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

## Simpson's Garden \& Farm Book

## Spring

## 1930

## Simex

## New Giant Dahlia-Flowered Zinnias

 ago and is now pretty well known to flower lovers the world over. Its immediate popularity proves it to be one of the outstanding introductions in recent years. The blooms are full and rounded and resemble a double dahlia, colors are in soft though varied shades and of a size to take the breath. Flowers of 5 to 6 inches in diameter are the average rather than the exception. We offer the following colors and recommend them all, as each has its particular merit:Polar Bear, pure white. Illumination, deep rose pink.
Crimson Monareh, red. Oriole, deep orange yellow.
Exquisite, light rose pink. Golden State, rich orange yellow.

Canary Bird, clear canary yellow.
Dream, deep lavender shading purple.

Any of the above, Pkts. 15c; $1 / 4$ oz. 50e; $1 / 2$ oz. 90c; oz. \$1.50.
Mixed Colors, Pkts. 10c; $1 / 4$ oz. 35e; $1 / 2$ oz. 60c; oz. $\$ 1.00$.
SPECIAL COLLECTION, One full sized packet of each of the above eight named varieties for 70e Postpaid. (Value \$1.20.)
 Yellow, Pink, Orange, Violet and Scarlet. Pkt. 10e each; $1 / 4 \mathrm{oz}$. 30e; $1 / 2$ oz. 50c; oz. 90c. Special Mixture of the six colors, Pkt. 10e; $1 / 4$ oz. 25e; $1 / 2$ oz. $40 c ;$ oz. 75e.

## Asters -- For Bedding and Cutting



This splendid fall favorite continues to gain in popular favor and is constantly being improved both as to type and size. The new varieties of PEONY-FLOWERED ASTERS are as large as Chrysanthemums and of wonderful beauty. Every garden should have an assortment of ASTERS. They bloom from AUGUST to NOVEMBER.

Culture. The Aster is hardy and easily grown. Sow seed in the open ground in May for August and September blooms, or in March or April in cold frames for earlier bloom. The seeds should be covered about $1 / 4$ inch in good, rich soil. When the plants are strong enough, transplant about 18 inches apart in deeply-dug, well-prepared beds. Asters must not be planted in freshlymanured soil nor in soil that has been planted to Asters for two or three years previous. Unslacked lime or fresh wood ashes are beneficial if stirred in the soil a little before planting and are said to counteract the ravages of the Aster blight. A few soakings with tobacco water around the roots during the growing season are also recommended.
Giant Peony-Flowered Asters
White, lavender, rose pink, shell pink, crimson, azure blue, purple and mixed. Pkt. 10c; $1 / 4$ oz. 35 c .
White, lavender, rose pink, shell pink, crimson, azure blue, purple and mixed. Pkt. 10c; $1 / 4$ oz. 35c; $1 / 2 \mathrm{oz}$. 60c.

## Giant Branching Comet Asters

White, lavender, rose pink, shell pink, Pkt. 10e; $1 / 4$ oz. 35c.

# Index--Where to find what you want <br> Page 

| Page | Page |  |
| :---: | :---: | :---: |
| Achillea, Plants_----- 16 | Cockscomb ---------- 14 | Hydrange |
| Ageratum ---------- 14 | Cod Liver Oil_---.-.-- 40 |  |
| Almond, Flowering--- 24 | Coleus --------------- 14 | Iberis, |
| Alyssum ------------ 14 | Collard |  |
| Amaranthus -------- 14 | Colorado Blue Spruce- 26 |  |
| Ampelopsis ---------- 14 | Columbine__-S. 14 ; P. 16 | Incubators ----------31 |
| Anchusa, Plants_---- 16 | Coreopsis, Plants_.-.-- 16 | Insecticides |
| Antirrhinum -------- 14 | Corn, Sweet_--------- 12 | Iris, Roots .------17 |
| Apple Trees_-------- 26 | Corn Sal | Ivy-..------S. 14; P. 25 |
| Aquilegia, Seed ------ 14 |  | Japanese Hop, Seed_- 14 |
| Plants ------------- 16 | Creosote ------------- 43 |  |
| Arsenate of Lead_--- 29 | Cress | Japanese Palm Food. 28 |
| Artichoke ---------- 2 |  |  |
| Ash Trees, Mountain_ 26 | Currant Bushes------ 26 |  |
| Asters -...-Second Cover | Cypress Vine ------- 14 | Killing Knives .------ 43 |
| sters, Hardy -------- 16 | Dahlias_-S. 14; B. 20, 21 | Kohl-Rabi |
| Asparagus -------- 2 | Daisies_-.--S. 14 ; P. 16 | Kudzu Vine, Plants-- 25 |
| Baby's Breath, Seed_- 14 | Delphinium_S. 15; P. 16 | Lamp Burners ------- 43 |
| Plants ---16 | Dianthus, Plants----16 | Lamp Wicks_---.---- 43 |
| Bachelor Button------ 14 | Digitalis_-_-S. 14; P. 16 |  |
|  |  | Larkspur _S. 15; R. 15, 1.5 |
| arberry, Plants----- 24 | --29, 30, 39, 40, 41, 43 | Lathryus Latifolius 17, 25 |
| Barnes Emulsion_-.-- 40 | Dog Feeds | Lawn Grass Seed -..- 27 |
| Beans, Garden -----2, 3 |  |  |
| Beans, Scarlet Runner 14 | Dusty Miller-.-.-.---- 14 |  |
| Beets, Table, Stock--- 3 | Dr. Hess \& Clark's | Leg Bands----------- 37 |
|  |  |  |
| Bell Flower---------1 16 | Dutchman's Pipe_---- 25 | Lilacs |
| Bellis, English | Egg Carrier-----_39, 43 |  |
|  | Egg Cartons_-------- 43 | Lily-of-th |
| Berries -------------2 26 | Eggplant | Lime, Air Slacked_--- 28 |
| Birch Trees _--------- 26 | Egg Scales_----------- 39 | Linum_----_S. 15; P. 17 |
| Bird Cages, | Egg Testers--------- 43 | Lobelia |
| Supplies -- | Egg Preserver ------- 43 | Lupinus, Plants----- 17 |
| B-K Disinfectant_---- 40 |  | Madeira Vine Bulbs_- 25 |
| Blackberries -------- 26 | Elm Trees_---------- 26 | Maple Trees_-------- 26 |
| lack Leaf 29.---.--- 39 | Elephants Ears ------ 19 | Marigold --------14, 15 |
| Bleeding Heart, Roots 16 |  | Matrimony |
| Bone Meal, Fertilizer- 28 | Eschscholtzia -------- 14 | Mignonett |
| Books, Garden _------ 54 | Evergreen Trees_----- 26 | Mimulus |
| Bordeaux Mixture_--- 29 | Everlasting Flowers_-- 14 | Mock Or |
| Borecole ------------ 7 | Farmtex ----------- 53 | Moisture |
| Bridal Wreath _------ 24 | Feeds, Poultry .-.---- 43 | Moon Flo |
| Brooders_-_--31, 32, 33 | Feeders, Poultry ----- 36 | Mulch Pap |
| Brooder Heater ------ 39 | Fertilizers ---------- 28 |  |
| Brussels S | Feverfew -----------14 | Muskm |
| Buddleya, Plants_-.-- 16 | Flower Seeds _---_14, 15 | Mustard |
| Bulbs, Summer | Forget-Me-Not ------ 14 | Nasturti |
|  |  |  |
| Burning Bush_-.-.-.-- 14 | Four o'Clock_-------- 14 | Nest Eggs _---------- 43 |
| Buttercup, Plants ---- 17 | Fox Foods _-------44-46 | Nicotiana ------------ 15 |
| Butterfly Bush ---_16, 24 | Foxglove_-_S. 14; P. 16 | Nigella ------------15 |
| Cabbage | Fruits --.-------... 26 | Nitragin Bacteria_--- 28 |
| Caladium Bulbs .------ 19 | Ful-O-Pep Feeds._-34, 35 | Nitrate of Soda_----- 28 |
| Calendula ---------- 14 | Garden Tools_----52, 53 | Oat Sprouters------ 38 |
| California Poppy_---- 14 | Gaillardia_-_S. 14; P. 16 | O. K. Poultry Litter |
| Calla Lily Bulbs_-.--- 19 | Garlic Sets --------- 6 | ---------------- 37, 48 |
| Calliopsis ----------- 14 | Geranium_-_S. 14; P. 16 |  |
| Campanula --------- 16 | Geum, Plants -------- 16 |  |
| Canary Bird Vine_--- 14 | Gladiolus Bulb | Oriental Poppy, Plants 17 |
| Candytuft ---------- 14 | 19, Fourth Cover | Oyster Plant -------- 11 |
| Plants ------------17 | Glass Cloth-------43, 53 | Palm Food --------- 28 |
| Canna_-_S. 14; Bulbs 19 | Globe, Amaranth ---- 14 | Pansy, Seed |
| Canterbury Bells, Seed 14 | Godetia ------------ 14 | Parcel Post Rates...- 51 |
| Plants .-----------16 | Golden Glow, Plants.- 16 | Paris Green --------- 29 |
| Caponizing Instru- | Goldenrod, Plants_--- 16 | Parsley |
| ments ------------------14 4 |  | Parsnip Pear T |
| Carrots -----------------14 | Grape Vines -----------26 | Peat Moss, Fertilizer- |
| Castor Beans .------- 14 | Grass Seed --.------- 27 |  |
| Cat Foods ---------44-46 | Gypsophila__S. 14; P. 16 |  |
| Cauliflow | Hardy Perennial Plants | Peony Ro |
| Celer |  | Pepper |
| Celer | Hedge Plants -------- 24 | Perennial |
| Cel-O-Glass ----------32 | Helianthus, Plants_-- 17 | Petunia |
| Centaurea---S. 14 ; P. 16 | Heliotrope ---------- 14 | Pigeon Supplies .---- 42 |
| Chappel Bros. Foods-- 45 | Hellebore ---------- 29 | Pinks -----------.. 15 |
| Chick Food, etc.--_34, 35 | Hemerocallis, Plants - 17 | Phlox_---S. 15; P. 15. 17 |
| Chinese Elm -------- 26 |  | Plant Food |
| Cherry Trees _-------- 26 | Hess' Poultry and | Plant Suppo |
| Chicory | Stock Remedies ---- 41 | Platycodon, Plants --- 17 |
| Chives | Hibiscus_S. 14; P. 17, 24 | Plum Trees --------- 26 |
| Chrysanthemum, Seed 14 | Hollyhock_--S. 14 ; P. 17 | Poplar Trees |
|  | Honeysuckle ----24, 25 | Popcorn |
| Cinnamon Vine Bulbs 25 | Hop Vine-_-S. 14 ; P. 25 |  |
| Clarkia ------------- 14 | Horseradish Roots --- 6 | Portulaca |
| Clematis ------------ 25 | Hot Caps-.---------- 53 |  |
| Cobaea Sc | Hyacinth Be | Poultry |Pratt's Lines

Putnam Stove ..... 39
Primrose ..... 15
Privet, Hedge Plants. ..... 24
Pumpkins ..... 10
Pyrethrum_-S. 15; P. ..... 17
Quince, Flowering ..... 24
Q-W Remedies ..... 46
Rabbit Supplies ..... 42
Radish ..... 11
Ranunculus, Plants ..... 17
Raspberry Bushes ..... 26
Remedies
Poultry ..... 40-42
Dog and Cat ..... 45-48
Bird ..... 50-5
Rhubarb ..... 11
Rose Bushes ..... -22, 23
Rutabagas ..... 13
Russian Olive_ ..... 26
Rye Grass Seed ..... 27
Sacco, Fertilizer ..... 28
Salpiglosis ..... 15
Salsify ..... 11
Salvia ..... S. $15 ;$ P. 17
Scabiosa ..... S. 15 ; P. 15
Schizanthus ..... 15
Shade Trees ..... 26
Seeders ..... 53, 54
Shasta Daisy, Plants
Sheep Manure17
28
Shrubs, Hardy ..... 24
Silver Lace Vine ..... - 25
Snapdragons ..... 14, 15
Snowball Bushes ..... 24
Snowberry ..... 24
Sodium Fluoride_ ..... 43
Spinach ..... 11
Spratt's Line ..... 46
Spray Pumps ..... 30
Squash ..... 12
Statice, Plants ..... 17
Stim-U ..... 28
Stocks ..... 15
Strawberry Plants ..... $2{ }^{2}$
lastings)
14
lastings)
Sulphur ..... 30
Summer Flowering
Bulbs ..... 9-21
Sunflower ..... 15
Sweet Corn ..... 12
Sweet Peas__S. 3rd Cove
Plants ..... 25
Sweet S4, 15
Sweet William S ..... 15
Plants ..... 17
Tamarix ..... 2.4
Thermometers ..... 38
Thunbergia ..... 15
Tobacco Dus ..... 29, 43
Tomatoes ..... 13
Tools, Garden ..... 52, 53
Trap Nests ..... 43
Trees, Fruit, Shade ..... 26
Tritoma, Plants ..... 17
Trumpet Vine ..... 25
Tuberose Bulbs ..... 19
Turkey Bells ..... 43
Turnips ..... 13
Vegetable Seeds ..... -13
Verbena ..... 15
Veronica, Plants ..... 17
Vigoro, Fertilizer ..... 28
Vines, Hardy ..... 25
Wafers, Incubator ..... 43
Watercress ..... 13
Water Fountains ..... 35
Water Glass ..... 43
Watermelons ..... 8
Willow Trees ..... 26
Wisteria ..... 25Worm Rem., Poultry- 40
Zinnias $-\ldots .-$ First Cover
Poultry Litter Hydrangea ..... 42

[^0]

## Vegetable Seeds

There is pleasure as well as profit in a vegetable garden. Once you have eaten fresh-pulled radishes from your own garden, you will never again be satisfied with the store or vegetable wagon product.

Radishes, Lettuce, Carrots, Beets, Beans, Peas, and many others, are easily grown and require little care. A comparatively small space will supply your table all through the spring and summer with healthful, succulent vegetables.

Resolve to have a garden in 1930 and prepare the soil just as soon as it can be worked in the spring. An occasional sprinkling with Swift's Vigoro will work wonders in your vegetable and flower garden.

One ounce will sow 100 feet of row, and produce about 500 plants. A deep, rich, sandy loam is best adapted to this plant. The seed should be sown thinly in drills $11 / 2 \mathrm{in}$. deep, 1 ft . apart. When large enough transplant to permanent rows 3 feet apart, allowing 2 feet between the plants. They reach maturity the second year, and in the northern states should be protected in winter by covering of leaves or coarse manure. A bed will continue in bearing for several years.
Improved Large Green Globe. Heads large, fleshy and of rich flavor. Cooks up nicer than usual because of fine grained flesh. Pkt. 10c; 1 oz. 60c; $1 / 41 \mathrm{~b}$. $\$ 1.80$ postpaid.

## Asparagus

One ounce will sow 50 feet of row and produce about 800 plants. Sow the seed early in spring in drills 12 to 14 inches apart and when well started thin out to 3 inches apart. Whn 1 or 2 years old, transplant into permanent beds, thoroughly trenched, 2 feet or more in depth. Set the plants in rows 2 feet apart, and not less than 18 inches apart in the row. Care should be taken that the roots are well spread and set at a depth of 6 inches below the level of the bed. Cover only 2 or 3 inches, and fill in gradually as the plants grow. Very little, if any, should be cut the first year after transplanting, but a fair crop can be cut the second year. Every fall, after the tops have been cut
 down, apply a dressing of coarse manure, and in the spring fork it in. An occasional top-dressing of salt at the rate of $1 / 2$ pound to the square yard is also beneficial and keeps down the weeds.


Mary Washington. Rust resistant. Pkt. 10c; oz. 20c; $1 / 41 \mathrm{lb} .70 \mathrm{c} ; 1 \mathrm{lb} . \$ 2.00$ postpaid.
Palmetto. Earlier than Conover's. Of Southern origin, but suitable for the North also; large, productive. Pkt. 5c; oz. 20c; 1/4 lb. 30c; 1b. \$1.00.

## Asparagus Roots

Any variety, 2 yr. old, 50 e doz.; $\$ 2.00$ per 100. Postage extra, 5e doz.; 35e per 100.

## Beans we par postase on Beans

## One pownd will plant 100 feet of drill.

CULTURE. No crop responds more readily than Beans to good soil and cultivation. A light, rich, well-drained loam which was manured for the previous crop is the most desirable. If too rank manure is used it is apt to make the plant run too much to vine.

Beans are very sensitive to both cold and wet and it is useless to plant them before the ground has become dry and warm. The large returns will result from planting in drills from two to three feet apart. Cover the seed one and one-half to two inches deep and thin the young plants three to six inches apart in the row. If planted in hills, make the hills about two feet apart each way. For succession, plant at intervals of two weeks till mid-summer. The plants up to the time of blossoming should have frequent shallow cultivation, but any mutilation of the roots by cultivation after the plants come into bloom is likely to cause the blossoms to blast and so cut off the crop. Cultivation should always be very shallow and it is useless to expect a crop from a field so poorly prepared as to need deep stirring after planting.

## Beans-Continued

## Bush Green Pods

Burpee's Stringless Green Pod. Earliest, most hardy and absolutely stringless. Pkt. 5c; $1 / 41 \mathrm{~b} .15 \mathrm{c} ; 1 \mathrm{~b} .45 \mathrm{c} ; 5 \mathrm{lbs} . \$ 2.00$.
Long Yellow Six Weeks.. Early, long podded variety, good producer, tender and brittle. Pkt. 5c; $1 / 4$ 1b. 15c; 1b. 45c; 5 lbs. \$2.00.
Giant Stringless Green Pod. Extra long, brittle pods. Pkt. 5c; 1/4 1b. 15c; 1b. 45c; 5 1bs. \$2.00.
Ex. Er. Red Valentine. Round, fleshy pods. Pkt. 5c; $1 / 4 \mathrm{lb} .15 c ; 1 b .45 c ; 5$ 1bs. $\$ 2.00$.
Dwarf Horticultural. Excellent for green or shell beans. Pkt. 5e; $1 / 41 b$. 15e; 1b. 45e; 5 lbs. 82.00.
California or Colorado Bintter. Larger than Lima and shaped like a Navy. Best shell bean grown. Pkt. 5c; 1/4 1b. 10c; 1b. stc; 5 1bs. \$1.50.
Fordhook Bush Lima. Does well in light soil. Pkt. 5c; $1 / 4 \mathrm{lb}$. 15c; 1b. 45e; 5 lbs. \$2.00.
Henderson's Bush Lima. Smaller than regular Lima but better producer in this territory. Pkt. 5c; $1 / 4$ 1b. 10c; 1b. 35c; 5 lbs. \$1.50.

## Bush Wax Pods

Improved Golden Wax. Pods broad and flat and very abundant. Pkt. 5e; 1/4 1b. 15e; 1b. $45 \mathrm{c} ; 5$ 1bs. $\$ 2.00$.
Dwarf Black Wax. Deep yellow pods, crisp and brittle. Ikt. 5c; $1 / 4$ 1b. 15c; $1 b$. $45 c ; 5$ lbs. \$2.00.
Davis White Wax. Favorite with market gardeners, makes good shell bean. Pkt. 5c; $1 / 4$ 1b. 15c; 1b. 45c; 5 lbs. $\$ 2.00$.
Brittle Wax or Kidney Wax. Favorite for canning. Pkt. 5c; $1 / 41 b .15 c ; 1 b .45 c ; 51 \mathrm{lbs}$. $\$ 2.00$.
Golden Cluster Wax. Similar to Golden Wax above. Pkt. 5c; $1 / 4$ 1b. 15c; 1b. 45e; 5 1bs. \$2.00.

## Pole or Running Varieties

Kentucky Wonder. King of all Pole Beans. Long, stringless pods in great abundance. Green. Pkt. ذc; $1 / 4$ 1b. 10c; 1b. 35c; 5 lbs. $\$ 1.60$.
Kentucky Wonder Wax. Yellow pod variety equal to Kentucky Wonder. Pkt. 5c; $1 / 41 \mathrm{~b}$. $10 \mathrm{c} ; \mathrm{lb}$. 35c; 5 1bs. $\$ 1.60$.
Lazy Wife. White seed, green pod, stringless. Pkt. 5c; $1 / 41 b .15 c ; 1 b .45 c ; 5$ lbs. $\$ 2.00$. Dutch Case Knife. Old time favorite. Pkt. 5c; $1 / 41 \mathrm{~b} .10 \mathrm{c} ; \mathrm{Ib}^{2}$. 35c; 5 1bs. $\$ 1.60$.
Cut Short or Corn Hill. Planted with corn. Pkt. 5c; $1 / 4$ 1b. 10c; 1b. 35c; 5 lbs. $\$ 1.60$.

Beets-Fine Table Varieties
CULTURE. Beets require a deep, rich, mellow soil, and may be sown from early spring to commencement of summer. Drop about an inch deep in drills 12 to 18 inches apart. One ounce to 60 feet of drill; 6 to 8 lbs. to the acre. When well up thin to from 3 to 4 inches apart. The young beets pulled out of the row are excellent when used as spinach. All Pośtpaid.

Detroit Dark Red. Favorite Beet for table or canning. Deep, blood red throughout. Tender and fine flavor. Pkt. 厄e; oz. 10c; $1 / 4$ 1b. 35c; 1b. \$1.10.
Early Blood Red Turnip. Turnip Beet. Early variety, tender and second to above. Pkt. 5c; oz. 10c; $1 / 4$ 1b. 30c; 1b. $\$ 1.00$.
Early Eclipse. Globular shape, early and tender. Pist. 5c; oz. 10c; 1/4 1b. 30c; 1b. $\$ 1.00$.

## Sugar and Stock Beets



Ex. Early Esyptian. Earliest of Beets. Larger than most varieties but not as tender. Pkt. 5c; oz. 10c; 1/4 1b. 30c; 1b. $\$ 1.00$.
Long, Smooth Blood. Best long beet grown. Late variety hence good for second crop Pkt. 5e; oz. 10c; $1 / 4$ 1b. 30c; 1b. $\$ 1.00$.
Swiss Chard or Foliage Beet. More desirable than Spinach for greens. Leaves are broad, flat and green with white stem. Pkt. 5c; oz. 10c; $1 / 4$ 1b. 35c; 1b. $\$ 1.00$.

CULTURE. The soil for these should be plowed more deeply and the drills should be farther apart than for garden Beets. Sow in April or beginning of May in drills from 2 to 3 feet apart, and when 4 to 5 inches high thin to 12 or 15 inches in the row. Four or five pounds are sown to the acre. Sugar Beets are also used for stock feeding, and while not as large as the Mangels, they have a higher percentage of sugar and therefore are of higher feeding value.

## Sugar Beets

Vilumorin's Improved Sugar. This is one of the best for making sugar. The skin is a creamy color and flesh is white. Pkt. 5e; $1 / 4 \mathrm{lb}$. 25e; 1b. 60c.
Lane's Imperial Sugar. Large, thick, tapering variety; yields almost as much as mangels. Is sweet and rich and very desirable for stock. Pkt. 5e; $1 / 4$ 1b. 25e; 1b. 60c.

## Stock Beets

Lons Red. Our stock of this variety has been grown in Germany and is the result of continued careful selection. It is one of the heaviest yielding Mangels there is, producing under proper conditions from 40 to 80 tons per acre, many specimen roots weighing from 40 to 50 pounds, and being of fine texture and good quality. Pkt. 5e; 1/4 1b. 25e; 1b. 60c.
Selected Golden Tankard. Most nutritious variety in cultivation; roots large, ovoid, but filled out at top and bottom, terminating with a small tap-root; flesh deep golden yellow, solid, crisp, sweet and rich; excels all others in milk-producing qualities, and very productive. It has no superior as a keeper Pkt. 5c; $1 / 4$ 1b. 25c; 1b. 60c.

A very delicate vegetable and deserves a more general cultivation than they receive. The plant belongs to the Cabbage family and should be grown and cultivated like Cabbage. The "sprouts" which grow around the strong, upright stems of the plant look like miniature cabbages. Very hardy, improved by frost. One ounce will produce 2,000 plants.
Dwarf Improved. Bearing a large crop of small, solid, tender heads. Pkt. 5c; oz. 20c; $1 / 4$ lb. 60c.

## Cabbage

Have you ever made any Sauerkrant or Liberty Cabbage? It is easy to make, and we will be glad to tell you how. It sure will taste good to you next winter.

CULTURE. For early Cabbages sow the seed in a hotbed in March or April, covering the seed from onequarter to one-half inch deep and when big enough transplant to another bed. As soon as the ground is in


Copenhagen Market Cabbage good condition, transplant outside in rows 2 feet apart and 15 to 18 inches in a row. The soil should be mellow, rich and well drained. For late crops the seed can be sown in a cold frame or even in the open ground, and then transplanted in rows 3 feet one way and 2 feet the other, so as to be able to work with a horse and cultivator. One ounce of saltpeter dissolved in 3 gallons of rain water, sprinkled over the Cabbage or Cauliflower will destroy the green worm. The liquid being clear does not color the Cauliflower or Cabbage heads. Fine air-slacked lime or tobacco dust sifted on the young plants as soon as the fleas appear on the ground will prevent them from doing harm. One ounce of good seed will produce 2,000 plants.

## Earliest Varieties

Copenhagen Market. The earliest round head, short stem Cabbage offered today. The heads are even in size of about 8 lbs. average and will stand longer than other early varieties without bursting. Pkt. 10c; oz. 40c; $\mathbf{1 / 4} \mathbf{1 b}$. $\$ 1.25 ; 1 b . \$ 4.00$.
Early Jersey Wakefield. Cone shaped heads maturing from late in June to July. Pkt. 10c; oz. 30c; $1 / 4$ 1b. 90c; 1b. $\$ 2.50$.
Early Winningstadt. But little later than Wakefield. Heads round and solid. Pkt. 10c; oz. 30c; $1 / 4$ 1b. 90c; 1b. $\$ 2.50$.
Glory of Enkhuisen. Medium early, solid round heads. Pkt. 10c; oz. 40c; 1/4 1b. \$1.2玉; 1b. $\$ 4.00$.
Warly Dwarf Flat Dutch. One of the most reliable headers. Medium early. Can be planted close on account of absence of "wing" leaves. Pkt. 10c; oz. 40c; 1/4 1b. \$1.25; 1b. \$4.00.
All Seasons. Good variety for kraut. Pkt. 10c; oz. 35e; $1 / 41 b . \$ 1.00 ; 1 b . \$ 3.00$.

## Second Early or Round Headed

Fremium Late Flat Dutch. Favorite for late crop. Makes enormous size and uniform, solid heads. Pkt. 10c: oz. 40c; $\mathbf{1 / 4}$ lb. $\$ 1.25 ; 1 b . \$ 4.00$.
Danish Ballhead or Hollander. Hardest heading variety known. One of the best keepers. Pkt. 10c; oz. 40c; $1 / 4$ 1b. $\$ 1.25$ : 1b. $\$ 4.00$.
Mammoth Red Rock. Largest heading Red Cabbage. Fully as large as Flat Dutch and fine grained. PKt. 10c; oz. 40c; $1 / 4$ 1b. $\$ 1.25 ; 1 b . \$ 4.00$.

## Caliots one ounce will sow 100 feet of drill; 3 to 4 pounds for an acre.

CULTURE. Carrots may be sown in hotbeds in February for early use. In open ground from March to first of July; however, main crop will produce best results if sown from first of May to first of July. Thin out early plantings to 5 inches apart in the row and main crop 6 to 8 inches apart. The rows
 should be 10 inches apart for early crop and 15 to 18 inches for main crop. Cultivation should be carefully performed to keep down the weeds and deep hoeing between the rows will give a large increase in the crop. Sow from 2 to 3 pounds to the acre. Carrot tops, cut from young plants, may be used for garnishing.
Ox Heart, or Guerande. Especially desirable for clay soil. Root is short and thick and flesh is bright orange in color. Heart is tender and not woody. Pkt. 5c; oz. 10c; 1/4 1b. 35e; 1b. \$1.00.
Danver's Half Long. One of the leading varieties. Pkt. 5c; oz. 10c; $1 / 4$ 1b. 35c; 1b. $\$ 1.00$.
Chantenay. Medium early and very productive. Pkt. ธc; oz. 10c; $1 / 4$ 1b. a5c; 1b. \$1.00.
Improved Long Orange. Good in light, sandy soil. Larger than other late varieties. Pkt. 5c; oz. 10c; $1 / 4$ 1b. 35c; 1b. $\$ 1.00$.
Early Scarlet Morn. Extra early and for that reason recommended for market. Pkt. 5e; oz. 10e; $1 / 4$ 1b. 35c; 1b. $\$ 1.00$.
Large White Belgian. Used for stock only. Pkt. 5e; oz. 10c; 1/4 1b. 25e; 1b. 90c.

## Cauliflower

One ounce will produce 3,000 plants. The cultural directions given for Cabbage will apply for this crop, but the soil should be more heavily manured. Keep the ground well hoed, and bring the earth gradually up to the stems. Water freely in dry weather, and especially when they begin to head. Never allow the plants to become crowded in the seed-bed; transplant them with great care, as any check will injure, if not entirely prevent the formation of the head. For late Caulifiower set the plants in a cool, moist place in the garden. When the heads have formed, the long leaves should be drawn over and tied above them, to keep off the sun and rain. Some gardeners break the leaves over the heads, but this method is not entirely effective.
Henderson's Early Snowball. One of the best types of Cauliflower on the market. Its compact habit of growth renders it a very profitable variety to force under glass, and it does well for late planting, as well as for early crops. It is a sure header. Pkt. 15e; $1 / 4$ oz. 75e; oz. $\$ 2.25 ; 2$ ozs. $\$ 4.00$;


Farly Snowball Caulifiower


## Celery

CULTURE
One ounce will produce from 5,000 to 10,000 plants.
Celery cultivation The conditions necessary for successful lety cultivation are good seed, plenty of manure and comfertilizers, moisture and cultivation. The most suitable soil is rich loam, finely pulverized and highly enriched with 30 to 40 loads to the acre of good stable manure. Sow seed in boxes for early planting; later plants may be produced from seeds sown in frames or open ground. Transplant 4 inches apart when 3 inches high, water and protect until well rooted, then transplant into rows for garden culture 18 inches to 2 feet apart, for field culture in rows 4 to 6 feet apart; set the plants from 8 to 12 inches apart, supply plenty of moisture and see that plants receive thorough cultivation. They may be set either on the surface or in well manured trenches 1 foot in depth. To blanch draw earth around the plants, being careful not to cover the tops of the center shoots.
Giant Pascal. By far the most popular Celery. Medium to small size but wonderfully well flavored. Pkt. 10c; oz. 30c; $1 / 4$ 1b. 80c; 1b. \$2.50.
Golden Self Blanching. Blanches easily and larger than Pascal. Pkt. 10c; oz. \$1.25; $1 / 4$ 1b. $\$ 4.00 ; 1 b . \$ 12.00$.

## Celeriac

(Turnip-Rooted Celery)
CULTURE. Grown mostly for its bulbous roots. Seeds are started and plants set out in the same way as advised for Celery. Celeriac is not usually blanched, but is very fine when thus treated, and much hardier than the stalk Celeries. Large, Smooth Prague. An improved form of turnip-rooted

Celery; round, smooth roots with very few side roots.
Pkt. 5c; oz. 30c; $1 / 4$ 1b. $\$ 1.00$.

## Collards

## Giant Pascal Celery

## Chicory

CULTURE. Sow seed in early spring as for Carrots, in rows 12 to 16 inches apart and thin the plants to 2 or 3 inches. To blanch the leaves for salad in winter, dig the roots in the fall, cut the leaves off a little above the root crown and place them horizontally in layers alternating with layers of sand or loam in a dark cellar, the tops all pointing outward of the sloping heap. One ounce will plant about 100 feet of drill.
Large Rooted. The dried roots are roasted and mixed with coffee or used as a substitute. Pkt. Јc; oz. 15c; $1 / 4 \mathrm{lb}$. 50c.

## Chives

Chives are perfectly hardy perennial plants of the onion type. They are grown for their small leaves, which are produced very early in the spring, for giving a mild onion flavor to various dishes. The tops appear early in the spring and can be shorn off close to the ground as needed. They can be grown also in pots in a sunny window during the winter. Pkt. 10c; roots 20 c bunch, 3 for 55e, postpaid.

CULTURE. This is a variety of Cabbage largely grown in the South, where it is extensively used for man and beast. It forms a large, loose, open head, or mass of leaves. Freezing does not injure the crop. Sow seeds in the South from January to May, August to September.
True Georgia. Pkt. 5c; oz. 15c; $1 / 4$ lb. 50c.

## Corn Salad

CULTURE. Sow during August and September in drills $1 / 4$ inch deep and 6 inches apart. If the weather is dry when the seed is sown, firm soil to insure germination Keep weeds down. Just before winter cover thinly with leaves or straw
Large Round-Leaved. Matures in four or five weeks. Sow two ounces to 100 feet of drill. Pkt. 5c; oz. 15c; $1 / 4$ 1b. 50c.

## Cress

Curled or Peppergrass. This small salad is much used with lettuce, to the flavor of which its warm, pungent taste makes a most agreeable addition. Sow very thickly in shallow drills; cover on a smooth surface at short intervals throughout the season. Pkt. 5c; oz. 15c; $1 / 4 \mathbf{1 b} .40 c ; 1 b . \$ 1.00$

## Cucumbers

CULTURE. One ounce will plant 100 hills; 2 pounds will plant an acre. They succeed best in a warm, rich, moist, loamy soil. Plant in hills 4 feet apart each way. Leave four of the strongest plants to each hill, but do not thin out until the plants are strong enough to resist the attacks of insects. The English forcing varieties can be grown in hotbeds where the temperature does not fall below 65 degrees at night. Many of this class grow from 20 to 30 inches in length.
Improved Long Green. Good for pickling when small and unexcelled as slicing Cucumber when matured. Pkt. 5e; oz. 15e; $1 / 4$ 1b. 40c; 1b. $\$ 1.25$.
White Spine. Early, prolific and continuous bearer. One of the most popular varieties. Pkt. 5e; oz. 15e; $1 / 4$ 1b. 35e; 1b. $\$ 1.10$.
Early Frame. Fruit straight and smooth. Pkt. 5c; oz. 15c; $1 / 4$ 1b. 35e; 1b. \$1.10.
Davis Perfect. "Excellent for forcing under glass; also for outdoor culture. Medium in size. Pkt. бe; oz. 15e; $1 / 4$ 1b. 40c; 1b. \$1.25.
Boston Pickling. Best pickling variety. Pkt. 5e; oz. 15e; $1 / 4$ 1b. 40c; 1b. \$1.25.
Early Cluster. Medium to small; produced in clusters. Tender and well flavored. Pkt. 5c; oz. 15e; $1 / 4$ 1b. 40e; 1b. $\$ 1.25$.
Japanese Climbing. Grown on trellis. Makes excellent cover for fence or porch while producing edible variety of fruit. Pkt. 5c; oz. $\mathbf{2 0 c}$; $1 / 4$ 1b. 50c; 1b. \$1.50.


New York Eggplant

## Endive

One ounce will sow 150 feet of drill. Sow in any ordinary dry soil in drills 1 foot apart, covering lightly. When the plants are about 2 inches high, thin to about 12 inches in the row. When the plants have attained full size, gather up the leaves and tie together at the tips. The inner leaves, in the course of three or four weeks, will become beautifully blanched.
Green Curled. Finely curled, dark green leaves; excellent plant. Not only most useful as a salad, but much used for garnishing. Pkt. 5e; oz. 15e; $1 / 4$ 1b. 40e; 16. $\$ 1.25$.
Broad Leaved Batavian. (Escarolle.) Leaves are broad and nearly plain; chiefly used in stews and soups. Pkt. 5e; oz. 15c; $1 / 4$ 115. 40c; 1b. \$1.25.

## Garlic Sets

Garlic sets or bulbs are planted from September to March in rows 12 inches apart, placing the sets 4 inches apart in the rows, 2 inches deep. Lb. 50c.

## Horseradish Roots

No home garden is complete without them. 35e doz., postpaid. A strong, uniform heat is required to germinate the seeds, and a thoroughly puloz. 20c; oz. 50c: $1 / 4$ 1b. \$1.60.


Improved Long Green Cucumber verized, well enriched, warm soil is necessary to perfect the fruit. Transplant to 3 feet apart each way, and when about a foot high support the plants by drawing the earth up around them.
New York Improved Purple. Fruit large, fine and free from thorns, and produces until frost; skin rich purple. Pkt. 15e; $1 / 4$

## Kale or Borecole

One ounce will produce 2,000 plants; 4 lbs. to the acre.
CULTURE. Sow from the middle of April in hotbeds; transplant in June and treat the same as Cabbage. Of all the cabbage tribe this is the most tender and delicate, and much more would be grown if its excellent qualities were generally known. Drill in rows of $21 / 2$ feet and thin to 6 to 10 inches. The varieties are extremely hardy.
Dwarfed Curled Green. Extensively grown as winter greens. Sow in autumn in rows 1 foot apart and treat as Spinach. Plants very hardy, 4 to 6 inches high. Pkt. Je; oz. 15e; $1 / 4$ 1b. 40c; 11 lb . \$1.60.
Tall Curled Scotch. Grows about 18 inches in height and spreads, sometimes reaching 3 feet in diameter. Desirable for winter use. Pkt. 5e; oz. 1.5e; $1 / 41 b .40 c ; 1 \mathbf{1 b .} \$ 1.60$.

## Kohl-Rabi

A plant forming a firm bulb above the ground and bearing short leaves. The bulb is the edible part, and when cooked tastes very much like turnip. If the seed is sown early the young bulbs will be ready for use in spring, and a planting in July will secure good vegetables for fall use. The seed should be planted in the open garden in 18 -inch rows and the young plants thinned to four or six inches. It does not transplant well, unless when very small.
Garly White Vienna. The most desirable variety for general use. It is very early and has small tops. Color, light silvery green. Pkt. 5c; oz. 20c; 1/4 1b. 75c.
Early Purple Vienna. Has a bright purple bulb. The leaf and stems are green and tinged with purple. Pkt. 5c; oz. 20c; $1 / 4 \mathbf{1 b}$. 75 c.

## Leek

One ounce will plant 200 feet of drill; 4 lbs. to the acre.
CULTURE. Leek is very hardy and very easily cultivated. Sow early in spring in rich soil $1 / 2$ inch deep, in drills 1 foot apart. When 6 inches high, transplant in rows 10 inches apart each way; as deep as possible, so that the neck, being covered, may be blanched.
Large London Flag. The oldest and best known and most largely


Kohl-Rabi grown variety. Pkt. 5c; oz. 20c; $1 / 4 \mathrm{lb}$. 60c.

## Lettuce

CULTURE. Sow in hotbed or boxes in February or March and in open ground as soon as it can be worked; transplant to rows 8 inches apart both ways. Extra rich, mellow soil, high cultivation and moisture are demanded by lettuce to secure best results. Lettuce is hardy and makes better growth when mercury is below 60 degrees; when above 75 degrees the plant is soon drawn out of shape. A succession of plantings at intervals of two weeks after first outdoor planting is desirable. In August any of the varieties can be sown either outdoors or in frames. In October, Grand Rapids and Denver Market may be planted in frame to head in winter. Always sow seed thin and then thin out plants to stand from 6 to 8 inches apart in row. Lettuce requires good soil, carefully enriched with well rotted manure and well pulverized to secure the best results. For hotbed and very early sowing, we especially recommend Big Boston, Grand Rapids, Early Curled Simpson and Black Seeded Simpson.

## Loose or Cutting Varieties

Hlack Seeded Simpson. One of the best leaf varieties. Leaves are fluffy but not crinkled. Tender and sweet. Pkt. 5c; oz. 15e; $1 / 4$ lb. 35c; $1 / 2$ lb. 60c; 1 lb. \$1.00.
Simpson's Early Curled. Crisp and tender. Pkt. 5c; oz. 15e; $1 / 41 b .35 c ; 1 / 2$ 1b. 60c; $11 b . \$ 1.00$.
Grand Rapids. Popular because of large bunches. Leaves are rather smooth with frilled edges. Pkt. 5c; oz. 15c; $1 / 4$ 1b. 35c; $1 / 2$ 1b. 60c; $11 b . \$ 1.00$.
Denver Market. Semi-head. Wrinkled leaves. Pkt. 5e; oz. 15c; $1 / 4$ 1b. 35c; $1 / 2$ 1b. 60; $11 b$. $\$ 1.00$.


[^1]
## Heading Varieties

California Cream Butter. Large, rich, creamy heads. Pkt. 5c; oz. 15c; $1 / 4$ lb. 35c; $1 / 2$ 1b. 60c; l 1b. $\$ 1.00$.
May King. Extra large, solid heads, green outside but cream colored within. Pkt. 5c; оz. 15c; $1 / 4$ 1b. 35e; $1 / 21 b .60 c ; 11 b . \$ 1.00$.
Paris White Cos. Distinct from other varieties. Leaves long and straight but when tied up heads nicely. Pkt. 5c; oz. 15c; $1 / 4$ 1b. 35c; $1 / 21 b$. 60c; $11 b . \$ 1.00$.
Prize Head. Not really a heading variety, though usually so catalogued. Leaves are red edged. Pkt. 5c; oz. 15c; 1/4 1b. 35c; 1/2 1b. 60c: 1 1b. \$1.00.
Hanson's Improved. Favorite with market gardeners. Heads easily if not grown too close together. Pkt. 5c; oz. 15c; 1/4 lb. 35e; $1 / 21 \mathrm{~b}$. 60c; 1 1b. \$1.00.
Iceberg. Leaves have a tendency to turn in, hence sure to head. Tender and crisp. Pkt. ธc; оz. 20c; 1/4 1b. 50c; $1 / 2$ 1b. 90c; 11 lb . \$1.50.

## Muskmelons

One ounce to 60 hills; 3 pounds to acre.
CULTURE. A rich, deep, sandy soil well worked and highly manured is of the utmost importance. Plant when all danger of frost is over, in hills 5 to 6 feet apart each way; scatter a dozen seeds to a hill and afterwards thin out to 3 or 4 plants. Cantaloupes and cucumbers are often destroyed by lice and should be well sprinkled with slug shot when the plants appear. When they have 4 leaves, pinch off the end of the main shoots, which will cause lateral branches to put forth sooner and strengthen the growth of the vines.
Burrell's Gem. An orange fleshed Rocky Ford. Fine grained and spicy. Pkt. sc; oz. 10c; 1/4 1b. 30c; 1b. $\$ 1.00$.
Rocky Ford. Oval shaped, of netted type. Green flesh of fine flavor. Pkt. 5c; oz. 10c; $1 / 14$ lb. 30c; 1b. $\$ 1.00$.
Emerald Gem. One of the earliest. Green skin and salmon flesh. IPkt. se; oz. 10c; 1/4 1b. 25c; 1b. 80c.

Hackensack. Ribbed variety, large and round. Good market variety. Pkt. 5c; oz. 10c; 1/4 1b. 25c; 1b. \$1.00.
Netted Nutmeg. Medium size, early, green flesh. Pkt. 5c; oz. 10c; $1 / \mathbf{1} \mathbf{1 b} .30 c ; 1 b . \$ 1.00$.
Osage, or Miller's Cream. Pink fleshed, spicy flavor. Very heavy producers. Pkt. 5c; oz. $10 c ; 1 / 41 \mathrm{~b}$. 30c; 1b. $\$ 1.00$.
Casaba or Large Persian. Long, oval shaped. Pkt. 5c; oz. 15c; $1 / 41 \mathrm{lb}$. 35c; 1b. $\$ 1.00$.
Honey Dew Melon. Comparatively new type of melon. Flesh is deep green, unusually sweet and will keep 3 to 5 months after ripe. Pkt. 5 c; oz. 15c; $\mathbf{1 / 4} \mathbf{1 b}$. 40c; 1b. \$1.30.
Greeley Wonder. Salmon flesh with thick meat. Pkt. 5c; oz. 15c; $1 / 4 \mathbf{1 b} .40 c ; 11 b . \$ 1.50$.
Honey Ball. Earlier than Honey Dew and smaller. Green meat with greenish-white skin. Pkt. 5e; oz. 15e; $1 / 4$ 1b. 40c; 1 lb. $\$ 1.50$.

## Watermelons

## Selected Strains of the Choicest and Best Varieties

## One ounce to 60 hills; 4 or 5 nounds to the acre.

CULTURE. The culture of the Watermelon is very similar in all respects to that of the musk varieties, being hardier and of more vigorous habit. However, it may be planted in May, before settled warm weather appears, in hills not less than eight feet apart, and thinned to two vines per hill.
Kolb's Gem. The best shipping melon. Rind thin but tough. Striped, slightly oval and of good size. Pkt. 5c; oz. 10c; $1 / 41 \mathrm{lb}$. 25c; 1b. 75c.
Rocky Ford. Oblong, green rind, superb flavor. Pkt. 5c; oz. 10c; $1 / 41 b .25 c ; 1 b . ~ 75 c$.
Tom Watson. A large melon, oblong and green with thick netting on entire surface. Pkt. 5c; oz. 10c; $1 / 4 \mathrm{lb}$. 25c; 1b. 75c.
Kleckley's Sweet. Early, medium sized and very sweet. Skin dark green, flesh bright red. Pkt. 5c; oz. 10c; $1 / 4$ 1b. 25c; 1b. $75 c$.
Mountain Sweet. Long, green type. Pkt. 5c; oz. 10c: $1 / 4 \mathrm{lb}$. 25c; 1b. 75c.
Georgia Rattlesnake. Sometimes called "Gypsy." Very large and good shipper. Pkt. 5c; oz. 10c: 1/4 1b. 25c; 1b. 75c.
Kansas Stock, or Colorado Preserving. A boon to dry farmers. Often weighs 60 to 70 lbs. Will keep all winter and can be fed to stock all winter. Pkt. 5c; oz. 10c; $1 / 4$ 1b. 25c; 1b. 75c.

## Okra

CULTURE. Sow late in the spring, after the ground has become warm, in drills 3 feet apart, where the plants are to remain. Thin out to from 9 to 12 inches. Soil should be well manured. Plants may also be raised in pots or hotbed and transplanted.
White Velvet. Of tall growth, pods never prickly to touch, being always round and smooth. Pht. 5c; oz. 10c; $1 / 4$ 1b. 20e; 1b. 50c.
Early Dwavf Prolific. Grows low, but stocky and is very productive. Pkt. 5e; oz. 15c; $1 / 4$ 1b. 25c; lb. 60c.

## Onions

One ounce of Onion Seed for 200 feet of drill; 4 to 5 pounds for an acre.
CULTURE. Onions must have a clean and very rich soil. A good loam, previously cultivated for two years, is the best. The land should be highly fertilized with well-rotted manure and fertilizers. Fresh stable manure has a tendency to produce soft, unsalable onions. Sow in drills 1 foot apart as soon as the ground can be worked in the spring. Thin plants to three or four inches apart, using rake and hoe frequently to keep down the weeds. The finest onions are produced by sowing seed in hotbeds in February and March and transplanting seedlings to the open ground in rows where they are to mature. Onions require a very high culture, and weeds soon choke them out if permitted to grow. Bottom sets are little onions, grown the previous year; when set out in the spring they soon form large onions. If you wish to grow onion sets, use 70 to 80 pounds of seed to the acre, drilled in very thick.
Yellow Globe Danvers. Brownish-yellow skin with mild flavor. A very excellent variety. Pkt. 10c; oz. 25c; $1 / 4$ lb. 60c; 1b. $\$ 1.90$.
Mountain Danvers. Reliable, flattened variety. Mild and same color as above. Pkt. 10c; oz. 25c; $1 / 4$ 1b. 75c; 1b. $\$ 2.25$.
Prizetaker. Heavy yielder on account of immense size. Skin pale straw color, flesh white and mild. Pkt. 10c; oz. 25c; $1 / 4$ 1b. 75c; 1b. \$2.25.
Large Red Weathersfield. Best red variety. By far the finest strain of red Onions. Pkt. 10c;
 oz. 30c; $1 / 4$ 1b. 75c; 1b. \$2.25.
Southport Red Globe. Matures slightly ahead of Weathersfield. Pkt. 10c; oz. 25c; 1/4 lib. 60c; 1b. \$2.00.
Silver Skin, or White Portugal. Medium sized, rather flat. Our strain is particularly excellent. Pkt. 10c; oz. 25c; $1 / 4$ 1b. 75c; 1b. \$2.50.
White Barletta Pickling. Best pickling onion. Pkt. 10c; oz. 25c; $1 / 41 b .70 c ; 1 b . \$ 2.00$.
Yellow, White or Red Bottom Sets. Write for prices.


Hollow Crown Parsnips

## Parsley

One ounce of seed for 150 feet of drill.
CULTURE. Soak the seed in warm water for several hours, and sow in border or frame; thin the row or transplant to another bed. If to be carried late into the fall, set eight inches apart both ways, and cover with litter. It will go through the winter with moderate protection. Make open ground sowing in April
Moss Curled. A choice selected strain with beautifully crimped and curled brightふreen leaves. Pkt. 5e; oz. 10c; $1 / 4$ 1h. 25e; ib. Soc.

## Parsnips

## One ounce for 200 feet of drill; 5 to 6 pounds for an acre.

CULTURE. Sow as early in the spring as the ground can be worked, in drills 18 inches apart. Only rich soil should be used and the ground should be thoroughly and deeply cultivated before sowing seed. Thin to 6 or 8 inches apart in the rows. Hoe and cultivate frequently to keep the weeds down.

Improved Hollow Crown. The best variety for market or home garden. Tkt. 5c; oz. 10c; 1/4 1b. 30c; 111 . 90c.

Improved Guernsey. Roots not so long as Hollow Crown, but of greater diameter and more easily gathered. Pkt. 5c; oz. 10c: $1 / 4$ 1b. 30c; 1b. 90c.


Ruby King Pepper

One pound will plant 100 feet of drill; 60 pounds to acre.
CULTURE. Peas are among the first seeds that are planted in spring and need rich, wellmanured soil. Sow in drills 3 feet apart and repeat until the first of July, with the exception of our Extra Early, which can be sown as late as August, on account of its early ripening and mildew resistance. The number of Peas may vary from 10 to the foot for the dwarf varieties to 8 to the foot of the medium tall and 6 to the foot of the very tall kinds.
Anerican Wonder. 1 ft . Matures in 50 days. Bears its crop quickly and is out of the way for other crops on same ground. Pkt. 5e; $1 / 4$ 1h. 10c; $1 / 2$ 1b. 15c; 1 1b. 35e; 2 lbs. 65c.
Dwarf Telephone. $21 / 2 \mathrm{ft}$. Pods larger than Am. Wonder. Well flavored and productive. Pkt. 5c; 1/4 1b. 10c; $1 / 2$ 1b. 20c; 1 1b. 35c; 2 lbs. 65c.
Telephone (Pole). $31 / 2 \mathrm{ft}$. Best of the pole varieties. Pkt. ذc; $1 / 4$ 1b. 10c; $1 / 2$ 1b. 20c; 1 1b. 35c; 2 lbs. 65c.
Yorkshire Hero. $21 / 2 \mathrm{ft}$. Hardy kind of good flavor. Pkt. 5e; $1 / 4$ 1b. 10c; $1 / 2$ 1b. 20c; 1 1b. 35c; 2 lbs. 60c.
Champion of England. 3 ft . Considered standard for summer use. Everbearing in nature. Pkt. 5c; $1 / 4$ 1b. 10c; $1 / 2$ 1b. 20c; 1 lb. 35c; 2 lbs. 60c.
Gray Sugar. (Edible pods.) Growing in popularity. Pkt. 5e; $1 / 4$ 1b. 10c; $1 / 2$ 1b. 20c; 1 lb. 35c; 2 1bs. 65e.
Blue Bantam. Early and dwarf. Very sweet. Pkt. 5e; $1 / 4$ 1b. 10c; $1 / 2$ 1b. 20c; 1 1b. 30c; 2 lbs. 50c.
Gradus, or Prosperity. 3 ft . Early as any standard sort and one of the best early kinds. pkt. 5e; $1 / 4$ 1b. 10c; $1 / 2$ lb. 20c; $11 b$. 35c; 2 lbs. 65c.
1remium Geni. Peas small and sweet, pods well filled. Pkt. 5e; $1 / 4$ 1b. 10c; $1 / 2$ 1b. 15e; 1 1b. 25c: 2 1bs. 45c.
Alaska. $21 / 2 \mathrm{ft}$. Earliest of all, though not so sweet. Truckers plant Feb. 22nd if ground can be worked. Pkt. 5c; $1 / 41 b$. 10c; $1 / 2$ 1b. 15c; $11 b .25 c ; 2$ 1bs. 40c.
First and Best. $21 / 2 \mathrm{ft}$. Good canning variety. Pkt. 5e; $1 / 41 \mathrm{lb} .10 \mathrm{c} ; 1 / 2 \mathrm{lb}$. 20c; 1 1b. 35e; 2 lbs. 65c.
Bliss Everbearing. 3 ft . One of the most prolific. Peas very large and wrinkled. Pkt. $5 \mathrm{5c}$; $1 / 4$ 1b. 10c; $1 / 2$ 1b. 20c; 1 1b. 35c; 2 1bs. 65c.
Thoms Laxton. 3 ft . Almost as early as the earliest. Very heavy cropper and a general favorite. Pkt. 5c; $1 / 4$ 1b. 10c; $1 / 2$ 1b. 20e; 1 1b. 35c; 2 1bs. 65c.
Stratagem (Improved). Middle crop sort. Good sized pods borne in abundance. Pkt. 5e; $1 / 41 b .10 c ; 1 / 2$ 1b. 15c; $11 b .25 c ; 21 b s .45 c$.

## Potatoes

CULTURE. Figure 1 pound to 7 hills. Space rows 3 ft . apart. 500 lbs. to the acre. Plant as soon as danger of killing frost is over. Be sure ground is well worked up to a good depth and fertilize with bone meal. Be sure to cut so as to leave one or two good eyes to each piece. DO NOT PLANT TOO DEEP IF SOIL IS HEAVY. Five inches is plenty.
Varieties. We recommend Early Ohio, Burbank or Peach Blow for light, sandy soil and IRISH COBBLER for heavy or clay soil. This latter variety has repeatedly proved itself the only consistent producer in heavy soil. Write for prices.

## Pumpkins

## One ounce will plant 15 hills; 2 quarts to acre.

CULTURE. Sow in May, when the ground is warm, in hills $8 \times 8$. Can also be grown with corn, every fourth hill of every fourth row. The common practice is to drop two or three seeds in every third or fourth hill in the cornfield. If cultivated in $8 \times 8$ hills use four plants to each hill.

Connecticut Field. Best variety for Colorado. Pkt. 5e; oz. 10c; $1 / 4$ 1b. 25c; 1b. 75c.
Kentucky Field. Large variety similar to above. Pkt. 5e; oz. 10c; $1 / 4$ 1b. 25c; 1b. 70c.

Mammoth Tours. French variety of great size. Pkt. 5e; oz. 10c; $1 / 4$ 1b. 25e; 1b. 90c.
Small Sugar. Finer grained and best for table use. Pkt. 5c; oz. 10c; $1 / 4$ 1b. 25c; 1b. 80c.

## Radish

One ounce to 50 feet of drill; 8 pounds to acre. CULTURE. The soil for radishes should be very rich, light and mellow, well broken by digging, as their tender and mild qualities depend much upon their rapid growth. For very early use, sow in gentle hotbeds in February, and in open air as soon as the ground can be worked, at intervals of ten or twelve days, for a succession as long as they may be wanted. The winter varieties should be sown in August, lifted before severe frost, and stored in the cellar.

Sow in drills 1 foot apart and cover lightly; thin out while small to 3 inches apart. Hoe often.
Early Scarlet Globe. One of the best both for forcing as well as open culture. Early, crisp and tender. Pkt. 5c; oz. 10c; $1 / 4$ 1b. 25c; 116. \$1.00.
French Breakfast. Pink with white tip. Olive shaped. One of the earliest and best. Pkt. 5c; oz. 10c; $1 / 4$ 1b. 25c; 11b. 90c.
Rosy Gem. Round, red with white tip. Very early. Pkt. 5c; oz. 10c; $1 / 4$ 1b. 25c; 1 1b. $\$ 1.00$.
Sparkler. Similar to above except that it gets larger. Pkt. 5e; oz. 10c; $1 / 4 \mathrm{Ib}$. 25e; $11 \mathrm{lb} . \mathbf{\$ 1 . 0 0}$.
Icicle. The king of all long radishes. Always tender, crisp and mild. Pkt. 5c; oz. 10c; $1 / 4 \mathrm{ib}$. 25c; 1 lb. 90c.
White Strasburg. Longer and larger than Icicle. Pkt. 5e; oz. 10c; $1 / 4$ 1b. 25c.
Simpson's Glass. Long, light pink type with transparent white flesh. Pkt. sc; oz. 10c; $1 / 4$ 1b. 25c; 11b. 90c.
Long Brightest Scarlet. The handsomest radish grown. Scarlet above and white below. Pkt. 5c; oz. 10c; $1 / 4$ lb. 25c; $111 \mathrm{lb} .90 c$.
China Rose Winter. Flesh firm and white; will keep all winter. Pkt. 5c; oz. 10c; $1 / 4$ 1b. 25c; 1 lb. $90 c$.
Long Black Spanish Winter. Black skinned with white flesh. Gets to enormous size. Pkt. 5c; oz. 10c; 1/4 1b. 25c; 1 1b. $\$ 1.00$.
Round Black Spanish. Globe shaped roots with black skin. Pkt. 5c; oz. 10c; $1 / 41 \mathrm{lb}$. 25c; $1 \mathbf{l b}$. $\$ 1.00$.

## Rhubarb or <br> Pie Plant

Linneus Giant. For market gardeners the best. Pkt. 5e; oz. 15c; 1/4 1b. 45e; 1b. \$1.40.

Strawberry. By far the sweetest, though small in size. Pkt. 5c; oz. 15c; $1 / 4$ 1b. 45c; 1b. \$1.40.

Rhubarb Roots, 2 for 25c. \$1.25 doz. Postpaid.

## Salsify or Oyster Plant

CULTURE. The oyster plant succeeds best in some light, well-enriched soil which previous to sowing the seeds should be stirred to the depth of 18 inches. Sow early in the spring in drills 15 inches apart; cover the seeds with fine soil 1 inch deep. One ounce for 60 feet of drill; 7 pounds to one acre.
Mammoth Sandwich Island. This splendid variety grows to fully double the size of the old sort; is of superior quality and delicate flavor. The Oyster Plant is one of the most nutritious and delicious vegetables and should be more generally cultivated for winter use when the supply of really good vegetables is limited. No market gardener should fail to grow it. It is a paying proposition. Pkt. 5c; oz. 25c; 1/4 1b. 75c; lit. \$2.00.

## Spinach

## One ounce will sow 50 feet of drill; 12 to 16 nounds to acre.

CULTURE. This is a very important crop in our market gardens, and is one of the most easily managed of all vegetables, requiring but little culture, and may be had fit for use the entire season. The main crop is sown in September. It is sometimes covered up in exposed places with straw or salt hay during winter, which prevents it from being cut by frost; but in sheltered fields there is no necessity for covering. For summer use it may be sown at intervals of two or three weeks from April to August. Spinach is best developed and most tender and succulent when grown in rich soil.
Long Standing. The best for spring sowing. Stands a long time before shooting to seed. Large, thick leaves, excellent for greens. Pkt. 5c; oz. 10c; $1 / 41 b$. 20c; 1b. 50c.
New Zealand. Makes a luxuriant growth all summer. In appearance entirely distinct from other spinach. Its quality is very desirable and tender. Soak the seed in warm water before planting. Pkt. 5c; oz. 10c; $1 / 4 \mathrm{lb}$. 30c; 1b. 90c.
Round Summer. This variety is generally preferred for early growing and is popular with market gardeners. Leaves thick and fleshy. Not quite as hardy as the prickly, but stands winter well. Pkt. 5c; oz. 10c; $1 / 41 b$. 25c; 1b. 60c.
Monstrous Leaved Viroflay. Quick, strong growth; much used by New York truckers. Pkt. 5c; oz. 10c; $1 / 41 \mathrm{lb}$. 20c; 1b. 50c. an acre.
CULTURE. The plants are very tender and sensitive to cold, and planting must be delayed until settled, warm weather. The general principles of culture are the same as those given for cucumbers and melons, but the plants are less particular as to soil. The summer varieties should be planted 4 feet apart each way and the winter sorts 8 feet. Three plants are sufficient for a hill. Care should be taken not to break the stems from the squashes intended for winter use, as the slightest injury will increase the liability to decay.

## Summer Varieties

Early White Bush. This is the well known White Patty-pan Squash. The earliest to mature, very productive; light cream colored. Pkt. ธe; oz. 15c; $1 / 4$ 1b. 35c; 1b. $\$ 1.00$.
Golden Summer Crook Neck. Very early and productive. Fruit about 1 foot long, with crooked neck and warty surface; color bright yellow. Pkt. 5c; oz. 15c; $1 / 4$ 1b. 35c; 1b. \$1.00.
Giant Crook Neck. This strain is a great improvement on the old variety of Crook Neck. It is larger and better in every way. Pkt. 5c; oz. 15c; $1 / 4$ 1b. 35c; 1b. $\$ 1.00$.

## Winter Varieties

Table Queen or Acorn. A deep green winter sort, just the right size to halve and bake and serve as individual helping. Pkt. 5c; $1 / 416.40 c ; 1$ 1b. $\$ 1.25$.
Warty Hubbard. Best shipper and best keeper. Shell is hard and warted. Dark olive green. Pkt. 5c; oz. 15c; $1 / 4$ 1b.. 45c; $1 / 2$ 1b. 75 c ; 1b. $\$ 1.15$.
Golden Hubbard. Somewhat smaller than the above, a trifle earlier but not so good a keeper. Pkt. 5c; oz. 15e; $1 / 4$ 1b. 45c; $1 / 2$ 1b. 75c; 1b. \$1.15.
Boston Marrow. Orange color with distinct flavor. Pkt. 5c; oz. 15c; $1 / 1$ 1b. 45c; $1 / 2$ lb. 75c; 1b. \$1.15.


Golden Bantam

## Sweet Corn

One pound will plant about 180 hills; 10 to 12 pounds to an acre, in hills.
CULTURE. Sweet Corn should not be planted very early in the season; the soil must be warm and should be a rich loam. If planted too early the seed is apt to rot. Sweet Corn will not make any progress until the weather is warm. If possible select a sheltered location for the very early kinds. A succession can be continued with the later kinds by planting at regular intervals from June to middle of August, thus insuring a continuous supply of table corn throughout the summer and fall months. Plant the small early varieties in drills $21 / 2$ feet apart and 10 inches apart in the rows. The taller varieties should be planted in drills 3 feet apart and 12 to 14 inches apart in the rows. Rich manure worked into the soil will increase the crop.

## Write for Quantity Prices.

Golden Bantam. The First Early Sweet Corn. Rich and delicious flavor. Pkt. 5c; $1 / 41 \mathrm{lb}$. 10c; $1 / 2$ 1b. 15c; 1b. 30c; 5 lbs. $\$ 1.25$.
Mayfower. One of the very earliest white Sweet Corns with regular sized cobs. Highly recommended. Pkt. 5c; 1/4 1b. 10c; 1/2 1b. $15 \mathrm{c} ; 1 \mathrm{1b} .30 \mathrm{c} ; 5 \mathrm{lbs} . \$ 1.25$.
Country Gentleman. "Shoe Peg." Grains not in rows on the cob. Very fine flavor. Pkt. 5c; $1 / 4 \mathrm{lb} .10 \mathrm{c} ; 1 / 2 \mathrm{lb}$. 15c; 1b. 30c; 5 lbs. $\$ 1.25$.
Early Evergreen. Has all the good qualities of Stowell's Evergreen and matures earlier. Pkt. 5c; $1 / 4$ lb. 10c; $1 / 2$ 1b. 15c; 1b. 25c; 5 lbs. \$1.15.
Howling Mob. Produces two splendid ears to the stalk. Early, sweet and of good size. Pkt. 5e; $1 / 41 b$. 10c; $1 / 2$ 1b. 15e; lb. 25c; 5 lbs. \$1.15.
Stowell's Evergreen. One of the very best late varieties. Planted with medium early variety, will furnish succession of corn until frost. Pkt. 5c; $1 / 41 \mathrm{lb}$. 10c; $1 / 2$ 1b. 15c; 1b. 25c; 5 lbs. $\$ 1.15$.
Extra Early Minnesota. Early and large. Stalks not very tall. Pkt. 5c; $1 / 41 \mathrm{lb}$. 10c; $1 / 2 \mathrm{lb}$. 15c; 1b. 25e; 5 lbs. $\$ 1.15$.
Peep-o-Day. Early as Golden Bantam. Ears average about 6 inches in length. Sweet and juicy. Pkt. 5c; $1 / 4$ lb. 10c; $1 / 21 b$. 15c; 1b. 25c; $51 \mathrm{lbs} . \mathbf{\$ 1 . 1 5}$.
Black Mexican. Highly favored in some sections. Ears size of G. Bantam, grains black when ripe and of a peculiarly delicious flavor. Pkt. 5c; $1 / 41 \mathrm{lb}$. 10c; $1 / 2 \mathbf{1 b}$. 15c; 1b. 25c; $51 \mathrm{lbs} . \$ 1.15$.

## Popcorn

Giant Spanish. Favorite with many. Large ears and large grains, popping quickly and very crisp. Yields more to acre than any other popcorn. Pkt. 5c; $1 / 41 \mathrm{lb}$. 10c; $1 / 2$ 1b. 15c; 1b. 25c; 5 lbs. \$1.15.
White Rice. Grains small and pointed. Some claim it to be more crisp than other kinds. Pkt. 5e; $1 / 41 \mathrm{lb}$. 10e; $1 / 2 \mathrm{lb}$. 15e; 1b. 25e; 5 lbs. \$1.15.

## Tomatoes

One ounce of seed will produce from 3,000 to 4,000 plants.
CULTURE. Sow seed in a box or hotbed early and transplant at least once to get a strong root growth. When danger of frost is over set in open ground 3 to 5 feet apart each way and cultivate thoroughly. Fruit may be had several days earlier by transplanting into small pots and then setting out the entire contents as soon as ground is warm. The varieties of Tomatoes described in this seed book comprise the very best kinds known to the trade and none are included that do not possess some merit.
Livingston's Beanty. Large, round and even. Early as any standard variety in this locality. Pkt. 10c; oz. 30c; $1 / 4$ 1b. 90c; $1 / 2$ 1b. $\$ 1.75$; 11 lb . \$2.75.
Ponderosa. The largest smooth Tomato. Slices exceptionally well and is firm and meaty. Pkt. 10c; oz. 75c; $1 / 4$ 1b. $\$ 2.00$; $1 / 2$ 1b. $\$ 3.75$; 111 . $\$ 6.75$.
Earliana. One of the earliest. Fruit is reasonably smooth and firm but not equal to Beauty. Pkt. 10c; oz. 35c; $1 / 4$ 1b. 90c; $1 / 2$ 1b. $\$ 1.75 ; 1$ ib. $\$ 2.75$.
Early June. Medium size, round and early. Pkt. 10c; oz. 50c; $1 / 4$ 1b. $\$ 1.50$; $1 / 2$ 1b. $\$ 2.25$; 1 1b. $\$ 4.00$.


Livingston's Beanty

John Baer. Very early and nearly as large as Beauty. Pkt. 10c; oz. 45c; $1 / 4$ 1b. $\$ 1.25 ; 1 / 2$ lb. $\$ 2.00 ; 1$ lb. $\$ 3.50$.
Dwarf Champion. Very sturdy grower. Potato leaf with medium sized purplish pink fruit. Pkt. 10c; oz. 40c; $1 / 4$ 1b. $\$ 1.15$; $1 / 2$ 1b. $\$ 1.75$; 1 1b. $\$ 3.00$.

## Yellow and Small-Fruited Varieties

Yellow Plum. Excellent for preserving. Pkt. 10e; oz. 50e; $1 / 4.1 b . \$ 1.30$.
Red Plum. Same as above except color. Pkt. 10c; oz. 50c; $1 / 41 \mathrm{~b} . \$ 1.30$.
Yellow Pear. For preserving only. Pkt. 10c; oz. 50c; $1 / 41 b . \$ 1.30$.
Husk or Ground Cherry. Very productive. Pkt. 10e; oz. 5ec; 1/4 1b. \$1.30.

## Turnips

One ounce will sow 150 feet of drill; 2 lbs. will sow an acre.
CULTURE. For early use, sow as soon as the ground can be worked in spring in drills 15 inches apart and thin to 8 inches apart as soon as the plants are large enough to handle. For succession, sow at intervals of a fortnight until the last week of July, from which time until the end of August sowings may


Purple Top Strap Leaf Turnip be made for main and late crops. The sowings should be made just before rain if possible, a rapid growth being important.
Early White Egg. General favorite. Flesh is white, firm and mild without the pungent taste. Pkt. 5c; oz. 10c; $1 / 41 \mathrm{lb} .30 \mathrm{c} ; 1 / 2 \mathrm{lb}$. 50c; lb. 90c.
Purple Top Strap Leaf. Best flat type for fall planting. Excellent for stock or table. Pkt. 5c; oz. 10c; $1 / 41 b$. 30c; $1 / 2$ 1b. 50c; 1b. 90c.

Early White Flat Dutch. Good quality. Pkt. 5c; oz. 10c; $1 / 41 \mathrm{lb}$. 30c; $1 / 2$ 1b. 50c; 1b. 90c.
Purple Top Globe. Larger than White Egg. Pkt. 5e; oz. 10c; $1 / 4$ lb. 30c; $1 / 2$ lb. 50c; 1b. 90c.
Yellow Aberdeen. Especially good for feeding. Fkt. 5c; oz. 10c; $1 / 41 \mathrm{lb}$. 30c; $1 / 2$ 1b. 50c; 1b. 90c.

## Rutabagas

Improved Purple Top. Perfect keeper, large, solid and sweet. An old time favorite never improved upon. Pkt. 5c; oz. 10c; $1 / 4$ lb. 35e; $1 / 2$ 1b. 60c; 1b. \$1.00.

## Water Cress

Quite distinct from Garden Cress, and thrives only when its roots and stems are submerged in water. It is one of the most delicious of small salads and should be planted whenever a suitable place can be found. Pkt. 5c; oz. 45c.

# Seeds for Your Flower Garden 

WE PAY POSTAGE ON FLOWER SEEDS
Every seed order should include a generous list of FLOWER SEEDS, ROOTS and BULBS. Time spent in your Flower beds is well spent. If you have a natural love of flowers, encourage it. If you have no such impulse, develop it. Flowers are God's message to u's of love and good cheer. They will erase the lines of care from your face and arrest the march of gray in your hair.
Ageratum. Light blue, low and compact. Make excellent borders. Pkt. 10c.
Alyssum. Little Gem. White, low and compact. Early and fragrant. Pkt. 10c.
Alyssum. Tall. 10 to 12 inches, otherwise same as Little Gem. Pkt. 10c.
Amaranthis. Caudatus. Blood red drooping flowers. Pkt. 10c.
Amaranthus. Curentus. (Prince's Feather.) Red, feathery flowers. Pkt. 10c.
Antirrhinum, or Snapdragon. Can be furnished in rose, red, yellow, white, orange and mixed. Large, fragrant flowers of great beauty. Pkt. 10c.
Ampelopsis. Veitchi. (Boston Ivy.) Hardy perennial climber. Pkt. 10c.
Asters. See Inside Front Cover.
Baby's Breath. (See Gypsophila.)
Begonia. Dense bushes about 1 ft . high completely covered with flowers. Single mixed. Pkt. 15c.
Begonia. Double mixed. Pkt. 15c.
Balsam. (Lady's Slipper.) Mixed. Pkt. 10c.
Bachelor Button. Single and double mixed. Pkt. $10 c$.
Beans, Scarlet Runner. Climber. Pkt. 5e; $1 / 2$ 1b. $25 c$.
Burning Bush. Turns scarlet in autumn. Pkt. 10c.
Calliopsis. Shades of red and yellow. Pkt. 10c.
Calendula (Pot Marigold). One of the most satisfactory for massed effects. Blooms abundantly. Pkt. 10c; $1 / 4$ oz. 20c.
Canna. (See also Summer Flowering Bulbs.) Mixed. Pkt. 10c.
California Poppy. (See Eschscholtzia.)
Canterbury Bells. Profusion of bell-shaped flowers. Pkt. 10c.
Canary Bird Vine. Rapid climber. Pkt. 10c.
Candytuft. One of the best for borders. Pkt. 10c; oz. 20c.
Carnations. (Centaurea Marguerite.) Pkt. loc; $1 / 4$ oz. 40c.
Centaurea Imperialis. (Sweet Sultan.) Pkt. 10c; 1/2 oz. 40c.
Centaurea. (Dusty Miller.) White-leaved foliage. Pkt. 10c.
Castor Beans. Beautiful foliage plant, 10 to 12 ft . high, leaves often 3 to 4 ft across. Pkt. ธe; oz. 10c.
Chrysanthemums. Excellent for cut flowers. Fkt. 10c; 1/4 oz. 15c.
Cobaea Scandens. Called "Foot a Day." Most rapid climber, having bell-shaped flowers of purplish lilac color. Pkt. $10 c$.
Colens. A marvel of beauty for house or garden culture. Pkt. 15c.


Calendula (Pot Marigold)

Cockscomb. One of the most brilliant and showy summer flowers. Colors range from bright red to orange and yellow. Mixed. Pkt. 10c.
Columbine. State flower of Colorado. Rocky Mountain. Pkt. 10c.
Columbine. (Aquilegia.) Mixed. Pkt. 10c.
Clarkia. Profuse and continuous bloomer. Pkt. 10c.
Cosmos. One of the most popular autumn flowering plants. The new giant early flowering kinds can be furnished in white, pink, yellow, crimson and mixed. Pkt. 10c; $1 / 2$ oz. 15c.
Cypress Vine. Scarlet and white starshaped blossoms. Will climb on trellis 10 to 12 ft . Pkt. 10c.
Dahlia. (See also Summer Flowering Bulbs.) Single or double. Pkt. 10c.
Daisies. Double mixed. Pkt. 10c.
Everlastings or Strawfowers. Excellent for winter decorations. Mixed. Pkt. 10c.


Gourds Feverfew. Free flowering either indoors or out. Pkt. 10c.
Forget-Me-Not. Good for shady spots. Pkt. 10c.
Foxglove. Hardy. Spikes 3 to 5 feet. Pkt. 10c.
Eschscholtzia. (California Poppy.) Very free flowering. Pkt. 10e; oz. 15c.
Four o'Clock. Handsome old-fashioned flower. Pkt. 10c; oz. 15c. Gaillardia. Profuse, continuous bloomer. Pkt. 10c.
Geraniums. Single and double mixed. Pkt. 10c.
Godetia. Very attractive. Pkt. 10c.
Globe Amaranth. Immortels or Everlasting. Pkt. 10c.
Gourds. Dipper, Disheloth, Nest Egg, Calabash and Mixed. Pkt. 10c.
Gypsophila. (Baby's Breath.) Annual. Pkt. 10c.
Gypsophila. Perennial. Pkt. 10c. Roots 2Je each. Heliotrope. Choice mixed. Fragrant. IKt. 10c. Hibiscus. Large flowers of great beauty. ingt. 10c. Hollyhock. Good for background. Double, red, white, pink, maroon, yellow, black or mixed. Pkt. 10c.
Hollyhock Roots. Separate colors or mixed. $\$ 1.50$ dozen, postpaid. Hyacinth Bean. Rapid growing climber. Pkt. 10c; oz. 35e. Japanese Hop. (Japonica.) A very ornamental climber. Pkt. 10e.

Job's Tears. Broad, corn-like leaves. Pkt. 10c.
Lantana. Verbena-like heads of orange, rose, white, etc. Pkt. 10c.
Larkspur. Annual. Mixed. Pkt. 10c.
Larkspur. Perennial. Mixed. Pkt. 10c.
Larkspur. Perennial roots. $\$ 2.00$ dozen Postpaid.
Linum. (Scarlet Flax.) Very brilliant bedding plant. Pkt. 10c.
Lobelia. Dwarf. Deepest blue. Pkt. 10c.
Lobelia. Trailing. Light blue. Pkt. 10c.
Marigold. French mixed. Pkt. 10c.
Marigold. African. Mixed. Pkt. 10c.
Mesembryanthemum. (Ice Plant.) Fine for hanging baskets. Trailing plants with small, double red flowers and icy foliage. Pkt. 10c.
Mignonette. Fragrant. Pkt. 10c; oz. 40c.
Mimulus. (Musk Plant.) Pkt. 10c.
Moon Flower. One of the most beautiful climbers. Blooms from mid-afternoon to daybreak. White or blue. Pkt. 10c.
Nasturtium. Dwarf. Yellow, bronze, orange, maroon, pink and mixed. Pkt. 10c; oz. 15c: $1 / 4$ 1b. 45c.
Nasturtium. Tall. Colors same as above. Pkt. 10c; oz. 15c; $1 / 4 \mathrm{lb} .45 \mathrm{c}$.
Nicotiana. Early and of great beauty. Pkt. 10c.
Nigella. (Love-in-a-mist.) Free flowering, white. Pkt. 10c.
Pansies. We carry only the Giant Trimardeau. Blossoms will often reach a diameter of 4 inches. Must have rich soil to produce large flowers. Our plants are grown in beds of half manure and half soil. White, black, yellow, blue, purple, bronze and mixed. Pkt. 10c; $1 / 8$ on. 50 .
Pansy Plants. Packed for express, 50c doz. Postpaid, 60c doz.
Petunia. Single mixed. Pkt. 10c.
Petunia. Giants of California. Pkt. 10c.
Petunia. Striped and blotched. Pkt. 10c.


Giant Pansies
Snapdragon. (See Antirrhinum.)
Stocks. Best mixed. pkt. 10c.
Sunflower. Giant Russian. Raise some fer your chickens. Pkt. 10c; $1 / 4$ lb. 15c; 1 ib. 25c.
Sunfower. Chrysanthemum-flowered. Very double. Grows lower than the Giant and is thoroughly desirable. pkt. 10c.
Scabiosa. (Mourning Bride.) Justly popular. Pkt. 10c.
Sweet Peas. See Back Cover.
Sweet Sultan. Sweet scented and fine for cut flowers. Pkt. 10c.
Sweet William. Hardy but blossoms first year from seed. Pkt. 10c.
Thunbergia. (Black-Eyed Susan.) Good for hanging baskets or low climber. Pkt. 10c.
Verbenas. One of the best bedding flowers. Covers lots of ground and comes in great variety of colors. We can supply young plants at $\$ 1.00$ dozen; Pkt. 10c.
Zinnias. See Front Cover.

## Hardy Perennial Plants

## THOSE MARKED * ARE SUITABLE FOR ROCK GARDENS

## Fach 20c, Doz. $\$ 2.00$ unless otherwise noted. We Pay Postage on All Perennials.

*Achillea (Yarrow or Milfoil). Desirable garden subjects for any soil. Good for cut flowers. Finely cut foliage, frequently silvery. Millefolium roseum. $11 / 2$ feet, summer, rosy pink.
Anchusa (Summer Forget-Me-Not). Fine, tall blue flowers for massing. Moisture lover.
*Aquilegia Coernlea. True Rocky Mountain Columbine. Large roots. こちc each.
(Hardy Aster) Michaelmas Daisy. A fine perennial for tall borders or mass effects, very hardy and blooms well in almost any location. Named varieties in white, cream, pink, light blue, lavender and purple.
Bellis (English Daisy). Very popular, low growing, six to eight inches. Blooms very double and full, something like a small Aster. Basket of 6 to 8 plants, 40c.
Bleeding Heart. Scare for three or four years, but we have a fair supply. 75e each.
Buddleya (Summer Lilac). A half hardy shrub freezing down to the root in the fall like the Shasta Daisy. Very attractive lavender colored blooms, fine for cutting. 35c each.
Campanula (Bell Flower). These come in great variety in height from 18 to 48 inches and colors from white through the shades of blue to deep violet. This family also includes the well known Canterbury Bell. 25e each; $\$ 2.50$ per doz.


Aquilegia Coerulea


## Delphininm

Centaurea (Hardy Corn Flower). A graceful and attractive plant. Height two to three feet. Valuable for cuts, as it has a good stem. Colors: White, yellow, red and rosy purple.
Chrysanthemum. Handsome and vigorous. Height about twenty-four inches. Fine for borders. We carry named varieties in many shades and colors.
Coreopsis. Good for cut flowers and continues in bloom through the entire season.
Delphinium. Larkspur. Very ornamental, flowers in large heads.
Dianthus (Pinks). Another large and valuable group. Some for borders, others suitable for rock gardens. All members of this family are hardy and will thrive in either heavy or sandy soils. Colors: White, light or deep pink, red and mauve. They are all-season bloomers.
Digitalis. Foxglove. An old-time favorite.
Gaillardia. Begins to flower in June.
"Geranium (Cranesbill). Easily grown plants giving masses of small, showy flowers and good foliage. Most of them have a magenta tinge. s5e each; \$2.50 per dozen.
*Geum. A good border subject, attractive foliage, bright scarlet flower. ص๖¢ each; $\$ 2.50$ per doz.
Goldenrod. Needs no description. Strong roots.
Golden Glow. Strong roots.
Gypsophila. Baby's Breath. Medium sized roots.

Helianthus (Hardy Sunflower). One of the most valuable tall borders. It is a hardy, vigorous grower with good foliage, flowers in this country in August and September. Color: Golden yellow.
Hemerocallis. Lemon Lily. Very satisfactory and pretty. Flowers are bell shaped of clear lemon yellow.
Hibiscus (Crimson Eye). Immense white flower with crimson eye. 25e each.
Hollyhocks. Double only. Can furnish in separate colors as follows: Buff, white, yellow, maroon, red, pink, blush, black.
Iberis (Hardy Candytuft). Grows low with beautiful foliage, fine for rock work or low borders.
*Iris. Germanica. Excellent for borders. Can supply in colors as follows: Blue, cream, purple, bronze, lavender, orange, yellow, pink.
Iris Dalmatica. The finest of all Iris. Grows to four feet, producing massive flowers of rich lavender. Very fragrant.
Lathyrus Latifolius (Everlasting Pea). A desirable, hardy climber, much like the annual sweet pea. 6 feet, July, white, pink, red.
*Linum (Flax). A desirable border plant having light, graceful foliage and bearing flowers all summer.
*alpinum. 1 to $11 / 2$ feet, June to July, blue.
*arboreum. 1 foot, May, yellow.
Lupinus. Somewhat resembles the larkspur but has a greater variety of colors and is fragrant. We have it in white, yellow and lavender blue. 25c each; $\$ 2.50$ per doz.
Oriental Poppy. The largest poppy, often nine or ten inches across when open. Color is a rich, fiery red. Perfectly hardy
Pentstemon. A rather low border that is hard to beat, the blooms rise above a beautiful mat of variegated foliage.
Hardy Phlox Special Collection. Crimson, white, white with red eye, pink, lavender, orange, purple.


## Lupinus



Hardy Phlox
Platycodon (Chinese Bell Flower). Attractive border plant with peculiar shaped blue flower. Blooms in July and likes lots of sun. 25e each; $\$ 2.50$ per doz.
Pyrethrum (Persian Daisy). A fine perennial, greatly improved of late. Prefers a rather open location, grows two to four feet, flowers are of Daisy type in a good variety of colors.
*Ranunculus (Buttercups). Deep green foliage, small, bright yellow flowers in clusters. A good border plant. No particular soil needed.
Salvia (Meadow Sage). A group of plants giving exceptionally fine spikes of small, graceful blue flowers. Do well anywhere in the border.
Scabiosa (Blue Bonnet). Good border plants. Fine blue flowers on long stems, good for cutting. Any well drained soil and a sunny place needed.
Shasta Daisy (Alaska). Immense white flowers with yellow center.
Statice (Lavender Baby's Breath). Produces a profusion of tiny lavender colored blooms in clusters or sprays useful for blending with other flowers. Can be cut when in full bloom and dried for winter use.
Sweet William. Flowers in clusters like phlox.
Tritoma (Red Hot Poker). One of the most attractive perennials. If you want a bed of flaming color that will last through the summer this is the one to use. A little more expensive to start than annuals but cheaper in the long run. Colors: White, yellow and orange red. 25e each.
Veronica (Speedwell). Some of the best garden subjects are found here. A fine range of blue spikes with attractive grayish foliage. Will do finely in any good rich soil in full sun.

Peonies
We quote on good, strong roots that are sure to bloom.
Free cultural leaflet on request.
Canari (Guerin 1861). Late. Globular bomb type. White guard petals tinted pale pink with center amber-white. Full, rounded flower of good substance. 50c each, postpaid.
Couronne d'Or (Calot 1873). Semi-rose type; late. Immense, very full, imbricated, flat flowers. Solid and compactly built; pure white with a ring of yellow stamens around a tuft of center petals tipped carmine. The whole flower glows with a delightful golden light, gaining the title of "Crown of Gold." Medium tall, robust grower, and very free bloomer. soc each, postpaid.
Germaine Bigot (Dessert 1902). Crown type. Very large, compact flower composed of broad petals. Color lilac rose, center prominently flecked crimson. Strong, erect grower with medium tall stems. Very free blooming. Mid-season. 75 e each, postpaid.
Gloire de Touraine (Dessert 1908). Semi-rose type flower with no stamens showing. Very full, compact, brilliant, velvety crimson blooms are produced very late in the season. Plant grows tall and upright with strong, erect stems. $\$ 1.25$ each, postpaid.
Grandiflora (Syn. Henry Woodward) (Richardson 1883). Rose type. Very large, flat bloom of bright sea-shell pink overlaid with salmon pink. Unusually fragrant; it blooms in clusters. Strong, tall, erect grower. It is very valuable on account of its color and size among the late Peonies. Its beauty, time of blooming and great reliability should commend it to everyone. $\$ 1.50$ each, postpaid.
James Kelway (Kelway 1900). Semi-rose type. Very double and full flowers, borne in clusters. Rose white, changing to milk white, tinged yellow at the base of the petals. Strong, tall grower and very free bloomer. Very fragrant; splendid lasting quality. Early mid-season. \$1.25 each, postpaid.
Marquis C. Lagergren (Dessert 1911). Semi-rose type; mid-season. Large, bright, vel-vety-crimson with a distinct silvery border. One of the finest reds ever produced; especially good for mass planting. \$1.00 each, postpaid.
Pomponette (Dessert 1909). Anemone type, mid-season. Velvety-pink, shaded purple with brilliant reflex and silver tipped border. Dwarf, erect growth. Very full flowers of good form. 75 e each, postpaid.
Sarah Bernhardt (Lemoine 1906). Semi-rose type; late mid-season. Very large flower of perfect form, full and double with twisted, imbricated petals. Color apple blossom pink, with each petal silver tipped. Strong grower, free bloomer and very fragrant. One of the finest and most dependable Peonies ever produced, attracting attention in every garden. \$1.50 each, postpaid.
Felix Crouse. Brilliant dark red. One of the best. 75 cents each, postpaid.
Duke of Wellington. Ivory white with creamy center. 50c each, postpaid.
Festiva Maxima. One of the very best peonies grown. Pure white flaked with red. 50c each, postpaid.
Rosea Superba. Large rosy-pink, free bloomer. 50c each, postpaid.
Unnamed Varieties In pink, red and white, 35c each or one of each for $\$ 1.00$, postpaid. Some Better Irises


18

The Iris is at last catching the popular fancy and nearly every home boasts a few of the better sorts. The oldfashioned Flag is a thing of the past and should be thrown out for the new, much improved varieties.

The following varieties, selected for their unusual beauty, are each 20c, dozen for $\$ 2.00$. All postpaid.

The letter $S$. in the descriptions given below indicates the Standard, or upright petals; the letter F. indicates the Falls, or lower petals.
Azure (Bliss 1918). S. lavender blue. F. rich violet blue. A pure, deep and intense color.
Camelot (Bliss 1918). Creamy white, edged pale violet. Very free bloomer. 4 feet.
Her Majesty (Perry 1903). S. rose pink. F. bright crimson, shaded darker. 22 inches.
Juniata (Farr 1909). S. and F. beautiful, clear, deep blue. One of the tallest bearded Irises known. Large, fragrant flowers. 36 inches.
Knysna (Bliss 1917). S. clear, deep yellow. F. a deep, velvety red-brown. Finest yellow in cultivation. 33 inches.
Lohengrin (Goos \& Koenemann 1910). Uniform lilac rose. 30 inches.
Monsignor (Vilmorin 1907). S. pale violet. F. heavily overlaid with dusky violet. 2 feet.
Parc. de Neuilly (Verdier 1910). Rich plum purple. S. arching and ruffled. F. drooping. 30 inches.
Quaker Lady (Farr 1909). S. cupped, smoky lavender with yellow shadings. F. drooping ageratum blue and old gold. Unusual and attractive. 32 inches.
Rhein Nixe (Goos \& Koenemann 1910). S. white. F. violet blue with white edge. Tall and large. Robust grower. 3 feet.
Troost (Denis 1908). S. deep, rosy purple. F. veined violet changing to brown. Unique and beautiful. 2 feet.
Violacea Grandifiora (Wild 1860). A large, violet-blue self of smooth, glossy texture. Vigorous. 3 feet.

## Summer Flowering Bulbs <br> \author{ These Prices Are Prepaid 

}Every yard or garden should have a bed or two of these bulbs. We list only proven items that you can count on to produce satisfactory plants and blooms.


A generous planting of Cammas is very effective

## CALADIUMS OR ELEPHANTS EARS

Medium sized bulbs, 20c each, 3 for 50e. Giant bulbs 35c each, 3 for \$1.00. To make the best growth they must have plenty of water. In planting make a circular trench about the plants to hold water. We have seen plants with leaves $21 / 2$ feet wide.

## CALLA LILIES

Yellow. 35e to 50c, according to size. Order early, as supply is gone after April 1st.
White callas are available only in the fall.


Lily-of-the-Valley

## CHOICE HARDY LILIES

Auratum. "Gold Banded Lily of Japan." Our customers have repeatedly written us praising our stock of these Japanese Lilies. They are perfectly hardy and will increase in number from year to year.
Rubrum. "Crimson Lily of Japan."
Albun. "White Lily of Japan."
Melpomene. "Pink Lily of Japan." Set of four bulbs $\$ 1.50$, or 40 e singly.
Tiger Lilies. Immense clusters of orange-red flowers. Hardy and easily grown. 15e each; 2 for 25e; $\$ 1.50$ dozen.

## CANNAS

One of the most satisfactory summer flowering bulbs. A bed 7 feet in diameter requires 19 bulbs. A 10 ft . bed requires 36 bulbs. We mention only the most popular varieties but carry others. Prices, single bulb 15e; $\$ 1.25$ dozen.
King Humbert. Large scarlet with bronze leaf. 4 to 5 feet.
Yellow Humbert. Bright, clear yellow flowers. Green leaf. 4 to 5 feet.
Apricot. Buff yellow base, overspread with salmon pink. 4 feet.
${ }^{p}$ resident. Glowing scarlet; often 7 inches in diameter. 4 feet.
Hungaria. The best pink. $31 / 2$ feet.
Wintzers Colossal. One of the largest. Vivid scarlet. 5 feet.
Mixed Cannas, for borders and beds. Good assortment. Dozen $\$ 1.00$.

## LILY-OF-THE-VALLEY

A shady corner is the place for these beauties. The flower is justly famed and will grow in almost any soil, though doing best in a sandy loam. Dozen 75 E ; 100 for \$5.00.

## TUBEROSES

One of the most delightfully fragrant and beautiful of the late flowering bulbs. Can be taken up and potted for indoor culture in the fall. 3 for 25c; \$1.00 dozen.

## GLADIOLUS

Your attention is called to the splendid listing of Giadiolus on the Fourth Cover Page. Our 50c Special Collection is an unusual value.

## Extra Fine Dahlias

## PRICES POSTPAD

Dahlias are easily grown and so exceptionally satisfactory that every garden should have a good variety. Some of the newer varieties are truly enormous in size and striking in color and form. We list only those that are well worth while. If you are a Dahlia Fancier bring in your list and tet us quote you on some of the more rare kinds.

## Standard Decorative Dahlias

Each, 玉כ̄e; Dozen \$*.40.

Berch Von Heemstede. An extra fine, clear, rich yellow.
Delice. A glowing rose-pink that is sure to please. The stems are long and stiff.
Eugene Teele. A deep scarlet with long stems.
Mrs. Thos. Bureh. Rich old gold, sometimes marked with pink.
Souvenir Douzon. An immense flower with flat petals, full to the center. The largest red in the decorative section.
Flamingo. An ideal variety for cutting. Bright shell pink.

## Show and Fancy Dahlias

25e Each; \$2.40 Dozen.

Arabella. Pale lemon, shading to primrose at the tips.
Bertha Bernstein. Dark lavender with beautifully quilled petals.
Dr. I. B. Perkins. An ideal white. Its large, pure white flowers are borne on long stems.
D. M. Moore. A deep, velvety maroon of mammoth size.
Stradella. A large, full, well rounded purple.
Victory. Of immense size and perfect form, deep yellow, each petal tipped with cherry red.

## Superb Cactus Dahlias

Each, 25c; Dozen \$2.40.
Charles Clayton. A vivid red with long stems.
Countess of Lonsdale. The freest flowering Dahlia grown, rich salmon.
Dainty. Rosy pink, shading to pale lemon.
Genesta. Rich bronze with orange cast.
Lavender Beanty. A clear, soft lavender.
Marion Thompson. Pure lemon yellow, large flowers with long, stiff stems.
Rheinkonig. The best white Cactus Dahlia, free flowering and vigorous.
Uncle Tom. A dark, deep maroon, with good stem.


Cactus Dahlia

## Peony-Flowered Dahlias

## Each. 50c; Dozen, \$4.50.

Arvada, a free blooming old rose shading to fawn pink.
Chancellor, large petals twisted and curved in a most fantastic form; coppery bronze.
Francis Daniels, a lovely light pink with long stems. Has excellent keeping qualities.
Happy Dream, stems long and wiry, holding the bloom to full view. Bright pink shading to lavender.
La Grande Lilas, a superb new variety of immense size. Stems are often two feet long. Rich amaranth red.
Mme. Bystein, a pure lilac lavender of exceptional size.
Sweetheart's Bouquet, a perfect Peony-Flowered Dahlia, salmon rose shaded with fawn.
The Screamer, the flowers are large and borne on long, firm stems. Dark red shaded to violet purple.

# Special Merit Dahlias <br> <br> POSTPAID PRICES 

 <br> <br> POSTPAID PRICES}

Figures following type indicate height


Peony-Flowered Dahlia
For Dahlias noted for Beauty, Form and Color, select from this list.

Amun Ra. (Decorative 4.) Originated and introduced by Jessie Seal. This fact in itself is the highest guarantee. A mammoth decorative Dahlia borne on stout stems of good length. The flowers are gorgeous. In color a combination of copper, orange and golden bronze. Highly recommended. 50 e each.
Butterfly. (Decorative 3.) A pretty shading of creamy pink. This one is particularly recommended for cut flowers. $\$ 1.00$ each.
Clarissa Blanco. (Decorative 3.) Deep wine color, often variegated with white. A beautiful flower and very early. 50c each.
Chipeta. (Cactus 4.) A mammoth flower borne on very long stems. A most pleasing amaranth red. 50c each.
Emperor. (Decorative 4.) Beautiful deep maroon of the finest type. The petals are long and flat and bloom is of unusual size. 50e each.
Ethel T. Smith. (Hybrid Cactus 6.) A giant creamy white with a slight lemon tint. A monster in size. soc each.
Gladys Sherwood. (Hybrid Cactus 4.) A pure white that can be grown to a diameter of 10 inches. $\$ 1.00$ each.
J. W. Davies. (Decorative 3.) The flowers are of great size, of good depth and fine form. Color a deep, bright rose. \$1.00 each.

Millionaire. (Decorative 3.) An immense Dahlia and among the most popular of all the extra large Dahlias. Color a clear. rich orchid, shading to almost white in the center. 50c each.
Mrs. Carl Salbach. (Decorative 5.) Extra large and of beautiful form and always full to the center. Color, soft lavender. One of the best recent introductions. 50c each.
Nobilis. (Decorative 4.) A combination of red and white with white predominating. $\$ 1.00$ each.
Oregon. (Cactus 5.) An American Beauty red, with long stems and large flowers. 50 c each.
Pierrot. (Cactus 4.) A striking novelty in color, form and size. Color, amber with white tips. 50c each.
Radio. (Decorative 4.) Without a doubt one of the greatest Dahlias ever originated. Can be grown 11 to 12 inches in diameter. Color, blood red, edged and tipped with yellow. \$1.50 each.
Rollo Boy. (Cactus 4.) An enormous amber and yellow cactus. One of the best new varieties. \$1.50 each.
William G. (Decorative 3.) A mammoth flower of shaggy form borne on stems long and strong enough to hold the flowers erect. Color, light or scarlet red and truly enormous. \$\$.00 each.

## Field Grown Dormant Roses

Stock ready for planting in March and April. For plantings after May lst we recommend our Choice Hardy Pot Grown Rose Bushes.

[^2]
## PRICES QUOTED DO NOT INCLUDE POSTAGE When sent by mail add 10 cents each, or $\$ 1.00$ dozen

## Hybrid Tea Roses

Average height $11 / 2$ feet, bloom all summer and fall.
Columbia, Bright Pink, good for cutting. Each 80c.
Double White Killarney, Snow White. Each 30 c .
Etoile de France, Double Crimson. Each 80c.
Pink Killarney, Brilliant Pink. Each 80c.
Madam Butterfly, Pale Pink and Gold. Each 80 .
Ophelia, Pearly Pink and Cream. Each Soc.
Pink Radiance, Bright pink, extra good. Each 80c.
Red Kadiance, Light Crimson. Each 80c.
Sunburst, Yellow with orange tint. Each 90c.


Crimson Rambler


## Red Radiance

## Hybrid Perpetual Roses <br> \section*{Average height 4 feet}

American Beauty, Dark Rose Pink. Each 80 c .
Frau Karl Drusehki, Snow White Each 80c.
General Jacqueminot, Bright Crimson Each $80 c$.
George Arends, Large Light Pink. Each $80 c$.
Paul Neyron, Rich Old Rose Pink. Each 80c.

## Climbing Roses

Climbing American Beauty, Crimson. Each $80 c$.
Crimson Rambler, Vivid Red in clusters. Each 75 C .
Dorothy Perkins, Shell Pink in clusters. Each 75c.
Excelsa, Bright Crimson in clusters. Each 75e.
Yellow Rambler, Bright Yellow clusters. Each 75 c.
Pauls Scarlet Climber, Bright Scarlet. Each $75 c$.

# Choice Hardy ( ${ }^{\text {Prot }}$ ) Rose Bushes 

## Outdoor Planting for Immediate Effect <br> Ready for Shipping April 15th

These roses are all grown on their own roots, assuring you that they will never "run wild." Most field grown bushes are grafted on wild rose roots and unless properly handled will turn to wild rose bushes in two or three years. This explains why some of the best roses you have bought have ceased blooming just as the bushes made a good growth.

Rose bushes do best in a heavy clay soil and for that reason we recommend the use of bone dust fertilizer applied as a top dressing several times during the growing and blooming season, rather than the use of barnyard fertilizer that is worked into the soil and which tends to lighten the soil.

Pot grown roses develop better root systems than do field grown bushes and there should be absolutely no loss of plants when planting these bushes. The soil must never be allowed to get dry, however, for the first two or three weeks.

We list only a few of the most popular monthly blooming varieties, but can furnish any satisfactory rose at the same price.
Prices-65 cents each, $\$ 6.50$ dozen, 100 for $\$ 50.00$. Shipped express collect or by parcel post. Postage 10 cents each, or $\$ 1.00$ dozen.

## Bush Roses

## White

Angelus. A big, yellowish-white.
Double White Killarney. Long budded and fragrant.
Edel. White shaded old ivory.
Kaiserin. Very fragrant and free bloomer.
White Ophelia. Pinkish center, long budded.

## Yellow

Golden Ophelia. Good, clear yellow.
Irish Fireflame. Flame colored bud, opening pinkish.
Lady Hillingdon. Clear, light yellow.
Mme. Butterfiy. One of the very best yellows.
Mrs. A. R. Waddell. Good bloomer, justly popular.
Roselandia. A new, rich yellow.

## Light Pink

Columbia. Big flowers of brilliant hue.
Cynthia Ford. Free bloomer and sturdy.
Pink Killarney. True pink and free bloomer.
La France. The best pink in the list.
Mme. C. Testout. The rose that made Portland famous.
Mrs. Chas. Bell. Shell pink.
Radiance. Free bloomer and sturdy.
Rosy Dawn. Form similar to Ophelia.

## Dark Pink

Commonwealth. Deep pink, very fragrant.
Dunlop. Deep pink with pointed bud.
Jonkherr Mock. The largest deep pink grown.
My Mariland. Free bloomer and sturdy.
Premier. Big and fragrant.

## Red

American Beanty. The most satisfactory rose ever grown, blooms freely and is hardy in any climate.
Crusader. Very double, with long stem.
Francis Scott Key. One of the largest reds.
Hadley. Good grower, fragrant and sturdy.
Legion. A medium sized rose with good growing. habits.
Mrs. Henry Sewall. Cherry red, pointed bud.
Red Columbia. Brilliant scarlet.
Red Radiance. One of the best.
Senator. A new dark red.
Templar. Similar to Ophelia.


## White Climbers

Mary Lovett. Large double flowers, glossy foliage.
White Perkins. The most rapid grower.

## Yellow Climbers

Electra. Blooms over a long period. Gardenia. Very free bloomer.
Light Pink Climbers
Alida Lovett. Large pink.
Dorothy Perkins. Rapid grower but flowers fade.
Pink Rambler. Similar to Crimson Rambler.
Tausendschoen. Shell pink, a beauty.
Dark Pink Climbers
American Pillar. Dark pink with white center.
Heart of Gold. Better than Hiawatha, larger and more vigorous.

## Red Climbers

Climbing American Bearuty. Best red rambler known.
Excelsa. Improvement over the old Red Rambler.
Paul's Scarlet. Large blooms, very popular.

## Hardy Flowering Shrubs

Almond. Pink flowering. The first shrub to flower in the spring. The whole bush is covered with beautiful double pink flowers before the leaves appear. Ea. \$1.00. Postpaid \$1.10.
Barberry. New red leaved. The foliage is a rich, bronzy red, changing to vivid orange, scarlet and red in the fall. Each 80c. Postpaid 90c.
Barberry. Common. Each 50c. Postpaid 60c.
Butterfly Bush. Beginning to bloom in July, it continues throughout the summer, until cut by frost. Very attractive lavender colored blooms, fine for cutting. Each 50c. Postpaid 60c.
Bridal Wreath. Spiraea van Houttii. The most beautiful of all Spiraes, blooming in early spring. Resembles a mass of snow. Each 60c. Postpaid 70c.
Dogwood. Coral and yellow. We can supply both. Coral Dogwood has bright red limbs and branches, and the Yellow Dogwood has yellow branches. These two Dogwoods make a beautiful contrast when planted together. Ea. 50c. Ppd. 65c.

Hibiscus (Rose Mallow). Crimson eye, enormous flowers of red, pink and white with crimson eye in center. Each 60c. Postpaid 70c.
Honeysuckle. Pink tartarian. Bright pink flowers in profusion. Ea. 65c. Postpaid75e.


Bridal Wreath


Snowball
Honeysuckle. Japanese bush. A spreading. variety with creamy white flowers. Each 65c. Postpaid 75c.
Hydrangea. Paniculata grandiflora. A most beautiful shrub with immense clusters of white flowers shading to pink. Each 75c. Postpaid 85c.
Lilac. White. An old favorite that deserves space in every yard. Each 75c. Postpaid 85c.
Lilac. Persian purple. More dwarf than the white, and less liable to lose blooms through early frosts. Beautiful shade of purple. Each \$1.00. Postpaid \$1.10.
Mock Orange. Early flowering, tall shrub that is justly popular. Ea. 75c. Ppd. 85c.
Quince. Japanese. The shrub is simply covered with dazzling scarlet flowers through the early spring, followed by quince shaped fruits which are fragrant. Each 75c. Postpaid 85c.
Snowball. Covered with white balls of flowers through the early spring. Each 60c. Postpaid \%5c.
Snowberry. White. Blooms during June and July with rose colored flowers, followed by clusters of milk-white fruits that remain through the winter. Each, 60c. Postpaid 70c.
Snowberry. Red. Similar to the white, except that the fruits are red. Becoming very popular as it is better known. Each 60c. Postpaid 70c.
Tamarix. Fine, feathery foliage with soft. pink flowers in July and August. Rather tall. $3-4 \mathrm{ft}$. size, 60c each. Postpaid 70c.
Hedge Plants. Amoor River Privet. Our stock is northern grown, therefore very hardy. 24 plants will make a 10 -foot row planted in a zigzag double row. Can be set in single row 10 to 12 inches apart, but planted in this way will make a thinner hedge. 12-18 inch, \$1.75 doz; 25 for $\$ 3.50$; 100 for $\$ 12.00$. Add 10 per cent for postage, or may be sent express collect.

## Hardy Climbing Vines

Cinnamon Vine. Very satisfactory for low walls or fences. Foliage is not dense, but is lacey in effect, with glossy, dark green leaves. Good sized tubers. 15c each; $\$ 1.50$ doz., postpaid.
Clematis Jackmanii. The most beautiful of all climbers. Large, star shaped purple flowers in clusters. This variety is difficult to grow from a dormant root, hence we furnish potted plants already well started. \$1.50 each, postpaid. Dormant plants if desired, $\$ 1.00$ each, postpaid.
Clematis Paniculata. The white Clematis. The flowers are pure white and borne in immense sheets covering the whole vine. Each 50c, postpaid.
Dutchman's Pipe. A vigorous grower with large, broad leaves and brownish colored flowers shaped like a pipe. Each $\$ 1.25$, postpaid.
Honeysuckle. Scarlet Trumpet. Very strong, rapid grower with red, trumpet-shaped flowers. One of the first vines to show green in the spring. Strong roots. 50c each, postpaid.
Hop Vine. The hop is such a rapid grower that it is always in demand for a quick fence coverer. The fruits are borne in profusion. Large roots. 20e each; $\$ 2.00$ doz., postpaid.
Ivy. Ampelopsis Engelmanni. A rapid growing vine that clings tightly to brick or stucco walls. Young plants should be fastened to wall by means of cloth strips, until the suckers form. Each 50c, postpaid.


Clematis Paniculata

Kudzu Vine. A Chinese introduction that has become justly popular. While slow to start, after three or four weeks begins to grow amazingly fast. In good soil and sunny location will sometimes reach a height of 60 to 70 feet in a season. Very effective when planted against tree trunks. Each 50c; $\$ 5.00$ doz., postpaid.
Madeira Vine. Grown from tubers that resemble a potato. This vine is well worth your attention, as the foliage is peculiarly attractive. Freezes down to the ground in winter. Tubers should be dug before killing frosts and stored in a cool, dry cellar. Large tubers. 10c each; 90c dozo, postpaid.
Matrimony Vine. Has small white flowers with scarlet fruit in the autumn. Used as a ground cover or for hanging over walls and fences. Will climb to moderate height if supported. Each 50c, or 3 for $\$ 1.25$, postpaid.
Silver Lace Vine. A hardy climber introduced from Turkestan. To see one is to want one. It grows rapidly and clings to any support. Each slender branch terminates in a spray of foamy white flowers. Will reach a height of 10 to 15 feet. Strong plants. 75 c each, postpaid.
Sweet Pea. Perennial. This vine is very popular because it is so easily grown. The flowers are formed in clusters and come in red, white and pink. Assorted colors only. $25 c$ each; $\$ 2.50$ doz., postpaid.
Trumpet Vine. See Honeysuckle, Scarlet Trumpet, above.
Wisteria. Purple. A rapid growing vine with purple-lilac, pea-shaped flowers in racemes. Very hardy. Each 90c, postpaid.
Wisteria. White. Twines tightly and will cling to any sort of support. Blooms early and profusely. Cach $\$ 1.00$, postpaid.

## Shade Trees, Evergreens, Small Fruits, Etc.

## Shade Trees

Ash. European Mountain Ash. Has green, fern-like foliage and is covered with red berries from late summer throughout the winter. The Ash is hardy in Colorado and makes a very attractive, ornamental tree. $5-6$ ft. $\$ \mathbf{\$ 1 . 0 0}$; 6-8 ft. \$1.50.
Birch. Cut-Leaved Wecping. This is the true white-barked, weeping birch. It is the most beautiful tree in the whole list and attracts attention wherever seen. $3-4 \mathrm{ft}$. $\mathbf{\$ 2 . 5 0}$; 4-5 ft. \$3.00; 6-8 ft. \$3.50.
Maple. Soft, or Silver Leaf. The fastest growing maple and best known. 6-8 ft. \$1.25; 8-10 ft. \$1.50.
Maple. Hard. This is one of our most beautiful trees, but is much slower in growth than the soft Maple. 4-5 ft. $\$ 1.40$; 5-6 ft. $\$ 1.75$.
Poplar. Bolleana. Similar to the Lombardy, except that it has leaves resembling the soft Maple. $6-8 \mathrm{ft}$. \$1.50; 8-10 ft. $\$ 2.00$.
Poplar. Lombardy. Grows to great height, narrow, with dense foliage. 6-8 ft. \$1.00; 8-10 ft. \$1.25.
Russian Olive. A blooming ornamental tree reaching a height of 30 feet or more. Blooms are yellow and fragrant, foliage silvery white. 5-6 ft. \$1.25.
Willows. Golden Weeping. Long, slender, drooping branches, giving the tree an excellent ornamental effect. 6-8 ft. 81.00; 10 for $\$ 9.00$.

Willown. Golden. Same as above without the drooping habit.


CHINESE ELM-About 12 feet high; 3-year growth from seedling, typical of what yon can expect from this remarkable drouth-resisting tree.

CHINESE ELM
This is the best tree for shade and ornamentation in the whole list. It is by far the most rapid grower and has more to recommend it than any tree we know of. It is not unusual for the Chinese Elm to attain a height of 45 feet, with a trunk circumference of 35 inches within six years. 4-5 ft. \$1.00 each, 10 for $\$ 9.00$; 5-6 ft. $\$ 1.25$ each, 10 for $\$ 10.00 ; 6-8$ ft. $\$ 1.50$ each, 10 for $\$ 12.50$. Prices for larger sizes on application.

## Fruit Trees

Apple. Chenango, Delicious, Grimes Golden, Jonathan, Tallman Sweet, Stayman Winesap, Wealthy, Yellow Transparent and Red Siberian Crab, 5-7 ft. 80c; ten for $\$ 7.50$.
Cherry. Early Richmond, English Morello, and Large Montmorency, 4-6 ft. $\$ 1.25$; ten for \$11.50.
Pear. Bartlett, Flemish Beauty, Kieffer, 5-7 ft. \$1.10; 10 for $\mathbf{\$ 1 0 . 0 0}$.
Plum. German Prune, Lombard, Wild Goose, Opata, Sapa, 5-7 ft. \$1.25; ten for $\$ 11.00$.

## Evergreens

Colorado Blue Spruce. This is the most beautiful of all the evergreens. Its distinct bluish color is immediately noticed. These trees are taken from our mountains and transplanted in the nursery for two to three years, giving them better shape and root growth. $18-24$ in. $\$ 4.00 ; 24-30$ in. \$5.00; 30-36 in. \$6.00.

## Berries and Other Small Fruits

Blackberries. Snyder, or Rathburn. Each 15c; 10 for 70 c ; 100 for $\$ 4.50$, postpaid.
Currants. Red Cherry, Perfection, or White Grape. Each 25c; 10 for $\$ \mathbf{2 . 0 0}$, postpaid.
Gooseberries. Downing, Houghton, or Oregon Champion. Each 25c; 10 for $\$ 2.00$ postpaid.
Grapes. Concord, Moore's Early, Brighton, or Niagara. The Concords are 20ceach, or 10 for $\$ 1.75$. Other varieties, 25c each, or 10 for $\$ 2.00$, postpaid.

Raspberries. St. Regis Everbearing, each 15c; 10 for 80c. Cuthbert, Marlboro, or Kansas Black, each 15c; 10 for 80c; 100 for $\$ \mathbf{5 . 0 0}$, postpaid.
Strawberries. Progressive Everbearing, probably the best all-around everbearing. 25 for 50c; 50 for 85c; 100 for $\$ 1.50$, postpaid. Superb, a good everbearing, somewhat larger than the Progressive. 25 for 60c; 50 for $\$ 1.00 ; 100$ for $\$ 1.50$, postpaid. Mastodon. Largest of all. 25 for $\$ 1.00$; 50 for $\$ 1.75$; 100 for $\$ 3.00$, postpaid.


## Lawn Grass Seed

No home is complete without a GOOD, WELL KEPT UP lawn, and no lawn is worthy of the name that was not grown from the proper mixture of grass seeds. Conditions of soil, climate, altitude and moisture have a decided effect on the mixture best suited for different localities, and we suggest that you write us if in doubt as to what you should use.

We firmly believe that in nine cases out of ten a base of pure Kentucky Blue Grass seed makes the best lawn, but as Kentucky Blue Grass is somewhat slow in starting, it is usually advisable to use other seeds, in the proper proportions with Kentucky Blue Grass, in starting a new lawn.

In filling grass seed orders, we feel that our reputation is at stake, and we use the utmost care in buying seeds of this nature. Establishing a new lawn is something of a battle, but your battle is half won if your order is sent to us. The other half of the battle lies in the preparation of the soil and the care given after planting.

## Send for free folder, HOW TO MAKE AND MAINTAIN A LAWN.

Kentucky Blue Grass, high test, heavy seed. 1 lb. 55c, postpaid, $60 c ; 5$ lbs. $\$ 2.50$, postpaid, $\$ 2.60$; 10 lbs. $\$ 4.50$, postpaid, $\$ 4.65$; 25 lbs. $\$ 10.75$, postpaid, $\$ 11$.
Kentucky Blue Grass, fancy grade, excellent germination. 1 1b. 50c, postpaid, 55c; 5 Ibs. $\$ 2.25$, postpaid, $\$ 2.35$; 10 lbs. $\$ 4.00$, postpaid, $\$ 4.15 ; 25$ lbs. $\$ 9.50$, postpaid, $\$ 9.80$.
Kentucky Blue Grass, average commercial grade, good seed but requiring slightly more seed to the square. 1 lb. 45c, postpaid, 50c; 5 lbs. $\$ 2.00$, postpaid, $\$ 2.10 ; 10$ 1bs. \$3.85, postpaid, $\$ 4.00$; 25 lbs. $\$ 9.00$, postpaid, $\$ 9.30$.
Capitol Lawn Mixture, based on mixture used in planting the State House lawn in Denver, with such additions as more recent experiments have made advisable. 1 1b. 45c, postpaid, 50c; 5 lbs. $\$ 2.00$, postpaid, $\$ 2.10$; 10 lbs. $\$ 3.85$, postpaid, $\$ 4.00 ; 25 \mathbf{1 b s}$. $\$ 9.00$, postpaid, $\$ 9.30$.
White Clover, fancy, high test seed, recommended to be used with any lawn mixture in proportion of $10 \%$ to $25 \%$. $1 / 41 b$. 20c, postpaid, $25 c ; 1 / 2$ 1b. 30c, postpaid, 30c; 1 1b. ©5c, postpaid, 60c; 5 lbs. \$2.50, postpaid, $\$ 2.60 ; 10$ lbs. $\$ 4.85$, postpaid, $\$ 5.00$.
Creeping Bent, So. German, has remarkable creeping habit, making a compact sod, but not entirely suitable for ordinary lawn use by itself. Highly recommended in lawn mixtures (not more than $25 \%$ ) to keep out dandelions. $1 / 4 \mathrm{lb}$. 30c, postpaid, 35e; $1 / 2$ 1b. 60c, postpaid, 65c; 1 lb. $\$ 1.00$, postpaid, $\$ 1.05$; 5 lbs. $\$ 4.75$, postpaid, $\$ 4.85$; 10 lbs. $\$ 9.50$, postpaid, \$9.65.
Coocos Bent, from Washington. $1 / 4$ lb. 50c, postpaid, 55c; $1 / 2$ 1b. 95c, postpaid, $\$ 1.00 ; 11 b$. $\$ 1.75$, postpaid, $\$ 1.80$; 5 lbs. $\$ 7.50$, postpaid, $\$ 7.60$; 10 lbs. $\$ 16.50$, postpaid, $\$ 16.65$.
Astoria Bent, a special grade of Washington grown seed. $1 / 416.60 c$, postpaid, $65 c ; 1 / 2$ lb. $\$ 1.15$, postpaid, $\$ 1.20 ; 1$ 1b. $\$ 2.00$, postpaid, $\$ 2.05 ; 5$ lbs. $\$ 9.00$, postpaid, $\$ 9.10 ; 10$ 1bs. $\$ 17.50$, postpaid, $\$ 17.65$.
Bermuda Grass, has a beautiful bright green color, but is not hardy in Colorado. 1/4 lb. 20c, postpaid, 25c; $1 / 21 \mathrm{lb}$. 30c, postpaid, 35c; 1 1b. 50c, postpaid, $55 c ; 5$ lbs. \$2.25, postpaid, $\$ 2.35$; 10 lbs. $\$ 4.00$, postpaid, $\$ 4.15$.
Meadow Fescue (English Blue Grass), grows quickly and is very hardy; not recommended to be used straight, as it is rather coarse and not permanent. We use some in our CAPITOL LAWN MIXTURE, as it makes a wonderful nurse crop and is ultimately crowded out by other grasses as soon as they have become established. 1 lb. 30c, postpaid, 35c; 5 lbs. $\$ 1.25$, postpaid, $\$ 1.35 ; 10$ liss. $\$ 2.40$, postpaid, $\$ 2.55$.
Poa Trivialis, recommended for shady places; resembles Kentucky Blue Grass. We use this variety in our SHADY NOOK MIXTURE. 1 1b. 75c, postpaid, 80c; 5 Ibs. \$3.j0, poste paid, $\$ 3.60 ; 10$ lbs. $\$ 6.75$, postpaid, $\$ 6.90$.
Shady Nook Mixture, a suitable mixture of grass seeds that will live and grow in shaded places. Occasional applications of Air Slacked Lime should be made to such spots, as deep shade tends to sour soil. 1 lb. 60e, postpaid, 65e; 5 1bs. $\$ 2.75$, postpaid, $\$ 2.85 ; 10$ lbs. $\$ 4.25$, postpaid, $\$ 4.40$.
Red Top, used in many lawn grass mixtures, has fine, narrow blade and good color. 1 lb. 35c, postpaid, 40 c ; 5 1bs. $\$ 1.50$, postpaid, $\$ 1.60$; 10 ibs. $\$ 2.70$, postpaid, $\$ 2.85$.
sheep's Fescue, recommended in mixtures for poor soil and shady places, too bunchy to be used by itself. 1 1b. 50c, postpaid, 55c; 5 lbs. $\$ 2.25$, postpaid, $\$ 2.35 ; 10$ 1bs. $\$ 4.00$, postpaid, $\$ 4.15$.
Chewing's Fescue, of spreading habit, used in mixtures for golf courses and sandy soils. 1 lb. 60c, postpaid, 65c; 5 lbs. $\$ 2.75$, postpaid, $\$ 2.85$; 10 lbs. $\$ 5.00$, postpaid, $\$ 5.15$.
Rye Grass, quick growing, with good color, recommended in mixtures with other grasses. 1 lb. 25c, postpaid, 30c; 5 lbs. $\$ 1.15$, postpaid, $\$ 1.25 ; 10$ lbs. $\$ 2.25$, postpaid, $\$ 2.40$.

## FERTILIZERS VIGORO <br> Specially prepared plant food <br> Enjoy Better Lawns, Flowers and Gardens By Using Vigoro Clean, Odorless, Easy to Apply

There is no secret in having a velvety lawn, colorful flowers, crisp, succulent vegetables, luxuriant shrubbery, and stately trees. You can enjoy these beauties of nature if you use good seed, plants, bulbs and the right plant food. The right plant food is important because plants must be fed the same as human beings.

VIGORO provides an economical, practical, and effective way to secure finest results. Economical because the cost is only 10 c to 20 c for every 100 square feet. Practical because it is clean, odorless, easy to apply-can be sown by hand like grass seed or applied with an ordinary kitchen colander. Effective because it contains all of the elements of plant food required to produce early, vigorous growth, and bring fruit, flowers and foliage to full development.

Complete directions in every bag.
100-1b. bag $\$ 6.00$ 50-1b. bag $\$ 3.75$ 25-1b. bag 2.00 5-1b. bag . 60

## A Swift \& Company Product



Flowers of Beanty Rare

Evergreen Bone Dressing. A packing house product that is now practically odorless. It is valuable for lawns and plants and trees. 5 lbs. 25c; 10 lbs. 40c; 25 lbs . 75c; 50 lbs . $\$ 1.35$; 100 lbs . for $\$ 2.50$.
Excelsior Plant Food. For all kinds of flowers and plants. Odorless and easily used. 2 oz . can for 15e, postpaid 18e; 5 oz . can 25c, postpaid 30c; 12 oz . can 40c, postpaid 50c.
"Feedem" Plant Food. A concentrated food for potted plants or garden use. One teaspoonful in two quarts of water makes a wonderfully effective solution. Pour on soil about roots and watch results. For lawns use one teaspoonful for one gallon of water and sprinkle over thegrass. All plants in pots require regular feeding, as the roots soon use the elements in the soil that cause plant growth. Unless your plants are fed regularly, they will discolor and cease to grow. 4 oz. pkg. 30e; 8 oz. pkg. 50e, postpaid.
Ford's Fertilizer. Sulphate of Ammonia, Acts quickly, rather a stimulant than a fertilizer. 1 lb. 15e; 2 lbs. 25c; 5 lbs. 50c; 10 lbs. 75e; 25 lbs. \$1.50; 50 lbs. \$2.75; 100 lbs. for $\$ \mathbf{\$ 5 . 0 0}$.
Granulated Peat Moss. We import this fertilizer in car loads. It is especially adapted for mixing with thesoil, though it makes an excellent mulch. When spread over the soil, after plants are through the ground, it
keeps weeds down and prevents soil from drying out. Original bale, about 180 lbs. $\$ 5.00 ;$ half bales $\$ 3.00$. Large sack, about 13 lbs. \$1.00.
Nitrate of Soda. A good, all-around fertilizer. 1 lb. 15e; 2 lbs. 25e; 10 lbs. $\$ 1.00$; 25 lbs. \$2.25; 100 lbs. $\$ 8.00$. Cannot be mailed.

Japanese Palm Food. Good for palms, ferns and rubber plants. Each package contains full directions. 5 oz. package 25e, postpaid 30c.
Lime, Pulverized. All soils that receive constant watering are liable to sour. An application of Pulverized Lime will bring back the original condition of the soil and prevent grass or plants turnng yellow, also will prevent growth of moss. Lime aids in breaking up lumps in heavy soil and helps to keep the top soil from caking. 6 lbs. for 25e; 10 lbs . for 40e; original bags of 50 lbs . for $\$ 1.00 ; 2$ sacks
Nitragin. Inoculating Bacteria. Wonderful for beans, peas, and sw e et peas. The "garden" size is but 20c, postpaid, and is enough to inoculate up to 8 lbs. of seed. Special bacteria for beans, peas, alfalfa and clovers. State which you wish. 1/4 bushel size 40c; $1 / 2$ bushel 60c; 1 bushel size $\$ 1.00 ; 5$ bushel size for $\$ 4.75$. Postpaid. Complete instructions for use with each package.
Saceoproduces won. derful results and will be found valuable for allpurposes. 1 lb. can 25e, postpaid 35e; 5 lb . bag 50c; 10 lb. bag 85c; 25 lb. bag \$1.75; 50 lb . bag $\$ 3.00$; 100 lb . sack for $\$ 5.00$.
Sheep Manure. Ground, treated to kill weed seeds, and pulverized. This pulverized sheep manure is very fine for lawns and gardens. 100 lbs. will cover 500 square feet. It is intended especially for early spring use, though may be used any time during the growing season. It is far superior to the ordinary barnyard manure, which is usually loaded with weed seeds and comes in large lumps that are never worked into the soil. 10 lbs. 25c; 25 lbs. 50c; $50 \mathrm{lbs} .80 c ; 100 \mathrm{lbs}$. $\$ 1.30$; 2 or 3 sacks at $\$ 1.25$ per sack; 5 sacks for $\$ 6.00$; 10 sacks for $\$ 11.50 ; 20$ sacks for $\$ 20.00$.
Steamed Bone Meal. Excellent for rose bushes and other shrubs. 1 lb . 10c; 5 lbs. 30e; 10 lbs. 50e; 25 lbs. $\$ 1.00 ; 50$ lbs. $\$ 1.65$; 100 lbs . for $\$ 3.00$.
Stim-U-Plant Tablets. Especially good for house plants. Also used for outdoor bushes and trees. Instructions for use in each package. 10 tablets for 15c; 30 for 25c; 100 for 75c; 1,000 for $\$ 3.50$, postpaid.

# INSECTICIDES 

## As Poisons Cannot Be Mailed, These Prices Are NOT Prepaid. All Insecticide Orders Will Be Sent By Express or Freight.

## FREE SPRAYING GUIDE ON REQUEST

Acme Paris Green. A rich emerald color and of fine, fluffy physical character. Containing 55 per cent arsenious oxide, it will give quickest control where extreme measures are necessary. For use on: Potatoes, cotton, tobacco, also to mix with arsenate of lead for fruit tree spraying where quick results are necessary.
Prices: $1 / 4 \mathrm{lb}$ 20c; 1 lb. 50c; 5 lbs. \$2.25.
Acme Arsenate of Lead. The most favored arsenical insecticide found on the American market. It is safest to use on tender foliage and sticks well on the leaves. Recommended for fruit trees, vegetables, bushes and tobacco. Can be used as dust or spray.
Prices: $1 / 2$ lb. 25c; 1 lb. 40c; 4 lbs. \$1.25; 100 lbs. \$22.00.
Acme Two-Way Spray. A balanced insecticide and fungicide containing. $14 \%$ arsenate of lead and $83 \%$ Bordeaux Mixture. Two results with one application. Use wet or dry on: apple, sour cherry, currant and gooseberry, grape, pear, plum, strawberry, pecan, bean, beet, cucumber, pepper, potato, tomato and many other fruits and vegetables. Prices: $1 / 2 \mathrm{lb}$. 25c; 1 1b. 45c; 4 lbs. $\$ 1.25$.
Acme Garden Guard. A garden insecticide and fungicide for use as a dust. No water, no mixing, no muss. For use on: Cabbage, caulifiower, tomato plants, melon vines, currants and gooseberries and other vegetables, flowers and shrubs of many kinds.
Prices: 1 lb. sifter carton 25c; 5 lbs. 85c.
Acme All 'Round Spray. Flowers, vines, shrubs, roses, vegetables need protection same as commercial crops. All 'Round Spray contains the three leading remedies used by all large growers. Arsenate of Lead, Nicotine Sulphate and Bordeaux Mixture. Perfect protection for the small user is assured by complete directions in form of spraying guide attached to every package.
Prices: $1 / 4 \mathrm{lb}$. 35c; 1 lb. 85c.
Acme Bait-M. An effective insecticide bait which will throw a ring of protection around shrubs, flowers and plants in garden and lawn. For use against snails, cutworms, sow bugs, grasshoppers and many other insects which migrate along the ground.
Prices: 1 lb. 35c; 3 lbs. 60c.
Acme Bordeaux Mixture. Prevents large losses caused by blight, rot, mildew, scab, anthracnose and certain other fungous diseases. It stimulates plant growth and greatly increases the harvests. Almost every kind of vegetable, fruit and shrub can be greatly improved by the early use of Bordeaux Mixture.
Prices: 1 lb. 40c; 4 lbs. \$1.40.
Acme Lime Sulfur. A standard $33^{\circ}$ Baume lime and sulphur converted into a dry powder but having all the effectiveness of the liquid product when dissolved in water. For use in dormant spraying against scale, peach blight, leaf curl and twig borer. Summer spraying against scab, soot, blotch, red spider and mite. Prices: 1 lb. 30c; 5 lbs. $\$ 1.30$.
Acme Spray Soap. A (fish oil) soap effective in destroying many sucking insects and lice on plants, trees, ferns, etc. Also used extensively with cylinder oils in making oil emulsions to reduce the surface tension. Its use with Nicotine greatly increases the value of that spray.
Prices: 1 lb. 30c.

Acme Bean Beetle Dust. A special beetle preparation most effectively used against Mexican bean beetle. Being both stomach and contact poison, it is sure to give quick results.
To be applied only as a dust. For use against: Mexican bean beetle, potato bug, cucumber beetle and many other less common hard-shelled beetles.
Prices: 1 lb. 25c; 4 lbs. 75e.
"Black Leaf 40." Nicotine Sulphate. The best contact spray for use against plant lice, aphis, and any soft-shelled bug or worm. Also used for poultry lice by simply painting the roosts. Kills lice from fumes while the chickens roost. See poultry section.
1 oz. bottle 35e; $1 / 2 \mathrm{lb}$. bottle $\$ 1.25 ; 2 \mathrm{lb}$. can $\$ 3.25$; 10 lb . tin $\$ 11.85$.
Tobaceo Dust. Excellent for dusting powder for aphis, plant lice, or worms. 1 lb . 10c; 3 lbs. 25c; 100 lb. bag for $\$ 5.25$.
Hellebore. Used for rose bugs, slugs, etc. $1 / 4$ lb. pkg. 15e; 1 lb. for 45c.
Hydrated Lime. Used as an insecticide in dry powdered form. 6 lbs. 25e; 10 lbs. for 40c. Original 50 lb . bag $\$ 1.00$.
Fish Oil Soap. $1 / 2$ lb. pkg. 20c; 1 lb. pkg, 35c; 5 lb. pkg. \$1.40. This soap is excellent for house plants and tender garden plants that will not survive a spray that has a tendency to burn.


MadeonlybyNational Products,Inc., Quincy, Itl.

## INSECTICIDES, Continued from page 29

Melrosine. Preferred by many for bugs on roses. Small size, enough for one gallon of solution, 50c; pint can \$1.00; one quart \$1.75; half gallon $\$ 3.25$.
Hammonds Slug Shot. A favorite for house and garden plants, shrubs, trees, vines, potatoes, etc. Shaker-top can, 25c, postpaid 35c.
Powdered Sulphur. 1 lb . 10c; 3 lbs. 25c; 10 lbs . 55c; 100 lbs . for $\$ 4.50$.
Tree Tanglefoot. Standard preparation for keeping ants, worms and insects out of trees. 1 lb . can 60c; 5 lb . can $\$ \mathbf{2 0 0}$.


## SPRAY PUMPS

Don't let the bugs get your crops. Remember that "a squirt in time saves nine." Free book on How, What and When to spray, on request.

 gal. \$7.65. $\$ 7.50$, prepaid $\$ 7.65$.
capacity, $22^{\prime \prime}$ brass extension, $\underset{\$ 11.35, ~ p r e p a i d ~}{\$ 11.50 .}$
\$11.35, prepaid \$1150 capacity, 22" brass extension. galv. tank, $21 / 2$ gal. capacity, $15^{\prime \prime}$ brass extension,
\$6.45, prepaid \$6.60.
No. 50-B, brass tank, $21 / 2$ gal. capacity, $15^{\prime \prime}$ brass extension, $\$ 9.80$, prepaid $\$ 9.95$.
Hudson Junior Sprayer, well adapted for small truck farms and poultry plants.
No. 140-G, galvanized tank, $21 / 2$ gal. capacity, $24^{\prime \prime}$ brass extension, \$5.00, prepaid \$5.15.


Duster Brown, an excellent small capacity duster suitable for use around the garden and poultry plant. Length $12^{\prime \prime}$. diameter $13 / 4^{\prime \prime}$.
No. 1, all tin. Each 60c, postpaid 70c.
No. 2, with quart size tank. Each \$1.25, postpaid \$1.35

# QUEEN Incubators 

## The Leading Hatcher in High Altitudes and Dry Climates

The Queen Incubator again leads the field in number of chicks hatched and weight per chick, showing that the Queen ventilation is well nigh perfect. In hatching in Colorado, many incubators must be altered in order to allow sufficient ventilation to furnish the necessary moisture. This is not the case with the Queen.

## Notice That We Pay All Carrying Charges on All Incubators and Brooders <br> All STANDARD QUEEN INCUBATORS are heavily built, carefully put together, and so constructed that they will last a lifetime. There is nothing cheap about the Standard Queen except the price. <br> The Style K QUEEN INCUBATORS meet the demand for a reasonably good incubator at a popular price. They will give just as good results as the Standard Queen models if conditions are ideal. The Standard Queen models are recommended, however, where there is any doubt about hatching conditions, changes of temperature, ventilation, etc. <br> Prices, Freight Paid to Your Station

## STYLE K MODELS



No. 22K, 220 egg capacity 36.75

STANDARD MODELS




No. 5, 400 egg capacity, with turning trays. 76.50


No. 40, 1,000 egg capacity, with turning trays



## Queen Oil Burning Brooders

The illustration shows the extra strong construction of the canopy legs. Note how sturdily they are braced - an innovation in brooders.

> Clear, Regular Heat from a Clear Blue Flame


That's what you get from the Nesco Heater in every Queen Oil Burning Brooder. No smoke-no gas: This burner stands strictly in the center of brooder. The clear, blue flame rises from the top of the chimney (which is $121 / 2$ inches above floor) directly to the ventilator or cap at center of hover-then spreads evenly all around. Supply tank is located outside the hover, connected by a long supply pipe. Regulation is controlled by the handle at the tank. Oil runs into sub-tank and flows through supply pipe into the burner, saturating the wick which feeds to the flame.

Wick of indestructible asbestos. No solder used on burner. All welded. Leaks almost impossible. Oil cannot overflow burner. Attractive guard around burner and cross pipes

Two gallon metal tank. Will burn 48 hours without refilling. Metal tank minimizes fire risk. No overflowing. No bottle to break. Few moving parts. All visible. Strong and rugged. Parts seldom need renewal.

## PRICES PREPAID TO YOUR STATION

300 Chick size (wt. 35 lbs.), 32 -inch Hover



# QUEEN Stove Brooders 

## Burn Either Hard or Soft Coal Free, Complete Queen Catalog on Request

GASPROOF and FIREPROOF. There are no drafts on the smokepipe of the Queen Stove Brooder. 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. When it is too cool the wafer contracts and closes the check and at the same time opens the draft. This keeps an even heat all the time.

Hundreds of farmers use Queen Stove Brooders in their hog houses to protect winter and early spring litters from chilling. Results prove that they save many pigs that would ordinarily have been lost.

Queen Stove Brooders are slightly larger at the bottom than at the top, thus preventing the clogging of stove toward morning, that is so common in some brooders. Complete brooder catalog sent free on request.
 book.


Illustration at the left shows the new QUEEN MAGAZINE BROODER STOVE No. 4. This brooder stove ends the work of constant refueling and assures you plenty of heat during cold nights for large flocks. It has a 60 -inch canopy and holds 75 pounds of coal. Fill the magazine and you can forget all about your stove for hours at a time. Has feed door above canopy and no openings for heat regulation below canopy, assuring safety to your chicks at all times.

Over a quarter of a century of satisfaction stands behind every QUEEN STOVE BROODER. Thousands are in daily use by poultry raisers in every part of the country. There is a model for every need and they are priced to fit your pocket-

## QUEEN STOVE BROODERS, FREIGHT PAID TO YOUR STATION



No. 2, 1,200 chick capacity, 56 -inch canopy

Roof Saddles, not prepaid, $4^{\prime \prime} \$ 1.75$ each, $5^{\prime \prime} \$ 1.85$ each.
Brooder Stove Pipe, not prepaid, 2 foot joints, $4^{\prime \prime} 20 c$ each, $5^{\prime \prime} 25 c$ each, 6" 30c each.
Elbows, same price as stove pipe. Adjustable Elbows. $4^{\prime \prime}$ 35e each, $5^{\prime \prime} 40 c$ each.
Reducing Stove Pipe. $5^{\prime \prime}$ to $4^{\prime \prime} 50 c$ each. Stove Pipe Dampers. 25c each, postpaid 30c each. Increasing Stove Pipe. $4^{\prime \prime}$ to $5^{\prime \prime} 40$ e each, $5^{\prime \prime}$ to $6^{\prime \prime} 45 \mathrm{e}$ each.

## CEL-0-GLASS

Cel-O-Glass is now too well known to require an introduction. It is now standard equipment for brooder house and poultry house fronts, and being cheaper and better than ordinary glass, is in wide use. There is one CAUTION, however, that we feel impelled to make. Like every other good article, Cel-O-Glass has many imitators. Some of them are practically worthless and will not stand the sun's rays any length of time. Unfortunately, these imitations are often sold as genuine Cel-O-Glass. We advise you to be sure of the manufacturer's name before buying. Genuine Cel-O-Glass is made by Acetol Products, Inc., 21 Spruce St., New York City, and their label appears on every roll. We handle the genuine product.

Because Cel-O-Glass admits the Ultra-Violet rays of the sun, its use is recommended by many experiment stations and practical breeders. These Ultra-Violet rays have much to do with the growth and health of any living creature, and chicks raised under Cel-O-Glass will not only grow faster but will be stronger than chicks raised under ordinary glass. We will gladly supply free bulletins by noted scientists who have experimented with Cel-O-Glass and strongly recommend its use.

## PRICES

Less than 25 running feet_-sq. ft. $131 / 2 c$, postpaid 14 c 25 running feet, 75 square feet $\qquad$ $\$ 10.00$ postpaid 60 running feet, 150 square feet $\qquad$ Original roll, 100 ft . by 3 ft ._-------- $\mathbf{3 9 . 0 0}$ postpaid


Cel-O-Glass will withstand the most severe hail or wind storm and when used in an upright position will last indefinitely. We do not recommend it, however, as roofing or in any position except vertical, if it is exposed to the burning rays of the sun in hot weather.

When used for hotbeds, and it is truly wonderful for this purpose, the frames should be removed in summer and stored away from the direct rays of the sun.

# Makomb Poultry Equipment 

Never in Poultry History a Brooder Line Like This The Oil-O-Stat Drum Type Brooder The Makomb Giant Coal Brooder and The Makomb Electric Brooder

## NOTE THE LOW FREIGHT-PAID PRICES

An Oil-O-Stat in your brooder house relieves worry
Oil-O-Stat is a Drum Type Oil Brooder equipped with the exclusive Twin Blast Furnace Burner using 38-42 distillate or any kerosene. The perfected Automatic Valve holds even brooding temperature always. Practically no attention or labor required. Very economical to operate because of big, oversize drums and exclusive baffling. All complete with valve, 8 gal. tank, pipe line cut and fitted, and auto-


The Standard Oil-O-Stat


The Makomb Giant Coal Brooder

## The New 1930 Improved Coal Burning Brooder MAKOMB GIANT

 (Cut shows stove only less canopy) New 1930 FeaturesConsidered by many authorities the greatest Coal Brooder ever built. Large coal capacity, holds fire longer. New fluted barrel construction radiates more heat from every pound of fuel. Makomb "by-pass" damper and draft control. Removable baffle plate. Self-cleaning, free burning, front shake grates. Improved Makomb tilting canopy. Three sizes-world's greatest value in coal burning brooder stoves.

## FREIGHT-PAID PRICES FOR THE MAKOMB LINE OF BROODERS

## The Senior Oil-o-Stat, massive 32 -inch heater drum. A big, dependable room heater.

 Flame travels twice completely around the drum. Used without canopyThe Junior Oil-O-Stat, ideal for the smaller house and broods up to 500 chicks: 18 -inch drum, complete with $\mathbf{4 2}$-inch canopy $\$ \mathbf{\$ 2 0 . 0 0}$, with $\mathbf{5 2}$-inch canopy_-_The Standard Oil-o-Stat, the most favored model and designed to meet general conditions. Has 25 -inch drum; spiral flame travels 22 feet.

\$25.00

The Makomb Electric Brooder, the only fully insulated electric. Exclusive magnetic switch never fails. Shipped complete, set up, ready to operate.
42-inch size
$\$ 20.00$


The Makomb Giant Coal Burning Brooder, described above.
Price with 42-inch canopy, all complete



## FUL: 0.PEP

WHAT IS THE ACTUAL DIFFERENCE IN DOLLARS AND CENTS between feeding Ful-O-Pep Mash Feeds and any other GOOD MASH FEED?

Most poultrymen will admit that Ful-o-Pep Mash Feeds are the best they have ever fed, but unless they have actually figured things out, they are pretty apt to say that they use Ful-o-Pep Chick Starter and then change to some other GOOD MASH FEED because of the difference in price.

## NOW LET'S SEE JUST WHAT THAT DIFFERENCE ACTUALLY IS

It takes approximately one pound of Starting Mash to feed a chick for the first six weeks, eight pounds of Growing Mash to feed this chick from the sixth week to the twentieth week, and about five pounds of Growing Mash and Egg Mash mixed to carry the chick through the next thirty days. (Most breeders agree that it pays to feed growing mash and egg mash mixed in equal proportions from the twentieth week to maturity.)

Suppose the chick in question, a pullet, was hatched on the last day of March, and that it required a total of twenty-three pounds of Ful-o-Pep Mash Feeds to carry it to January 1st, at which date it is fully matured and has been laying regularly. Suppose, to give the other feeds the benefit of the doubt and all the best of the argument, that the Ful-O-Pep Mash Feeds cost you as much as $\$ 1.00$ per cwt. more than other GOOD MASH FEEDS (as a matter of fact, some of the other feeds cost more than Ful-O-Pep and we кnow of none that is as much as $\$ 1.00$ per cwt. under Ful-o-Pep), this chick at nine months of age would have cost you 23 c more than if it had been raised on some other GOOD MASH FEEDS.

## NOW LET US SEE IF THAT 23c EXTRA COST WAS JUSTIFIED

At the end of nine months we have a fully matured pullet that has been laying from two to three months. This pullet will have laid not less than 36 eggs up to January 1 st , which is easily twice the production from a pullet raised on mash feeds containing a higher percentage of corn. This additional egg producton is more than enough to pay for the difference in cost of Ful-O-Pep Feed, and is not by any means the principal gain.

Ful-O-Pep pullets have deeper bodies, larger combs, and lay bigger eggs. They begin to lay earlier, and the cycle of egg production is longer and better sustained over the high egg price period. They will make better breeding stock and prove more profitable from every angle.

There is no secret as to why this is true. Ful-O-Pep Mash Feeds contain more oats than other feeds. You know that race horses are fed heavily on oats; that a work horse shows far more strength when fed on oats; that oats grow a deeper bodied and larger and better bacon hog than corn, and that oat-fed hogs are better breeders than corn-fed hogs. NOW COMPARE THE COST OF FEEDING FUL-O-PEP EGG MASH WITH ANY OTHER GOOD EGG MASH
A hen will consume about 40 lbs . of egg mash in one year. Ful-o-Pep Egg Mash will cost you approximately 70 c per cwt. more than the average GOOD EGG MASH, or a yearly cost per hen of 28c more for the Ful-O-Pep fed hen. Twenty-eight cents is less than the value of one dozen eggs. The Ful-o-Pep fed hen will lay more eggs than one fed on corn base mash, the eggs will be bigger and the laying cycle will be longer. More eggs will be produced at the period of high egg prices. Trying to save money by buying cheaper feeds frequently means no profit at all at the end of the year, or an actual loss, while an investment in better feeds will show a handsome profit for the season. You will profit by starting your chicks on Ful-o-Pep Chick Starter, changing to Ful-o-Pep Growing Mash at the proper time, and feeding Ful-o-Pep Egg Mash to all laying stock.


PRICES (Subject to Market Changes A


C

$\underset{3.80}{ } \underset{3.75}{ }$

# WATER FOUNTAINS FOR CHICKS AND CHICKENS 

O. K. Fountains

No. 400 O. K., $\$ 5.45$, postpaid $\$ 5.60$. This is an insulated fountain with drinking space all around the fountain. Keeps water warm in cold weather, or cool in warm weather. Excellent as a baby chick fountain by removing from the base and placing flat on the floor. Made of copperized galvanized iron, which lasts much longer than the ordinary galvanized. Equipped with handy appliance to release the water instead of the old cork style. Made in two sections that come apart, making it easy to clean. Many poultry raisers tell us this is the finest waterer they have ever used.
No. 3 O. K. Super Heated Fountain, $21 / 2$ gallon capacity, similar to the No. 400, except that it has a lamp in the base, guaranteeing warm water in the coldest weather. Price $\$ 3.60$, postpaid $\$ 3.75$.
No. 4 O. K., same as above except holds 5 gallons. Price \$4.60, postpaid $\$ 4.75$.
No. 10 . K., 10 gallon capacity. Price $\$ 6.75$, postpaid $\mathbf{\$ 6 . 9 5}$.


No. 400 . K.


Summer Waterers

## Summer Waterer

No. 1 Summer Waterer, 1 gal. capacity. 90c, postpaid \$1.00.
No. 2 Summer Waterer, $21 / 2$ gal. capacity, $\$ 1.35$, postpaid $\$ 1.45$.

## Buttermilk Feeders

No. 7 Charcoal Tin Buttermilk Feeder, 1 gal. capacity, $\$ 1.35$, postpaid $\$ 1.45$. No. 8 Charcoal Tin Buttermilk Feeder, $21 / 2$ gal. capacity, $\$ 1.85$, postpaid $\$ 1.95$. These waterers have the all-around trough, made in two sections, easy to clean.


Magazine Waterer and Feeder

Mason Jar Fountains
No. 142. Fits any standard jar, pint, quart, or 2-quart. Galvanized, each 10e, 1 doz. for $\$ 1.00$, postpaid. Same style in charcoal tin for buttermilk, each 10c, 1 doz. for $\$ 1.00$, postpaid.
No. 32, Star Shaped, galvanized, each 10e, 1 doz. for $\$ 1.00$, postpaid.

## Bottom Fill Fountains

Made in two pieces, easy to clean:
No. 19-1 quart capacity, each $\mathbf{2 5 c}, 1$ doz. for $\$ 2.50$, postpaid.
No. $20-1 / 2$ gallon capacity, each 35e, 1 doz. for $\$ 4.00$, postpaid.
No. 24-1 gallon capacity, each 50c, 1 doz. for $\$ 5.50$, postpaid.

## Moe's Magazine Waterer and Feeder

The upper magazine is fitted to the feeder top with a spiral thread so it can be adjusted up or down. Works equally well for waterer or feeder. Diameter $81 / 4$ inches, height $81 / 2$ inches, capacity two quarts. Twelve feeder holes.
No. 18-Made of galvanized steel, each 55e, 1 doz. for $\$ \mathbf{\$ 6 . 0 0}$, postpaid. No. 139-Made of tin plate for buttermilk, each 75c, 1 doz. for $\$ 8.10$,


No. 142
Mason Jar Fountain


Bottom Fill Fountain


RAISE YOUR BABY CHICKS ON Ful-O-Pep CHICK STARTER. One pound will carry a chick to six weeks, when it will be ready for Ful-O-Pep GROWING MASH. Most starting feeds require 2 lbs . per chick; this is because they are corn-base feeds. They may produce rapid growth, but will never mature a perfectly developed chick.


## FEEDERS FOR POULTRY



Moe's Grit and Shell Box

## Mash Hoppers

Layers should not be given any scratch feed until about one hour before roosting time in the evening. In order to control mash feeding, it is necessary to have enough properly made mash feeders to supply your flock. The Moe Mash Hopper prevents waste and fills every requirement for a good feeder. No. Height Width Capacity Each
$35 \quad 19 \mathrm{in} . \quad 81 / 2 \mathrm{in} . \quad 10 \mathrm{qts} . \quad \$ 1.50$, postpaid $\$ 1.60$ $36 \quad 19 \mathrm{in} . \quad 12$ in. $\quad 14 \mathrm{qts} . \quad 2.05$, postpaid $\mathbf{2 . 1 5}$ $13 \quad 19$ in. 18 in. 22 qts. 2.35, postpaid 2.45 $37 \quad 19$ in. 24 in. 32 qts. $\quad 3.00$, postpaid 3.20

## Grit and Shell Boxes

Grit is always necessary, even where poultry are allowed to range. A good grit box is one that hangs on the wall out of the way, holds enough for several days' supply and offers easy access to the flock. Moe's grit and shell boxes are satisfactory in every particular.


## Moe's Mash

 Hopper

No. 45-2 compartments, 8 in. high, 5 in. wide, each 45 e , postpaid 55 c .
No. 9-3 compartments, 13 in. high, $81 / 2 \mathrm{in}$. wide, each $\mathbf{8 5}$ e, postpaid 95 .
No. $90-4$ compartments, 13 in. high, 11 in. wide, each $\$ 1.20$, postpaid $\$ 1.30$.
3 or more grit boxes at 10 per cent discount.

## Moe's Round Chick Feeder

Is in great demand. It keeps the feed pure and prevents waste. Top comes off but is so made that chicks or hens cannot remove it.
No. 11-6 in. diameter, 8 feed holes, each 12c; 1 doz. for $\$ 1.20$, postpaid.
No. 12-81/4 in. diameter, 12 feed holes, each 25c: 1 doz. for $\$ 2.50$, postpaid.
No. 131-For buttermilk, 8 holes, each 20c; 1 doz. for $\$ 2.25$, postpaid.

## Moe's Single and Double

 Chick FeedersNo. 132-For buttermilk, 12 holes, each 35c; 1 doz. for $\$ 4.00$, postpaid.


## Double Chick Feeder

No sharp or rough edges. Well made of galvanized steel. Sliding top, easy to fill and clean. Just what you want. Prices quoted are postpaid.
$\qquad$
No. 56 - Single,
No. 57 - Single,
No. 58 - Double
No. 59 - Double, length
No. 60 - Double


Single Chick Feeder
length 12 in., 9 holes, each 25c; dozen. \$2.50 length 18 in., 13 holes, each 35c; dozen, $\mathbf{3 . 5 0}$ length 24 in., 18 holes, each 40e; dozen, 12 in., 18 holes, each 35e; dozen,
in., 26 holes, each 50c; dozen, 4.00
3.50 $\mathbf{5 . 0 0}$ 5.50 7.50

## Moe's Eclipse Feeding Trough

Galvanized steel, made without seams, rivets, or solder. The top slides off for filling, making cleaning easy. Nos. 137 and 138 are made of charcoal tin for milk or buttermilk. Prices quoted are postpaid.


No. $2 \boldsymbol{2}-10 \mathrm{in}$. long, 10 holes_ Moe's Eclipse Feeding Trough



## Moe's Large Capacity Chick Feeder

Is the best of this type feeder. A wonderful feeder for young, growing stock, and a great time and labor saver when chicks are raised in large numbers.
No. 140-21 in. long. 32 feeder holes, each \$1.20; 3 for \$3.20, postpaid.
No. 141-35 in. long, 54 feeder holes, each $\mathbf{\$ 1 . 8 0}$; 3 for \$5.00, postpaid.

## Leg Bands for Poultry, Pigeons and Turkeys

## COLORED SPIROL LEG BANDS

Made of celluloid in the following non-fading colors: White, Black, Red, Garnet, Pink, Green, Dark Blue, Light Blue, Purple, and Yellow. Please be sure to order by number, otherwise we may send the wrong size. When ordering less than 100 , please add
 10c for postage. Prices quoted are postpaid when 100 or more are ordered. Spirol Leg Band Spirol No. 96, Baby Chick Size
 100 for------ $\mathbf{2 0}$

500 for 1.25

Spirol No. 95, Pigeon

| 2 for_-----\$0.05 500 for |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |

50 for----- $\quad .20$ 1,000 for------- $\mathbf{2 . 0 0}$
100 for 30
Spirol No. 94, Bantam Size
12 for

50 for_----. . 25 1,000 for_----- $\mathbf{2 . 2 5}$
100 for_-_..- . 40
Spirol No. 93, Leghorn Size
12 for

36 for_-_--- . $25 \quad 500$ for_------ 2.25
50 for----- $\mathbf{3 0}$ 1,000 for------- $\mathbf{3 . 7 5}$
Spirol No. 92, Reds and Rocks
12 for_-_-_\$0.10 500 for_-_-_- $\mathbf{2 . 3 5}$

50 for_-_-_- $\mathbf{3 5} 1,000$ for_------ $\mathbf{4 . 0 0}$
100 for----. . 50
Spirol No. 398, Turkey Size
12 for-_----\$0.15 100 for_----- . 75

24 for_-_-_ . $25 \quad 500$ for
50 for---- $40 \quad 1,000$ for------- 6.00
Spirol No. in, Orpington Size
12 for_----_\$0.10 500 for_-_--- 2.50

50 for------ $\mathbf{5 5} 1,000$ for-------- $\mathbf{4 . 2 5}$
100 for

## "BANDETTES"

A Spirol celluloid band about $3 / 8$ in. wide. The band is a bright red with a prominent black number. Packed 25 in a box.

| 25 | _\$0.50 | 500 | for_-_-_\$ 7.00 |
| :---: | :---: | :---: | :---: |
| 50 | . 95 | 1,000 | for_-_-- 13.50 |
| 00 |  |  |  |

No. 130 ALUMINUM LEG BANDS


## No. 130 Aluminum Leg Band

The best numbered leg band for ordinary marking. Large, raised numbers that are easy to read. Adjustable for any size fowl. Packed in cartons of $12,25,50$ and 100 bands each. Numbered 1 to 12,1 to 25,1 to 50,1 to 100,101 to 200 , etc., up to 9,999 , which is the largest number made. Prices are postpaid.
No. 130 Aluminum, Numbered, Adjustable Leg Bands.

| 12 | for | \$0.15 | 100 | for_-----\$0.55 |
| :---: | :---: | :---: | :---: | :---: |
| 25 | for_----- | . 25 | 500 | for_-_--- 2.50 |
| 50 | for | . 35 | 1,000 | for_-_-_- 4.25 |

## COLORED LOCKFAST BANDS

Similar to the No. 130 Aluminum, except that the whole band is colored. We have them in three colors: Blue, Green and Red. Numbered 1 to 100 . Please order in lots of 50 or 100 . Prices are postpaid.
50 for_-----\$0.50 500 for
------\$4.00
100 for_-----. $90 \quad 1,000$ for_------ $\mathbf{7 . 0 0}$

## "RELIABLE" NUMBERED BANDS

Wider and heavier than No. 130, with colored numbers. We have them in Blue, Green and Red. Please order in lots of 25 , 50 or 100 . Prices are postpaid.


Very wide with extra prominent colored number. Intended for marking exhibition birds or for trapnesting.


# O. K. Pioneer Poultry Litter 

## POULTRYMEN INSIST ON O. K. PIONEER POULTRY LITTER

It Is a Labor Saver. It does not need to be changed often. Many poultrymen leave it down for a full year before replacing.
It Prevents Dampness, because of its great absorbing power. It is dry and will absorb several times its own weight of water.
It Is Sanitary. It appears to have certain germicidal properties. Laboratory tests have shown it to be remarkably free from bacterial and parasitic life.
It Prevents the Spread of Disease, by keeping the house dry and clean.
It Absorbs Offensive Odors, keeping the atmosphere of the house clean and pleasant.
It Keeps the Birds Clean. It prevents droppings from sticking to them, and thus reduces the number of dirty eggs.
It Makes an Ideal Dust Bath. It has a tendency to reduce lice, probably by suffocation.
It Keeps the House Warm in Winter, by acting as an insulator. It keeps the birds off the cold, damp floor.
It is Economical. Though the original cost may be slightly higher, it outlasts other litter two or three times, and saves the labor of handling.
It Prevents Fire. It takes an intense heat to make O. K. Poultry Litter smolder, and it will never blaze.
It Makes a Valuable Fertilizer. Not only does it preserve the plant food value of the droppings, but the organic matter in peat moss itself is highly beneficial to the soil. Many poultrymen sell their O. K. POULTRY LITTER manure mixture to gardeners, florists and nurserymen at a high price.

per 20 bushel bale F. O. B. Denver

[^3]
# POULTRY KEEPERS' REQUISITES 



Tycos Hygrometer No. 5796

## No. 5776

Tycos Incubation-Zone


When used with Stand


When used without Stand

## Hygrometers and Thermometers

"Tycos" Hygrometer No. 5796. No incubator should be run without a HYGROMETER, as it is necessary to have just the correct amount of moisture throughout the hatch. Full instructions with each hygrometer. Packed one in a box, complete for $\$ 1.75$, postpaid. Extra wicks, each 15c, postpaid.
"Tycos" Incubator Thermometer No. 5776. Used with or without stand. Price, complete with stand \$1.00, postpaid.
"Tycos" Certified Incubator Thermometer No. 5783. Similar to No. 5776, but certified and guaranteed absolutely accurate. Price, complete with stand $\mathbf{\$ 1 . 2 5}$, postpaid.
"Tycos" Brooder Thermometer No. 5792. Price $\qquad$ -75c, postpaid
"Tycos" Brooder Thermometer No. 5794. Red liquid, easy to read., Price
"Tycos" Household Thermometer No. 5140-S. Suitable to hang in poultry house, or for outside use.
Price $\qquad$ 50c, postpaid


## Close-to-Nature Oat Sprouter



Close-to-Nature Oat Sprouters are made in two styles. The Premium Sectional Sprouters are made mostly of galvanized sheet steel with wood frames and are intended for use in a room where some heat is furnished. The Double Quick Sprouters are for use in unheated rooms. They are well constructed of Cypress Wood, well insulated, and produce the much-to-bedesired Vapor Bath Sprouts.

## PRICES AND DESCRIPTION (All Prices Prepaid)

The Little Eggetter, $13 \times 13 \times 28$ inches, 4 trays, 25 to 35 hens
Small Premium, $24 \times 20 \times 26$ inches, 2 trays, 70 to 75 hens
Small Premium with 1 section, 8 compartments, 4 trays, 100 to 140 hens----------10.-
Small Premium with 2 sections, 48 -quart capacity, 6 trays, 150 to 200 hens_--------19.
Small Premium with 3 sections, 64 -quart capacity, 8 trays, 200 to 275 hens--------- $\mathbf{2 3 . 5 0}$
Large Premium, 48-quart capacity, 6 trays, 150 to 200 hens
Large Premium with 1 section, 80 -quart capacity, 10 trays, 250 to 325 hens------0.-20.0.
Large Premium with 2 sections, 112 -quart capacity, 14 trays, 350 to 425 hens.-.-- 31.50
Large Premium with 3 sections, 144 -quart capacity, 18 trays, 450 to 550 hens $-----{ }_{37} .50$
Large Premium with 4 sections, 176 -quart capacity, 22 trays, 550 to 675 hens------- 43.00

## DOUBLE QUICK VAPOR BATH SPROUTERS



## LITTLE PUTNAM STOVE AND PUTNAM BROODER HEATER

The Little Putnamp Stove is nine inches in diameter and four inches high and BURNS THREE TO FOUR WEEKS WITHOUT REFILLING OR OTHER ATTENTION. Excellent as a fountain heater in cold weather.
Price complete $\qquad$


Brooder Heater
$\$ 2.00$, postpaid


The Putnam Brooder Heater makes an excellent heater for small brooders. Ample for lots of 30 to 40 chicks. It requires tending and refilling only once a week and can be depended upon to furnish a regular supply of heat.
Price complete, with instructions for making a home-made brooder_-_---------\$4.75, postpaid

## ACME EGG GRADING SCALE

The best egg scale we have seen, postpaid for 83.00. This scale will accurately grade all eggs ranging from 16 ounces per dozen to 32 ounces per dozen. The operation of this scale is so simple a child can operate it. By placing an egg in the cup the beam will automatically adjust itself. The low est number visible on the blades will indicate the weight in ounces of one dozen like eggs. The scale works so fast that eggs can be weighed and graded almost as fast as they can be picked up, placed in the cup and then in the carton or case which is properly marked for that particular grade of eggs. Ungraded eggs should never be marketed, as they bring a lower price than graded eggs.


Acme Egg Grading Scale

## Patterson and Young Moisture Guide

Has glass tube,


Patterson and Young Moisture Guide telling when to give more moisture or ventilation. Worth many times its cost every time you set your incubator.

Price postpaid complete, $\$ 1.00$.

## HUMPTY.

DUMPTY EGG CARRIERS


Light slat construction, yet perfectly safe for shipping eggs to market.
Prices, 6 doz. size_-_-_---_-_\$0.70, postpaid $\$ 0.80$
9 doz. size_-_-------- .75, postpaid .85
12 doz. size_-_-------- . 80 , postpaid . 95
15 doz. size_-_-...-_-_ .85, postpaid 1.00

## Discovered: A New Control for Poultry Lice

## BLACK LEAF 40 WORKS WHILE THEY ROOST

It has been demonstrated that "Black Leaf 40," undiluted, painted on the top side of the roost will control body lice. This saves the labor of handling each bird, either to dust, dip or grease. "Black Leaf 40 " does not harm the birds nor retard egg production. We regard this discovery as one of the greatest aids to poultry raising in the last generation. One ounce of "Black Leaf 40 " will paint about 12 to 15 feet of roosts. One pound will paint 190 to 240 feet.

Prices-One ounce bottle 35c; half pound bottle \$1.25; 2 pound tin $\$ 3.25 ; 10$ pound tin $\$ 11.85$. "Black Leaf 40 ," being a nicotine poison, cannot be sent through the mails.
"PAINT'THE ROOSTS


WITH'BlaCK LeAF40

The value of Cod Liver Oil is now recognized universally. Poultry, dogs, foxes, etc., respond quickly to its use. The market, however, is flooded with poor grades, making it difficult for those not informed to know how to order. We carry two brands, "Nopeo Fortified" and "Ko-Vita." We believe these oils to be the best obtainable and their cost is reasonable.
Nopeo Fortified Cod Liver Oil. The National Oil Products Co. is exclusive licensee in the United States and Canada of a process developed by Dr. Theodore $F$. Zucker, of Columbia University, of fortifying the vitamin poteney of Cod Liver Oil. This FORTIFIED oil will go twice as far as other oils in feeding, on account of this increased potency. The ordinary feeding ration is $1 \%$, but in using NOPCO FORTIFIED OIL we recommend but $1 / 2$ of $1 \%$.



Ko-Vita Cod Liver oil. This is one of the better grades. It is pure Norwegian oil, tested for vitamin potency, but not fortified. It should not be compared in price with the cheap, low grade oils that are often lacking in the very elements that are most necessary.



Ko-Vita Cod Liver Oil, half gallon cans, plain, postpaid




## B-K (Bacili-Kil) Disinfectant

In our opinion the most wonderful disinfectant ever placed
 on the market. It is non-poisonous, non-obnoxious to poultry and animals, harmless to fur and skin, a sterilizer and deodorant. We know of mothing that will take its place. Descriptive folders free on request. Prices are postpaid.

B-K Disinfectant, 10 oz . bottles $\$ 0.60$
B-K Disinfectant, quart bottles 1.00

B-K Disinfectant, 5 gallon bottles
12.50

## WORMS IN POULTRY

It is a known fact that most poultry flocks are more or less infected with worms, and that worms must be eradicated if results are to be obtained. Wormy fowls will eat more than they should and produce less, hence it is readily seen that wormy flocks are not profitable. BARNES EMULSION is recommended because it is not a poison, rather it acts as a tonic. Two treatments are possible, both described fully in the BARNES BOOKLET, sent free on request. The use of BARNES EMULSION at regular intervals is not expensive and will prevent worms forming. When worms are present a 30 -day treatment in the drinking water will be found advisable.

Where tape worms are suspected, we suggest the Kamala or Nema Capsule treatment, as it acts quicker than anything else. PRICES INCLUDE POSTAGE

## BARNES EMULSION

Pint size, enough for 12 fowls

- 0.60

Quart size, enough for 25 fowls 1.00

Gallon size, enough for 100 fowls 3.00
12.50

5-gallon kegs, enough for 500 fowls

## KAMALA CAPSULES



## NEMA WORM CAPSULES, PARKE DAVIS \& CO.

No. 188, for baby chicks and turkeys three weeks old or older. Box of 12 for $25 e ;$ box of 50 for 60c.
No. 187, for chickens and turkeys, adult fowls up to 6 pounds. Box of 12 for $40 c$; box of 50 for $\$ 1.20$.

Ask for free booklet on NEMA CAPSULES for poultry, dogs, hogs, etc.
For Pan-A-Min Worm Powder, see page 41. Hess \& Clark Preparations, see page 41.
For Lee's Gizzard Capsules, see page 42.

## DR.HESS \& CLARK'S POULTRY AND STOCK PREPARATIONS

We find this the best all-around line to tie to, and buy it in carload lots direct from the factory at Ashland, Ohio.


Dr. Hess Poultry Pan-A-Min (formerly called Pan-A-cea).

3 lb. package 0.65 , postpaid 0.75
7 1b. package -------- 1.25, postpaid 1.40
15 1b. package ------------ 2.25 , postpaid 2.45
25 lb . package ------------ 3.50 , postpaid $\mathbf{3 . 8 0}$
100 lb. drum
Dr. Hess Hos Special. Widely used and universally liked.

15 1b. package -----------_\$ 2.25, postpaid $\$ 2.45$
25 1b. package ------------ 3.50 , postpaid $\mathbf{3 . 8 0}$
100 lb. drum --------12.00, not postpaid
Dr. Hess Improved Stock Tonic. An excellent tonic for all stock, especially recommended for milk cows.

100 lb. drum --------------12.00, not postpaid
Dr. Hess Instant Louse Killer
1 1b. package_-----------(\$ 0.30, postpaid $\$ 0.40$ 2 $1 / 2$ 1b. package_-_--. .60 , postpaid .70
Dr. Hess Poultry Ver-Mi-Trol (formerly called Worm Powder). When mixed with the feed will control worms in poultry.
4 1b. package _-_ 1.50, postpaid $\$ 1.60$
10 lb. package _------------ $\mathbf{3 . 2 5}$, postpaid $\mathbf{3 . 4 0}$
25 1b. package _----------- $\mathbf{7 . 5 0}$, postpaid 7.85
Dr. Hess Dip and Disinfectant. Forms a milky white solution when mixed with water. Rated equal to any and better than most.
12 oz. bottle $\qquad$ \$ 0.50, postpaid $\$ 0.60$ Quart cans $\qquad$ .75, postpaid .85 $\begin{array}{llll}\text { Half gallon cans } & \text { 1.25, postpaid } & \mathbf{1 . 4 0} \\ \text { Gallon cans } & & \end{array}$
 30 gallon barrels ---------- 39.00, not postpaid 50 gallon barrels -------- 59.00, not postpaid
Dr. Hess Fly Chaser. We have sold many kinds, but like this one the best.
Half gallon cañ_-_-_--

- $\$ \mathbf{1 . 0 0}$, postpaid $\$ 1.15$

Gallon cans _---------------- 1.75, postpaid 1.95
5 gallon cans _-------------- $\mathbf{7 . 2 5}$, postpaid $\mathbf{7 . 7 5}$
Dr. Hess Poultry Tablets (formerly called Roup Tablets).
Medium size package_-_-_-_\$ 0.50, postpaid \$0.60
Large size package_-------- 1.00 , postpaid 1.10
Dr. Hess Chick Tablets (formerly called Diarrhoea Tablets).
Medium size package__-_-_\$ 0.50, postpaid $\mathbf{\$ 0 . 6 0}$
Large size package_-_------ 1.00 , postpaid 1.10
Dr. Hess Antiseptic Powder (formerly called Healing Powder).
4 oz. package $\qquad$ \$ .25, postpaid $\$ 0.35$
10 oz. package 50, postpaid . 60


Pratts.

## Don-Sung Tablets and

 Powder. We have never found anything better to start pullets or moulting. hens laying. It frequently happens that pullets will delay starting to lay, seeming to require some stimulant or tonic to get $t h e m$ started. The same condition prevails with moulting hens. Never let your flock hang back too long. This condition always comes just at the period of high egg prices and it is truly provoking to have a flock that you know should be producing, yet see them loaf along, consuming feed but not producing. Fifteen days' Don-Sung treatment will start a flood of eggs. Try it.
Burrell-Dugger's Don-Sung Tablets. Box of 45 tablets, treatment for 15 hens, 50c. Box of 135 tablets, treatment for 45 hens, \$1.00. Large box $\$ \mathbf{\$ 5 . 0 0}$. For large flocks we recommend Don-Sung in powdered form. Put up in following sizes: 3 pound pkg. \$5.00; 10 pound pail $\$ 10.00$; 25 pound pail $\$ 20.00$. Use the $\$ 20.00$ size for flock of 1,000 . The cost will be 2c per bird and Should return ten times that much in eggs.
Burrell-Dugger's Roup-Over. The best treatment we have found for roup, colds, canker, etc. Liquid. 50c, $\$ 1.00$ and $\$ 8.00$.
Burrell-Dugger's Avicol. Tablets used in treatment of White Diarrhoea in chicks and Black Head in turkeys. 50c, $\$ 1.00$ and \$5.00.

## RABBIT Supplies and Remedies

Pottery Feed Dishes, with flange tops. Pint size 15e each, doz. for $\$ \mathbf{1 . 7 5}$. Quart size 18 e each, doz. for $\$ 2.00$.
Pottery Drinking Dishes, round bottom, will not tip over or split with frost. Pint size 12e each, doz. for $\$ 1.40$. Quart size 15 e each, doz. for $\$ 1.75$. Half gallon size 18e each, doz. for $\$ 2.00$. Not prepaid.
Barnes Rabbit Remedies. $W e$ find these wonderfully satisfactory to breeders.
Barnes Anti-Diarrhoea, small size 50c; large size \$1.00. Postpaid.
Barnes Anti-Snuffie, small size 50e; large size $\$ 1.00$. Postpaid.
Barnes Anti-Slobber, small size 50c; large size $\$ 1.00$. Postpaid.
Breeding Cards, 20c doz.; 100 for $\$ 1.00$. Postpaid.
Rabbit Disease Books, each 25c. Postpaid.
Rabbit Ear Markers, complete outfit $\mathbf{\$ 1 . 0 0}$. Postpaid.
Feed Racks, hold hay and ground feed, 90c each. Postpaid.
Salt-Sulphur Spools, 2 for 15e; 6 for 35c; dozen for 55e; 100 for $\$ 4.00$; case of 250 for $\$ 7.50$. Also packed in cartons of 1 gross for $\$ 5.50$.
Amerco Rabbit Feed, 5 lbs. 2бe; 10 lbs. 45c; $25 \mathrm{lbs} .80 c ; 50 \mathrm{lbs} . \$ 1.45 ; 100 \mathrm{lbs} . \$ 2.75$. Not Postpaid.
Pedigree Blanks, book of 100 for $\$ 1.00 ; 25$ for 35e; 1 doz. for 20c. Postpaid.

## IGEON SUPPLIES

Amerco Pigeon Feed, 5 lbs . 30c; $10 \mathrm{lbs} .50 c ; 25 \mathrm{lbs} .95 c ; 501 \mathrm{bs} . \$ 1.80 ; 100 \mathrm{lbs} . \$ 3.45$. Not postpaid. Pigeon Grit, 12 lbs . 25c; 30 lbs 50c; 100 lbs . \$1.35. Not postpaid.
Grit and Shell Box, 2 compartments, 45e each, postpaid.
Moe's Pigeon Feeder, No. 105, 3-quart capacity, $\$ 1.00$ each, postpaid.
Moe's Pigeon Feeder, No. 106, 6-quart capacity, $\$ 1.80$ each, postpaid.
Pigeon Nests, galvanized steel, 15c each; 1 doz. for $\$ \mathbf{1 5 0}$, postpaid.
Leg Bands, aluminum, numbered, 20e doz.; 100 for $\$ 1.20$, postpaid.
Pigeon Peas, 5 to 25 lbs be lb.; 50 lbs . \$3.25; 100 lbs . $\$ 5.75$.
Pigeon Health Grit, 5 lbs . 25e; 12 lbs . 50c; 28 lbs . $\$ 1.00 ; 100 \mathrm{lbs} . \$ 2.25 . \quad$ Not postpaid.

## Miscellaneous Poultry Feeds and Supplies <br> Prices include delivery within the city limits of Denver, or to freight stations. Sub-

 ject to market changes withont notice. For Ful-o-Pep Feed prices, see page 34.

## Miscellaneous Poultrymen's Requisites

Egg Cartons, $3 x 4$, good grade. Doz. 15e; 2 doz. 25c; 50 for 50c; 100 for $\$ 1.00$; 125 in bundle $\$ 1.20 ; 250$ for $\$ 2.25 ; 500$ for $\$ 4.00$; 1,000 for $\$ 7.50$.
Humpty-Dumpty Egg Carriers, see page 39.
Health Paint, a disinfecting paint in powder form. 5 lb . pkg. 75c; 10 lb. pkg. \$1.25; 25 lb. bag \$3.00; 50 lb. bag $\$ 5.00 ; 100 \mathrm{lb}$. bag $\$ 9.50$. Not postpaid.
Caponizing, Instruments, Pilling's "Philadelphia", $\$ 2.50$; "Farmer" \$3.00; "Special" \$4.00; "Jersey" \$4.50; "Farmer Miles" \$5.00; "Twining" \$4.00; "Lansdowne No. 1" \$4.00; "Lansdowne No. 2" \$3.50; "Cornell" \$5.00. We recommend the "Cornell" or "Lansdowne No. 1." All postpaid.

Nest Egg.


Killing Knives, Pilling's "safe edge" and "angular," each 50c. Postpaid.
Wire Hen's Nests, diameter 14 in., each 35c; doz. \$3.50. Not postpaid.
Egg Testers, fit incubator lamp, each 25c. Postpaid.
Nest Eggs, porcelain, 3 for 10e; 35e doz. Limed, resemble chalk, 3 for 10c; 35e doz. Add 10e doz. for postage.
Water Glass Egg Preserver, cannot be mailed. Pint can, enough for 12 doz. eggs, zac; quart 45c; half gallon 70c; gallon $\$ 1.25$.
Fleming Egg Preserver. 1 oz. preserves 30 doz. eggs. 1 oz. can 50c; 2 oz. can $75 c ; 4$ oz. can \$1.25. Postpaid.
Lee's Egg-O-Latum, 50 doz. egg size 50c; 150 doz. egg size $\$ 1.00$. Postpaid.
Sun-Tex Glass Cloth, per yard 40e; 10 yards or more at 35e yard. Postpaid.
Turkey Bells, 25c each. Postpaid.
Brass Lamp Burners. No. 1, 50c; No. 2, 65e; No. 3, \$1.00. Postpaid.
Double Wick Sun Hinge Burners, 7 e each. Postpaid.
Lamp Wicks, white cotton. No. 1, 15e doz.; No. 2, 25e doz.; No. 3, 40e doz. Postpaid.
Lamp Wicks, red felt. No. 1, 25e doz; No. 2, 45e doz.; No. 3, 55e doz. Postpaid.
Lamp Bowls, pint size 55c each; quart size 65c; 2 quart size 80c. Postpaid.
Wafers, for incubators and brooders, double brass, 3 inch 45c; 4 inch 80c; 5 inch \$l.00. Postpaid.
Tarolfectant, a disinfectant and germ killer. 1 gallon cans $\$ 1.50$; 5 gal. cans $\$ 6.25 . \operatorname{Not}$ postpaid.
Tobaceo Dust, 1 lb . 15c; 2 lbs. 25c; 5 lbs . 60c; 10 lbs. 80c.
Trapnest Fronts, the Drew front, 45c; postpaid for 55c.
Sodium Fluoride, the best lice powder, $1 / 2 \mathrm{lb}$. 20c; 1 lb . 35c; 2 lbs. 6玉e; 5 1bs. \$1.50; 10 lbs. \$2.75. Cannot be mailed.
Creosote, quart 35e; half gal. 55e; 1 gal. 75c. Not postpaid.

## Foods for Dogs, Cats, Foxes, Mink, Etc.

## WRITE FOR SPECIAL KENNEL PRICES

A few short years ago feeding our pets was a major problem that continuously confronted the household. Table scraps were not satisfactory, or were lacking when most needed. Starchy foods did not agree with either dogs or cats. Fried meats made our pets sick, pork did not agree with them, chicken bones killed many a valuable dog, gravy was too rich, they would not eat what we thought they ought to have. Too much milk caused worms, sweets upset their stomachs, greasy foods caused poor coats and made them throw up. In short, we got gray headed trying to find the proper foods.

And now, what a change! Properly balanced foods are easily obtainable, inexpensive and satisfying. Our pets look better, feel better and live longer. If wormed regularly and properly housed, they are almost never sick.

When a new puppy comes into the home its food is not a problem, it is a pleasure. Use one of the canned puppy foods, mixed with puppy meal. Two or three times a week mix ground carrots with the above, and do not overfeed. Growing and matured dogs love these canned meat foods and thrive on them.

A good rule to follow in feeding growing dogs is one ounce each day for each pound of dog's weight; for matured dogs, half this amount. We recommend one of the canned meat foods mixed with an equal amount of puppy meal or kibbled (broken) biscuit. Feed puppies at least four times a day, and matured dogs twice. The morning meal should be light and the evening meal substantial. Never give more than a puppy or grown dog will clean up at a feeding. Young puppies are more inclined to overeat than grown dogs.

Cantion. Do not let canned meat foods freeze, and always remove contents of can as soon as opened, place in glass or china dish and keep in a cool place. Any of the canned foods will keep indefinitely unopened, but should not be exposed to extremes of temperature.

We list what we consider the best of the various kinds. If you prefer some other brand, write us. We wish to always have just what you want.

## THESE PRICES DO NOT INCLUDE POSTAGE

## AUSTIN'S DOG FOODS

Austin's is an old and well known biscuit., ranking with the best. Sold in bulk only.


## BENNETT'S BONE SHAPED BISCUITS

## Cartons Only, Never Sold in Bulk



Bennett's Maltoid Milk Bone is probably the finest biscuit ever offered. It is made particularly for shy feeders and notional appetites. Each Doz.



 Bennett's Junior Biscuit, large carton, about 22 ozs .


## CHAMPION ANIMAL FOOD CO.'S FOODS

The Champion line is the result of constant, intelligent and extensive kennel tests. An up-todate laboratory is maintained and every product is carefully tested to prove its value as a balanced ration.

|  | $1 \mathrm{lb} .$ | 5 lbs. | $10 \mathrm{lbs} .$ | $25 \mathrm{lbs} .$ | 50 lbs . | 100 lbs . |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Champion Dog and Fox |  |  |  |  | \$5.50 | \$11.00 |
| Champion Puppy Biscuit | . 15 | .75 | 1.40 | 3.00 | 5.75 | 11.50 |
| Champion Kibhled Biscuit | . 15 | . 75 | 1.40 | 3.00 | 5.75 | 11.50 |
| Champion Puppy Meal | . 15 | . 75 | 1.40 | 3.00 | 5.75 | 11.50 |
| Champion Mink Food |  |  | 1.75 | 4.10 | 7.70 | 13.40 |
| GOLDEN DOG FOOD (IN CANS) |  |  |  |  |  |  |
| A Denver made product. <br> We recommend it highly. | E | xes | to it | readily | d thr | on it. Case |
| 10 oz. cans, 48 to case | _\$0. |  |  | \$0.25 | \$1.00 | \$3.75 |
| 1 lb. cans, 24 to case |  |  |  | --- | 1.50 | 2.65 |

## JUSTRITE DOG AND CAT FOODS

| A package food that seems to be just right, as to it greedily, and do well on it. | implies. Each | Dogs and 6 Pkgs. | take |
| :---: | :---: | :---: | :---: |
| Justrite Dog Biscuit, $11 / 2 \mathrm{lb}$. pkg. | \$0.35 | \$1.86 | \$3.50 |
| Justrite Kibbled Biscuit, $11 / 2 \mathrm{lb}$. pkg. | . 35 | 1.80 | 3.50 |
| Justrite Meal for Pups-Kittens, $11 / 2 \mathrm{lb}$. pk | . 35 | 1.80 | 3.50 |
| KIPPY DOG AND CAT FOODS (IN CANS) |  |  |  |

"Kippy" Foods are made in Denver from pure, inspected meats, cereals, etc. No byproducts are used in their manufacture. We are advised that "Kippy" foods are being used for very valuable dogs at the Fitzsimons General Hospital (Government institution), and at the Colorado General Hospital (state institution). Each 3 Cans Doz. Case Kippy Dog Food, 10 oz. cans, 48 to case_--------------- $\$ 0.10 \quad \$ 0.25 \quad \$ 1.00 \quad \$ 3.75$



## Chappel Brothers Foods

There are on the market today some 43 different brands of canned foods for dogs, cats and foxes. The oldest and largest manufacturer is Chappel Bros., of Rockford, Ill. Their product is, we believe, the best of the lot, and while we sell many brands, we believe that a continued trial will convince any user that this is the one to feed. Descriptive Folder Free on Request.


## CHAPPEL BROS. CANNED FOODS

Ken-L-Ration, a complete, balanced food, requiring no preparation. Rich in meat, cereal, ground bone and cod liver oil.


Hemo-Ration, a blood-making food recommended for breeding animals, anemic and convalescent animals; a wonder-food in cases of rickets and chorea.

Each 3 Cans 6 Cans Doz. Case 3 Cases
1 1b. cans, 48 to case___-_-_-_-\$0.17 \$0.50 \$1.00 \$1.86 \$6.65 \$5.64 each
Pup-E-Ration contains red meat, organic iron, calcium phosphate, Norwegian Cod Liver Oil and' marrow-fat, all elements necessary for building body, bone and coat.

Kit-E-Ration, a ration of well nigh perfect balance, containing fresh liver, meat, cereals, cod liver oil and other essential elements. Promotes health, growth and glossy coat.
6 oz. cans, 48 to case, and 1 lb. cans, 48 to case, prices the same as Ken-L-Ration above.
Maro-Meat, a clear, lean meat and marrow product to be fed with other material. We recommend boiled rice, rolled oats or cooked vegetables, or any of the bulk dog biscuits listed herein. A $21 / 2 \mathrm{lb}$. can of Maro-Meat supplentented with water and roughage as indicated above will make 8 to 12 pounds of nourishing food. This item should not be overlooked by kennel owners. $\quad$ Each Doz. Case 3 Cases


| CHAPPEL BROS. BULK FOODS, SOAPS, ETC. |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 lb. | 5 lbs. | 10 lbs . | 25 lb | 501 | 100 lb |
| Kib-L-Biscuit (broken biscuit) | \$0.15 | \$0.70 | \$1.30 | \$2.75 | \$5.25 | \$10.00 |
| Ken-L-Biscuit (whole biscuit) | .15 | . 70 | 1.30 | 2.75 | 5.25 | 10.00 |
| Pup-E-Crumbles (granulated) | . 20 | . 85 | 1.50 | 3.25 | 6.25 | 12.00 |
| Ken-L-Sope, cakes 25e each; 8 | oz. | tle | 50e | ; | rt | \$1 |

CHAPPEL BROS. PACKAGE FOODS
These are put up in attractive, handy-sized cartons.


## PERFECTION DOG AND FOX FOOD

"Perfection" Dog and Fox Food is sold in bulk only. It is a cereal and meat food, clean, nourishing and appetizing. It is used extensively by large kennels and fox farms, and is the best low-priced food we know of.
Perfection Dog and Fox Food

| $\mathbf{1} 1 \mathrm{~b}$. | 5 lbs | 10 lbs. | 25 lbs. | 50 lbs. | 100 lbs. |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{\$ 0 . 1 5}$ | $\$ 0.60$ | $\$ 1.00$ | $\$ 2.25$ | $\$ 4.00$ | $\$ 7.50$ |

Also sold in 500 1b. lots at $\$ 7.00$ ewt.

## PURINA DOG CHOW AND FOX CHOW

One of the famous "Purina" foods. Comes in approximately one inch cubes.

$\begin{array}{llllll}\mathbf{\$ 0 . 1 5} & \$ 0.55 & \$ 1.00 & \mathbf{\$ 2 . 2 5} & \mathbf{\$ 4 . 0 0} & \$ 8.00\end{array}$

## ROSE'S ANIMAL FOOD

A finely ground Bone Meal and Cereal Dog and Fox Food, widely used in the South and beginning to be in considerable demand in this territory. We sell in bulk only.




## SERGENT'S FOODS AND REMEDIES

The Sergent line is considered A1 in the East and South, and breeders from these points will use nothing else. Sergent's "Sure-Shot" Worm Capsules are highly recommended. $1 \mathrm{lb} \quad 5 \mathrm{lbs} . \quad 10 \mathrm{lbs} . \quad 25 \mathrm{lbs} . \quad 50 \mathrm{lbs} . \quad 100 \mathrm{lbs}$.


## Sergent's Kibbled, 2 lb. cartons 40c each; 6 for $\$ 2.25 ; 1$ doz. for $\$ 4.35$.

Sergent's "Sure-Shot" Worm Capsules for Dogs, 60e pkg.
Sergent's "Sure-Shot" Worm Capsules for Pups, 60c pkg.
Other Sergent remedies will be offered as demand arises.


## SPRATT'S FOODS

Spratt is probably the oldest and best known manufacturer of foods for dogs, cats and foxes. The whole line is dependable and complete. If we do not list items that you use, write us for particulars. We recommend this line to your consideration.

| SPRATT'S PACKAGE FOODS | Each | $6 \underset{\$ 2.40}{\text { Pkgs. }}$ | $\begin{gathered} 12 \\ \text { Pkgs. } \\ \$ 4.50 \end{gathered}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Fibo, medium cartons | \$0.45 |  |  |  |  |
| Ovals, medium cartons | . 40 |  | 4.20 |  |  |
| Dog Cakes, medium cartons | . 40 | 2.20 | 4.20 |  |  |
| Puppy Cakes, medium cartons | . 40 | 2.20 | 4.20 |  |  |
| Puppy Meal, medium cartons | . 40 | 2.20 | 4.20 |  |  |
| SPRATT'S BULK FOODS 11 b . | 5 lbs. | 10 lbs. | 25 lbs. |  |  |
| Fibo (granulated) -----------\$0.20 | \$0.85 | \$1.60 | \$3.75 | \$7.00 | $\begin{aligned} & 100 \text { Ibs. } \\ & \$ 13.25 \end{aligned}$ |
| Ovals (small, round)---------- . 20 | . 75 | 1.50 | 3.50 | 6.40 | 12.40 |
| Rodnim (for hunters, etc.) --.-- . 20 | . 85 | 1.60 | 3.75 | 7.25 | 14.00 |
| Dog Cakes _------------------20 | . 75 | 1.50 | 3.50 | 6.40 | 12.25 |
| Puppy Cakes ----------------20 | . 75 | 1.50 | 3.50 | 6.40 | 12.40 |
| Cod Liver Oil Cakes, ovals_---- .20 | . 85 | 1.60 | 3.75 | 7.00 | 13.25 |
| Charcoal Cakes, ovals_-------- . 20 | . 85 | 1.60 | 3.75 | 7.00 | 12.25 |
|  | . 75 | 1.50 | 3.50 | 6.40 | 12.25 |
| Challenge Terrier Meal_------ . 15 | . 70 | 1.25 | 3.00 | 5.75 | 11.00 |
| SHREDDED WHEAT WASTE |  |  |  |  |  |



## SHREDDED WHEAT WASTE

A by-product from the manufacture of shredded Wheat cereal food. Very nourishing and valuable for both growing and mature animals. An excellent supplementary food.


## VITAL FOOD

A new, balanced ration, in cartons and bags. Dogs eat it greedily, and many veterinarians recommend it because of its undoubted food value. Give it a trial, you will like it. Vital Food, 2 lb. cartons, each \$0.25; 6 for $\$ 1.30$. Vital Food, 25 lb. bags, each $\$ 2.25$. Vital Food, 10 lb . bags, each $\$ 1.00 ; 6$ for $\$ \boldsymbol{\$} .40$. Vital Food, 100 lb . bags, each 7.00.

## VITAMONT DOG AND FOX FOOD (In Cans)

A meat, vegetable and cod liver oil food that is pleasing dog and fox owners immensely.


## Q-W REMEDIES—Postpaid

The whole $Q-W$ line will be found satisfactory in every way. The life of your pets may depend on having the proper remedy on hand. All $Q-W$ preparations are quoted prepaid. Ask for free booklet.

Q-W Verminol, disinfectant and vermin killer. Pint $\$ 1.25$; quart $\$ 2.00$.
Q-W Dos Soap, cake form. Per cake 35c; 3 for \$1.00.
Q-W Flea Powder. Per box $\$ 1.00$.
Q-W Flea Oil and Coat Grower. Pint \$1.00; quart \$1.75.
Q-W Condition Powder. Conditioner, regulator, aids digestion, mange, eczema, etc. Regular size, $\$ 1.00$; kennel size $\$ 3.00$.
Q-W Constipation Pills. Per bottle \$1.00.
Q-W Phosphated Cod Liver Oil Compound with Lime. Pint $\$ 1.25$; quart $\$ 2.00$.
Q-W Tonic and Red Blood Builder. Per bottle $\$ \mathbf{1 . 0 0}$.
Q-W Distemperol. 6 oz . bottle $\$ 2.00 ; 12 \mathrm{oz}$. bottle $\$ 3.50$.
Q-W Book, All About Dogs. Each \$1.00.
Q-W Mange Lotion. 8 oz. bottle $\$ 1.00$; quart \$3.25; gallon \$12.00.
Q-W Mange and Flea Soap. Regular size $\$ 1.00$; kennel size $\$ \mathbf{3 . 0 0}$.

Q-W Sulphur Compound Solution. Regular size \$1.00; large size \$1.75.
Q-W Healing Salve. Regular size \$1.00; kennel size \$3.00.
Q-W Worm Mixture. 4 oz. bottle $\$ 1.00 ; 16$ oz. bottle \$2.50.
Q-W Worin Capsules. Per box 65c.
Q-W Tape Worm Mixture. 2 oz , bottle $\$ 1.00 ; 6$ oz. bottle $\$ 2.50$.
Q-W Fit and Sedative Tablets. Per bottle $\$ 1.25$.
Q-W Rheumatism Tablets. Per bottle \$1.00.
Q-W Liniment, per bottle $\$ 1.25$.
Q-W Diarrhoea and Dysentery Tablets, per bottle \$1.25.
Q-W Ear Canker Lotion, per bottle \$1.25.
Q-W Breeding Tablets, regular size \$2.00; kennel size \$6.00.
Q-W Eye Salve, per jar $\$ 1.00$
Q-W Hand Book, describes all remedies, FREE.

## VERMICIDE WORM CAPSULES (ffrench's). Postpaid.

This product of The firench Remedy Co. is the outstanding WORM remedy for dogs and foxes. It is exclusively used by the largest fox farm in the world. Gets all worms, roundworms, tapeworms and hookworms, and is absolutely harmless.
Vermicide Capsules, No. 1, full strength, for old dogs, box of 20
$\$ 1.00$
Vermicide Capsules, No. 2, half strength for puppies, box of 20
1.00

Vermicide Capsules, either strength, in boxes of 500,100
french's Flea and Lice Powder
firench's Cedar Dog Soap
1.00

## Clayton's Dog and Cat Remedies <br> A popular line with individual owners, famous for 25 years.

FOR DOGSClayton's Mange Remedy$\$ 0.60$Clayton's Skin Medicine ..... 60
Clayton's Hair Tonic .....  60
Clayton's Distemperine, liquid .....  60
Clayton's Distemperine, tablets ..... 60
Clayton's Condition Pills with Pepsin_ ..... 60
Clayton's H1ood Purifying \& Cooling .....  60
Pills
Pills ..... 60
Clayton's Digestive Tablets
60
60
Clayton's Laxative Pils
Clayton's Laxative Pils
60
60
Clayton's Worm Pills
Clayton's Worm Pills ..... 60
Clayton's Tape Worm Expeller
60
60
Clayton's Vermifuce Liquid
60
.60
Clayton's Little Red Worm Bullets.--
Clayton's Canker Lotion, liquid ..... 60
Clayton's Eye Lotion, liquid ..... 60
Clayton's Fit Remedy, liquid .....  60
Clayton's Cough Remedy ..... 60
Clayton's Sulphur Tablets ..... 60
Clayton's Puppy Tonic ..... 60
Clayton's Rheumatic Tablets ..... 60
Clayton's Diarrhoea Remedy, liquid_- ..... 60
Clayton's Chorea Tablets ..... 60
Clayton's Goitre Remedy ..... 1.00
Clayton's Ceoline Dog Wash and Dis- ..... 35
infectant
Clayton's Kilflea Soap ..... 25
Clayton's Kilfiea Powder ..... 35
Clayton's Cream Soap .....  25
Clayton's Ceoline Soap ..... 25
Clayton's Treatise on all Breeds of Dogs
FREE.
FOR CATS
Clayton's Cat Mange Remedy
$\$ 0.60$
$\$ 0.60$
Clayton's Cat Distemperine, liquid ..... 60
Clayton's Cat Distemperine, tablets .....  60
Clayton's Cat Tonic and Condition Tab- lets .....  60
Clayton's Cat Blood Purifying \& Cool- ing Tablets ..... 60
Clayton's Cat Digestive Tablets ..... 60
Clayton's Cat Laxative Tablets .....  60
Clayton's Cat Worm Tablets .....  60
Clayton's Cat Tape Worm Expeller Tablets ..... 60
Clayton's Cat Vermifuge, liquid _-_-- .....  60
Clayton's Cat Canker Lotion Tablets_-
60
60
Clayton's Cat Eye Lotion Tablets .....  60
Clayton's Cat Fit Tablets ..... 60
Clayton's Cat Cough Remedy ..... 60
Clayton's Cat Diarrhoea Tablets ..... 60
Clayton's Cat Mouth Wash ..... 60
Clayton's Cat Wash and Disiufectant ..... 25
Clayton's Kilfiea Powder ..... 35
25
25
Clayton's Shampoo Soap
Clayton's Shampoo Soap
Clayton's Cat Soap25
NEMA WORM CAPSULES (Chemically Tested Tetrachlorethylene) postpaidNema Worm Capsules are made by Parke, Davis \& Co. They are carefully graded asto dosage and complete instructionsBox Box
are on each package.
No. 188, toy dogs, fox cubs, puppies and cats ..... of 12
No. 187, small adiult dogs $\mathbf{8 0 . 6 0}$
$\mathbf{1 . 0 0}$ ..... 35BoxNo. 189, medium sized adult dogs
EMARNES2.002.50${ }_{.5 \%}^{2.50}$ DOGS,CATS ANDFOXES
No. 190, adult dogs, 30 to 50 lbs. ..... 65 ..... 35

## BARNES' EMULSION (Postpaid)

Barnes, Emulsion is a liquid given either in the feed or by individual dose. It dissolves the worms instead of causing them to be passed. It causes no shock to either dogs or puppies, and for that reason is superior to many remedies because of the safety element.

Barnes, Emulsion, quart cans
Barnes, Emulsion, gallon cans


## MISCELLANEOUS FOODS-Not Postpaid

Large kennels and fox farms find it advisable to mix bulk foods for a part of the feeding ration; we can furnish such foods and would appreciate a chance to quote on your requirements. A few items are listed herewith. Prices are subject to market changes and we suggest that you ask for prices if wanted in large quantities. $1 \mathrm{lb} . \quad 100 \mathrm{lbs}$.

 Edible Bone Meal, less than bag lots___-_\$0.04 \$3.50 | Rice, less than bag lots_-------- | .07 | 6.75 |
| :--- | :--- | :--- | Pearl Barley, less than bag lots_---------- .07 for 6.50 YEAST

Raisins, 25 lb . box for $\$ 2.25$.
Animal Yeast is now recognized as one of the necessities. Its action is so directly beneficial that breeders find it thoroughly practical to include some yeast in the daily ration. We can supply free booklets that fully describe its use and benefits.
Animal Yeast, 4 lb. boxes, postpaid, for Animal Yeast, 25 lb. boxes, postpaid, for_-_-_-_6.00 KO-VITA COD LIVER OIL AND COD LIVER MEAL

The Ko-Vita line is one of the better grades. It is pure Norwegian oil and should not be compared in price with the cheap, low grade oils that are lacking in the very elements that are most necessary Ko-Vita Cod Liver Oil

2 oz. bottle, phosphated, postpaid
2 oz. bottle, phosphated, postpaid



5 gallon cans, plain, postpaid-------------13.50

Ko-Vita Cod Liver Meal




## NOPCO COD LIVER OIL

The National Oil Products Co. is exclusive licensee in the United States and Canada of a process developed by Dr. Theodore F. Zucker, of Columbia University, of fortifying the vitamin potency of Cod Liver Oil. We quote NOPCO FORTIFIED COD LIVER OIL below. The ordinary feeding ration is $1 \%$, but with this oil we recommend only $1 / 2$ of $1 \%$. Nopeo Fortified Cod Liver Oil, quart cans _-_-_-_\$ 0.75, Postpaid \$ 0.85 Nopeo Fortified Cod Liver Oil, half gallon cans_- 1.40, Postpaid 1.55 Nopeo Fortified Cod Liver Oil, gallon cans _-_- 2.60 , Postpaid $\underset{120}{ }$ Nopco Fortified Cod Liver Oil, 5 gallon cans---- 12.30, Postpaid 12.80

## B-K (Bacili-Kil) DISINFECTANT-Postpaid

In our opinion, the most wonderful disinfectant ever placed on the market. It is nonpoisonous, non-obnoxious to animals, harmless to fur and skin, a sterilizer and deodorant. We know of nothing that will take its place. Prices prepaid. Descriptive folders free on request.





## DR. HESS DIP AND DISINFECTANT

A Pine Tar base disinfectant rated unusually high in efficiency.


. 75 Postpaid
1.25 Postpaid

Dr. Hess Dip, 50 gallon barrels
PAR-I-NOX
A powder for fleas, lice, etc. Clings to the hair and skin and is not shaken off like most powders.


CATNIP AND CATNIP MICE




## RUBBER TOYS FOR DOGS AND CATS








.15

## BRUSHES AND COMBS




Watson's Wire Brishes, short haired dogs






## O. K. LITTER (PIONEER BRAND). Not Prepaid.

O. K. Litter is used for poultry and animals. It is an imported peat moss having most remarkable properties of absorption. It will keep kennels and dog houses sweet, clean and sanitary.
O. K. Litter, original bale, about $165 \mathrm{lbs} .--1-1$
O. K. Litter, half bale
O. K. Litter, 15 lbs . for

Each bale contains 20 bushels before compressing, and will cover about 250 sq. ft. one inch deep.

## PEDIGREE BLANKS FOR DOGS, CATS AND RABBITS



## Hendryx Bird Cages

Prices include packing for shipment, but do not include carrying charges.

## ROUND BRASS CAGES

The No. 274 Series is the most popular of all cages. The screen guards keep all seed and litter off the floor and make birds a pleasure rather than a nuisance. Prices include perches and cups complete.
No. 274, $101 / 8$ inches diameter, $153 / 8$ inches high_-------- $\$ 3.50$ No. 275, 11 inches diameter, $155 / 8$ inches high_--------- $\mathbf{3 . 7 5}$ No. 376, $113 / 4$ inches diameter, $171 / 4$ inches high_--------. 4.20
The No. 2274 Series has the same diameter as the No. 274, and is similar in every way except for the pedestal base. This cage has a better appearance when used with a stand.
No. 2274, complete with cups and perches $\qquad$ $\$ 3.50$


Special Enameled Cages. The No. 165 Series seems to be the most in demand of all enameled cages. They are well made, light but substantial, white, with green trimming. No. 165- $93 / 4 \mathrm{in}$. $\mathrm{x} 61 / 2 \mathrm{in}$. x $121 / 2 \mathrm{in}$. high. No. 166-101/2 in. $\times 67 / 8 \mathrm{in}$. $\times 131 / 2 \mathrm{in}$. high. No. 167-11/2 2.70 No. 168-11 in. x $71 / 2$ in. x 14 in. high. Each__-_---- 3.00 No. $168-121 / 2$ in. x $81 / 4$ in. x $141 / 2$ in. high. Each_-_------ 3.25
Hendryx Stock Cages. Each cage equipped with drawer base and four large feed and water dishes. Excellent for young birds. Before much progress is made in bird breeding it will be found necessary to have a good breeding cage and a stock or flight cage. Young birds should have plenty of room and require a large cage for exercise.
No. $81-16$ in. high, 16 in. long, $91 / 2$ in. wide. Each_---- $\$ 6.00$ No. 82-18 in. high, $173 / 4 \mathrm{in}$. long, $101 / 2 \mathrm{in}$. wide. Each_-- 6.50 No. $83-20 \mathrm{in}$. high, $201 / 4 \mathrm{in}$. long, 12 in . wide. Each_--- 7.00
Bird Cage Stands. An attractive stand is an ornament in any home, ana makes it possible to keep birds in light, sunny locations not always possible where cages are hung on brackets or ceiling hooks.
No. 29, polished brass, single loop
No. 30, polished brass, full loop
$\$ 3.60$
$\begin{array}{ll}\text { No. 30, polished brass, full loop } \\ \text { No. } & \text { 31, polished brass, single loo }\end{array}$ 4.50

No. 32, polished brass, full loop 3.15

No. 3728, polished brass, single loop 4.15


Breeding: Cage


Hendryx Stock Cage

No. 3729 , polished brass, full loop -- 4.50
No. 3730, polished brass, single loop_ $\mathbf{3 . 2 5}$
No. 3731, polished brass, full loop -- 4.25
No. $\mathbf{3 7 4 7}$, polished brass or 2 -color combination, single loop_
2.70

No. 3748, polished brass or 2-color combination, full loop_---------- 2.90
"Hendryx" Breeding Cages. Each is equipped with a solid partition, a wire partition, two nests and four large feed and water dishes. A breeding cage is very necessary in mating canaries to insure success.
No. 86S-14 inches high, $171 / 4 \mathrm{in}$. long, $83 / 4$ in. wide, $\$ 5.50$ each.

No. 86-143/4 in. high, $191 / 2$ Cage in. long, 10 in . wide, $\$ 6.00$ Stand each.
No. $87-161 / 4$ in. high, 22 in . long, 11 in . wide, \$6.50 each.
No. 88-17 in. high, $241 / 2$ in. long, $121 / 2$ in. wide, $\$ \mathbf{8 7 . 0 0}$ each.
Extra nests 15c each. These cages have a slide bottom, making it easy to clean without disturbing birds.


No. 2274 Series Cage

## Canary Birds, Foods and Supplies

Please add postage at regular zone rates

## BIRD SEED IN BULK

Canary Seed (imported Sicily), 1 lb. 20c; 2 lbs. 35c; 6 lbs. $\mathbf{\$ 1 . 0 0} ; 10 \mathrm{lbs}$. $\mathbf{\$ 1 . 5 0}$; 25 lbs. $\$ \mathbf{3 . 2 5}$.
Rape Seed (sweet summer), 1 lb . 20c; 2 lbs . 35c; 6 lbs . $\$ \mathbf{1 . 0 0}$; 10 lbs. \$1.40; 25 lbs. $\$ \mathbf{\$ . 1 5 .}$
Hemp Seed, 1 lb . 10c; 5 lbs. 45c; 12 lbs. \$1.00; 25 lbs. \$2.00.
Millet Seed (French Pearl), 1 lb . 10c; 3 lbs. 25c; 10 lbs. 55c; 25 lbs. \$1.15; 50 lbs. \$2.00.
Flax Seed, 1 lb. 15c; 2 lbs. 25c; 5 lbs. 55c; 10 lbs . $\$ 1.00$.
Poppy Seed (Turkish Maw), 1 lb. 35c; 3 lbs. $\$ 1.00 ; 10$ lbs. $\$ 2.50$.
Thistle Seed (Niger), 1 lb . 50c; 3 lbs. $\$ 1.25$.
Simpson's Superior Mixed Bird Seed (with hemp), 1 lb . 20c; 2 lbs. 35e; 6 lbs. $\$ 1.00 ; 10$ lbs. $\$ 1.50 ; 25$ lbs. $\$ 3.25$.
Simpson's Special Roller Bird Mixture (no hemp), 1 lb . 2oc; 2 lbs. 35e; 6 lbs. $\$ 1.00 ; 10 \mathrm{lbs}$. $\mathbf{\$ 1 . 5 0 ; ~} 25 \mathrm{lbs}$. $\$ 3.25$.
Lettuce Seed, 1 lb . $15 \mathrm{c}: 2$ for 25 c .

SPECIAL NOTICE. In ordering any of the package seeds or supplies on these pages, please include 10 c for postage. If three or more packages are ordered, 5 c per package will cover.

## SIMPSON'S PACKAGE SEEDS AND REMEDIES

Simpson's Mixed Bird Seed. carton_-_-\$0.20
Simpson's Roller Bird Seed, carton_--- . $\mathbf{2 0}$
Simpson's Song Restorer, carton _-_-. . 25
Simpson's Nestling Food, carton__-_-_ . 15


## THE "JUSTRITE" LINE OF FOODS AND SUPPLIES

We consider this one of the most complete and best supply lines.
Justrite Honey Roll, 15c, 2 for
Justrite Rol-Er-Ka-Nar-E Bird Seed_-_------ . 26


Justrite Love Bird Seed (Parrakeets)__-_-.... . 25

Justrite Parrot Food with Crackers_-_------- . 40
Justrite Bird Gravel, brown
Justrite Silver Bird Gravel $\qquad$
Justrite Gravel Paper, $9^{\prime \prime}$ circles, 12 in envelope . 2
Justrite Gravel Paper, $10^{\prime \prime}, 12$ for


Justrite Gravel Paper, $7^{\prime \prime} \times 9^{\prime \prime}$, 12 for
Justrite Gravel Paper, $9^{\prime \prime} \times 11^{\prime \prime}, 12$ for
Justrite Song Restorer
FREE Justrite Bird Book with every Justrite order.

$\begin{array}{lll}\text { Justrite Vitamine Health Food_------------------- } & \mathbf{. 2 5} \\ \text { Justrite Monlting Food }\end{array}$
Justrite Moulting Food
Justrite Color and Pepper Food
Justrite Egg and Nestling Food
Justrite Bird Tonic
Justrite Bird Bitters


Justrite Parrot Tonic
Jnstrite Lice Powder
Justrite Bird Wash
Justrite Cage Cleaner
Justrite Lice Destroyer Kit
Justrite Cuttlebone, large, with holder_-_-_-- . 10
Justrite Cintlebone, medium, with holder__-. . 10
Justrite Cnttlebone, small, with holder_-_--- . 05


Justrite Balm for Baldness_------------------ . 35
Justrite Bird Jelly
.25
Justrite Bird Salve
.15

Jnstrite Crushed Oyster Shells_---------------10



## KAEMPFER'S BIRD SUPPLIES

Kaempfer's Highballs, 15e, 2 for_----\$0.25
Kaempfer's New Birdolene _-_------- $\quad .25$
Kaempfer's Asthma Remedy --------- . 25
Kaempfer's Foot Ointment _---------- . 25
Kaempfer's Bird Remedy, tonic_------ . .

## HALLER'S BIRD SUPPLIES

Haller's Canary Bird Pie, 2 for $25 e^{-}$_- $\$ 0.15$
Haller's Dutch Song Restorer, small


## FRENCH'S BIRD SUPPLIES

French's Bird Seed with Biscuit ..... $\$ 0.15$French's Canary TintFrench's Canary Tint25
French's Mite Powder ..... 25
French's Coloring Paper
30
French's Nestling Food ..... 10
French's Nesting Hair
French's Nesting Hair
25
25
French's Bird Ointment ..... 20
French's Bird Tonic ..... 25

GEISLER'S BIRD FEEDS AND SUPPLIES
Geisler's Roller Bird Seed $\qquad$ Geisler's Tonic, A, song restorer Geisler's Tonie, , for diarrhoea Geisler's Tonie, B, for diarrhoea -Geisler's Tonic, C, for colds
Geisler's Tonic, D, general
Geisler's Bird Biscuit
Geisler's Medicated Biscuit
Geisler's Song and Moulting Food_
Geisler's Parasite Cure
Geisler's Health Food
Geisler's Vegetable Extract
Geisler's Parrot Tonic
Geisler's Parrot ronic
PHILADELPHIA B
PHILADELPHIA BIRD FOOD
CO.'S SUPPLIES
Bird Manna, 15e; 2 for 25e; 6 for__\$0.70
Bird Bitters
Bird Seed


Geisler's
Products
Geisler's
Products Are

SIMPSON'S PERFECT BLEND WILD BIRD FEED
4 lbs. ..... $\$ 0.25$
9 lbs. ..... 50
20 1bs. ..... 1.00
25 1bs. ..... 1.15
50 llos. ..... 2.25
100 1bs. ..... 4.25
SPRATT'S BIRD SUPPLIES
Spratt's Bird Tonic ..... $\$ 0.25$
Spratt's Canarydine (asthma) ..... 25
Spratt's Color Food ..... 25
Spratt's Egg Flake and Fruit .....  25
Spratt's Nestling Food ..... 15
Spratt's Song Restorer ..... 25
Spratt's Sing-Song, 15e;

## CANARY BIRDS

Imported Roller Canaries. We import from the best breeding districts of Germany, and sell only especially trained Rollers. We do not consider a bird raised in this country from imported parents a true Roller, since such birds usually lose their trills after the first moult and revert back


## to an ordinary "choppy" song. <br> Imported St. Andreasberg Rollers

$\qquad$ Each \$10.00
Imported Females from Roller stock Each 3.50

Imported German Hartz Mountain Singers
Imported Hartz Mountain Females Each
Domestic Singers, according to breeding, color and song, $\$ 6.50$ to
Domestic Female Canaries, $\$ 1.50$ to

## MISCELLANEOUS BIRD SUPPLIES

Perches, tapered, set of three.

$\qquad$ ..... $\$ 0.25$Swings for brass cages15
Swings for enameled cages ..... 10
.35

Swings for round brass cages, full circle
Food Holders, treat cups, 10c each; 3 for
Bird Bath Dishes, oval, glass or white
Crystal Fountains, fit any cage.
Delta Bath Houses, white (see picture)
Delta Bath Houses, colored, green, blue
Nests, wire, with holder, 15c each; 2 for
Powder Guns, empty, 15c; filled_
Cups, feed or water, several styles, 2 for
Cuttle Bone Holders .25 $\begin{array}{r}.25 \\ .15 \\ \hline\end{array}$

Springs, short, for cage stands_


Springs, brass coil, long $\qquad$ 25
ings, hea Water Wells, cannot spill
Delta Bath House

Cage Bells, canaries like them
.15

Springs, heavy brass
Springs, with adjustable chain
Cage Brackets, swinging, nickeled, $10^{\prime \prime}$, No. K
.15
Cage Brackets, swinging, brass $10^{\prime \prime}$, No. O
Cage Brackets, swinging, nickeled, 12",
No. Le ---N,
Cage Brackets, swinging, b rass, 12",
No. $P$
Brass Guard Cloth, per foot

Bird Books, Breeding \& Training_--- $\quad .35$
Bird Books, Feathered Pets _-_ .
Bird Books, Parrots \& Talking Birds -- . 35 Canary Leg Bands, 2 for 5e; 1 doz. for- $\mathbf{. 2 5}$ Canary Nest Eggs, 2 for 5c; 1 doz. for- . 25 Cuttle Bone, bulk, 1 lb._-_


PARCME Bird Cage covers 40 PON POSTAGE
Many items in this catalog are quoted "Postage Prepaid," and when so priced, we pay postage. We have endeavored to mark every item either "Postage Prepaid" or "Postage, Express, or Freight Extra" so that there may be no doubt in your mind whether or not you should include postage.

When postage is extra it is best to include same in your remittance, as it costs you 12c plus a 5c return charge, to have parcel post matter sent C. O. D.

The following table offers a simple, convenient way to compute parcel post postage: Local zone, Denver, 7 c for first pound, 1c for each additional 2 pounds.
1st and 2nd zones (within 150 miles from Denver). Number of pounds plus 6 cents.
3rd zone (150-300 miles from Denver). 2 times number of pounds plus 6 cents.
4th zone (300-600 miles from Denver). 4 times number of pounds plus 4 cents.
Sth zone ( $600-1,000 \mathrm{miles}$ from Denver). 6 times number of pounds plus 3 cents.
6th zone ( $1,000-1,400$ miles from Denver). 8 times number of pounds plus 2 cents.
Tth zone ( $1,400-1,800$ miles from Denver). 10 times number of pounds plus 2 cents.
8th zone (over 1,800 miles from Denver). 12 times number of pounds plus 1 cent.
EXAMPLE: You live 280 miles from Denver and are ordering merchandise weighing 12 pounds. You are in zone 3 , and postage would be- $12 \times 2=24$ cents, plus 6 cents $=30$ cents. NOTE: Limit of weight for delivery within the first, second and third zones is 70 pounds; to all other zones the limit is 50 pounds. If weight exceeds these figures it is necessary to make two or more packages and figure postage on each package.

GUARANTEE: We offer only merchandise in which we have confidence, but cannot be responsible for the results, as there are too many circumstances over which we have no control, such as weather, insect pests, etc., etc.; therefore, we give no warranty, express or implied, as to description, quality, productiveness or any other matter of any seeds, bulbs or plants we send out, and we will not be in any way responsible for the crop.

Simpson Seed and Floral Co.

## Miscellaneous Garden Tools

## The Village Blacksmith Line

Grasnip Shear No. 410-With 6-inch cutlery blades, a tool that will come in handy in many ways. Good for cutting grass, vines and light shrubs. s0e each, postpaid.
Grass Hooks No. 3-Swings perfectly in the hand with little effort. Forged cutlery steel, tempered edge, ground sharp and whetted. 65e postpaid.
Pruning Shears No. V188-Full polished, forged tool steel, length 8 inches. \$1.75 each, postpaid.
Graswips No. 160-Cut your grass and weeds the new way without stooping. Cuts both ways. 37 inches long with $91 / 4$-inch tool steel blade. $\$ 1.00$ each, postpaid.
Special Dandelion Knives No. 219-The one we have all been looking for. Will not bend. 15 inches long. Tool steel, tempered, with enameled, corrugated handle. 35 e each, postpaid.
Garden Trowels No. T10-6-inch heavy crucible steel, forged, one-piece, with hardwood handle. $\mathbf{7 5 c}$ each, postpaid.
Garden Trowels No. T20-6-inch rolled steel, riveted blade. 25e each, postpaid.
Garden Trowels No. T25-6-inch transplanting. Heavy rolled steel blade, 15c each, 25c postpaid.
Sprinklers No. 19-Non-corrosive-won't clog-with clean-out brass plug. Equal distribution of water over a large area. Base 8 inches wide. Will not tip. 65c each, postpaid.
MeKenney Pruner No. 0-An excellent pruner with handy grip. $\$ 3.00$ each, postpaid.
MeKenney Pruner No. 1-A pruner that clips off surprisingly large branches with very little pressure. \$4.50 each, postpaid.
Dibbles. Transplanting tools that all gardeners use. Each 50c; postpaid 60c.
Norcross Cultivators. Every home needs one.
No. 55, 5 prong with full length handle, \$1.25. Not postpaid.
No. 33, 3 prong, medium length handle, 90c. Not postpaid.
No. 11, 3 prong, short handle, 60c. Postpaid for 75 c.


Garden Trowel

neKenney Pruner No. 0


McKenney Pruner No. 1

Trimsnip Hedge Shears No. os-Full polished blades with selected maple handles, 8 -inch blades with notch. One of the best models offered. \$2.65 each, postpaid.
Hedge Shears No. 600-Ladies' size with long handles, 6 -inch blades. $\$ 1.60$ each, postpaid.


Trimsnip Hedge Shears No. os


Grasnip Shear No. 410


Grass Hook No. 3


Pruning Shear No. V18s


Graswip No. 160


Dandelion Knife No. 219


Sprinkler No. 19

## Garden, Farm and Home Requisites

## NOT PREPAID

# Reenforced Farmtex Stops Weeds-Speeds Growth 



The value of Mulch Paper for growing crops has been established through scientific tests made by agricultural colleges in various states by the United States Department of Agriculture and by results obtained by farmers and gardeners.


Mulch Paper has proved a great labor saver by keeping down weeds and thus doing away with the necessity of weeding or cultivating. This means an important saving of time and money where labor is employed.

Keeping the weeds down prevents their taking fertility from the soil, thus saving in the amount of fertilizer required.

Evaporaton is prevented. Mulch paper permits all rain that falls to enter the soil and then keeps it entrapped there. All moisture is kept in the ground for the use of the crop and the land being free from weeds, the crop has the full benefit of the fertility of the soil without having to share it with useless weeds.

REENFORCED FARMTEX absorbs the heat of solar radiation and keeps the soil at favorable growing temperature. Thus-

LARGER AND BETTER CROPS AND LESS LABOR where FARMTEX is used.
Three weights of FARMTEX-Light, Heavy and Reenforced. The light weight is recommended for annuals, the heavy weight for perennials, and the reenforced for farm crops. All weights will last for several years, depending on care given them.

## PRICES, SIZES AND WEIGHTS

Light Weight Farmtex, 300 yards to the roll.


Heavy Weight Farmtex, 150 yards to the roll.
Up to 25 yards

$$
12 \text { inches wide, 3e per lineal yard. }
$$

18 inches wide, $31 / 2$ e per lineal yard.
36 inches wide, $6 \mathbf{c}$ per lineal yard.


| Full Roll | Wt. per Roll |
| :---: | :---: |
| $\mathbf{\$ 2 . 6 0}$ | 20 lbs. |
| $\mathbf{3 . 5 0}$ | 30 lbs |
| $\mathbf{7 . 0 0}$ | 60 lbs. |

Reenforced Farmtex, 150 yards to the roll. Up to 25 yards
12 inches wide, $31 / 4$ e per lineal yard.
18 inches wide, $33 / 4$ c per lineal yard.
36 inches wide, $61 / 2 \mathbf{c}$ per lineal yard.

25 to 100 yards 21/4e per lineal yard. 3e per lineal yard. 6c per lineal yard.

Full Roll Wt. per Roll

| $\$ 2.60$ | 20 lbs. |
| :---: | :---: |
| $\mathbf{3 . 5 0}$ | 30 lbs. |
| $\mathbf{7 . 0 0}$ | 60 lbs. |


| Full Roll | Wt. per Roll |
| :---: | :---: |
| $\mathbf{\$ 3 . 0 0}$ | 201 lbs. |
| $\mathbf{3 . 7 5}$ | 30 lbs. |
| $\mathbf{7 . 5 0}$ | 60 lbs. |

## FOR PLANT PROTECTION

Hotkaps
An individual hothouse for each and every plant. Protects plants from frost and other elements. Matures crops earlier, keeps insects out, and keeps soil soft. Full directions in free circular.
1 Doz. 30c, postpaid 35c; 100 for $\$ 1.50$, postpaid $\$ 1.65 ; 1,000$ for $\$ 11.50$, not postpaid.
Handy Box Lot of 250 Hotkaps with one fibre setter, $\$ 4.00$; postpaid for $\$ 4.40$.
Metal Setters, $\$ 2.50$ each; postpaid $\mathbf{\$ 2 . 7 5}$.
Tamper, a special tool to use in placing soil over edge of Hotkap, 玉あe each; postpaid for 30c.

CYCLONE SEED SOWER

A $h a n d$ sower that willsave time and energy. Price \$2.00. Postpaid $\$ \mathbf{2 . 2 5}$.


## "SUN-TEX" GLASS CLOTH



## A TEXTILE PRODUCT <br> -PROMOTES GROWTH-

The special claim for Sun-Tex is that the filler is more lasting than other products of this kind. It is guaranteed not to "run." Price, 100 yard roll $\$ 27.50$; 50 yard roll $\mathbf{\$ 1 3 . 7 5 ;} 25$ yard roll \$6.90; 10 to 25 yards 35e per yard; less than 10 yards 40c per yard. Postpaid.


## LAWN MOWERS

The Hudson No. 505, a 16 -inch genuine roller bearing lawn mower that will give you years of faithful service. Not to be compared with the cheap mail order kinds. Price, only $\$ 9.95$.

## THE BERGHMAN LAWN MOWER SHARPENER

Keep your lown mower sharp and save your disposition. The Berghman sharpener will do the job in a few moments. \$1.00 each, postpaid.

## THE LAWN POLICEMAN

A metal sign, very substantially made, green with white letters, size about $51 / 4$ by $81 / 4$ inches, stands about 10 inches high, each 25e; postpaid 35c.
THE THOMPSON COMBINATION BROADCASTER


Thompson Combination Broadcaster

For spreading Grass Seeds and Fertilizers, is a companion to the lawn mower as a household necessity. When used for seeding and spreading fertilizers and all dry materials on lawns, parkways, golf tees, greens, flower and truck gardens, it not only saves time and labor, but broadcasts evenly and accurately. Spreads as fast as a man can walk and is quickly adjusted for any quantity desired.
No. 112 Combination Broadcaster, $\$ 13.50$ each, f.
o. b. factory at Ypsilanti, Michigan, or $\mathbf{\$ 1 5 . 0 0}$
f. o. b. Denver. Shipping weight 40 lbs . Not Prepaid.

## DAISY FOLDING PLANT SUPPORT

For Peonies, Tomatoes, etc., etc. Can be folded up and put away when season is over.
No. 1, has one 16 -inch hoop, electric welded, and 3 rods 27 inches
long looped on the hoop. Each 35c; 1 doz. for $\$ 3.60$, postpaid.
No. 2, has two 16 -inch hoops and 3 legs so constructed that the hoops are evenly spaced 13 inches apart and legs extend 12 inches below the surface. Each 55c; 1 doz. for $\mathbf{\$ 6 . 0 0}$, postpaid.

## Books for Better Gardens

Inexpensive books that deal directly with the subject, or subjects that most appeal to you. Prices quoted are postpaid.


## Daisy

 Plant SupportAround the Year in the Garden. By F. F. Rockwell. 88 illustrations, 350 pages, $\$ 2.50$. Home Flower Growing. By E. C. Volz. 151 illustrations, 364 pages, $\$ 3.50$.


Lawn:

Lawns. By F. F. Rockwell. 39 illustrations, 87 pages, \$1.00.
Rock Gardens. By F. F. Rockwell. 31 illustrations, 86 pages, $\$ 1.00$.
The Book of Bulbs. By F. F. Rockwell. 187 illustrations, 264 pages, $\$ 3.00$.
Dahlias. By F. F. Rockwell. 65 illustrations, 80 pages, \$1.00.
Lilies, Garden Cinderellas. By Helen M. Fox. 51 illustrations, 269 pages, \$5.00.
Gladiolus. By F. F. Rockwell. 45 illustrations, 79 pages, $\$ 1.00$.
Irises. By F. F. Rockwell. 54 illustrations, 80 pages, $\$ 1.00$.
Evergreens for the Small Place. By F. F. Rockwell. 67 illustrations, 84 pages, $\mathbf{\$ 1 . 0 0}$.
Shrubs. By F. F. Rockwell. 49 illustrations, 76 pages, $\$ \mathbf{1 . 0 0}$.
The Design of Small Properties. By E. M. Bottomley. 64 illustrations, 233 pages, $\$ \mathbf{3 . 0 0}$.
Principles of Fruit Growing. By L. H. Bailey. 186 illustrations, 432 pages, $\$ 2.50$.
The Care of Ornamental Trees. By C. F. Greeves-Carpenter. 7 illustrations, 70 pages, $\$ 1.25$.
The Pruning. Manual. By L. H. Bailey. 381 illustrations, 400
pages, $\$ 2.50$. pages, \$2.50.
How to Grow Roses. By Robert Pyle. Illustrated with numerous color and halftone plates. $\$ \mathbf{\$ 2 . 0 0}$.

| QUANTITY | ARTICLES WANTED | PRICE |  |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

## ORDER SHEET

## Simpson Seed \& Floral Co. <br> 1551 Champa Street <br> Denver, Colorado

Terms: Cash with order. Money may be sent by Postoffice Money Order, Express Money Order, Bank Draft, or Personal Check. Amounts up to $\$ 2.00$ may be sent in $2-\mathrm{cent}$ stamps.

When ordering items that are not priced "Postpaid" please include postage at regular zone rates (see page 51). We do not advise C. O. D. shipments, because of the 17c collection charge made by the Postoffice Department.

$$
\text { Date.............................................. } 193 .
$$

Please forward the following articles to:
Name $\qquad$
Postoffice
County
State
Amount Enclosed
Send by
(Mail, Express or Freight) $\$$


| QUANTITY | ARTICLES WANTED | PRICE |  |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

# Sweet Peas -- World's Finest 

Sweet Peas are worth a little extra care and if you will follow these instructions you will get more and better blooms and general satisfaction. Where possible, plant your rows running north and south well away from tight board fence or wall. Sweet Peas require free circulation of air about the roots and vines and will not stand reflected heat such as might be caused from planting close to a wall.

Spade the soil to a depth of at least a foot, work the ground up thoroughly and fertilize with pulverized sheep manure or bone meal. When ready to plant the seed dig a trench about ten inches deep the full length of the desired row. Fill trench to within 5 inches of the top with finely pulverized, lightly fertilized soil. To use too much fertilizer will result in rank growth of vine and few blooms, or burn the tender sprouts. Inoculate the seed with NITRAGIN (a 20 c size is enough for a pound or more of seed) and plant carefully in the bottom of the trench. Plant in a zig-zag row, spacing each seed about an inch apart like this

Cover the seed with not more than 2 inches of soil and water thoroughly. If you have followed instructions you now have a trench 3 inches deep. This should be gradually filled in as the plants grow, always keeping the heads of plants in sight.

Water once a day, morning or evening, and avoid watering when the sun is hot. After plants are an inch or two above the top of the trench, which by this time should have been filled in to the level of the surrounding ground, place your wire, lattice, or strings for the vines to cling to. This support should be 4 or 5 feet high, as the vines will reach this height if they have been properly cared for.

PICK BLOOMS EVERY DAY OR TWO if you wish free flowering throughout the entire summer. To allow too many blooms to wither on the vines causes setting of seed pods with resultant stoppage of blooming. DO NOT PLANT TOO EARLY in the season. The best Spencer varieties are not as hardy as the old types and too early planting will result in loss of some of the most beautiful shades. We recommend the latter part of March or any time in April as a rule. Growth will not start until the ground is warm.

## Selected Named Varieties

Barbara, Lovely soft salmon, very large.
Blue Stone, A striking new blue. This variety deserves a generous space in your garden.
Brilliant, Brilliant cherry-cerise, a sweet pea of unusual beauty.
Cherub, Rich, creamy yellow, edged with pink.
Crimson King, A rich, deep crimson, the best red, does not burn.
Fordhook Orange, Glistening orange, the best
Giant Attraction, Large, shell pink.
Guinea Gold, Glowing. liquid gold.
Hebe, Large, bright pink, an improvement on Countess Spencer and Hercules.
Joan Rider, the finest white, pure and glistening.
Mrs. C. P. Tomlin, A wonderful fiery red.
Powerscourt, One of the finest lavenders.
Warrior, A rich chocolate maroon.
orange produced.
PRICES-Any of the above separate colors, large packets 10c: $1 / 2$ oz. 15c: oz. 25e: $1 / 4$ 1b. 65e; $1 / 21 \mathrm{~b}$. $\$ 1.25$; 1 1b. $\$ 2.00$ postpaid.

A mixture of all colors of Spencer varieties, large packet 10c; oz. package 15e: $1 / 4$ 1b. 35e: $1 / 2$ 1b. 65e: $11 b$. $\$ 1.25$.

One packet each of the ten best named varieties, including all of the favorite shades and colors, 75e postpaid.

## Magnificent Selected Gladiolus

One of the easiest bulbs to grow and at the same time one of the most satisfactory from every standpoint. They enrich your whole garden with a wealth of color that is not possible from other sources. They practically take care of themselves and multiply generously. If cut when the first one or two blooms open, they will keep for a full week and even the small buds will develop and open.

Planted in groups or rows they furnish a flare of color that can be seen from a great distance. Planted singly or by twos and threes with other shrubbery they blend in with anything you may have. When successive plantings are made about three weeks apart blooms may be had from early July until well into November.

Gladiolus bulbs may be had in literally thousands of different named varieties. We are listing what we consider the cream of the good, medium priced ones, but will be glad to quote on any others that you may desire.

## Prices Quoted are for Large Bulbs, Postpaid

All of the following varieties, 5e each, 12 for 50c, 25 for $\$ 1.10,50$ for $\$ 2.00,100$ for $\$ 3.50$. Alice Tiplady, an extra large orange-saffron. Anna. Eberius, dark, velvety purple, deeper throat.
Carmen Sylvia, the best white we have seen. Pure white, with slight violet tint deep in the throat.
Crimson Glow, a large, deep scarlet-crimson.
Halley, a beautiful salmon-pink.
Le Marechal Foch, deep rose-pink. A beauty. Yellow Treasure, a large, deep yellow.
The following varieties are 8c each, 12 for $75 c$, 25 for $\$ 1.50,50$ for $\$ 2.60,100$ for $\$ 5.00$ :
Early Sunrise, a good scarlet, with cream stripe. Mrs. Dr. Norton, pink, with yellow throat. A striking combination.
Rose Ash, ashes of roses, rather new as to color. E. J. Shaylor, deep rose-pink. A beauty.

Lily White, a very early pure white.
Golden Measure, a new dark yellow.
Prince of Wales, a charming coral pink.
The following are $10 c$ each, 3 for 25c, 12 for $90 c$, 25 for $\$ 1.65,50$ for $\$ 3.15,100$ for $\$ 6.00$ :
Illuminator, a brilliant carmine-red, wonderfully attractive.
Henry Ford, a dark velvety-purple. This gladiola attracts attention wherever shown.
Mrs. Watt, an American Beauty shade of red.

## Mixed Colors

A mixture that will bring us your future orders. 3 for $\mathbf{1 5 c}, 12$ for $35 e, 100$ for $\$ 2.50$.

## Special Gladiolus 50 c <br> Offer <br> 15 named varieties no two alike, only



# Simpson's Garden \& Farm Book Spring 1930 Simpson Seed \& Floral Co. 


[^0]:    (i) printed in denver, colorado, u. s.a.

[^1]:    California Cream Butter Lettuce

[^2]:    We list only those varieties that are found to be hardy in Colorado and adjoining states. Many fine roses are not suitable for our climate and to plant them will only lead to disappointment.

    Roses are lovers of heavy soil and for that reason we do not recommend lightening the soil with manure or leaves. Fertilization is very necessary and should be applied in the form of surface dressing, slightly worked into the sol. We suggest VIGORO, listed on page 28, bone dust or manure water.

    Protect your roses in winter by working leaves, straw or dried grass about the roots but do not wrap the stems. Frequent freezing and thawing will cause mildew, sweating and mould, and result in winter killing if wrapping is resorted to.

    Bush roses should be cut back to 18 inches to 2 feet soon after the first killing frost. Watch out for bugs. Spray with Black Leaf No. 40 , or Melrosine, and powder leaves and buds with any good insect powder to prevent stinging by the rose fly. Insecticides listed on page 29 .

[^3]:    Ask for free illustrated booklet telling how to use O. K. Pioneer Poultry Litter.

