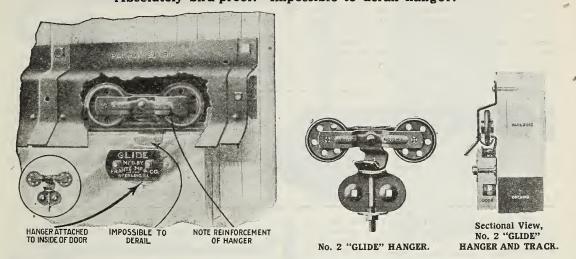
Flies breed in manure heaps and go from place to place carrying disease germs along with them. Flies are responsible for many of the epidemics that appear among people and animals.

If their breeding places are regularly sprayed with **Creonoid** they cannot breed and the number around the buildings will be greatly diminished.

#### Price, per gallon, \$1.25.

## "GLIDE" DOOR HANGER AND TRACK.

The ORIGINAL Watershed Construction. A Combined Track and Cover IN ONE PIECE. Absolutely bird-proof. Impossible to derail hanger.



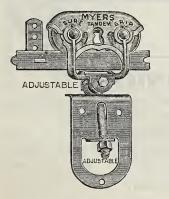
"Glide" Hangers require no lateral adjustment, as they are fastened to the inside face of door, and all doors are carried just the right distance from the building. Hence the necessity for lateral adjustment is avoided. There are times, however, when a vertical adjustment is desirable, which is the reason for building this construction.

Packed one pair in a box, with bolts, lags, socket wrench, name plates, directions, end stops for track and steel adjusting wrench, also paper template for guidance in attaching to door.

"Glide" Track is made in 4, 6, 8 and 10 foot lengths.

## **MYERS**

# SURE GRIP ADJUSTABLE TANDEM DOOR HANGERS.



This hanger is adjustable in all parts. The perpendicular and lateral adjustments are made with an ordinary wrench and at the will of the user. It has hard steel roller bearings and will fit any thickness of door. The track is heavy special high carbon stiff steel,  $3-16 \ge 11-4$  inches, supported by rigid brackets with a square shoulder mortised through the track.

Price on application.

## HUDSON SPRAYERS.

For Spraying All Insecticides on Potato Vines, Shrubs, Small Trees, House Plants, Live Stock and Poultry.

A Great Labor Saver on the Farm and in Every Garden, Barn, Greenhouse, Orchard and Hennery.

Will apply the finest possible spray on any object desired, and exterminate any kind of insect life. Quart size sprayer made of selected stock and carefully tested before packing. The method of construction, with the pump passing through the top of the can, keeps the air nozzle and spray tube in a straight line, and adds to the strength of the entire sprayer. Pump is  $1\frac{3}{4}$  inches in diame-ter, 14 inches long; tank is 4 inches in diameter,  $4\frac{1}{2}$  inches long. All seams locked and soldered.

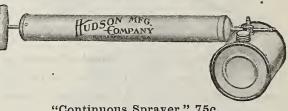




Double tube sprayer, throwing a wide, fanshaped spray; has proven a popular favorite for using fly oils and in general garden use. Pump  $1\frac{3}{4}$  inches in diameter, 14 inches long; tank, 4 inches in diameter,  $4\frac{1}{2}$  inches long. Galvanized. Holds one quart. Carefully tested double tubes. Length over all, 19 inches.

#### "Rapid" (Galvanized Iron), 60c.

The Continuous Sprayer is a popular pattern because it delivers a fine, even spray continuously. It will handle all soluble solutions-chemicals, insecticides, disinfectants, etc.—in a practical and satisfactory manner. Construction permits it to operate in any position. All working parts are brass. Two nozzle caps are furnished, one straight, one angle. They are adjustable so that any spray from very coarse to very fine may be Syphon tube and check valve are obtained. removable.



"Continuous Sprayer," 75c.

13 inches diameter, 14 inches long; fitted with Hudson cupped plunger leather and heavy rod. **Pump.**  $1\frac{3}{4}$  inches diameter, 14 inches long; fitted with Hudson cupped plunger learner and nearly roa. **Tank.** Heavy tin; 4 inches diameter,  $4\frac{1}{2}$  inches long. Capacity one full quart. Double seamed and thoroughly soldered throughout.



PRAYER

Weighs only one pound, holds one and onehalf pints. Well and simply made of heavy tin, combined into the strongest possible shape, and cannot come apart.

"Acme" (Tin), 45c.

A size made to fill the need for small sprayer for household require-

ments.

"Midget" (Tin), 35c.



## HUDSON JUNIOR.

The Hudson Junior Sprayer is made for the man who needs a high pressure compressed air sprayer smaller than the Perfection.

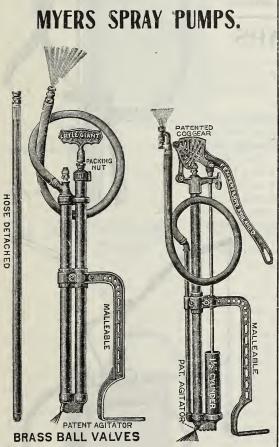
Tank. 61 inches diameter, 17 inches long; capacity about 21 gallons. Side seams are riveted and soldered, head and bottom seams crimped and soldered. Made of first quality galvanized steel.

Price on application.

## HUDSON PERFECTION SPRAYER.

Built on the best lines, of high grade material, and with the idea of producing a sprayer which has none of the faults and defects so common in many knapsack sprayers heretofore on the market. The hose is attached to the sprayer at an angle, so that it will not kink and become cracked and broken. The shoulder strap is attached with snaps and can be quickly and easily removed. The hose is  $\frac{3}{8}$ -inch, 5-ply cloth inserted and is equipped with automatic shut-off nozzle. These sprayers are made of galvanized steel or brass as ordered. Weight, 9 pounds empty. All sprayers tested to 60 pounds before leaving factory.

Price on application.





No. 324.



## BROWN AUTO-SPRAY NO. 9. COMPRESSED AIR SPRAYER.

The strongest and most simple in its working parts of any compressed air sprayer. Two pumpings of about fifteen strokes on the plunger will discharge the contents under high and contents under high and constant pressure. After pumping, the operator has nothing to do but direct the spray. Sprayer is equipped with patented non-clogging nozzle.

This sprayer consists of a solution tank holding four gallons, made of galvanized steel or heavy sheet brass, as ordered, and a brass air pump, the cylinder of which is made of seamless tubing, located inside of the solution tank.

The entire machine is made without screws or bolts, and no tools of any kind are required to take it apart.

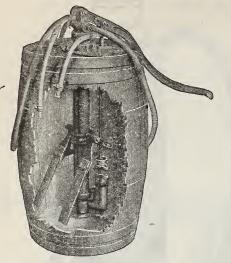


No. 327 1-2. Myers Little Giant Brass Spray Pump, with agitator, complete with hose and Imperial combination fine and coarse spray and solid stream nozzle.

No. 324. Myers Cog Gear Brass Spray Pump, with agitator, complete with hose and graduating Vermorel fine and coarse spray and solid stream nozzle.

Price on application.

With Bordeaux nozzle for spraying whitewash, \$1.00 additional.



## GOULDS "POMONO" BARREL PUMP.

#### NO. 1100.

#### Outside Packed Plungers. No Leather Packings.

Is unusually powerful, fully capable of supplying two leads of hose, 15 feet each, and two angle nozzles. The working parts, including the plunger, plunger connection, gland, valve, valve seats and strainer, are of solid bronze. They are simple, accessible and easily removed. It is equipped with a long adjustable lever, producing long or short strokes by simply removing

and replacing a single bolt, thus varying the pump's capacity. The agitator is simple, but very effective, operated by the same lever that works the sprayer.

Price on application.

## MYERS SPRAY PUMPS.

No. R318B. A spray pump of a construction that is the very best in all its parts, being self-contained and ready for operation, when bolted to the barrel. Has bronze ball valves and brass seats; the plunger, cylinder and discharge pipe are all brass.

No. 329. Whitewash, Cold Water, Painting Machine and General Purpose Sprayer, with patent double agitator, a most complete and serviceable outfit. The tank is made of heavy galvanized iron with a wide bottom, so as to set steady in operation. The cover is removable, is held securely in place by two end bolts with thumb nut, one on each side, which hold the cover tight and prevent any

> spilling or splashing of the liquid. Holds seven gallons and is fitted with Bordeaux nozzle, brass ball

valves, and has both jet and dasher agitator.

No. 330. Myers Knapsack Spray Pump, made with galvanized iron tank, and fitted with five feet of  $\frac{1}{2}$ -inch hose, pipe extension and Bordeaux or graduating ·Vermorel spray nozzle, which can be graduated from a fine mist spray to a solid stream, or shut off entirely.

No. 331. Same as No. 330, except made with heavy copper tank.

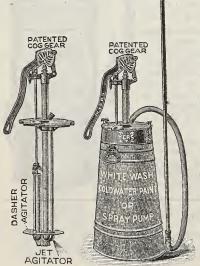
No. 329. Price on application. Prices subject to change without notice.

Myers Knapsack Spray Pump. (See note on page 2.)

PAT JET AGITATOR

No. R318B.

STRAINER



# AUTO-SPRAY No. 5.

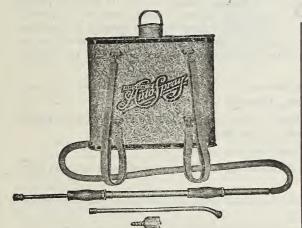
### In a Class by Itself.

This pump is the ideal all-purpose hand sprayer. It may be used for spraying trees, vines, garden truck, potatoes, and any field crop.

This pump is made entirely of brass.

The nozzles regularly furnished with this pump are of special design, so this sprayer can be used on trees the height of an apple tree as well as on bushes near at hand.

This pump can be used with any receptacle the user may possess for spraying, where the outfit does not necessarily have to be portable, when purchased as shown in cut Figure 468. Where there is any field work to be done and the sprayer has to be moved constantly about, we advise purchasing with this pump a knapsack tank as shown in Figure 483.



## THE MYERS DOUBLE ACTING COG GEAR, COMPLETÉ SPRAY PUMP OUTFIT, No. R316B.

Fig. 483.



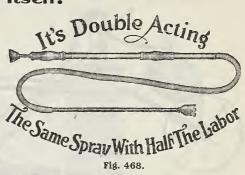
With brass valves and ground bevel brass seats, 2-inch seamless brass removable cylinder, hemp packed plunger.

SPECIAL FEATURES: Cog gear movement, increased leverage adapted for spraying under heavy pressure, mounted complete, occupying smallest possible space. Capacity sufficient for eight nozzles; well adapted for spraying potatoes.

Pump complete, 50 gallon barrel mounted on skids, with pressure gauge, one 15-foot lead,  $\frac{1}{2}$ -inch, 5-ply discharge hose, one Fembro nozzle, one 8-foot pipe extension with lever shut-off and mechanical agitator.

#### Price on application.

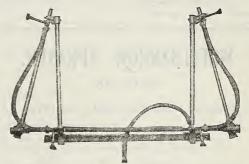
Prices subject to change without notice. (See note on page 2.)



# SPRAY BOOM.

This boom is adjustable both horizontally and perpendicularly. By moving the spray boom proper on the uprights, you can raise or lower the nozzles, as required. Then by moving the clips on the horizontal bar the nozzles can be so placed to spray rows of a number of different widths.

This boom is made so that the ends can be swung up, as shown in cut, so that sprayer can be drawn on the road or through a gate without danger of the boom being broken off by any obstruction.





## HUDSON IDEAL SPRAYER.



This outfit differs from the No. 30 in that it is equipped with a reserve air pressure tank and gauge. Once the desired pressure has been reached, this reserve air chamber enables the operator to maintain an even high pressure with less effort. In fact, the operator can stop pumping and spray several minutes before the pressure is reduced to a point where further pumping is necessary. It will do all the work a Barrel Pump can, and has the added advantage of being so easily portable. One man can operate it alone.

**Pump.** Fastened in top of tank by pressed steel support and is easily removed. Unbreakable pressed steel handle is properly proportioned

for easy operation. Valves are bronze balls mounted in a brass cage and protected from sediment, stones, etc., by a brass wire screen. Agitator is of the dasher type, operated by the motion of the plunger. Insures a thorough mixing of the solution.

Tank. Heavy galvanized, reinforced at top and bottom with channel iron hoops. Fitted with malleable castings for attaching to frame. Easily removed. Capacity, 15 gallons.

Air Pressure Tank. Boiler iron with joints welded. Tested under pressure of 275 pounds. Fastened to frame by steel straps and supports. Fitted with a pressure gauge reading to 200 pounds.

Frame. Heavy steel tubing reinforced with channel iron cross braces.

Wheel. 20 inches diameter; 3 inch tire; 'light, strong and rigid. Provides easy traction under heavy loads and in soft soil.

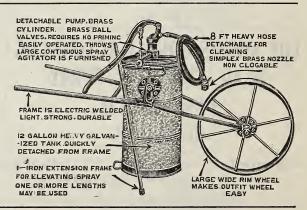
**Discharge Equipment.**  $12\frac{1}{2}$  feet of  $\frac{1}{2}$ -inch spray hose, an 8-foot  $\frac{1}{4}$ -inch pipe extension, angle Ideal nozzle and leakless shut-off.

# WHEELBARROW SPRAYER.

NO. 30.

### A HANDY, DURABLE SPRAY OUTFIT. LIGHT IN WEIGHT.

This outfit is adapted for all spraying purposes, and extensively used by gardeners, orchardists and florists; also highly adapted for spraying disinfectants, whitewash and cold water paint.



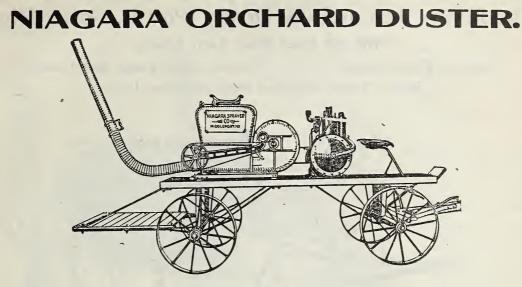
## THE MYERS POWER SPRAY GUN.

Length over All, 26 Inches.

Utilizes the entire capacity of the pump and does away with all bamboo extensions, nozzles, fittings and long lengths of hose.



**Price on application.** Prices subject to change without notice. (See note on page 2.)



Model F-24.

This model is furnished on skids with 5 H. P. engine, including drive belt, also with wagon complete.

#### SPECIFICATIONS.

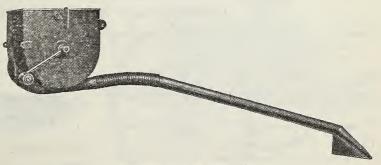
Model F-24, Niagara Orchard Duster, has aluminum housing, fan, fan housing, pulleys, steel shafts, gears, clutch. Fan revolves 3,000 times a minute on Hyatt roller bearings. Hopper holds 100 pounds, with big opening, so that it is easier to pour dust into hopper than to spill it. Spring cover fits on rubber gasket and is dust-proof. But what made dusting possible is the celebrated and patented cylinder of brushes. It sweeps dust, free from lumps, through feed-screen. Operator controls dust supply by regulator. Below the feed-screen dust drops to air chamber, whence continuous air blasts drive dust atoms through a 4-inch flexible metal or rubber hose attached to a 4-foot discharge pipe on to the orchard trees. Flexible metal or rubber hose permits entire freedom of direction in discharging dust at trees. The Niagara Orchard wagon, especially designed (weight alone 700 pounds), with drop platform for operator, and a 5 H. P. water or air cooled motor, complete the outfit. Total weight, 850 pounds. Crop attachment, for dusting potators, etc., can be supplied.

Model F-24, with two men and team, will dust forty acres of mature apple trees in one day.

Price on application.

## NIAGARA HAND DUST MACHINES.

The Niagara Blower Gun is an improved type of hand duster which embodies many of the patented features of the larger motor operated models, including the approved brush and feed devices. Its mechanical construction is very simple and durable. This gun is designed for low growing crops, such as potatoes, strawberries, tomatoes, etc., and also is adapted for treating small trees in young home orchards, etc.



NIAGARA BLOWER DUST GUN.

The weight is about 12 pounds, and its capacity for dust material is about 8 pounds. A flexible metal hose section permits free direction of dust mixture.

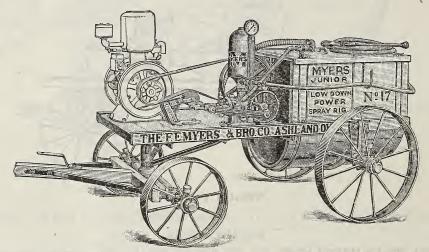
We furnish a two-row attachment at small cost.

#### Price on application.

## The Myers Junior Low Down Power Spray Rig.

With All Steel Short Turn Truck.

Complete Except Engine. Double Acting Pump, Belt Driven. 46-inch Tread, 43 Inches High, 78 Inches Long.



Capacity: 5 1-4 gallons at 50 R. P. M.; 6 1-2 Gallons at 60 R. P. M.

Specially designed for the farmer with small orchard who raises fruit for his own use, or what is generally known as Farmers' Spray Rings or Community Spraying where several farmers combine to do their own spraying or hire one of their number to spray for all.

Pump-Double acting, back geared 5 to 1.

Plunger-Brass, telescope pattern, hemp packed.

Piston-Solid brass, with heavy brass stuffing nut.

**Pulley**—14 x  $2\frac{1}{2}$  inch, crown face.

Cylinder-2 x 4 inch, removable brass shell.

Valves and Seats-Brass beveled and ground in.

Gear and Pinion-Machine cut.

## THE MYERS JUNIOR POWER SPRAY OUTFIT.

Fitted with 2-Inch Horizontal Double Acting Force Pump.

Complete Except Engine. Belt Driven.

Tank—Cypress, 100 gallons, fitted with semi-rotary agitator swung from top of tank and connected direct to face-plate on the pump.

Frame-3 inch channel steel.

**Deck**—(On which engine and pump are mounted) plank, 30 x 47 inches.

Pump-No. 580 double acting, back geared 5 to 1.

- **Capacity**  $-5\frac{1}{4}$  gallons per minute at 50 revolutions,  $6\frac{1}{2}$  gallons at 60 revolutions.
- Cylinder-2 x 4 inch, removable brass shell.

Plunger—Brass, telescope pattern; hemp packed; handles hot or cold mixture.



Valves and Seats-Brass beveled and ground in.

Piston-9-16 inch solid brass, with heavy brass stuffing nut and brass follower.

Gear and Pinion— $1\frac{1}{4}$  inch face, machine cut.

**Pulley**—14 x  $2\frac{1}{2}$  inch, crown face.

Price on application.

## BROWN'S AUTO-SPRAY NO. 39-A.

Two Horses.

Four Row Field Sprayer.

#### 100 Gallons.

The AUTO-SPRAY No. 39-A was designed after nineteen years of careful study and experience in manufacturing traction sprayers. All unnecessary parts have been eliminated. The machine is simple in design and can be operated easily by the average grower. This machine will develop and maintain 150

pounds pressure with eight nozzles. We don't recommend this machine to be used with more than eight nozzles.

The pump proper rests on the axle, doing away with all strain on the frame of the sprayer. The pump so located enables the manufacturers to build this machine in perfect balance. The tank is also located over the axle.

Pump and air chamber are made of heavy iron castings which reduce breakage to a minimum.

This sprayer all the way through is built of nothing but the best of materials. The tank is built of Louisiana cypress. The frame is of 2" ash reinforced by heavy angle iron, which insures

alignment. The pump plungers are made of brass and are outside packed. To adjust the packing you only have to loosen or tighten two bolts.

Wheels are hickory and of Sarven pattern, 4 inches in diameter, 3-inch tire.

#### IN DETAIL.

**Axle**—Cold rolled steel,  $1\frac{3}{4}$  inches in diameter. Tracks two rows. Machine tracks 5 or 6 feet.

Pump — Double cylinder.Plunger style.Brass plungers  $2\frac{1}{5}$  inches in diameter.Packing — Graphite composition, packed from the outside.Adjustable without withdrawing the plunger by simply screwing two nuts over the gland. Valves-Brass check. Broad brass seats. Set in pump manifold. Can be easily ground or replaced.

Agitator-Revolving twin paddles.

Air Chamber-Large capacity, tested under high pressure.

Nozzle – Non-Clog Junior Nozzles. Nozzles on field attachment adjustable to correspond with track. Spray boom may be raised or lowered on the two uprights.

## **IRON AGE Four-Row Sprayer.**

55 GALLON TANK DUPLEX PUMP.

The "Iron Age" Duplex (double acting) Pump used on this No. 354-S Sprayer is new. Designed to give double the capacity of the single-action pump. It also gives smoother action, thus you can get higher pressure under the same con-ditions. This surplus power saves expense in the long run, quickly offsetting the slightly higher first cost. Its greater power is particularly important when the vines become very dense and heavy mixtures are used to prevent blight. This advantage will be readily appreciated by practical farmers.

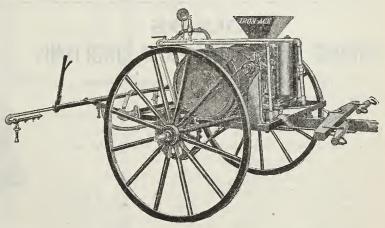
This fast-working, longlived machine will deliver spray at a pressure of 150 pounds or

more. Width of rows is adjustable to 28, 30, 33 or 36 inches.

Price on application.

Prices subject to change without notice. (See note on page 2.)

# EQUIPPED WITH THILLS FOR ONE HORSE.



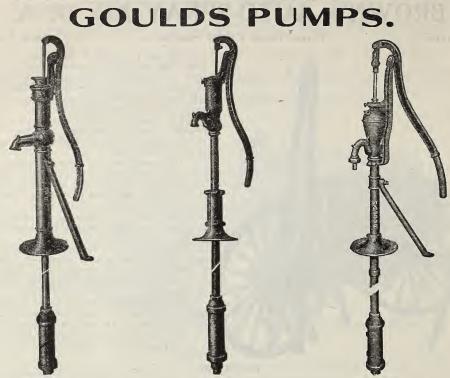


Fig. 551.

Fig. 1625.

Fig. 1729.

#### "STAR" ANTI-FREEZING STOCK PUMP.

Fig. 551, No. 8. The standard farm pump of two generations. Pumps as fast as a wood pump. Brass lined cylinder, 4 x 10 inches. Non-corrosive, non-breakable, permanent white bronze valve seat. Nothing to replace but leathers.

#### "STAR" ANTI-FREEZING LIFT PUMP. (Adjustable Base.)

Fig. 1625, No. 4. An adjustable base lift pump of real merit. Extra high base gives rigid support. Brass lined cylinder, 3 x 10 inches. Non-corrosive, non-breakable, permanent white bronze valve seat. Nothing to replace but leathers.

#### **GOULDS ANTI-FREEZING FORCE PUMP.**

Fig. 1729, No. 4. A pump with adjustable base, brace and bearer. Tested air chamber; hose connection. Combines high quality and low price. Brass lined cylinder,  $3 \ge 10$  inches. Non-corrosive, non-breakable, permanent white bronze valve seat. Nothing to replace but leathers.

## GOULDS "PYRAMID" DOUBLE-ACTING PISTON POWER PUMP.

For capacities of 6 to 114 gallons per minute and heads up to 175 feet or pressures up to 75 pounds.

Built better than the rest to stand up to the exacting duty of farm and factory pumping. Gears machine cut from the solid. Brass lined cylinder. Rubber disc valves on bronze grids seats.

	Capacity.		
	Gallons	Connection	
Size.	Per Minute.	Inches.	Pulleys.
$2\frac{1}{4} \ge 4$	6	14 ~ .	$8 \ge 2\frac{1}{2}$
3 x 5	12	$1\frac{1}{2}$ .	$15 \ge 2\frac{1}{2}$
4 x 5	21	2	15 x 3 ·

Also larger sizes.

Prices on application.

Fig. 1531.

## GOULDS PITCHER PUMP.



Pitcher Spout Pump.

Fig. No. 205 1-2. Standard closed top Pitcher Spout Pump. A low-priced, substantial pump for use over cisterns or wells not over 25 feet.

Price on application.

# GOULDS Brass Jacket Drive Well Point.

This well point is made of galvanized iron pipe with elliptical holes punched of uniform size an equal distance apart. It contains the greatest number of holes possible to punch in a pipe and retain sufficient strength for driving.

Price on application.

## MYERS COG GEAR DOUBLE AND SINGLE AGTING FORCE AND LIFT PUMPS.

Fig. R186.

FIG. R1072.

Fig. R186. A double acting, anti-freezing force pump for shallow or deep wells. Has a 3-inch brass lined lower cylinder, with glass valve seat. The brass upper cylinder is  $4\frac{1}{2}$ feet below the platform, tapped for  $1\frac{1}{4}$ -inch pipe. Capacity, 440 gallons per hour.

No. 661.

Fig. R1072. A single acting, anti-freezing force pump. Has adjustable base and reversible spout; 3-inch brass cylinder with glass valve seat, tapped for  $1\frac{1}{4}$ -inch pipe. Capacity, 440 gallons per hour.

Fig. R1052. Lift pump, antifreezing. Has adjustable base and reversible spout; 3-inch brass lined cylinder with glass valve seat, tapped for  $1\frac{1}{4}$ -inch pipe. Capacity, 440 gallons per hour.

Price on application.

Prices subject to change without notice.

(See note on page 2.)

123

## **MYERS HOUSE PUMPS.** MYERS LONG STROKE COG GEAR PITCHER | MYERS LONG STROKE COG GEAR BRASS CYLINDER PITCHER PUMP. PUMP.



#### Fig. R416.

This pump is built to fill the requirements of a pitcher pump with extra large capacity. It is fitted with rolling motion cog gear handle, adjustable to any desired angle. The cylinder is bored and highly polished. Arranged to drop the water to prevent freezing. Tapped for  $1\frac{1}{4}$ " pipe.

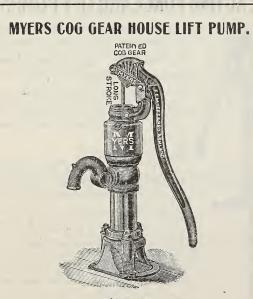


Fig. R245.

This pump has siphon spout. Also fitted with 3-inch brass cylinder, glass valve seat and patent drop valve. Tapped for 14" pipe.

PATENTED



Fig. R220.

Built in strictly first class manner, with seamless drawn brass cylinder, rubber fibre check and revolving top. Tapped for  $1\frac{1}{4}$ " pipe.

### **MYERS LONG STROKE COG GEAR, DOUBLE** ACTING HOUSE FORCE PUMP.

PATENTED



#### Fig. R251.

This pump is double acting, has heavy seamless brass upper and lower cylinders, with patented glass valve seat, fibre rubber check valve and expansion plunger bucket. A powerful pump for forcing water to an elevation or into a tank. Tapped for  $1\frac{1}{4}$ " pipe.

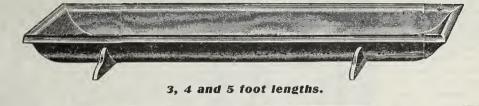
#### Price on application.

## STEEL ROAD SCRAPERS.

Made of heavy steel plates, cut from a single sheet pressed cold, lapped and riveted at the corners, giving greatest strength where needed. Special steel is used in the bail, and they are hung so as to handle easily. Heavy shoes or runners are used to stiffen the bottom.



CAST IRON HOG TROUGHS.



## STEEL HEAD FOR DRAG.



This illustration shows a simple device whereby a drag can be readily made by using STRAIGHT plank. We also furnish the drag complete as shown above.

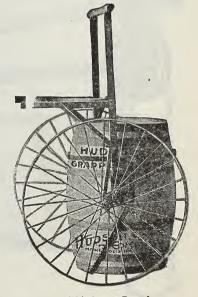
Price on application.

## HUDSON BARREL CART.

This is the simplest, strongest and handiest grapple cart made. It will pick up an ordinary barrel without extra fixtures on it, and will handle any size barrel without adjustment. It is so well balanced that a ten-year-old boy can lift a barrel full of water and wheel it wherever he desires without any trouble.

To pick up a barrel, push the cart against it and raise the handles. The hoop then drops into place over the top and the bail can easily be slid into place underneath, making a substantial arrangement. Lowering the handles raises the barrel from the ground and brings it into the proper position for wheeling. Nothing is more simple or as positive in action.

The wheels are 36 inches in diameter, rigidly braced with 24 spokes, and with heavy, half-oval  $1\frac{1}{2}$ -inch steel rims. Axle is of selected 1-inch steel, curved to fit the barrel.



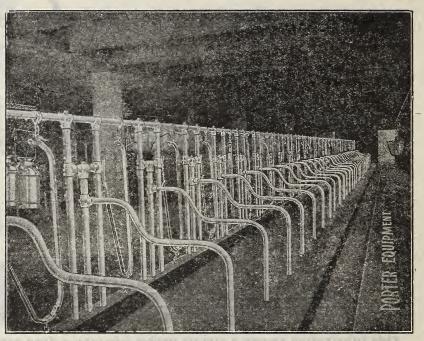
Picking up a Barrel.

Price on application.

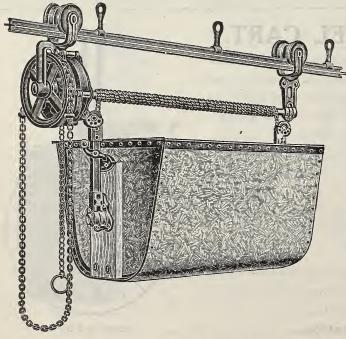
## PORTER BARN EQUIPMENT.

The Cleanliness, Convenience and Comfort of Porter Equipment Will Swell Your Dairy Dividends.

The better care you give yourcows, the better they will pay you. Stable them in light, clean, comfortable, sanitary quar-ters and they'll require less feed, keep freer from disease, produce more milk, with a higher percentage of butter fat, and your milk and butter will bring top-notch prices. These are facts proved over and over again in the experience of successful dairymen who are using Porter Stalls and Stanchions. Porter Equipment in your barn will mean a big boost for extra profits, for it's built with practical, commonsense understanding of the care the dairy cow needs for best results. It keeps the stalls clean, prevents waste of feed and manure.



Expert Advice on Barn Plans and Equipment, Free for the Asking.



## PORTER LITTER CARRIER.

With it one man can do the work of three, and do it better and easier. It is the handiest and most satisfactory litter carrier on the market. The chain hoist gives the biggest lift for the power and the quickest action. The hopper is made of heavy galvanized steel with capacity of 10 bushels; is held automatically at any height, and is provided with a dumping device, which is tipped at will by the man in the stable. Has one piece steel track, carrier wheels are roller bearing, and are swiveled so carrier will go around the sharpest curves safely. No end motion, no joggling, liquid litter will not slop over-the only litter carrier with a stationary arm.

Price on application.

### HUDSON STEEL WATER BOWL. WILL NOT BREAK.

NONE OTHER LIKE IT. **ONE-HALF THE WEIGHT.** This new bowl is not cast from any kind of metal, but is stamped from sheets of best grade galvanized steel. Its special advantages are:

1. It is unbreakable-you cannot break nor crack it.

It will not rust. 2.

3. It is much more easily cleaned and kept clean than other bowls.

 It is more durable than cast iron.
 Attachment can be made from any point of the bowl's rim. Others must be attached at one certain place.

6. It attaches easily and quickly to either wood or steel stalls or pens.

7. Valve is easily and quickly removable.

Specifications: Made of 14-galvanized steel; formed with a heavy rolled rim and galvanized afterwards, so that the galvanizing will not be cracked in the process of manufacture. Size:  $4\frac{1}{2}$  inches deep; 10 inches across top.

Best malleable fittings. Brass valve fitted with standard size rubber fuller ball, same as used in any ordinary water faucet; easily replaced. Valve seat of brass; will not rust. Pressure plate made of malleable, resting low in the bowl, thus avoiding interference

with the cow drinking. 1-inch pipe should be used for the main supply pipe and 3/-inch for the short length connecting bowls with the main supply pipe.

Weight, 61 pounds each.

## PORTER AUTOMATIC DRINKING BOWL.

Cannot overflow because automatic valve is controlled entirely by the pressure plate. Valve seat, stem and spring made of highest grade brass. Bowl, 8½ inches deep, 4½ inches diameter, constructed to fit ¾-inch pipe. Can be attached to 1-inch or 1¼-inch steel tubing supports.

## STANCHION BASIN.

C

ATERING DEVICE

AT'D, FEB 31 1891

An examination of this cut shows its advantages; canbeemptied and cleaned in three minutes. without fouling supply pipe; is easily kept antiseptic, and can be quickly connected, being screwed on to the upright pipe inside of basin.

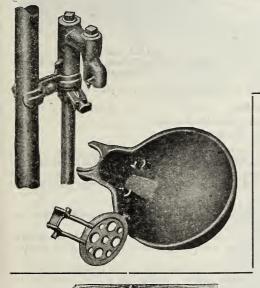
Robertson's Patent Chain Hanging Stanchions. Practical, Safe and Durable, and Afford Comfort to the Animal.

FERGUSON ABBANY

#### Made with Adjustable Neck Space.

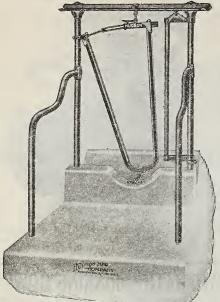
A pleased customer is the best possible endorsement that an article can have. These stanchions are in use by thousands of the most successful dairymen and farmers all over the country, who have had practical experience and know that these stanchions are not an experiment.

WRITE FOR PRICES.

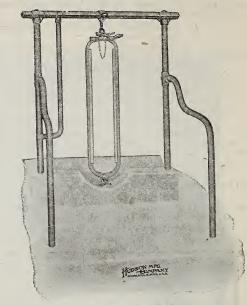




HUDSON BARN EQUIPMENT.



STALL NO. 4B 10. Shown with No. 10 Adjustable Wood Lined Stanchion.



STALL NO. 2A 5. Shown with No. 5 Chain Guide Wood Lined Stanchion.

These stalls can be equipped with wood lined or tubular steel stanchions, as desired.

#### SPECIFICATIONS.

Material. Special, heavy, rust resisting tubing. Heavy malleable fittings.

Stall Upright. 18 inch O. D. heavy wall, rust resisting tubing.

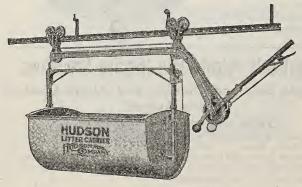
Horizontal Top Rail.  $1\frac{1}{2} \ge 1\frac{1}{2}$  inch heavy square tubing. Partitions.  $1\frac{1}{8}$  inch O. D. heavy tubing. Triple bend. Outer end of partition extends 3 feet, 3 inches from stall upright. Proper length for separation of animals, but short enough to leave room for milkers.

Swinging Sure Stop. 14 inch O. D. steel tubing hinged to stall post and connected by 4 inch throw bar. Can be operated from any point in stall line. When stanchion is closed sure stop swings back against stall partition, leaving ample head room for animals. Fittings. Best malleable. Overlapping joints.

Anchors. 1x § x is inch angle iron connects stall uprights full length of stall line and partitions are similarly anchored. Anchors also act as reinforcement for concrete.
 Assembly. The angle iron anchors extending full length of stall line permit of shipping Hudson stalls

"set up," saving much labor and time in installing. Ready to place in position on barn floor without props or braces when concrete is poured.

Alignment Device. Furnished at slight extra charge. Allows 7 inches adjustment forward or back. Stanchion. Hudson No. 10. Wood lined. Adjustable neck space. Malleable guide. Simple cow proof lock. Can also be furnished with any other of the regular Hudson stanchions.

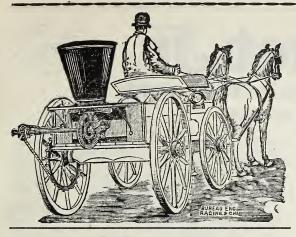


### HUDSON LITTER CARRIER NO. 40. LEVER HOIST. SPECIFICATIONS.

Hoist. Ratchet and drum. Very simple. Drops tub to floor in an instant or it can be lowered slowly, as desired. Lifts loaded tub in ten seconds or less. Tub has regular drop of 8 feet, which can be increased to 20 feet at small addi-tional cost, if desired. Extreme leverage and little friction make it quickest and easiest lifting carrier. Hands do not become soiled with manure. Lever is always clean and is the handle to push carrier out of barn.

Capacity, 9 bushels.

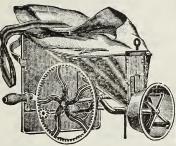
Price and catalog on application. Prices subject to change without notice. (See note on page 2.)



### THE CAHOON BROADCAST SEED SOWER.

For Sowing Wheat, Oats, Barley, Rye, Buckwheat, Grass Seed, etc.

This hand machine sows from four to eight acres per hour, at a common walking gait.



# Foster (Racine) Broadcast Seeder.

Will sow perfectly any quantity to the acre of oats, barley, rye, buckwheat, clover, millet, timothy, Hungarian, etc. Will also sow peas, corn and fertilizers in a most satisfactory manner.



This seeder is practical, neat and mechanically correct in construction. It distributes seeds evenly, has an automatic cut-off, and the iron distributing wheel gives great momentum. Nomachine does better work, it being strictly a high grade seeder.

### "NEVER MIND THE WIND-SOW ANY TIME." WHEELBARROW GRASS SEEDER.

This is really the greatest grass seeder made to-day. Not a toy, but a strong and durable implement specially designed and adapted to its use. It's easy—it weighs only 45 pounds. Does not throw the seed into the wind. Puts it on the ground lightly and evenly where it belongs, insuring the operator a good even catch. Strong and durable. We know of Hudson Seeders which have been in use 30 years which are thoroughly good and effective to-day. 14 and 16 feet. Price on application.



### WHEELBARROW SEEDERS

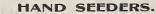
are a most valuable implement for sowing all grass seeds broadcast. The quantity of seeds sown per acre is accurately governed by the wheel, which moves correspondingly slow or fast as the machine is run over the ground. For all sections where winds prevail, there is no machine made that will equal this implement for an even, accurate job of seeding. The quantity required per acre can be instantly changed by slipping a pin from one hole to another. These seeders run light and are not complicated. Seeds can be sown mixed or separate and in any quantity desired.

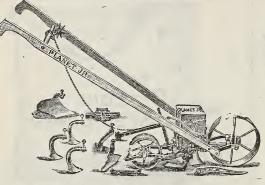






## FARM AND GARDEN TOOLS.





No. 4.

No. 4-D Seeder. Same as the No. 4, except comes as a seeder only, without the cultivating attachments. The feed of the seeder is adjusted accurately by a brass set screw and cut-off sliding on the outside of the cylinder, and connected to a lever and index at the right-hand side of the hopper. The index contains the names of the principal seeds and indicates separately the proper adjustment of the seeder for sowing in hills and drills.

No. 25 Planet Jr. Combined Hill and Drill Seeder, Double and Single Wheel Hoe. The No. 25 combined seeder, double and single wheel hoe is valuable for gardeners who have enough acreage for a double wheel hoe to be used, and yet prefer not to buy seeders and wheel hoes separately. The hopper holds four pounds of onion seed. As a seeder, it is practically the same as the No. 4 Planet Jr. described above.



No. 3 Planet Jr. Hill and Drill Seeder. The No. 3 Planet Jr. Seeder is a popular size for market gardeners, at a moderate price. The special force feed is an admirable feature, working equally well whether sowing with an ounce No. 25.

Planet Jr. Seed Sowers were first made in 1871. They were then, as now, the best in design, quality and usefulness. Since then they have been adopted and recommended by leading seedmen and seed growers. Their use has spread all over the world among market gardeners, general farmers,

No. 4 Planet Jr. Combined Hill and Drill Seeder, Single Wheel Hoe, Cultivator and Plow. There are doubtless more of them in use in the world than any other seeder made. This combined tool will quickly pay for itself in seed, labor saved and increased crops. It combines in one machine an accurate hill dropping seeder, a continuous

sugar beet and onion growers.

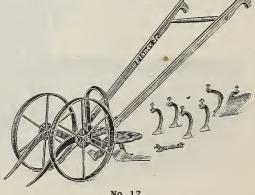
or a full hopper. The hill dropping attachment is simple and reliable, spacing hills either 4, 6, 8, 12 or 24 inches apart. Changes of distance between hills may be made in less than a minute by changing spacing wheels from hill to drill.

No. 5 Planet Jr. Hill and Drill Seeder is recommended for those who desire a larger seeder of this type. Its capacity is five quarts of seed.

#### WHEEL HOES.

No. 12 Planet Jr. Double and Single Wheel Hoe Combined. The No. 12 is the most popular double wheel hoe in use to-day. Can be used by man, woman or boy. Its equipment consists of one pair of 6-inch hoes, four steel cultivator teeth, one pair of plows, and two leaf lifters. This variety of equipment makes it possible for one to do practically all the cultivating work required in market, farm or home garden.

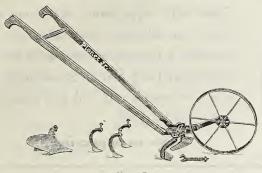
#### Price on application.



No. 12.

row seeder, a useful single wheel hoe and an effective single wheel hoe and cultivator, an excellent furrower, and a rapid and efficient wheel garden plow. It is accurate, simple, durable, refiable and easy running.

Planet. FARM AND GARDEN TOOLS.

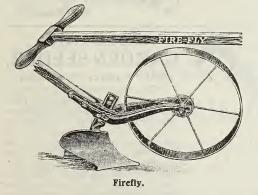


No. 17.

No. 17 Planet Jr. Single Wheel Hoe. The equipment of the No. 17 single wheel hoe consists of one pair of 6-inch hoes, three steel cultivator teeth and one large garden plow. These three sets of equipment are all the finest of their kind, and make an outfit sufficient for most garden work. You can do more and better work in one day than you can do in several days with the old-fashioned hand hoe. With the hoes you work to or from the row. A change of wheel regulates the depth for working the hoes.

For No. 119 Planet Jr. Garden Plow and Cultivator. those who prefer a high wheel hoe for their garden work. The No. 119 garden plow and cultivator has been welcomed by thousands who wanted a high wheel hoe and is giving many years of service and absolute satisfaction. With it you may do the necessary plowing and cultivating, making furrows for seed, covering seed and hilling. The scuffle blade is just the thing for weed cutting and shallow cultivation. Leaves a fine mulch, preventing rapid loss of moisture by evaporation.





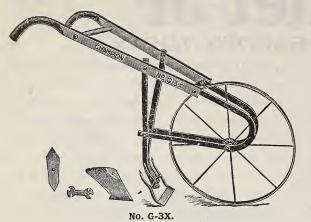
Firefly Garden Plow is exceedingly useful to owners of small gardens. It will throw a furrow four to six inches wide, one to three inches deep, deeper by going a second time in each furrow. It opens furrows for manure or seeds and covers them, and opens up rows for all kinds of plant setting.

Planet Jr. Star Pulverizer, Lever and Weeder. Comes in two sizes, one cutting  $7\frac{1}{2}$  inches and the other 12 inches. The star wheels break up the soil and the scuffle blade cuts the weeds close to the surface and mulches the soil. Very effective in weeding, in leveling and pulverizing the soil for seed beds, and particularly effective in breaking up the soil after a rain, without producing a lot of lumps.



#### Price on application.

## THE TRUE TEMPER CHAMPION, No. G-3X.



A single high wheel cultivator, having a 24-inch heavy oval spoke steel wheel with  $1\frac{1}{4}$ -inch tire, complete with equipment, including a 4-inch mouldboard plow with steel landside, a reversible sweep with four cultivating teeth and an 8-inch scuffle hoe, a reversible calf and bull tongue and a steel wrench.

Price on application.

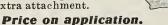
### THE TRUE TEMPER GENEVA, QUICK-ADJUSTABLE CULTIVATOR NO. G2,

is recognized everywhere as the only real quickadjustable cultivator on the market. It has a weeding hoe, a plow and five cultivator teeth, all permanently attached to a revolving steel plate. Any of these tools may be securely locked into working position by a few turns of the hand wheel—a time and labor saver.

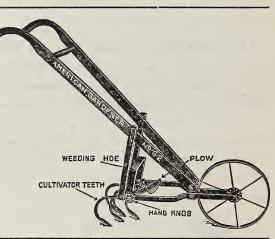
Machine has steel forged tools, well selected oak handles, with comfort-

able handle grips. It has 14-inch steel wheel and is finished in colors, then varnished.

Plow and furrow opener comes as extra attachment.



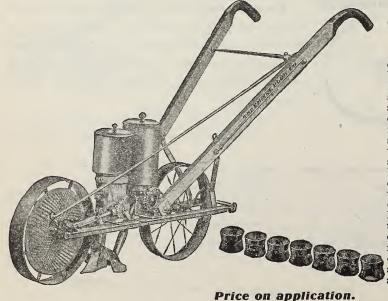
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## COLUMBIA GARDEN SEEDER.

(With Fertilizer Attachment.) This machine plants all kinds

This machine plants all kinds of garden seeds, including lima beans and onion sets, with absolute accuracy. The seed may be spaced in the furrow any distance apart from one-fourth inch up to eight feet. It is a hill and drill machine and you can plant one seed in a hill or a dozen. It positively will not spill or waste the seed. The fertilizer attachment has four feed cones with each machine, giving positive control of the quantity of fertilizer you may desire to sow per acre. The Columbia has no complicated parts to get out of order. Its rugged construction will make it your friend for years to come. Its ease of operation will also be a pleasant surprise to you. Onion set attachment extra.

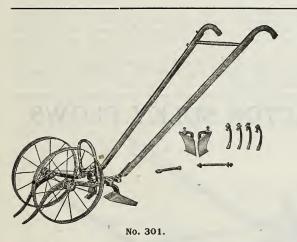


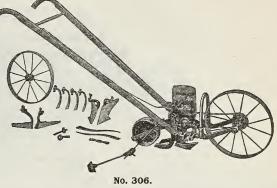
## IRON AGE GARDEN IMPLEMENTS.

Are Strong, Accurate and Can Be Operated by Man, Woman or Child.

### No. 306. Iron Age Combined Double and Single Wheel Hoe, Hill and Drill Seeder.

Ten tools in one, and each as satisfactory as a tool made for the special purpose. Places the seed in continuous rows or in hills, 4, 6, 8, 12 or 24 inches apart. Can be quickly changed to a double or single wheel hoe, cultivator, rake or plow.





### No. 301. Iron Age Double and Single Wheel Hoe.

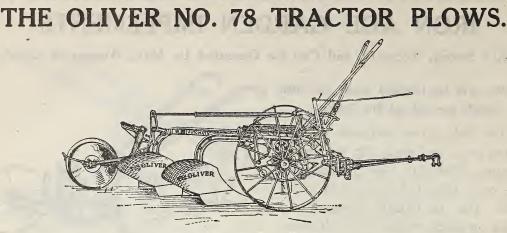
Can be quickly changed to a double or single wheel hoe, cultivator, plow or rake. As a double wheel can be used astride the row or as a single wheel between the rows. A drill seeder or hill and drill seeder attachment can be added at any time.

# ACME ROTARY AUTOMATIC CORN PLANTER.

Used in one hand, like a walking stick. Disc is set for correct number of kernels by loosening thumb nut, moving star till pockets are of right size, then tightening thumb nut again. Seed corn should be graded by shelling off butts and tips. Plunge planter into ground, rock forward to trip seed, and withdraw. Double coil spring automatically rotates disc and closes jaws, thus filling same for next hill.



#### Price on application.



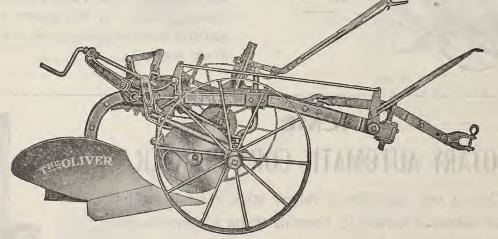
Oliver No. 78, Two Bottom.

Plowing is the hardest work connected with farming. It is also the most expensive single item in preparing the seed bed.

With an Oliver Tractor Plow and any standard light tractor, the farmer can turn from six to nine acres of land per day. This can be done in the spring when the team is soft or in the fall when the heat is intense. Not only can plowing be done at the proper season, but also at a big saving in cost. As the Oliver Tractor Plow is a one-man outfit, the labor of one man is sufficient to turn nearly five times as much land in a day as he can with a walking plow.

The Oliver No. 78 plows are strong and durable. They are equipped with a positive power lift which permits raising and lowering the plow from the tractor seat. Oliver combined rolling coulters and jointers bury all weeds and trash, and leave no air spaces in the seed bed.

## **OLIVER NO. 611 TRACTOR SULKY PLOWS.**



No. 611.

THE IDEAL PLOW TO USE BEHIND THE FORDSON TRACTOR.

There is a measure of satisfaction in owning an Oliver No. 611 Sulky Plow, because of its dependability, economy, ease of operation, and correct design for the preparation of seed beds. These are elements that

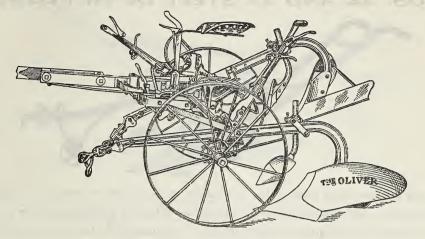
go to make up a good investment when considering the purchase of a tractor plow. The No. 611 is the result of years of practical knowledge of plow designing by our expert designers and we are proud to introduce to farmers their achievement in sulky plow designing. The operator has full control of the plow at all times owing to the fact that the controlling levers are

located within easy reach from the seat of the tractor.

The Oliver No. 611 is equipped with an adjustable hitch and pin break that releases the plow from the tractor when striking an obstruction. The tractor can be backed and rehitched with little effort.

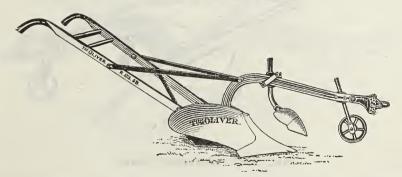
Price on application.

## OLIVER PLOWS. REVERSIBLE SULKY PLOW.



There are certain conditions in which it is necessary to be able to plow back and forth one side of the field, using alternately a right and left hand bottom. The Oliver No. 23-A Reversible Sulky provides farmers with a means of doing this kind of work with minimum effort. By means of a horse lift, operated by a foot trip, the operator can keep his eyes on his team and his hands on the reins. Adjustable bail block adapts the No. 23-A Sulky for three different sizes of bottoms. Through this adjustment, it is possible to keep the plow in direct line of draft, eliminating side strain on the beams. A guiding lever permits perfect line of draft, when the change of bottom is made. The Oliver No. 23-A Sulky is equipped with steel mouldboard.

### NOS. 82, 83 AND 84.



This series of plows is designed for those sections where a general purpose plow is needed to turn sod, raw land, clay and sand, and gravelly, stony soil. The long, curved mouldboard turns the deep furrow slice completely over, covering trash. The plows are steady running, light in draft, easily handled and heavily braced. This series of Oliver plows is made with steel mouldboards.

No. 82. A light two-horse plow, capacity 6 x 12 inches.

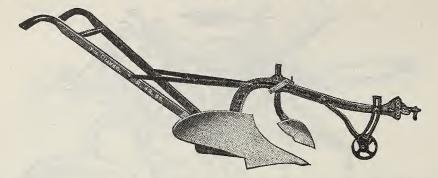
No. 83. A medium two-horse plow, capacity 7 x-13 inches.

No. 84. A large two-horse or medium three-horse plow, capacity 8 x 15 inches.

#### Price on application.

# OLIVER PLOWS.

NOS. 42 AND 43 STEEL BEAM PLOWS.

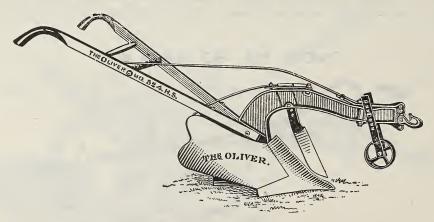


The turning and pulverizing shape of the mouldboard at the top and its bluffness in front make this an easy scouring plow, and it can be used to good advantage on level or rolling land, either sod or stubble. The beams are steel, with high arch for trashy clearance. The renewable landside shoe and chilled share make a plow that always runs with the proper suck and wing, no matter how long it may be in use.

No. 42. Medium two-horse plow, capacity 7 inches deep, 13 inches wide.

No. 43. Large two-horse plow, capacity 8 inches deep, 15 inches wide.

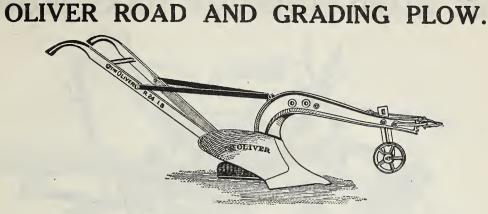
### **OLIVER HILLSIDE PLOWS.**



#### No. 524 Hillside Plow.

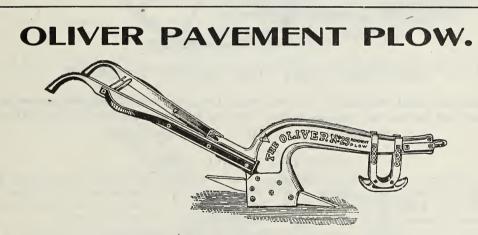
The Oliver series of hillside walking plows is built for use in hilly country and other places where it is desirable to plow back and forth across the same side of the field, without laying out lands. The Oliver No. 524, because of its lightness of draft, strong construction, and adaptability to both hillside and level field work, has found great favor with the farmer. The No. 524 is equipped with a steel mouldboard and chilled share. Its automatic hanging cutter is always in line with the cutting edge and gives satisfaction. A steel lever shifting clevis regulates the width of furrow. Shifting of the bottom is made easy by a conveniently placed foot lever. The Oliver No. 524 is regularly equipped with a gauge wheel. It has a capacity of 8 inches deep by 15 inches wide.

#### Price on application.



No. 24.

The "Good Roads" movement which is now nation wide is causing a great demand for road plows. For certain types of road work there is no better implement than the Oliver No. 24 Road and Grading Plow. This plow will break the hardest roads, as it is sturdily built. It can be used with horses or light tractors. The chilled mouldboard is long and deep for breaking the soil into lumps. The chilled cutter share is of a special deep suck type to insure penetration. Hanging coulter, jointer, gauge wheel or gauge share furnished extra on order. The capacity of the Oliver No. 24 is 7 inches deep by 14 inches wide.

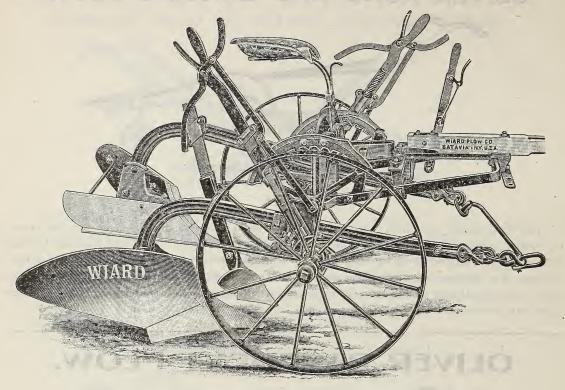


The Oliver No. 25 Pavement Plow. "THE PLOW FOR THE CONTRACTOR."

Contractors demand a plow like the Oliver Pavement Plow. It does the work and saves time and money. Note the adjustable and double reversible, crucible, self-sharpening spike steel point, the hanging adjustable gauge shoe with chilled wearing parts, the well-braced handles with loop handle wear irons, and its massive beam with extremely heavy upper and lower flanges, insuring plenty of strength. The point is made of the highest grade of steel, and being double reversible gives the maximum of service. This plow is as strong as it looks. It is built for a purpose, namely, to give the contractor a tool that will stand up under all kinds of hard work. The Oliver Pavement Plow is precisely the tool for breaking cobblestones, pavement or any unusually hard ground.

#### Price on application.

# THE WIARD REVERSIBLE SULKY PLOW.



### THE WIARD SULKY PLOW ALWAYS A LEADER.

The Wiard (New Model) Reversible or Two-Way, Power Lift Sulky Plow (lift and trip operated by hand or foot), with Shifting Pole, Automatic Shifting Clevis and Adjustable Tilting Seat and Steel Wheels.

No. 400-Two or Three-Horse-Weight 550 pounds.

### ADAPTED TO ALL SOILS.

The Reversible or Two-way Sulky, is adapted to work in all soils, especially where the plowing is difficult, rough and uneven. For plowing flat land it is desirable to turn the land all one way, leaving no ridges or dead furrows. For work on side hills the soil can be worked all in one direction, and the plow by use of the levers can be leveled, and the seat can be tilted so that the driver avoids all discomfort.

As shown in the illustration, there are two plows, one right and one left hand, each operated by separate levers and having an automatic power lift which can be operated by the driver from the seat, either by the use of a trip lever operated by the foot, or by a hand lever which can be operated by the driver either when riding or walking. The plows have the highest grade soft-center steel mouldboards.

The Nos. 43, 103, 44 and 104 plow bottoms can be easily adjusted independently of the beam so that they will take more or less land as required, and when properly set the plows will run in a direct line, thus relieving all side strain on the pole and horses' necks, hence it is not necessary to use the pole shift except in extreme cases.

The device for adjusting the plow bottoms consists of a sliding wedge between the beam and plow standard, which can be adjusted very easily by loosening the bolts which hold the beam to the plow standard.

The sulky is perfectly balanced, so that whether the operator is on the seat or following the plow there is absolutely no weight on the horses' necks.

### Price on application.



Nos. 43 and 44.

These plows are equipped with channel steel beams, highest quality, soft-centered steel mouldboards, "which is the strongest and most durable steel mouldboard made," adjustable handles, steel wheel standards. Can be furnished with either jointer or coulter.

No. 43. Capacity, 5 to 7 inches deep, 10 to 13 inches wide.

No. 44. Capacity, 6 to 8 inches deep, 12 to 15 inches wide.

### WIARD STEEL BEAM ONE HORSE PLOW.



No. 74.

This very light, strong, durable plow is fitted with forged steel, one piece beam, set for horse to walk in furrow. Equipped with steel mouldboard, adjustable jointer or coulter, white oak handles, adjustable sidewise, also can be raised and lowered.

Weight 87 pounds, capacity 5 to 7 inches deep, 6 to 11 inches wide.

### Price on application.

WIARD STEEL BEAM PLOWS.

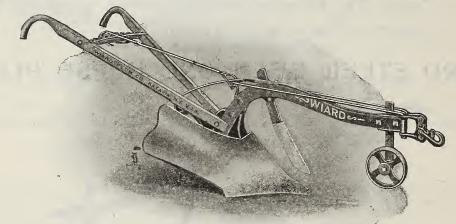


Nos. 524 and 526.

The turning qualities of this shape of mouldboard are unequalled for plowing level or rolling land, sod or stubble. Equipped with soft-centered steel mouldboards, channel steel beams, coulters or jointers. No. 524. Medium two-horse plow, capacity 6 to 7 inches deep, 9 to 13 inches wide.

No. 526. Large two-horse plow, capacity 7 to 8 inches deep, 10 to 15 inches wide.

# WIARD STEEL BEAM SWIVEL PLOWS.



### Nos. 120 and 126. Steel Mouldboard, Rigged with Jointer or Coulter.

This illustration shows the shape and general construction of the Wiard reversible side hill plow—a little the best side hill plow we have ever seen.

No. 120. Light two-horse plow, capacity 5 to 8 inches deep, 10 to 13 inches wide, weight 118 pounds. No. 126. Heavy two-horse plow, capacity 5 to 8 inches deep, 12 to 15 inches wide, weight 139 pounds.

#### SPECIFICATIONS AND DESCRIPTIONS.

Beam-Forged steel, two pieces. Mouldboard-Soft center steel, highly polished. Saddle for Mouldboard-Malleable iron. Shoe-Cast iron, chilled on bottom. Coulter or Jointer—Adjustable, automatically shifted when mouldboard is reversed. Handles—White oak, natural finish.

#### Price on application.

KENDALL & WHITNEY'S CATALOG.



This plow is intended for use with either animal power, a traction engine or road roller. Weight, with clevis, 315 pounds.

We guarantee the steel beam on this plow against breakage for one year from date of sale.

This plow is very simple in construction, consisting of only nine parts aside from the braces and bolts. For all road or contractor's work, for tearing up cobblestones and macadam, it can be used as a perfect **in-one plow** for all-around work. Ordinarily, the contractor has one plow for general purpose or furrow work and another plow for rooter work or tearing up old pavements. This No. 69 does the work of both and answers for any

and all purposes.

We would also call special attention to the main plow point. This point is made from a solid bar of forged steel 11-4 inches thick, insuring great strength. It can also be reversed end for end, thus giving double wear.



No. 69 Main Point.

#### SPECIFICATIONS.

Beam-One solid piece of cast steel. The Landside is formed by this reversible point, which has countersunk bolt holes on both sides, into which bosses of steel beam fit, holding it most securely in place, protecting the bolts and preventing the possibility of their shearing off.

Wing for Point—A forged steel plate, extra strong and heavy. Mouldboard—A heavy plate of steel, made extra thick at places where most wear comes.

Shin Piece-Above the point and in front of the mouldboard to protect it.

Shoe or Heel—At rear end of plow under heel of point to protect it and also gives pitch to the plow. Handles—All steel (patented). They have the strength and will stand the racket and don't break or bend.

Clevis-Forged steel, made to wear and stand the strain.

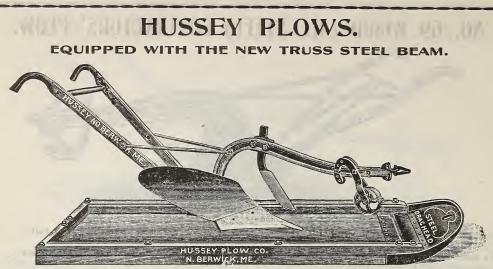
Price on application.

THE SARGENT NO. 76 PLOW.

This series has proved very popular in New England. They are light weight, of good capacity and handle easily. These plows are made with steel mouldboard.

76A. Medium Two-horse Cast Share, Steel Board. 76B. Light Two-horse, Cast Share, Steel Board. 76C. One-horse Cast Share, Chill Board.

Price on application.



These plows are very strongly built, have the regular "Hussey" shaped mouldboard, which is so much liked by New England farmers, are made of the best materials throughout, are easily held, and are as nearly complete and satisfactory in every respect as the most critical can ask.

No. 23. MEDIUM OR LIGHT TWO-HORSE PLOW. Steel Mouldboard, "Hard Metal" Point. Cuts from 5 inches to 7 inches deep, 11 inches to 13 inches wide. Weighs, complete, 120 lbs.

No. 26. LARGE TWO-HORSE PLOW. Steel Mouldboard, "Hard Metal" Point. Cuts from 6 inches to 8 inches deep, 13 inches to 16 inches wide. Weighs, complete, 128 lbs.

No. 28. LARGE THREE-HORSE PLOW. Steel Mouldboard, "Hard Metal" Point. Cuts from 7 inches to 9 inches deep, 14 inches to 18 inches wide. Especially adapted for breaking up new land. Weighs, complete, 162 lbs.

> No. 100. (Wood Beam.) ONE-HORSE PLOW. Cuts from 5 inches to 6 inches deep. 10 inches wide. Weighs, complete, 66 lbs.

No. 102. (Wood Beam.) LIGHT TWO-HORSE PLOW. Cuts from 5 inches to 7 inches deep, 12 inches wide. Weighs, complete, 82 lbs.

No. 104. MEDIUM TWO-HORSE PLOW. Cuts from 7 inches to 8 inches deep, 16 inches wide. Weighs, complete, 111 lbs.

No. 106. LARGE TWO-HORSE PLOW. Cuts from 7 inches to 9 inches deep, 16 inches wide. Weighs, complete, 124 lbs.

No. 108. (Wood Beam.) HEAVY ROAD OR BUSH GROUND PLOW. Cuts from 8 inches to 10 inches deep, 18 inches to 20 inches wide. Weighs, complete, 190 lbs.

> This size is made with heavy brace-cutter. and beam lined with wrought iron, for road work or bush ground.

Price

on

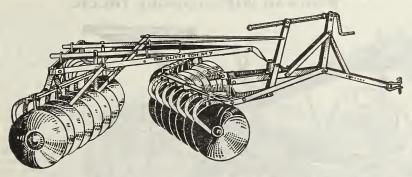
application.

WOOD BEAM HARD METAL PLOW. Prices subject to change without notice. (See note on page 2.)



On the Oliver "A" series disc harrow the gangs can be set at any angle for proper penetration of different soils. Just the right degree of disc curvature enables the discs to pulverize the soil to the desired depth. High quality spring steel scrapers are controlled by foot levers. Slat and control levers are so placed that the driver can be comfortable and at the same time adjust the gangs easily and conveniently. Frame, constructed from angle steel, is sufficiently large to make it strong and durable. The Oliver "A" Harrow is furnished in sizes cutting 6 feet wide with 16 or 18 inch discs.

# **OLIVER TRACTOR DISC HARROW.**



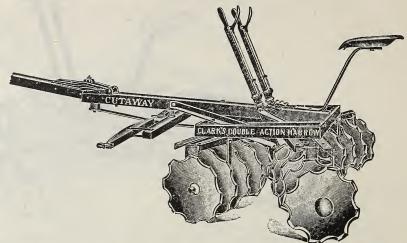
Special 6 foot size for Fordson Tractor.

No farm equipment is complete without a good disc harrow. The best plowing only partially prepares an ideal seed bed. The Oliver TDH is specially designed for use with any standard light tractor. Its construction permits all four gangs to be set at more or less angle from the tractor seat without the use of a lever and without backing the harrow. All changes are made quickly and easily by means of a screw crank adjusting device accessible from the tractor seat. The gang connection pivot, being higher than point of pitch, converts the forward pull of the tractor into a downward pull on the gangs. This feature, together with the fact that the gangs can be set at a wide angle, assures ready penetration. The Oliver TDH Harrow can be furnished in 6, 7 and 8 foot sizes with either 16 or 18 inch discs. Weight pan furnished as an extra.

### Price on application.

# CLARK'S "CUTAWAY" TOOLS. Clark's Double Action "Cutaway" Harrow.

These machines have four gangs of discs, two in front and two in the rear. The front gangs loosen and break up the dirt and throw the dirt out; the reargangs throw the dirt in. All four gangs are carried by a main frame that gives a very strong, unyielding connection between them. The rear discs are placed so as to track between the front discs, and the main frame holds the rear discs to their work, keeping them from dodging to either side and holding them in the ground, no matter how hard the land is. Any trash passing be-tween the front discs is cut up and turned under by the

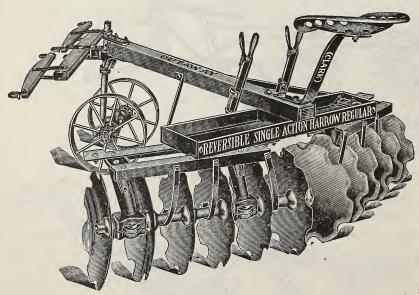


rear discs, where it will turn into plant food. Having a four-point bearing on the ground, these machines run steady and true in the line of draft. The draft of these machines is very light, as the rear discs work in loose soil and consequently are drawn easily.

The whole machine, with the exception of the pole, is made of either iron or steel. The main frame and the gang frame side pieces are made of heavy angle iron. The strain of the gangs is taken up by angle iron bars, one above and one below the inner end of the gang frame. Both side pieces on each gang extend out between these bars. Heavy pipe standards are used, with the oil hole for the bearing at the top of the standard.

### Clark's "Cutaway" Single Action Harrow.

**REGULAR WITH TONGUE TRUCK.** 

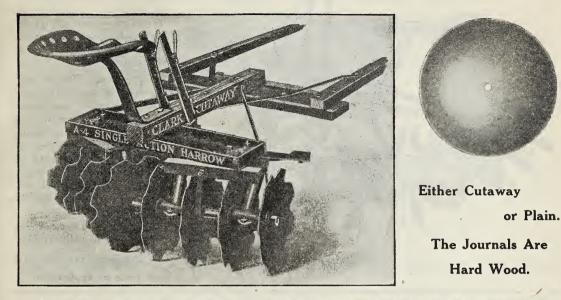


Why has this harrow won the support of practically every farmer who owns one? Because, first of all, it does the work; it is one of the most effective tillers ever put in the field. Second, its durability is almost unlimited. Third, it is convenient to handle and easy on the team. To reverse this harrow you simply dis-connect the lever links from the gang frames and swing the gangs around on the king bolts until what were formerly the outer discs become the inner discs, and reconnect the links. In this latter position the discs will throw the soil inwardly. Like those on all other "Cutaway" implements, the discs on this harrow are cutlery steel discs, forged sharp. This feature partly accounts for the remarkably

long service always given by "Cutaway" disc implements. Forging compacts the molecules in the steel, making the disc much tougher than those sharpened in any other manner. It makes them retain a sharp edge long after ordinary discs are well worn away.

#### Price on application.

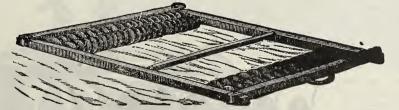
# CLARK'S "CUTAWAY" TOOLS—Continued. Clark's "Cutaway" One-Horse Harrow.



It is made for the express purpose of meeting the needs of the man who has only one horse. By means of the "**Cutaway**" **Harrow** intensive tillage is made as economical and as practical for the man with a small outfit as for the man with large equipment. This machine is equipped with 16-inch Clark *forged edge* discs.

Price on application.

### THE MEEKER SMOOTHING HARROW.

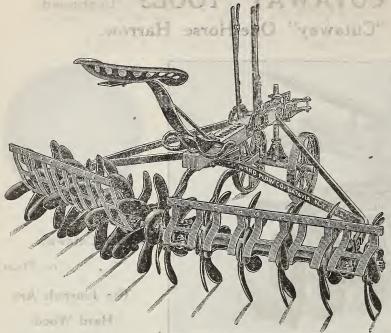


Perfect Harrow and a Perfect Land Roller Combined.

This harrow has become a great favorite among all classes of farmers and market gardeners in all parts of the country. It has two sets (four) of rollers containing fiftyeight steel discs. These discs grind all lumps and save the work of raking, and also mash small stone below the surface better than any field roller, leaving the land smooth and level. The discs of one roller work between those of the other, preventing clogging in damp soil. The board in the center is set at an angle, is adjusted up or down and serves as a leveler.

#### Price on application.

### MORGAN SPADING HARROW.



### WITH FORE TRUCK.

These harrows have the cleaner attachment, preventing loading or clogging. The frames are arched so that they will easily pass over uneven ground and any ordinary obstructions.

The Morgan Patent Spading Harrow leaves the earth tinely pulverized and smooth without ridge or furrow. The action of the spades forms cuplike cavities in the under soil, which receive and hold the water from rains and dashing showers, conserving all moisture for the benefit of growing crops.

For deep and fine cultivator no other harrow equals it.

Two sizes, 12x16 and 12x18.

Price on application.

### **DISC HARROW WITH FORE CARRIAGE.**

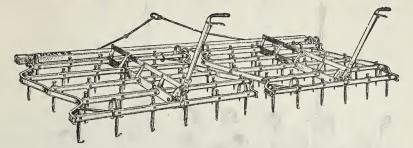
This Disc Harrow is one of the most efficient tools. It cuts and covers the weeds and stubble; cuts the sod without pulling it up.

The value of fall plowing in many sections is being recognized more and more. The disc harrow for spring use is, therefore, becoming more and more valuable.

Even when plowing in the spring the disc harrow will prove valuable. By cutting up trash first, when the plow comes along the ground settles down more quickly than if the trash were turned under whole. Of course after spring plowing the disc harrow will be needed to get the seed bed into shape as quickly as possible.

Price on application.

# **OLIVER SPIKE-TOOTH HARROW.**



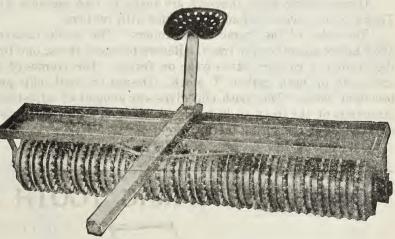
The Oliver Spike-Tooth Harrows are equipped with side latch levers that make it easy to control the harrow and provide a grip for lifting the sections to clear the teeth of trash.

Price on application.

### DO NOT CONFUSE THIS CULTI-PACKER WITH THE ORDINARY LAND ROLLER. IT IS A PULVERIZER, PACKER AND CULTIVATOR.

Culti-Packer breaks the crust, cultivates oats and barley, stops soil blowing, crushes lumps, fills air spaces, conserves moisture, creates a mulch and speeds germination.

The Culti-Packer is not recommended to replace any tillage tool you ordinarily use. It finishes what the other seed bed makers begin. Under the old way a field was plowed, disked and smoothed with a pegtooth harrow, but you know of many, many times when, after those operations were complete, the field was far

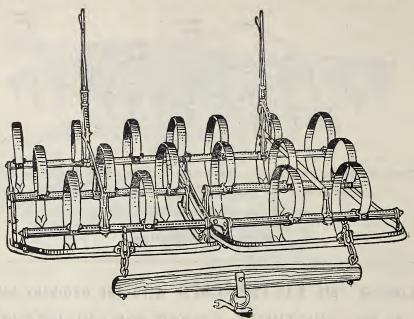


from smooth. There were great lumps of dirt still cluttering up the surface. Hard clods were scattered about, and under the hot sun these became solid and utterly devoid of moisture. It is not the best kind of a seed bed to plant grain in, because the drill furrow openers will not penetrate evenly—some seed is scattered about on the surface to be eaten by the birds and the resulting stand is considerably under normal. You must have a good seed bed.

Beneath the surface of a newly plowed field there are innumerable air spaces where one furrow strip overlaps the other. Unless the disc harrow is used both before and after plowing, these air spaces are never completely filled in, but remain as pockets to wither the plant roots and retard the upward flow of sub-soil moisture. For many years farmers have realized the need of a tool to crush lumps and press out the concealed air spaces. The Culti-Packer has been developed to meet this need.

#### Price on application.

# THE OLIVER LEVER HARROW.

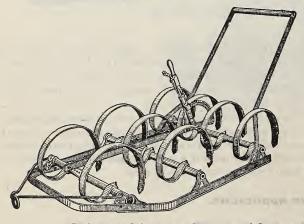


Oliver spring tooth harrows are made in two sections, fifteen or seventeen teeth. They are made with channel bar frames with runners.

The sides of the frame form runners. The inside runners are cut off halfway to allow ample clearance for trash. Reversible steel shoes, one-fourth inch thick, bolted to the bottom of runners saves wear on frame. The frames of the channel bar harrows are made of high carbon T stock. Design of tooth clip prevents teeth slipping or becoming loose. The tooth clip gives any amount of adjustment desired, and allows a large part of the tooth to be used. A lever on each section also permits quick, positive adjustment of the spring teeth.

Price on application.

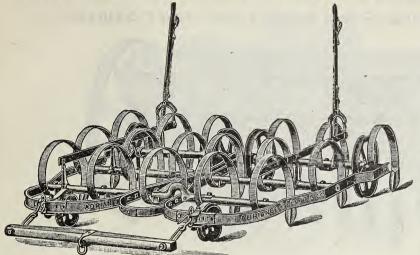
### **ONE-HORSE SPRING TOOTH HARROW.**



A very popular harrow, used extensively for orchards, gardens and small farms. Made entirely of steel and malleable iron. Is controlled by the handles as easily as a cultivator. Frame is made of angle steel and is sloped at the front to avoid obstructions. Has renewable steel runners.

Price on application.

# The Adriance Spring Tooth Harrows.



Adriance Frame Bars-Are of heavy channel steel, two inches wide, stiff and substantial. The frames are car-ried high above the ground, affording sufficient clearance and avoiding obstructions. They will last a lifetime.

Tooth Bars-The tooth bars are heavy steel tubing, 15 inches in diameter and proportionate weight. Large malleable trunnions are riveted in the tooth bars and pass through the frame, being secured laterally by a washer and cotter. The tooth bars turn freely in the frame bars yet hold the frame firmly together. Two large wheels are mounted on the rear

tooth bar of each section. These do not revolve on the bars, however, but on bushings-easily renewed when worn. The front wheels caster to assist in turning quickly. Wheel and Bushings—A flange in the middle of the wheel hub, turning in a channel between the

bushings, keeps the wheels in place. This channel also forms an oil chamber for the bearings.

### JOHNSON FAN MILL.

The fan mill is indispensable to a well-regulated grain barn. This mill runs the sound, clean grain to one side of the mill, while the - sand and small seeds pass out at the other, and the heavy chaff and heads are caught in a receptacle behind the machine. It will not only clean grain, but also grass seed in the best manner.

#### Price on application.





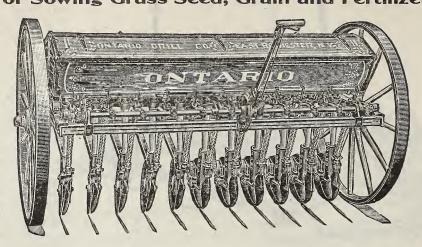
No. 14 AMERICAN **Double Cylinder BEAN and PEA THRESHER.** 

Strong, Rugged, Efficient. EVERY BUYER A SATISFIED CUSTOMER.

This machine will thresh all varieties of beans (or peas) directly from the rankest growing vines without splitting the seed. It takes all the seed from the vines and pods in a clean, marketable condition, and shreds the vines, making them valuable for fodder.

Price on application.

### ONTARIO COMBINED SINGLE DISC DRILL. (For Sowing Grass Seed, Grain and Fertilizer.)



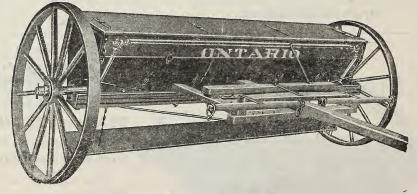
The most popular and best adapted style of drill for the New England States. In simplicity of construction, accuracy of operation and lightness of draft, it excels any machine in the world of similar construction and recognized merit.

### The Ontario Fertilizer and Lime Distributor.

#### Style H.

### SIMPLE, STRONG, DURABLE.

SOWS BROADCAST.

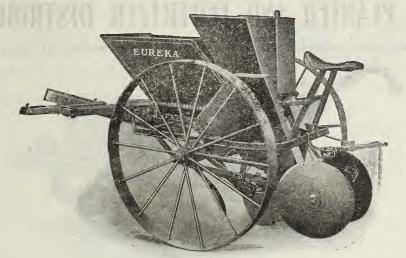


#### One and Two Horse.

Built to meet the demand for a simple, practical and comparatively inexpensive machine with which to distribute lime and fertilizer. The quality of the material used, the workmanship, the design and finish are all first-class. The parts are few, and are made not only with a view to efficiency, but for strength and durability. The mechanism is of the simplest form and easily understood. It is an honest, durable and practical machine, with exceptional value for the cost. Has proved a useful, handy machine for sowing dry fertilizers, such as plaster, ashes, lime, bone dust, cotton seed meal, salt, etc.

#### Price on application.

### EUREKA POTATO PLANTER.



The Eureka Potato Planter is the most complete manufactured. No other planter will supply the requirements of all growers so satisfactorily.

The main frame is made entirely of steel and practically all of the operating parts are steel or malleable iron. By avoiding numerous cast iron parts we secure a much stronger and dependable machine, obviate delays in the field and lessen the cost of keeping in repair.

All users enthuse regarding the light draft of the Eureka as compared with other makes. Our No. 11B is equipped with strong steel wheels, 40-inch diameter, with  $3\frac{1}{2}$ -inch tire. These unusually large wheels decrease draft, carry the machines more steadily over rough and uneven fields, and prevent sinking into the soft earth of the fields. Both wheels drive the operating parts.

The driver clearly sees the operation of the seed pickers and fertilizer distributor and does not have to guess as to accuracy of the machine. All working parts are in plain view and all adjustments are easily and quickly made. The machine is automatic and requires only one man.

A specially constructed lever, without finger latch, is easily operated from seat. This raises the plow and discs above the ground, throws the machine out of gear, and raises the marker, saving considerable time as required with other potato planters having several levers.

The dropping mechanism of the Eureka is very simple, with a positive movement, and is unusually accurate. Frequent tests have shown it to be more than 95 per cent. correct. Many users report 97 to 99 per cent. A planter with this high average satisfies growers and entirely offsets the old-time argument made to sell planters which require a driver and an extra man to watch the seed dropper and supply the skips. The Eureka, with one man, will equal, if not surpass, the results obtained from any other style.

Instead of being two feet or more ahead of the main axle, our furrow opening plow is placed directly under the axle. It is, therefore, carried in a relative position with the wheels through uneven ground, absolutely insuring planting at an even depth under all conditions.

The covering discs are fitted with scrapers to keep the discs clean. The discs can be adjusted as to height or width, as desired, without changing the position of the plow. Some makes of planters have discs from three to four feet back of the plow. The Eureka discs are placed as close to the plow as is possible for them to travel, and positively cover on side hills and uneven ground. They cannot "slew" on side hills, turning the seed out of the furrow.

The bottom of the potato hopper is an endless conveyor. This travels very slow, carrying the seed into the picker pit. When the pit is properly supplied the weight of the potatoes operates a governor which stops the movement of the conveyor. After the pickers have removed some of the seed, the conveyor again starts automatically. This ingenious and patented construction provides at all times for the right quantity of seed, and overcomes the inaccuracy usually experienced with planters. None of the parts are complicated and seed is not injured.

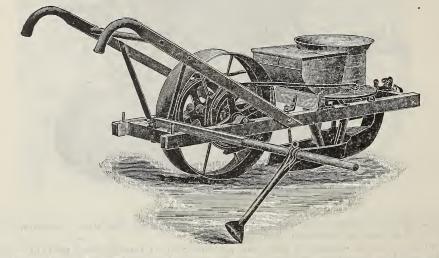
The Eureka method of distributing fertilizer is preferred by growers. No part of the fertilizer comes in contact.with the seed. The seed drops in the V of the plow, and adjustable coverers turn earth upon the potato to any depth desired before any fertilizer is applied. Then, instead of dropping the fertilizer on the furrow, it is distributed through two tubes, and is spread evenly on both sides of the furrow in such a manner that when the covering discs turn the earth the fertilizer becomes thoroughly mixed, with the earth that covers the seed.

Many successful growers use Eureka Planters exclusively, because of the superior results obtained from the fertilizer attachment.

#### Price on application.

# THE KING OF THE CORN FIELD CORN PLANTER AND FERTILIZER DISTRIBUTOR.

Plants Corn, Beans, Peas, Beets and Other Seeds of Like Size.

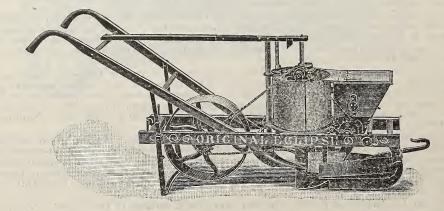


This planter is perfectly adapted to every requirement; durable and simple in construction, not liable to get out of order, and is arranged to drop any desired quantity of seed or fertilizer at a time, at equal and various distances apart, in hills or drills of uniform depth. The seed-dropping device is positive; never misses or skips a hill.

### Price on application.

# ECLIPSE CORN PLANTER And Fertilizer Distributor.

For Planting Field or Ensilage Corn, Beans or Peas, in Hills or Drills.



### Price on application.

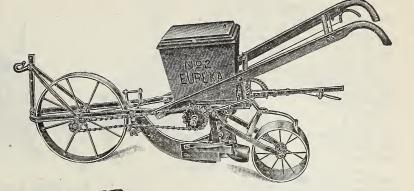
# EUREKA CORN AND BEAN PLANTERS.

No. 2 EUREKA JR.

One-Row.

Fertilizer Attachment, with Standards to Prevent Tipping Over.

Plants in Drills, Hills or Checks.



### No. 4 EUREKA RIDING.

Two-Row.

Plants Corn, Peas, Beans, Beets. etc.

Fertilizer Attachments always

furnished.

The No. 4 adjusts to plant 28, 30, 36 or 42 inches between rows, as desired.

Eureka planters will drill the seed in continuous rows, or drop automatically in hills the distance apart desired. Various changes can be made for the distance between hills. The driver can see the seed dropping and is never in doubt as to obtaining the results desired. The No. 2 only is equipped with a row-checking device.



Double Hopper.

A very popular feature is the great variety of seed in addition to corn that can be successfully handled by the Eureka without expensive attachments. The regular dropper will plant corn, peas and ordinary sized beans. A different style dropper is required to plant beets and kidney beans. A special attachment can be supplied to plant turnip and onion seeds. Extra attachments at small additional cost.

### **DOUBLE HOPPER.**

Some growers desire two kinds of seed in the same row, dropping a hill of corn and in the next hill planting beans. When desired, two kinds of seed can be separately carried in the Eureka hopper at the same time, and kernels of each be dropped in alternate hills or both in the same hill.

#### Price on application.

### "NEW MODEL CENTENNIAL."

No. 8. An extra implement at small additional expense.

The regular 5-tooth Horse Hoe, Cultivator and Coverer combined (No. 1), or an 8-tooth Pulverizer, on same frame.

The long frame of the "New Model Centennial" allows us to add the extra teeth

without danger of clogging. No. 8

has eight 1-inch points, long wings and lever.

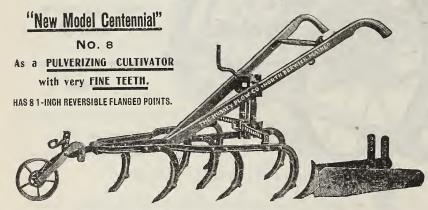
No. 1 has five 3-inch points, long wings Back of Improved and lever.

Point, 1 inch wide.

New Model Cultivator. No. 1.

The "New Model Centennial" Horse Hoe, Cultivator and Coverer combined has long been recognized as an implement of unusual merit. The simplicity and fewness of parts required for changing it over to suit the various kinds of work to which it is adapted, and its unique and very efficient expansion lever, are among the reasons for its popularity.

An important improvement has recently been made in the one-inch reversible points for this cultivator. The illustration at the left shows the improved point with the strengthening flanges. It will be readily



seen that the flanged point is not only much stronger than the old style, but the flanges prevent the point from swinging around on the standard in rough and rocky land.

Equipped with eight of these narrow flanged points, the No. 8 is one of the very best pulverizing cultivators on the market.

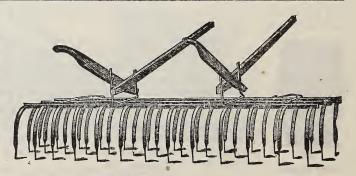
No. 8 as a PULVERIZING CULTIVATOR with FURROWING WINGS DETACHED. Price on application.

### THE "K. & W." WEEDER.

The attention of farmers is called to the great saving effected in time and labor by using the "K. & W." Weeder.

One of the best machines for level cultivation; will not injure the roots of growing crops, but kills out the weeds, and leaves a fine mulch on the surface of the ground.

Price on application.



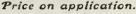


As plainly shown in cut, the teeth are diamond shaped, with a small cultivator tooth forged on one end-steel, of course. For very close work, every other tooth can be quickly removed. Cultivating width, when equipped with lever expander, 34 inches.

#### Price on application.

FIVE-TOOTH CULTIVATOR, WITH HILLING ATTACHMENT.

The hilling attachment is applied by simply removing four standards and placing the standard of the hiller on the middle bar and attaching the short standards of the blades to the side bars. This attachment is used in cases where higher ridging is desired than what can be accomplished with the regular horse hoe blades.





The Improved Potato Hoe is, as its name indicates, especially adapted for hilling potatoes, banking celery, and also as a coverer. It is much used as a "marker" for different crops, making the rows parallel and equally distant.

Price on application.

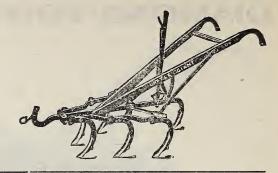


Considered by many farmers the best hoe made for hilling and covering. A distinct departure from the styles commonly in use, the large discs doing smooth and perfect work.

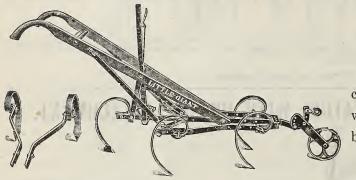
Price on application,

### LITTLE GIANT SEVEN-TOOTH CULTIVATOR.

The Little Giant is the trimmest tool of this kind made. Outside handle braces shipped with all cultivators. Lever expander, solid and strong, narrows cultivator to 9 inches and expands to 29 inches.



### Price on application.



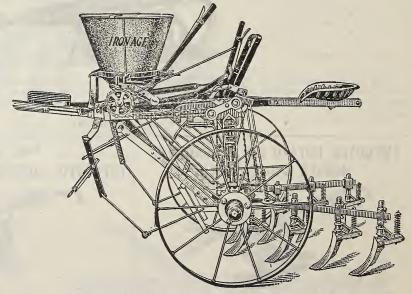
### LITTLE GIANT FIVE-TOOTH CULTIVATOR.

The frame is of high carbon channel steel. Furnished only with lever spread outside handle braces and plain gauge wheel.

Price on application.

## NO. 78 IRON AGE RIDING CULTIVATOR AND FERTILIZER ATTACHMENT COMBINED.

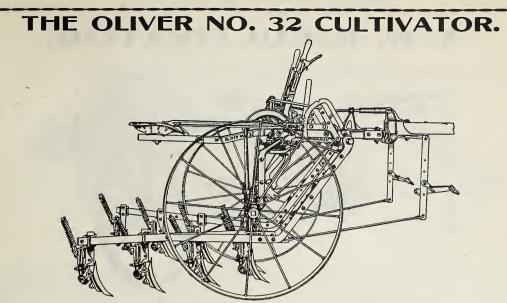
A new and important attachment that combines fertilization and cultivation in your fields. Scattering fertilizer all over the field before planting is very wasteful, and fertilizer applied directly to the hill is likely to burn the plant if it comes in contact. With this attachment a quickacting fertilizer can be thoroughly mixed with the moist soil underneath when the crop is first cultivated. This correct application enables the plant to absorb the fertilizer much more easily. The hopper on this attachment holds about 80 pounds of fertilizer or about 50 pounds of cotton seed meal. The feed is practically the same as that on the Iron Age Potato Planter, which has served efficiently and dependably for many years. The feed spouts are adjustable, and can be reg-



NO. 78 RIDING CULTIVATOR EQUIPPED WITH NO. 578 FERTILIZER ATTACHMENT.

ulated to suit the width of rows. Cultivator and attachment furnished complete or separately as desired. Cultivator furnished with eight trip spring hoes and shields. Disc attachment extra.

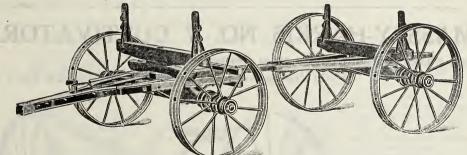
#### Price on application.



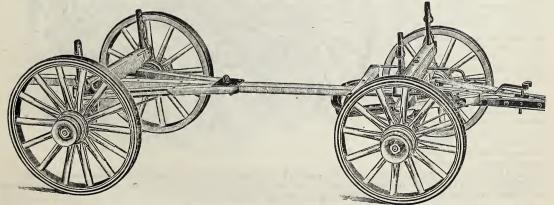
This NEW Oliver No. 32 Cultivator has been thoroughly tested out in different parts of the country where conditions are difficult and has received the unqualified approval of the practical farmer. Price on application.

### FARM TRUCKS.

We emphatically recommend these trucks as adapted for all kinds of farm work, being exceptionally well made, and so constructed as to carry any style farm wagon box. The frames are solidly put together, and are of especial value in hauling **heavy loads**, being built with that end in view. Are equipped with either steel wheels or heavy wood wheels.

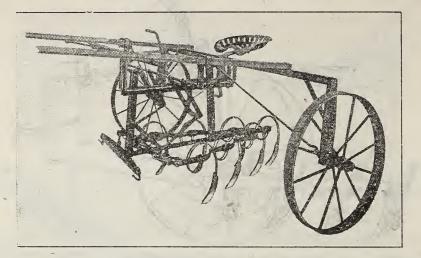


No. 15. STEEL WHEEL TRUCK, WITH 3 1-4 x 10 INCH SKEIN, 30 AND 34 INCH STEEL WHEELS AND 4 x 3-8 INCH TIRES



CRESCENT TRUCK, WITH 3 1-4 x 9 INCH SKEIN, 30 AND 36 INCH WOOD WHEELS, AND 3 x 3-8 INCH TIRES Price on application.

# A. W. R. CULTIVATOR.



With this implement a man or boy and one horse will do practically as much work as a man and team with a two-horse machine—do it easier, cheaper, and in most cases better. It raises with the foot, hay rake fashion, and is easily guided, as each side of the cultivator frame closes with slight foot pressure and opens automatically. Recommended for hilly and stony ground when equipped with the patented spring teeth.

"Hallock" style weeder, with special attachment, is easily attached in place of cultivator, making an ideal riding weeder.

Price on application.

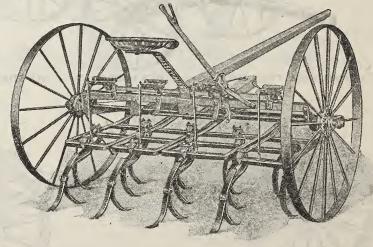
# MASSEY-HARRIS NO. 7 CULTIVATOR.

The ideal tillage tool and quack grass destroyer.

It will dig up hard ground that a disc harrow can't touch.

For exterminating weed pests, summer fallowing land, breaking stubble ground and making seed beds this implement is especially suited. Its teeth are so controlled that they tear up the soil with short elastic vibrations which shake out the roots of the weeds and keep the latter from hanging on to them. Indeed, it actually digs up the ground, shakes it into a fine, loose mass and works the weed roots to the surface where they are soon killed by the wind and sun.

Spring pressure is a controlling factor. When pressure is applied, that pressure remains the same when passing knolls or furrows and a uniform depth of cultivation, be it deep or shallow, is thus always assured. Because of this footure there is preserve here.



feature there is never any bouncing of the teeth when clumps of sod or hard ground are encountered. High steel wheels, 49 inches in diameter and with a 2½-inch face, which, because of their height and wide tires, facilitate the handling of the implements in the field.

#### Price on application.



The New Moline No. 100 Spreader is a result of exhaustive experiments and tests to make the best spreader possible according to the most modern construction and to have the most features of real merit and value to the farmer. The larger use of steel, simplifying of parts, the clean-cut design, improved wide spread and pulverizing devices which break up chunky manure and spread it in a wide, even blanket, simplified beater and conveyor drive, short turning spring, suspended automobile type front axles, easy filling, low tapered box and light draft built into the whole machine are but a few of the outstanding improvements. 50 to 55 bushels without top boards and with a two-horse hitch.

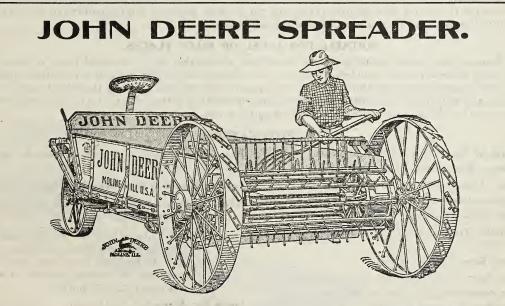
The front axle construction is an exclusive feature and a marked improvement. Front axles are of forged steel, automobile type, and are mounted in cushion springs. This takes the strain off the frame and makes easier going in rough ground. There is no tongue whip. Front wheels can cramp almost at right

angles. Front and rear wheels have same track, which makes for light draft.

Machine without side boards, 1,532 pounds.

A rear wheel contracting external brake, controlled from foot board, is furnished when ordered. Tractor hitch can also be furnished on order.

#### Price on application.

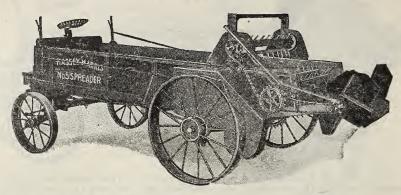


The John Deere Spreader—the spreader with the beater on the axle—has only one-half as many parts as the simplest spreader heretofore manufactured. All its working parts are mounted on the rear axle. It has no chains, no clutches and no adjustments. Being low down, it is easy to load.

#### Write for quotations.

### The Massey-Harris No. 5 Manure Spreader.

The Very Features You Want in a Manure Spreader Are Contained in This Massey-Harris Machine.



From whatever point of view you are of the mind to consider the Massey-Harris No. 5 Manure Spreader you will find it mighty good equipment that will serve you to splendid advantage. It is of the most improved and convenient-to-use types yet developed; it has been tried and proven and it is offered to you with the warranty that it is well made of good materials and will do good work for you.

#### IT IS EASY TO LOAD.

Only 43 inches is the loading height at the rear wheels and the box is so narrow in width (being only  $40\frac{1}{2}$  inches) that you can load all from one side without the least difficulty. Yet there is ample capacity for from 60 to 65 bushels without using the side board extensions. The seat has a hinged mounting, which permits of tipping it forward when loading, so that it will be out of the way and will not get any of the manure on it.

#### DRAFT IS LIGHT.

Everything about the machine is conducive to light draft. The wheels are high and broad-faced and those at the front track with the ones at the rear, the working parts are few in number and are always in perfect alignment, and friction is minimized at every point.

#### SUITABLE FOR LEVEL OR HILLY PLACES.

Being of light draft, having the high, broad-faced wheels that are so arranged that the front ones track with those at the rear, and being built low with great stability this machine is equally suitable for level and rough country. With it you can work up and down the hills or along the side of them accordingly as you may prefer. The rear wheels are so lugged that they will not easily slip to the side and when necessary they can be equipped with an effective, quick-acting, band brake.

#### SPECIFICATIONS.

Length of Box (inside)-9 feet, 10 inches.	<b>Rear Wheels</b> —Steel, 40 inches in diameter, $5\frac{1}{2}$ -inch
Width of Box (inside) $-3$ feet, $4\frac{1}{2}$ inches.	_ tire.
Depth of Box (inside)-1 foot, 6 inches.	Loading Height at Rear Wheels-3 feet, 7 inches.
Height of Load-1 foot, 6 inches to 2 feet, 8 inches.	Hitch-Combined 2 and 3-horse with neck yoke and
Width Over All-6 feet.	combined straight and offset pole.
<ul> <li>Width of Tread (both front and rear)—5 feet, 5<sup>3</sup>/<sub>4</sub> inches.</li> <li>Wheel Base—7 feet, 8 inches.</li> <li>Front Axle—Steel, auto type, 1<sup>5</sup>/<sub>8</sub> inches in diameter.</li> <li>Rear Axle—Steel, 2<sup>1</sup>/<sub>8</sub> inches in diameter.</li> <li>Front Wheels—Steel, 28 inches in diameter, 4<sup>1</sup>/<sub>2</sub>-inch tire.</li> </ul>	<ul> <li>Capacity—Level full, without side board extensions, 40 bushels; heaped, without side board exten- sions, 58 to 65 bushels; level full, with side board extensions, 58 bushels; heaped, with side board extensions, 72 to 75 bushels.</li> <li>Loads Per Acre—4, 8, 12, 16 or 20.</li> <li>Width of Spread—7 feet covering both wheel tracks.</li> </ul>

#### Price on application.

# MASSEY-HARRIS TWO-HORSE MOWER.

A Big, Powerful-Cutting Machine of Light Draft. Built in only the plain lift style in three sizes-5 ft., 6 ft. and 7 ft.

With this mower you can cut all kinds of grasses and clovers to advantage. They are the outgrowth of an intensive study of the performance of different types under different conditions and embody the latest and most approved principles in mower building.

Strong, perfectly meshed gears transmit the power to the knife with comparatively no friction loss.

Splendid balance obtains. The gearing is located back of the axle, where, aided by drawing the machine from beneath the pole, it successfully balances the cutting apparatus.

Rough fields are readily mowed without straining the cutter bar. This is made possible by adjustments provided for the lifting spring.

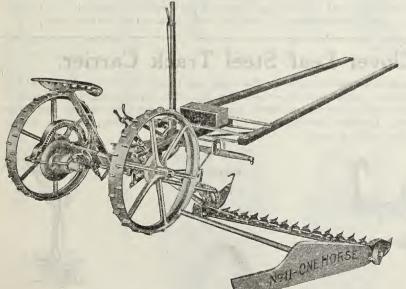
The knife works without clogging. Its head travels in a close-fitting bearing on the inner shoe, for which the head

between the guards is quickly cut.

is specially milled, and its sections are held to their work by a series of steel clips. Everything that comes Price on application.

# MASSEY-HARRIS ONE-HORSE MOWER.

Built in the vertical lift style in one size-4 ft. Width of Tread, 39 in. Height of Wheels, 31 in Face of Wheels, 4 in.



This mower is especially

designed for a strictly onehorse machine and well supplies the need of those who require one of that kind. It has ample weight and traction to cut all kinds of hay crops, and yet is of such construction that one horse handles it easily. Light draft is one of its salient features, and in combination with power and durability, makes it good equipment.

The main frame is in one piece, accurately bored to hold the gears and shafting in positive alignment.

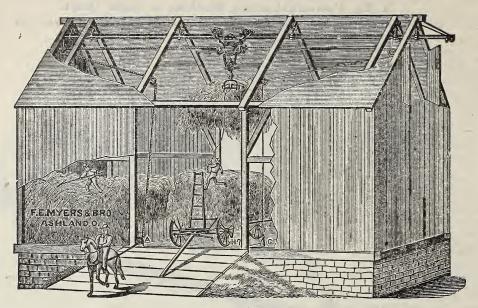
Roller bearings are used for both the main axle and the cross shaft, where they reduce the friction to a minimum

The cutter bar is of cold rolled steel fitted with mal-leable guards and shoes, all of which are aligned to insure knife working properly.

Price on application. Prices subject to change without notice. (See note on page 2.)

### KENDALL & WHITNEY'S CATALOG.

# CUT SHOWING HAY CARRIER AT WORK.



#### MATERIAL REQUIRED FOR A STEEL TRACK OUTFIT FOR DIFFERENT LENGTH BARNS.

FOR A 40-FOOT BARN.—One reversible carrier; 40 feet steel track; 21 hanging hooks; 21 rafter brackets; 5 pulleys; 1 fork; 6 floor hooks; 110 feet  $\frac{3}{4}$ -inch Manila rope; 50 feet  $\frac{3}{8}$ -inch trip rope.

FOR A 50-FOOT BARN.—One reversible carrier; 48 feet steel track; 25 hanging hooks; 25 rafter brackets; 5 pulleys; 1 fork; 6 floor hooks; 130 feet  $\frac{3}{4}$ -inch Manila rope; 55 feet  $\frac{3}{8}$ -inch trip rope.

FOR A 60-FOOT BARN.—One reversible carrier; 60 feet steel track; 31 hanging hooks; 31 rafter brackets; 5 pulleys; 1 fork; 6 floor hooks; 160 feet  $\frac{3}{4}$ -inch Manila rope; 60 feet  $\frac{3}{4}$ -inch trip rope.

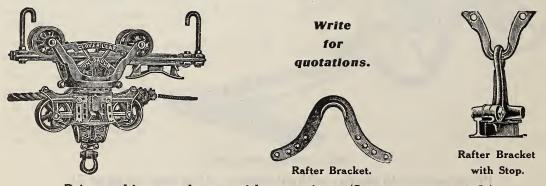
Different lengths of barns will use track, hanging hooks and rope in same ratio as above.

Above estimates of rope are for an end hoist. In hoisting from center of barn less rope will be required.

When requesting quotations do not fail to give exact length of barn, whether ridgepole or full rafter, and distance between rafters. Also state whether you expect to hoist from end or center of barn.

### Myers Clover Leaf Steel Track Carrier.

This carrier is made of malleable iron throughout. Has 6-inch truck, and is heavily and substantially made. It is fitted with wide, open mouth to receive the fork pulley when approaching in any direction. Also has swinging fork pulley, which relieves the carrier from all strain when drawing hay over a high beam or into a well-filled mow. The track wheels revolve on  $\frac{7}{8}$ -inch turned steel axles. The rope sheaves have longer hub than any other make of carrier.



Prices subject to change without notice. (See note on page 2.)

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Myers Clover Leaf Steel Track Carrier, with Steel Bearings. SWIVEL AND REVERSIBLE.

FOR DOUBLE STEEL TRACK. FOR ROPE OR CABLE DRAFT.



This carrier is made of the best annealed malleable iron, thoroughly braced, which insures strength sufficient to with-stand the most severe usage. The rope sheaves are 7 inches in diameter with 17-16 inch turned steel bearings. Thisstyle of bearingwillgivemore service and is easier to operate than any other style of sheave. The fact that you can use rope or cable for draft is a special feature used only on the Myers and enables the farmer

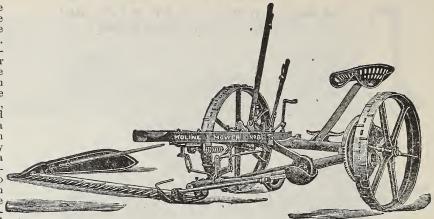
a large open mouth, swinging fork pulley and double force lock, which engages the frame of the fork pulley on both sides, allowing the load to swing





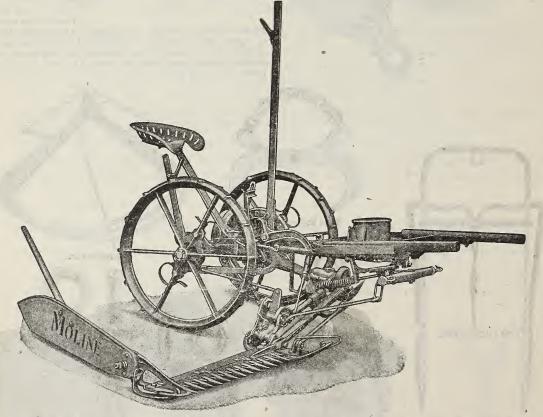
## Adriance (Moline) Two-Horse Mower.

For over sixty-five years these mowers have given satisfactory service in all parts of the world. Their mechanical features make them the peer of all mowers. They have solid bronze composition crank shaft bearings, one piece tubular main frame, cold rolled steel axle and main shaft, and extra strong cutting parts with perfect shear at every edge. The machine as a whole is so well propor-tioned and lined up so truly that ease of motion and positive action is the result. Has every advantage of foot and hand



levers for meeting varying field conditions. Made in sizes to meet all requirements. Five and six foot.

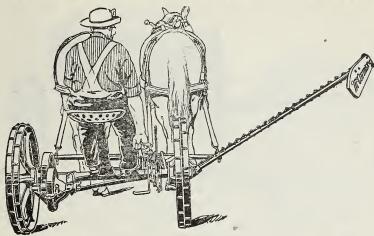
# Adriance (Moline) One-Horse Mower.



On the one-horse mower will be found those improvements which on the regular mower are so successful in reducing draft. They are especially advantageous in the construction of the one-horse mower, in fact, the one-horse mower is simply a smaller counterpart of the two-horse. This one-horse mower is made from patterns especially designed for a small machine. They are well proportioned in every respect and have all the necessary strength, and are as free from breakage as the larger mower. Made with 4-foot cutter bar only.

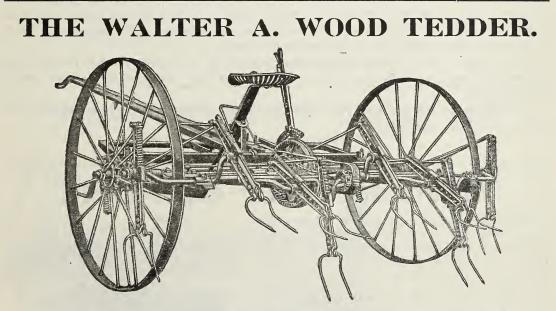
Price on application.

### **DEERING-McCORMICK MOWERS.**



The Deering-McCormick Mowers are easy to pull and have a minimum side draft because of the ball and roller bearings used in their construction and the features which allow the cutter bar to follow the ground. When you buy a mower you want one that will cut the grass without clogging, without wasting grass or putting excessive strain upon the horses. The Deering-McCormick can be depended upon to do this work day after day and year after year, even though the conditions may not always be favorable. Made in the following sizes: One-horse regular lift, 4-foot; two-horse, 5, 6 and 7-foot.

Price on application.



The Wood Tedder is built very strongly and substantially. Its construction will withstand all the jar and strain caused by the rapid motion of the fork arms. Strong springs absorb the vibration so that it does not reach either driver or team. Power is transmitted by chain and sprocket from the main axle to the fork arms so that the mechanism works smoothly and evenly. The motion of the forks has been so timed as to toss every bit of hay. Outside forks toss the portion just passed over by the wheels. It is equipped with roller bearings in the places where friction would be most likely to occur.

#### Price on application.

TACO-MYERS MOWER FOR FORDSON.



The Taco-Myers Mower is a complete machine in itself. It can be detached from tractor in one unit same as a plow or disc harrow. You simply loosen four cap screws and one wing nut. It is attached to the only part of the Fordson Tractor that was designed to pull or carry a load. It requires only fifteen or twenty minutes to install the Taco-Myers Mower on the Fordson. The average mower attachment, put on in sections, requires four or five hours' time to install.

The mower drives off the worm of the tractor through a single pair of gears—simply a continuation of the Fordson worm housing designed so as not to interfere with Fordson engineering.

The cutter bar being located opposite driver gives operator an opportunity to see a stone or stump before cutter bar strikes it. The sickle bar is in full view of operator at all times without turning around.

Mower has more clearance than tractor; essential where land is rocky and in irrigated land. Speed of sickle is always right, whether running on high, second or low gear. A new design is introduced in our drive shaft housing, which is as rigid as the tractor itself. This, along with a long 39-inch pitman (standard length), reduces vibration to minimum. Location of sickle bar permits turning a square corner when cutting. Pitman drive shaft short (only 18 inches) and heavy, runs on Hyatt roller bearing and in oil fed from worm housing; no grease cups or universal joints necessary.

When attached does not interfere with accessibility of tractor. The crank case can be removed without removing mower. Cutter bar is pulled, not pushed. Control levers within reach of operator without rising from seat.

The drag bar and arch are in one piece, which prevents sagging of bar, as this design eliminates two joints found in conventional design.

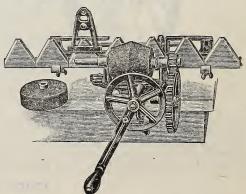
Price on application.

# "TWO IN ONE" GRINDER.

May be handily and securely fastened to bench, table, or, while in the field, to the mower wheel.

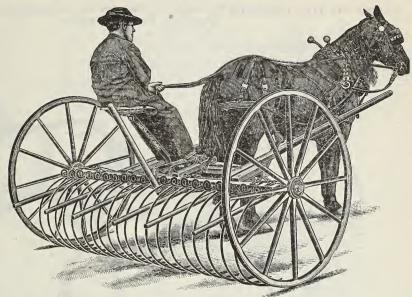
The mower knife holder is capable of any adjustment desired, and firmly holds the mower knife with two guides or rests adjustable for any width or thickness of knife backs, and requires no change after the first adjustment; the spring clamp allows shifting of the knife to any position while grinding. The entire weight of the knife is carried by the holder, and the operator has full view of the work and easily controls the pressure and governs the grinding. Is equipped with vitrified corundum grinding wheels, the hardest, sharpest and fastest cutting abrasive known.

Price on application.



## THE WIARD EMPEROR SULKY RAKE.

Many sulky rakes at the present time are only imitations of those made under old and expired patents, containing no improvements whatever, while in some cases changes have been made that are positively injurious to the working of the rake. Our Emperor Rake is the result of long and careful experiment, the dumping parts being entirely new and far different from anything else made. The rake is dumped with the greatest ease and with less wear, tear and jarring than any other positive dump rake.



We furnish these rakes in the following sizes: 8 feet wide, 28 teeth; 9 feet wide, 31 teeth. These are a few of the many valuable features:

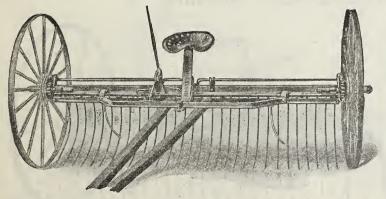
A Doubly Trussed Frame that prevents sagging.

A Hand Lever That Does Not Change Position when the foot dump is used. On many rakes this lever flies forward and back, sometimes striking the operator and causing serious injury.

A Revolving Steel Axle and Dumping Device that cannot get out of order. Steel axles are best and most durable. Wood axles with castings for the wheels get rickety, sooner or later, and cause trouble.

#### Price on application.

### MASSEY-HARRIS SELF-DUMP STEEL HAY RAKE. BUILT STRONG AND LASTS LONG.



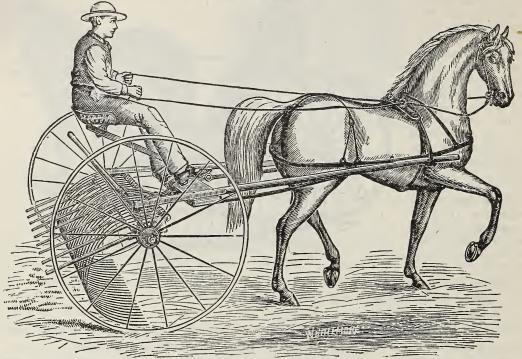
Strength, efficiency and convenience of operation are pronounced features of this rake. It is built mostly of steel, is adapted to heavy and light hay, and can be dumped either by hand or by an automatic trip controlled by the foot. Frame and rake head are steel angles. Wheels are steel, of good height, have removable hubs, of which the ratchets are a part, and will interchange. Double wear is obtained from each ratchet. Dumping mech-

anism has no springs, is of utmost simplicity and can be adjusted to conform with the speed at which the horses walk. Teeth are coiled at upper end and are so shaped that they carry the hay along instead of dragging it. Combination thills and pole are a part of the regular equipment.

### Price on application. Prices subject to change without notice. (See note on page 2.)

# THE ORIGINAL YANKEE RAKE.

Some of the Leading Points of Superior Excellence Found in the Yankee Horse Rake.

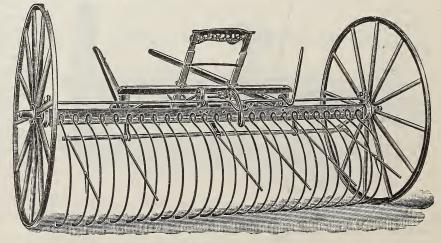


Simplicity in construction and excellent quality of materials. Adaptability to rake anywhere, whether the fields are rough or smooth or the hay green or dry. Rake head adjusted so as to balance the weight of the teeth. This device completely prevents the teeth from dragging heavily and digging into the ground or filling the hay with dirt and dust. Teeth run level with the ground at their points. Each tooth is perfectly independent in action and supplied with a yielding spring that will allow it to pass safely over any obstruction that the axle can pass over.

### The "Genuine" New York Champion Hay Rake. STRONG, SIMPLE, DURABLE.

A "Genuine" New York Champion means to many thousands of farmers the standard of all rakes—one that is always in perfect condition whenever it is wanted. It cleans the ground thoroughly without taking up dirt, and works with ease and convenience, in heavy or lightcrops, on level fields or hillsides.

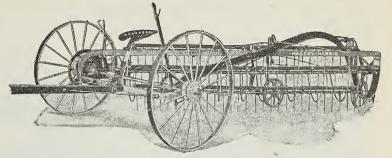
Dumps with one piece rod from both wheels at once—this makes even draft. Levers, hand and foot, give the driver control at all times.



Price on application. Prices subject to change without notice. (See note on page 2.)

# Massey-Harris Combined Side Rake and Tedder.

This implement offers you all of the advantages of the most modern side delivery rake and then goes one further. It gives you, in addition, an excellent hay tedder, into which it is quickly converted by simply moving a lever, which causes the motion of the raking cylinder to be reversed at increased speed. Combining two machines in one, it saves you the cost of one, the time of changing from one to the other when separate machines are used, and yet requires no more space for storing than a side rake of the ordinary type.



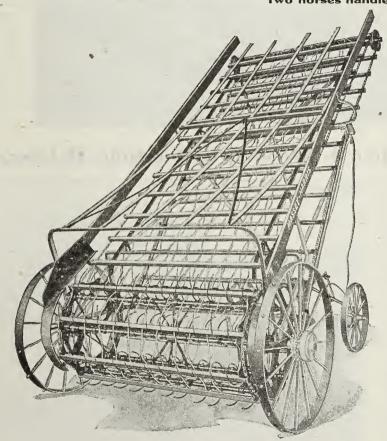
9 1-2 Foot Cylinder for Hay.

ake of the ordinary type. Price on application.

## Massey-Harris No. 4 Cylinder Hay Loader.

The Windrow Loader Supreme.

It is light in weight and elevates the hay over roller bearings. Two horses handle it easily.

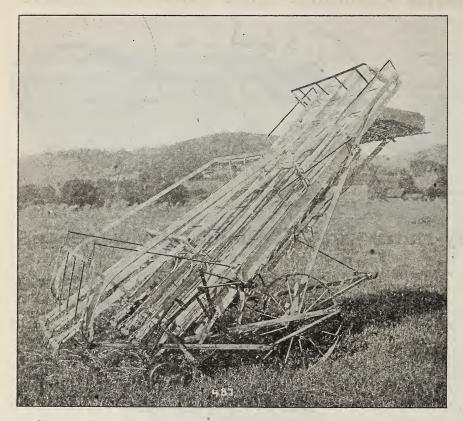


Loading from the windrow is the purpose for which this loader is designed, and it has every feature that successful windrow loading requires. The weight is light, the capacity is large, it works rapidly and draws easily. It supplies in every respect the demand for an efficient windrow loader and will render you, in the saving of time and labor, a service of inestimable value.

Descriptive circular and price on application. Prices subject to change without notice. (See note on page 2.)

### KENDALL & WHITNEY'S CATALOG.

### The Walter A. Wood Gearless Hay Loader.



In this new loader we have what we consider the latest and best gearless loader that has been designed up to the present time.

This loader has been submitted to many severe tests, and has proved itself to be a most successfully working machine, both in the class of work it does and the way it does it.

Many people who are thoroughly acquainted with the performance of other makes of loaders have witnessed this loader in operation under every possible kind of conditions and all have pronounced the Wood to be the most perfect working loader they have ever seen. We confidently recommend the Walter A. Wood Gearless Hay Loader to all of our customers as a machine that will give them the best of satisfaction.

### The Walter A. Wood Cylinder Side Delivery Rake.

This machine has been given a most exhaustive trial in actual working conditions, and the tests to which it has been submitted during this trial period were perhaps more severe than the average work it will be called upon to perform by those who buy it, thus proving that the Wood Side Delivery Rake is worthy of a place in the famous Walter A. Wood line of machines, and we heartilly recommend it to everyone who is in the market for a machine of this kind.

This Cylinder Side Delivery Rake combines strength, durability, light draft, ample power and efficient working qualities. It is adjustable to the different conditions that are encountered in the hay field so that it can be made to do good work at all times. It is a machine that will give long, satisfactory service and there-



fore it is a machine that will yield good dividends as an investment.

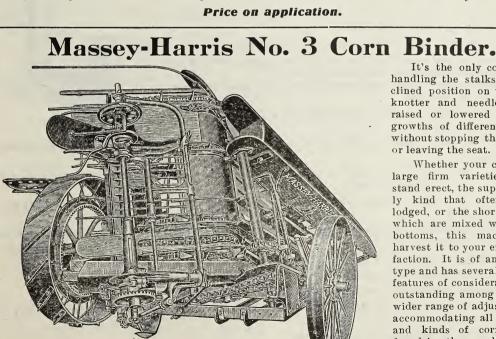
Price on application. Prices subject to change without notice. (See note on page 2.) Massey-Harris No. 5 Grain Binder.

You can rely upon this binder, absolutely, to withstand the hardest kind of work incident to the harvesting of a grain crop. It is built for use with either horses or tractors and is made to give you satisfaction in every respect. Right from its foundation up through every part of its structure it is built for service, the principal of its design is correct, none of the materials are skimped and the manufacturing operations are most carefully performed.

The main frame is trussed like a bridge. Seldom in agri-

cultural implement construction do you find a frame which has the strength and rigidity of this one. Lengthwise and crosswise, it is made up of a series of high carbon steel truss-like forms, which are so arranged and united that the strength of each one is contributed to and supplemented by that of the others. Indeed, so substantially is it tied, trussed and reinforced at every supporting point there isn't the least chance of sagging, twisting or any other kind of distortion, and a positive alignment of all bearings is assured.

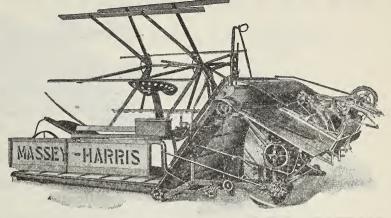
Roller and self-aligning bearings lighten the draft. Special care has been exercised to provide bearings that would insure light draft and long life. For both the main and the grain wheels, for the cross and crank shafts, and for the rollers that drive the elevators, roller bearings in cages are used. Then, in addition, self-aligning boxes are provided wherever they are of advantage, as at the rear of the crank shaft, at the sprocket end of the inner platform roller, etc. Friction is minimized at every bearing point.



It's the only corn binder handling the stalks in an inclined position on which the knotter and needle can be raised or lowered to meet growths of different heights without stopping the machine or leaving the seat.

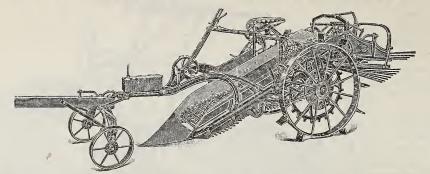
Whether your corn is the large firm varieties, which stand erect, the supple, spindly kind that often become lodged, or the short growths which are mixed with grassy bottoms, this machine will harvest it to your entire satisfaction. It is of an improved type and has several exclusive features of considerable merit, outstanding among which is a wider range of adjustment for accommodating all heights and kinds of corn than is found in other machines of its class.

Descriptive circular and price on application. Prices subject to change without notice. (See note on page 2.)



### KENDALL & WHITNEY'S CATALOG.

THE HOOVER POTATO DIGGER.



No. 330. "Hoover" Potato Digger with Agitating Rear Rack and Vine Separator. Price on application.

# **BEVAN PUMP JACK.**

The Bevan Junior Pump Jack is a machine designed and constructed to last a number of years. It has an exclusive patented method of distributing the power to the pump by means of a cast steel walking beam. This walking beam arrangement is so designed as to make possible a long leverage on the lift stroke and a short leverage on the return stroke, which reduces the water friction in pipe and pump cylinder 50%. By reason of this method it is possible to increase the speed of the pump one-half with a Bevan Jack. A few of the superior and patented features are as follows:

1. Slow lift and quick return stroke saves 50% of fuel and power and increases the capacity of the pump.

2. Will operate any type of hand force or windmill pump.

3. Large internal gear allows two teeth of the pinion in mesh at all times, increasing the strength and wearing surface.

4. Pinion made of steel with machine cut teeth, case hardened, shrunk and keyed on shaft.

5. Jack mounted on wooden base with anchor holes drilled ready for immediate installation.

6. Lift rods are of steel, channel section, and are provided with suitable end bearings at walking beam connections.

7. The travel of the lift rod is only one-fourth inch from a vertical position, eliminating all side thrust, jerking and undue wear on pump.

8. The motion of the walking beam lift arms is continuous up and down. There is no lost motion at top and bottom dead centers.

9. The smooth action of the walking beam and lift arms eliminates all wear on the pump, resulting in long life and minimum repair expense.

10. Walking beam is made of cast steel with roller channel accurately machined.

11. Walking beam pin and roller are made of steel and case hardened.

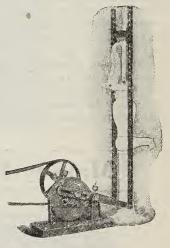
12. Babitted bearings are used throughout.

13. All gears thoroughly enclosed as a complete protection against accidents and keeps out all grit and dust. Complies with law.

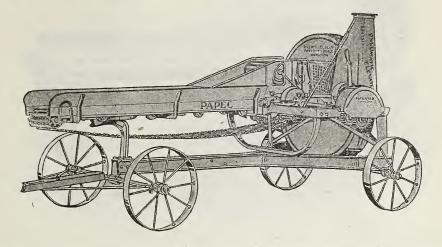
14. Grease cups are mounted on all bearings.

15. Jack can be used overhead just as efficiently as in the upright position.

### Price on application.



## PAPEC ENSILAGE CUTTERS. THEY THROW AS WELL AS BLOW.



### Eleven Reasons Why the Papec Cutters Are Best.

1. The Papec requires less power to elevate than any other blower cutter because "it throws as well as blows," and because it operates at a low speed of 600 R. P. M.

2. The Papec is not dependent upon the air blast alone to elevate ensilage. It throws as well as blows. Ensilage is thrown twenty feet or more, then a powerful air blast completes the work of elevation.

3. The Papec has a powerful self-feed that handles far in excess of what the square inch throat opening would indicate. The capacity of the cutter is practically unlimited, yet clogging is almost unknown.

4. The pipe on the Papec is just the right size. The use of a large pipe requires a large fan, a large amount of air to be blown, high speed; hence results in a waste of power.

5. All Papec Cutters have a solid one-piece semi-steel frame. No wood to warp or twist—not affected by the weather—absolutely rigid for all time. The five heavy main bearings are a part of the frame, not bolted but cast in, hence the alignment of the cutting mechanism is permanent. The bearings are lined with an excellent grade of babbitt metal. The caps are provided with grease cups.

6. Because the semi-steel frame is solid there are no joints to work loose and for this reason the machine may be belted either way and the knives will run to the shear plate equally well.

7. The Papec is the handiest cutter to set up and operate. When once assembled, you have only to erect the blower pipe when starting to fill and remove the pipe when ready to move on.

8. For convenience in moving, from one place to another the Papec mounting cannot be beaten. The table is permanently assembled—does not need to be folded up before moving—and is at the right height for the feeder to stand on the ground and feed with comfort.

9. The Papec knife can be adjusted to any position in one minute or less, and can be removed from the wheel without disturbing the adjustment by taking out only two bolts.

10. The Papec has six fans instead of three or four, and the ensilage is elevated in a steady stream instead of bunches. This means less power, less strain on machine and men, and less liability of pipe clogging.

11. The Papec drum is of sheet steel and will not break as a cast iron drum often does if a stone accidentally gets into the machine. Then, too, the smooth surface of the sheet steel insures easier elevation.

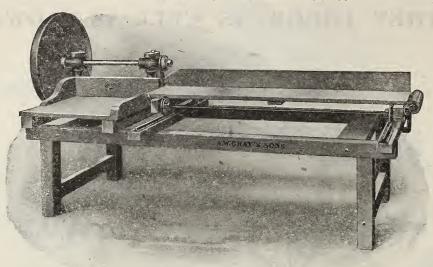
#### SPECIFICATIONS.

R-10 cutter with 2 knives, capacity 2 to 5 tons an hour; power 3 to 6 h. p. gas, cuts  $\frac{1}{4}$ ,  $\frac{1}{2}$ ,  $\frac{3}{4}$  and 1 inch lengths. Weight 880 pounds on legs, 950 pounds with 2-wheel truck, 1060 pounds with 4-wheel truck.

N-13 cutter with 2 knives, capacity 5 to 10 tons an hour; power 6 to 10 h. p. gas, cuts  $\frac{1}{4}$ ,  $\frac{1}{2}$  and 1 inch lengths. Weight unmounted, 1100 pounds, mounted, 1370 pounds.

### Price on application.

### GRAY'S CIRCULAR POLE SAW, WITH SLIDING TABLE NO. 5.



### Fitted for saw with 1 3-8 inch arbor.

### NO. 4 WOOD SAW FRAME WITH TILTING TABLE.

The frame is built especially for doing custom or contract work. Carries cord wood saws up to and including 30 inches.

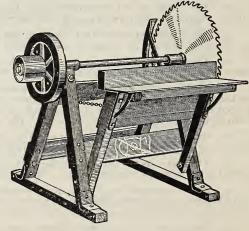
Mandrel—Cold rolled steel 1 7-16 inches in diameter, 49 inches long. Fitted for saw with 1 3-8 inch arbor.

Flywheel—56 pounds, 17 inches in diameter.

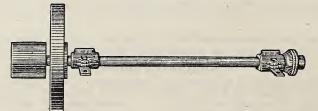
Pulley-6-inch face, 6 inches in diameter.

**Boxes**—Solid pattern, lined with good babbitt.

Shipping weight, 256 pounds.

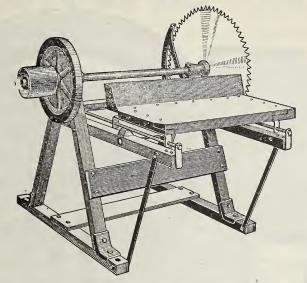


MANDREL SETS



No. 2 Mandrel with 56-pounds flywheel, 6 x 6 inch pulley. Size, 1 7-16 x 49 inches long. Price on application.

## NO. 11 SLIDING TABLE SAW FRAME.



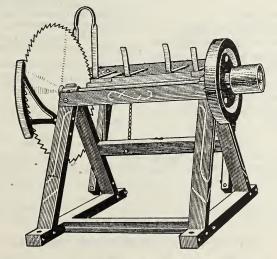
This machine is a favorite when a sliding or rolling table is preferred and is far superior to any rolling table machine. Table will not bind or catch. Will swing saws up to and including 30" diameter.

**Mandrel**—Cold rolled steel, 1 7-16" diameter, 49" long. Fitted for saw with  $1\frac{3}{8}$ " arbor. **Fly Wheel**—56 lbs., 17" diameter.

Pulley-6" face, 6" diameter. Boxes-Solid pattern, lined with good babbitt. Shipping Weight-243 lbs.

Price on application.

NO. 1605 WOOD SAW FRAME.



This frame is especially adapted for heavy work, will swing blade up to and including 30". Mandrel—Cold rolled steel, 1 7-16" diameter, 49" Boxes—Split pattern. The lower half long Fitted for saw with 1<sup>st</sup> arbon

long. Fitted for saw with  $1\frac{5}{8}$ " arbor. Fly Wheel—70 lbs., 17" diameter. Pulley—6" face, 6" diameter. Boxes-Split pattern. The lower half runs the length of the frame, being a part of it, making it impossible to get out of alignment with the mandrel. Lined with good babbitt, having liner adjustment features.

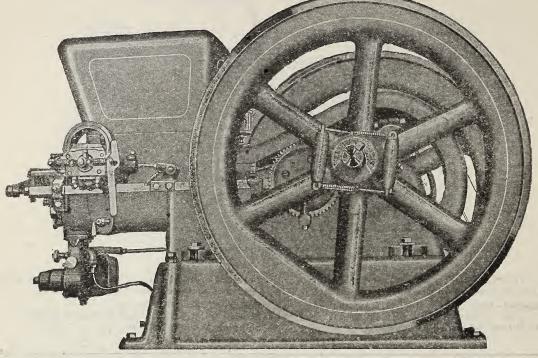
Shipping Weight-300 lbs.

If pole attachment wanted, order Saw Frame No. 1607.

Price on application.

### KENDALL & WHITNEY'S CATALOG.

## GASOLINE OR KEROSENE ENGINES.



QUALITY ADVANTAGES OF MONARCH THROTTLING GOVERNOR ENGINES.

1. Throttling governor for steady speed and close regulation.

2. Suction fuel feed-no pump.

3. Speed control while engine is running.

4. Webster magneto for hot blue starting spark.

5. Starts easily. Monarch method of vaporizing fuel insures easy starting.

- 6. Burns kerosene, gasoline, distillate.
- 7. Handles varying loads readily.

8. Economical in using fuel—one gallon per horse power each 10 hours.

9. Surplus power-20 per cent. overload.

10. Special water spray valve supplies water to combustion chamber, assisting combustion and giving smoother operation.

11. Fuel is taken into cylinder cold, thus giving greatest power for fuel consumed.

12. Monarch oversize valves reduce carbon.

13. Large, heavy flywheels, properly counterbalanced, insure smooth, steady runing without vibration.

14. Pulleys attached to crank shaft—standard pulleys may be used.

#### MONARCH "HIT AND MISS" ENGINES.

Monarch "Hit and Miss" engines burn gasoline only. The "Hit and Miss" governor is recognized by engine authorities as the best for small engines—particularly the  $1\frac{3}{4}$  horse power. This governor automatically regulates the fuel supply so that only enough gasoline can be drawn into cylinder to keep the engine up to normal speed.

Power and long life are largely a matter of bore and stroke. Read carefully the specifications given below. You will find Monarch engines well in the lead with surplus power.

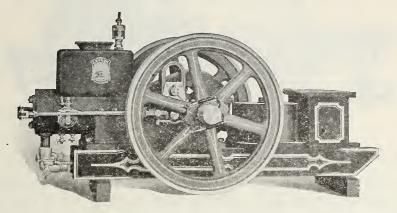
### SPECIFICATIONS OF MONARCH ENGINES.

Horse Power		Fuel Consumed.	Speed.	Floor Space.		ameter of s lywheels. 1		Weight.
$1\frac{3}{4}$	Hit and Miss	Gasoline	500	20" x 40"	$3\frac{1}{2}'' \ge 5''$	16″ 4	4" x 4"	225 lbs•
3	Throttle	Kerosene and gasoline	450	27 x 38	$4\frac{1}{2} \times 6$	21	8 x 6	475 ''
5	Throttle	Kerosene and gasoline	430	30 x 45	$4\frac{3}{4} \times 8$	26 1	2 x 6	700 "
7	Throttle	Kerosene and gasoline	. 370	38 x 58	$5\frac{1}{2} \ge 10$	36 1	4 x 8	1215 ''
12	Throttle	Kerosene and gasoline	- 330	46 x 71	$6\frac{3}{4} \times 12$	42 2	2 x 8	2100 ''

### Price on application.

## The Lauson "Frost King" Semi-Portable.

Built in Sizes from 2 1-2 Horse Power to 28 Horse Power.



The "Frost King" Engine never overheats, regardless of the size or load, owing to the correct construction of the hopper. Plenty of surplus power is the unfailing characteristic of all "Lauson" and "Frost King" engines, owing to their uniform construction, due particularly to the large number of drop forged and ground parts used. This means an engine that can be accurately adjusted and therefore is as economical after five years' use as when new. They cost a little more than some others to start with, but a great deal less in the long run. The lower cost of up-keep and fuel will save you the extra cost many times over.

Cylinder and Piston-Semi-steel ground to size.

Crank Shaft-Hammer forging, finished and ground.

**Connecting Rod**—Forged steel, adjustable to wear at either end. Bronze bearings at piston end and high grade babbitt metal at crank end.

Main Bearings—Extra long, cut on angle of forty-five degrees, lined with highest grade babbitt metal. Perfect in alignment and adjustable to wear.

Valves-Nickel steel stem with cast iron head fused on and accurately ground to size.

**Cams and Cam Shaft**—Drop forged in one piece, case hardened and ground to size. Run in bath of oil, enclosed in dust-proof case.

Timing Gears-Drop forged steel, machine cut and unbreakable.

Lubrication—Standard lubricators for cylinder. Special grease cups on main bearings and connecting rod. Force feed lubricator can be furnished for small additional cost.

Governor-Gasoline, "Hit and Miss" type, kerosene, throttling governor type.

Ignition-Make and break, sumter built-in magneto.

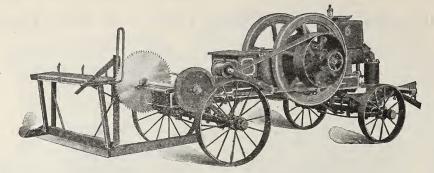
Fuel-Gasoline, distillate, alcohol or kerosene.

Skids-Hardwood on 2<sup>1</sup>/<sub>2</sub> horse power and 3<sup>1</sup>/<sub>2</sub> horse power steel skid on 6 horse power and larger.

**Equipment**—One set of wrenches, screw driver, oil can, one quart can of Frost King Gas Engine Oil and one box of Keystone Cup Grease.

### Special catalog and price on application.

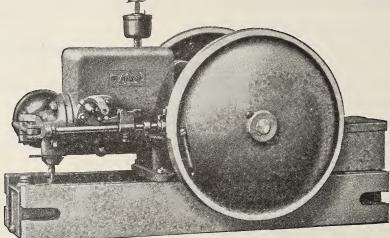
## The Lauson "Frost King" Portable Saw Rig.



Truck all steel. Equipment includes pole, whiffletree, neck yoke, heavy saw arbor with pulley, collar and nuts, saw guard, balance wheel, hardwood top table, high grade rubber belt, belt tightener, saw, tool box with complete set of wrenches, screw driver, one quart can of "Frost King" Gas Engine Oil and one box of Keystone Cup Grease.

Price on application.

# THE NEW 1 1-2 H. P. LAUSON.



### **Features That Compel Attention.**

Wearing parts hardened, drop forged crank shaft, connecting rod and crank shaft bearing inlaid and removable, make and break ignition, well-fitted piston and cylinder, insuring good compression. A smooth running, high-grade engine at a medium price.

### Price and catalog on application.

## GRAY'S NEW THRESHER Nos. 305-306.

WITH TAILINGS ELEVATOR, BAGGER, STACKER, ETC.

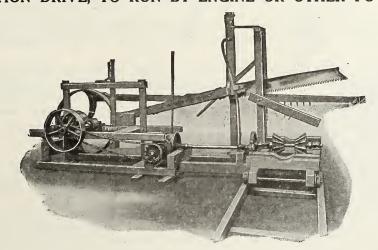
Nos. 231-261 also in stock.



This thresher has been remodeled and reconstructed, and while built along the lines of regular threshers a number of radical changes have been made, one of the principal ones being that it is arranged so that it commences to separate the grain from the straw as soon as it leaves the cylinder, thus meeting the special benefit claimed for the undershot threshers. It is built especially to meet the demand for use with gasoline engines, is made with 18 x 30 cylinder, but two different sizes of separators have been added to admit using different size engines and are numbered 305 and 306.

### Price on application.

## GRAY'S INDEPENDENT DRAG SAW MACHINE. FRICTION DRIVE, TO RUN BY ENGINE OR OTHER POWER.

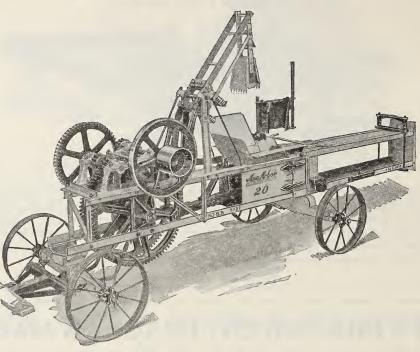


This is the latest and best drag sawing machine on the market. One of the most important points in using the drag saw is to be able to start it slowly, thus removing any danger of breaking or bending the saw, and this is accomplished perfectly by using the friction transmission. Another feature is to be able to stop instantly, and this is arranged for in this machine as the moving of the break lever releases the friction pulley, at the same time applies the brake on the balance wheel, thus stopping the machine instantly. By changing the size of the driving pulley on the counter shaft, these machines may be adapted to almost any style of power.

### Price on application.

### KENDALL & WHITNEY'S CATALOG.

## ANN ARBOR BALERS. "THE BALER FOR BUSINESS."



THE ANN ARBOR "20."

The Ann Arbor "20" is the best value, reliable belt-power baler on the market. It is particularly well suited for baling alfalfa and for such baling requirements as are met with in the middle West, South and Southwest.

The Ann Arbor "20" is a single geared machine with longer stroke than similar presses. In general construction, such as the large feed opening, the "grasshopper" feeder arm, the automatic block dropper, perfect alignment of the strong gearing, all gears on true centers, the hot riveted bale chamber, top and bottom, the Ann Arbor "20" is the same as the Ann Arbor "35." The essential difference is in the total weight and in the capacity of the machine. It also has an all-steel frame construction, built low-down—feed hopper only 39 inches from the ground—and is light in weight so that you can easily haul it to the field and bale direct from the windrow.

For producing well-formed, square-cornered bales at a remarkably low cost the Ann Arbor "20" is just the machine that you want. It can be had with an extended platform for making a "combination" outfit, and then the whole outfit complete can be easily hauled to any part of the field.

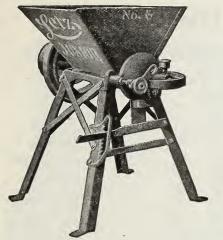
If any machine in the world is entitled to the name Alfalfa King, Alfalfa Queen, or any other member of the Royal Alfalfa Family, it is the Ann Arbor "20." In this machine we recognize the **absolute necessity** of preserving the delicate leaves and branches of this valuable food plant. (Get Government report on alfalfa.)

Take your pocket rule and measure the length of the Ann Arbor feed opening; measure the dimensions of the feeder head, and you will appreciate what we have done for the conservation of the country's greatest forage crop in giving to alfalfa producers the Ann Arbor "20."

The long bale chamber gives ample time for tying at any speed of feeding. Capacity,  $2 \text{ to } 3\frac{1}{2}$  tons per hour.

Sizes: 14 x 18 inches; 16 x 18 inches; special, 17 x 22 inches.

### Price on application.



## No. 6 LETZ Grinder.

SPECIFICATIONS.

Grinding plates, 6 inches in diameter. Drive shaft, 1¼ inch. Pulleys, 6, 8, 10 and 12 inches. Fly wheel, 24 inches; weight, 24 pounds. Total weight, 175 pounds. Capacity, 2 to 15 bushels per hour. Power required, 1 to 3 horse power.

The No. 6 Letz, Jr., is a combination cob crusher and small grain grinder. It is substantially built throughout and is guaranteed to give entire satisfaction.

## No. 9 LETZ Grinder.

### SPECIFICATIONS.

Grinding plates, 8 inches in diameter.
Drive shaft, 1 7-16 inch.
Pulleys, 8, 10, 12, 14 and 16 inches.
Fly wheel, 24 inches; weight, 55 pounds.
Total weight, 273 pounds.
Power required, 3 to 7 horse power.
Capacity, 6 to 30 bushels per hour.

The No. 9 Letz is a combination cob crusher and small grain grinder. It is an ideal mill for medium power. 11 Sizes. 22 Styles.

1-2 to 40 Horse Power.

## No. 20-X LETZ Grinder.

### SPECIFICATIONS.

Grinding plates, 10 inches in diameter. Pulleys, 8, 10, 12, 14 and 16 inches. Fly wheel, 24 inches; weight, 85 pounds. Total weight, 402 pounds. Power required, 10 to 15 horse power. Capacity, 25 to 60 bushels per hour.

It is an extra heavily built grinder for large power, grinds finer and faster, and will last a lifetime.

### Feed One Animal in Every Five FREE!

This is what the Letz Grinder does. When small grain is fed whole, fully 20% is wasted by not being properly digested. The Letz Grinder will pay for itself in a very short time by the saving it makes in feeding cost.

The famous self-sharpening, keen-cutting, patented Letz grinding plates are guarateed to grind finer and faster and to outlast from three to five sets of any other plates on the market. They cut the grain like a pair of scissors; no crushing, no mashing, no heating of the grain. It will pay you well to investigate the Letz Grinder thoroughly.

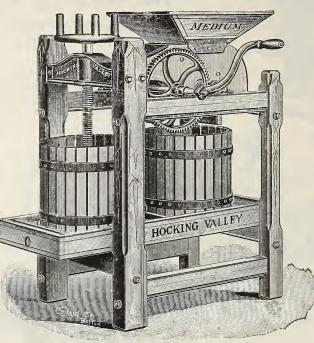
Price and catalog on application.



### KENDALL & WHITNEY'S CATALOG.

## HOCKING VALLEY CIDER MILLS.

THE DEVICE FOR GRINDING THE FRUIT IS THE SAME AS THAT USED ON THE LARGE HYDRAULIC PRESSES.

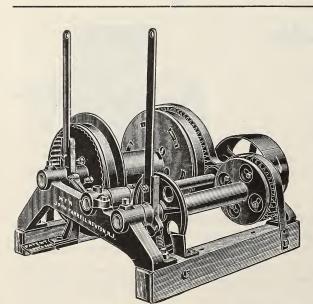


THERE ARE NO CAST IRON ROLLERS TO RUST AND TO GIVE COLOR AND TASTE TO THE CIDER.

In these cider mills we adapt the principle of the large hydraulic presses to a hand mill. The grinding device consists of a hardwood cylinder, revolving rapidly, with serrated steel knives running lengthwise, which break down the juice cells and make a pomace that yields under the press every particle of juice in the fruit. They are made in the three following sizes:

Junior,with tubs 12inches high,  $10\frac{1}{2}$  inches inside.Capacity, 25 to 35 bushels per day.Medium,with tubs  $13\frac{1}{2}$  inches high,  $12\frac{1}{2}$  inches inside.Capacity, 30 to 40 bushels per day.Senior,with tubs 15 inches high,  $15\frac{1}{2}$  inches inside.Capacity, 50 to 60 bushels per day.

Price on application.



STYLE B HOIST. LATEST MODEL.

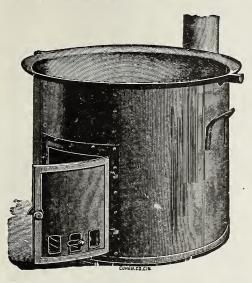
## THE FARREL GEARED HOIST.

This machine is especially designed to save time and labor in unloading hay, hauling ice, etc. This hoist saves one man and team, and from one-third to one-half the time in unloading hay. The man on the load operates it by a rope attached to the operating levers. The load is under perfect control at all times, and may be held, raised or lowered at will. New patented ratchet device holds the load at any point without attention. The machine is equipped with powerful band brake. Can be run by a 4 horse power gasoline engine in unloading hay. Weight, 325 pounds. Other styles designed for special purposes also manufactured.

### Price on application.

Prices subject to change without notice. (See note on page 2.)

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# Farmer's Boiler and Feed Cooker.

Heavy cold rolled steel furnace; extra large feed door; malleable iron handles, firmly riveted on; strong, durable, economical and cheapest feed cooker on the market.

The kettles are of smooth, heavy cast iron, and will last a lifetime. The furnace jacket is of heavy cold rolled steel and very durable. Door, frame and flue collar cast iron.

Is designed to set on the ground or on brick foundation, and is especially adapted for cooking feed, rendering lard, making soap, scalding hogs and poultry, and all work of this nature. Cast iron flues are constructed inside, retaining the heat and greatly economizing fuel.

$\begin{array}{ccccccc} 15 \ {\rm gals.} & 20^1_4 \ {\rm inches} & 53 \\ 22 \ {\rm gals.} & 23 \ {\rm inches} & 63 \\ 30 \ {\rm gals.} & 26 \ {\rm inches} & 73 \\ 35 \ {\rm gals.} & 28^1_2 \ {\rm inches} & 90 \\ \end{array}$	pacity. Fu 5 gals. 32 5 gals. 34 5 gals. 36 0 gals. 38 <sup>1</sup> / <sub>2</sub>	neter of rnace. inches inches inches inches inches
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## "Farmer's" Favorite.

The top section, or boiler, is made of heavy galvanized steel that will not rust, and is also provided with four heavy tinned malleable iron drop handles. This sets down inside the lower section one inch, thus making it impossible for the boiler to slip to one side and tip over, as when on top of furnace.

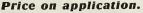
The lower section, or furnace, is made with cast iron ends, and the center, or body, of heavy steel plate.

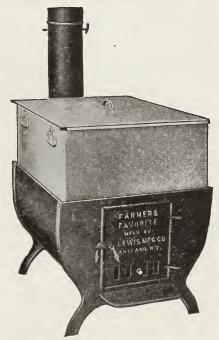
With this construction the entire surface of the boiler is exposed to the heat, thus making it a very quick heater.

The door is extra large, which will allow large chuncks and knots to be used without the labor of splitting.

	Capacity.	Size Boiler.	Length Fire Box.
No. 1	25 gallons	22x22x12	24 inches
No. 2	30 gallons	$22 x 24 x 13 \frac{1}{2}$	24 inches
No. 3	40 gallons	22x30x14	30 inches
No. 4	50 gallons	22x36x15	36 inches
No. 5	75 gallons	22x48x17	48 inches

Our prices are for the cooker complete, consisting of stove, or firebox, galvanized steel boiler with four handles and cover, one length of 6-inch stove pipe and damper, and one 6-inch elbow.





## Rubber Belting.

Made from the highest grade material. Belting that will give you the maximum service under all operating conditions.

### Price on application.

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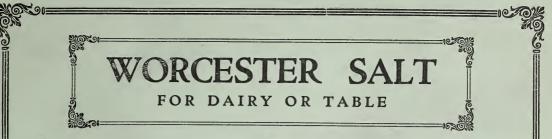
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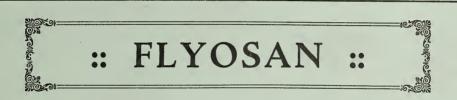
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