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# READ What WE Do and What YOU Should Do READ 

## FORWARDING CHARGES

By Mail or Parcel Post

The following rules apply to the states west of the Rocky Mountains, that is, OREGON, WASHINGTON, CALIFORNIA, IDAHO and MONTANA.

ALASKA and OTHER STATES.-Customers ordering from other states must add postage (see rate table, page 1), if wanted by mail, otherwise shipment will be made by express or freight, transportation charges collect.

> On Cash Orders we will at prices printed in this catalog send by prepaid parcel post all Seeds in packets, ounces or single pounds.
> Small Plants (not potted), Bulbs and Roots are postpaid, unless otherwise stated.
> SEEDS IN BULK.-When you order Seeds in quantity above 1 lb. , add postage. (See parcel post rates, page 1.)
> TOOLS, SUPPLIES, FOODS, REMEDIES, ETC. -On this class of goods we have marked the parcel post weight, including packing (PP.

Wgt.), so that you can add pcstage to catalog prices if you want them by parcel post. PP. Wgt. does not mean postpaiủ.
HARDY FLOWERING SHRUBS, SMALL FRUIT, BERRY and ORNAMENTAL SHRUBS and PLANTS, CLIMBING VINES and 2-YEAR-OLD ROSE BUSHES can be sent by parcel post if necessary, but be sure you send extra money for packing and postage. Postage and packing charges will be specified on the different pages unless the prices are postpaid.

NOT MAILABLE.-Plants in pots, large branching shrubs, Evergreens of all kinds, that must be balled in earth. Fruit and Shade Trecs cannot be sent by Parcel Post. Neither can Insecticides that are poisonous, flower pots, jardinieres, bird cages, or liquids in larger than 1-pint cans.

By Freight or Express

We DO NOT at catalog prices pay freight or express charges on any stock we offer, unless so stated; therefore, take note of the following paragraphs:

ORDER EARLY.-We aim to execute all orders as soon as received, but during the rush season, March and April, short delays may occur, which, however, can be overcome by our patrons anticipating their wants and ordering and taking delivery of their requirements early.

CORRESPONDENCE. - We try to give prompt attention to all proper letters of inquiry, etc., but ask, as a favor, that all questions be stated clearly and briefly, and not on order sheets.
OUR TERMS ARE STRICTLY CASH-NO C. O. D. SHIPMENTS. - The proper remittance must in all cases accompany the order. Send money by bank draft, pcstoffice or express money order. ALL PERSONAL CHECKS MUST INCLUDE 10c EXTRA FOR EXCHANGE. We will not be responsible for stamps or coin sent in unregistered letters.

LARGE ORDERS.-Any gardener, institution or individual wishing seeds, plants, trees or supplies in large quantities is requested to mail a list of what is wanted, stating grade, size or amount, and we will promptly return it with our very lowest prices. A letter of inquiry may save you dollars if you want to buy in QUANTITY, or some PARTICULAR STOCKS.

PREPAY STATIONS.-When you send in orders to go by freight or express be sure you send extra money to pay the transportation charges if your station is a prepay point, which is always the case where there is no regular agent. If you send more than enough, we will refund it as soon as we get the prepay bill. If not enough, we will write for the balance and expect you io remit promptly.

SEASONABLE STOCKS.-Many customers order plants and bulbs out of season-that is, before we get stocks in or perhaps too late in the spring. Rather than delay the balance of your order, we will send what is seasonable at once and defer the balance until proper planting season unless otherwise instructed.

REPORTS-GOOD OR BAD.-Will you help us to attain greater success by writing and telling us how our Seeds and Supplies reach you, how they grow and how you like them? We will certainly appreciate it. Your criticisms, if you have any, as well as your praises, are desired.
MISTAKES.-These will happen occasionally, in spite of all care. Write us at nnce, with copy of original order, if possible, and mistakes will be promptly rectified.

NOTE.-We use every precaution in procuring fresh, pure and reliable seeds, etc., but we, in common with other responsible seed houses, sell our goods subject to the following disclaimer, it being that adopted by the American Seed Trade Association, i. e.: We give no warranty, expressed or implied, as to dessription, quality, productivenєss or any other matter of any seeds, bulbs, nursery stock, roots or plants sent out and will not be in any way responsible for the crop. If the purchaser does not accept the goods on these terms they are to be returned at once. ROUTLEDGE SEED \& FLORAL CO.


> The Stock Dip, Home Disinfectant and Poultry Mite Liquid with a "Thousand Uses"

This preparation has few equals in all-round usefulness. Every poultry yard, ranch, home, factory, stable, store, office building-in fact, every place where sanitation is necessary to health-needs Conkey's Nox-I-Cide every day in the year.

For poultrymen, Nox-I-Cide is indispensable as a red mite destroyer-paint it on the roosts and spray it into cracks. As a preventive of disease, it is unexcelled for cleansing and disinfecting coops, runs, brooders, fountains, and everything else about the premises. Spray premises daily when disease is present and once a week as a preventive of red mites, ticks, "blue-bugs" and disease epidemics.

As a veterinary wash in treating swine, sheep, stock, etc., Nox-I-Cide is widely used. For mange, itch, ringworm galls, sores, scratches, sore mouth, eczema, foot rot, proud flesh and other
conditions requiring a disinfectant, Nox-I-Cide is employed. Sheep raisers, swine herds, cattlemen and others praise it highly as a dip and keep it on hand constantly for use wherever an effective germicide or insecticide is needed.

Try it for household use-for assisting in driving out ants, destroying odors, routing out bedbugs and cockroaches, for making sinks, cess-pools, garbage containers, etc., sanitary and safe-in fact, you will find that Conkey's Nox-ICide when properly diluted-you mix it with water according to directions-is an effective preparation which easily has the thousand uses ascribed to it.

 preparation, you will never be without it. We can't speak too highly of this remedy-advise you not to try to do without it. As a preventive of bowel troubles, White Diarrhea and other digestive complaints, it has given great satisfaction for many years. Once started, diarrhetic conditions often sweep away the whole hatch-hundreds of chicks. Keep Conkey's Remedy in the drinking water until the danger period is passed. The loss of one or a few chicks would more than

## WHITE DIARRHEA REMEDY

offset the cost of remedy used. 30c, 60 c , $\$ 1.20$, all postpaid. Breeder size ( 1200 Tablets) \$3.50; \$3.60 postpaid.


Gape worms accumulate in the windpipe and choke the chick to death. Don't try to extract worms with a wire or feather when you can get such an
 effective remedy as Conkey offers.
Conkey's Gape Remedy comprises two powders-both in same box for one price-one sifted over chicks causes them to dislodge the worms in windpipe by coughing, the other is a tonic powder which is mixed in the feed-to help the bird build up its resisting powers and retain its vitality. $30 \mathrm{c}, 60 \mathrm{c}$; sent posipaid for 35c, 65 .
*Weights here given are for parcel post shipments. Weight limit is 70 pounds or less for zones up to and including the third, and 50 pounds or less for zones up to and including the eighth. Larger shipments are sent express or freight collect. In remitting with order, consult weights and add postage for your zone. Postmaster can tell you in what zone you live from Portland.

## Symptoms of the most prevalent Poultry Diseases and Ailments

## Preserve this Circular. Knowing how to tell what is wrong may save your whole flock some day.

ROUP
Nostrils closed. Running at the nose. Face swollen. Comb pale.
Whistle or sneeze when breathing.
Breath with Catarrhal odor.

## WHITE DIARRHEA

Chick droops wings.
Eye listless and chicks generally weak.
First symptoms usually a white, chalky deposit on down below the vent.
Severe diarrhea; droppings gummy.

## CANKER

Hard swelling on face.
Yellow or cheesy growth may show in roof of mouth.
Eye distended. Breath foul.

## BRONCHITIS

Fowl rattles, not sneezes, when breathing Labored breathing.
Eyes bright. Comb bright.
CATARRH
Gummy deposit around nostril.
Froth in eyes.
Frequent shaking of head due to irritation. Similar to roup; in fact, usually forerunner of roup.

## DIPHTHERIA

False membrane in nostrils, throat, mouth and eyes.
Foul odor not like roup.
Membranes bleed when removed.
PIP
Tipof tongue hard. Nostrils usually closed.
Breath through mouth.

## PNEUMONIA

Rapid and labored breathing.
Bloody mucus may show at corner of mouth.
Comb dark red or bluish.
Bird sleepy or in a comatose condition.
CHOLERA-LIKE DISEASES
Comb dark or bluish. Fowl sleepy.
Feathers rough. Flesh clammy and bloodless.
Droppings showing canary yellow
possibly at times a brown mucus.
Constant diarrhea.
Breath bad and general dejected condition
SOUR CROP
Crop distended. Soft and full of foul water. 1
When handled bird belches.
Discomfort plainly visible.
CROP BOUND
Great discomfort. Crop solid and distended.
Bird ravenous and constantly crówding the crop.
BLACKHEAD
Usually develops in young turkeys.
Marked diarrhea. Lack of interest in food.
Head dark in color. General dejected condition.
Wings drooped; legs weak, feathers ruffled.

## TUBERCULOSIS

Lack of life. Rapidly loses weight. High temperature.
Usually violent diarrhea.

## LIMBERNECK

Fowl loses partial or complete control of its neck.
Bird weak and head drags on ground when it attempts to walk.

## GAPES

Chick gapes constantly. Rapidly weakens.
Stands with eyes closed.

## CHICKÉN POX or SOREHEAD

Dark, warty spots on comb and face.
When removed, discharge a yellowish liquid.

## FAVUS

Scaly gray spots on comb and face.
Grow in numbers until entire comb, face and neck are covered.

## RHEUMATISM

Stiff joints. Muscles contracted.
Toes sometimes drawn under foot.
Bird walks stiffly and lame.

## BUMBLEFOOT

Foot swollen. Hard calloused place on bottom of foot.
Foot very sore and may be very dark or bluish above the toes.

## COCCIDIOSIS

Attacks chicks and old fowls.
Dullness, Weakness, Sleepiness, Diarrhea.
Loss of weight. Bloody droppings.

## LEG WEAKNESS

Chicks wobbly on legs. Sit down to eat.
Drag along on hocks.
INTESTINAL WORMS
Wasting away. Slight Diarrhea. Worms in droppings.
Fowls mope. Dull. Listless.

## CONSTIPATION

Dullness. Loss of appetite.
Birds stand with arched back.
Walk with difficulty.
BROODER PNEUMONIA

## (Aspergillosis)

Slight catarrh. Fast breathing. Chicks mope.
Emit croupy sound. Weakness. Fever.
Drooping wings. Excessive thirst.
LICE, MITES, TICKS, FLEAS
Restlessness.
Fowls pick and scratch selves.
Grow listless and thin.
Little chicks suffer bowel trouble and wings droop.

## LIVER TROUBLE

Comb and wattles fade, gradually changing to dark red or purple.
Loss of appetite. Sluggishness.

## Learn to know them by their given names to save confusion



RALPH R. Pres-Gen'l Mgr.

J. IRA

Sec.-Treas.



GEORGE L. Mgr. Pet Stock Dept. and Poultry Expert

PORTLAND, OREGON, JANUARY 1, 1923.

## Greetings to Our Customers and Friends:

On this New Year's day we extend to all our customers and friends the "season's greetings." We wish you a very happy, prosperous and successful new year.

We have re-written and revised this catalog and made it right up to date. Some stocks have been discarded and others of increased value added.

We have made most prices much lower although increased costs and some short crops really do not warrant it, but we'll hope to gain by increased business.

Remember our motto is "Quality First," then prices as low as we can make them. We are catering to the planters, growers and poultry keepers that appreciate "Highest Quality" and good service. We are in close touch with the world's best markets and know that our "prices" and "quality" are right. Thousands of our customers testify to this. You will find a few reports scattered throughout this catalog. These unsolicited reports are encouraging and our rapidly increasing business leads us to believe we are supplying satisfactory stocks and giving efficient service. If you don't think so, tell us, so we can satisfy you.

We certainly appreciate the support given us and thank you sincerely for past orders, and hope that we will have the pleasure of serving you again this year.

## Routledge Seed \& Floral Co.

OFFICE AND SALESROOM, 145-147 Second St., between Morrison and Alder EAST SIDE STORE and CITY NURSERY DEPT., Corner East Oregon and Union Ave.

## U. S. PARCEL POST RATES AND REGULATIONS

BY PARCEL POST.-We do a direct mail order business with our customers. This enables us to give you direct and personal attention, quick service and lower prices.

## Size and Weight of Parcel Post Packages

Packages cannot be sent that measure over 84 inches in length and girth combined. The weight limit for the local, first, second and third zones is 70 pounds. The weight limit for the third to eighth zones is 50 pounds, except as follows:

ALASKA, MEXICO, CUBA, HAWAII, PANAMA and the PHILIPPINES take the 8 th zone rate with a WEIGHT LIMIT OF 20 LBS. We do not pay postage in 7 th and 8 th zones.

CANADA takes the EIGHTH zone rate with a WEIGHT LIMIT OF 4 LBS. 6 OZS.

Zones
First and second zone..... 50 to
Third zone .................. 150 to
Fourth zone ................ 300 to Fifth zone ............... 600 to 1,000 miles, first lb. 8 c ; each additional lb . or fraction 6 c Sixth zone .................. 1,000 to 1,400 miles, first lb. 9 c ; each additional lb. or fraction 8 c Seventh zone ..............,400 to 1,800 miles, first lb. 11c; each additional lb. or fraction 10c Eighth zone ...............all over 1,800 miles, first lb. 12c; each additional lb. or fraction 12c

War Postage Tax.-Add the war tax of 1 c extra for each 25 c or fraction thereof required to cover postage. Don't forget.

When you order by mail from Portland, look for the zone that corresponds to the number of miles you are away, consult the table above and add postage on stocks not postpaid by us.

ALL MISCELLANEOUS MERCHANDISE offered in this catalog THAT CAN BE SENT BY PARCEL POST is marked P. P. and the PACKED WEIGHT is given so that extra money for POSTAGE can be remitted according to the table above, OTHERWISE we will send by freight or express. Read copy inside front cover.

## INDEX TO CONTENTS

| A | $\text { -B-Bulbs. } \quad \begin{array}{r} \mathrm{P}-\mathrm{Pla} \\ \mathrm{Pag} \end{array}$ | $\begin{array}{rr} \text { R-Roots. } & \begin{array}{r} \text { F—lowe } \\ \text { Page } \end{array} \end{array}$ |  |
| :---: | :---: | :---: | :---: |
|  | $\mathbf{C} \quad \text { Page }$ | D Page | Page |
|  |  |  | G |
| Abelia . . . . . . . . . 105 | Cages, etc... 149 to 154 | Dad's Lanterns.... 114 | 59 |
| Acuba ........... 105 | Cabbage..12, 13, P 37 | Dahlias | detia ........ 59 |
| Acroclinum . . . . . 50 | Calendula ........ 53 | F 57, B 90-91-92 | Golden Glow (see |
| Ageratum ....50 P 78 | Calf Meal ........ 146 | Daisies, Shasta...F 56 | Rudbeckia) |
| Agrostemma . . . . . 50 | Calla Lily . . . . . . B 79 | Daisy (see Bellis) | $\ldots . . . . F^{\text {F }} 67$, P 85 |
| Alfalfa ........... 48 | Calliopsis ........ 53 | . . . . . . P 82, F 52 | Golden Bells (see |
| Alfalfa Meal . . . . 145 | Calceolaria . . . . . 53 | Dandelion Puller... 115 | Forsythia . . . . . 101 |
| Almond . . . . . . . . . 104 | Campanula...54, P 82 | Day Lily (see | Gold Fish, etc..... 160 |
| Aloysia ......... 50 | Canary Seed ..... 150 | Hemerocallis).. P 83 | Gomphrena . . . . . . 59 |
| Alyssum..50, P 78, 82 | Canary Birds ..... 148 | Delphinum.F 57, P 83 | Gooseberries . . . . 110 |
| Amaranthus . . . . . 52 | Canary Creeper ... 58 | Deutzia .......... 101 | Gopher Traps . . . . . 120 |
| Amaryllis ....... 79 | Candy Tuft | Dewberries ...... 110 | Gourds . . W . . . . . . . 59 |
| Ampelopsis . . . . . 100 | F 54, P 78 | Dianthus.. . F 57, P 82 | Grafting Wax .... 123 |
| Anemone .......P 82 | Canna...... F F 53, B 89 | Dicentra ........R 81 | Grapes . ......... 110 |
| Anise . . . . . . . . . . 37 | Canterbury Bells | Didicus ..........F 57 | Grinding Mills . . . . 140 |
| Annual Bedding | . .F 54, P 82 | Digitalis .....58, P 83 | Granulated Bone. .145 |
| Plants . . . . . 75 to 82 | Caponizing Tools.. 137 | Dimorphoteca .... 57 | Grass Seeds, etc.42-49 |
| ntirrhinum | Carco . . . . . . . . . 121 |  | Grass Catchers.... 119 |
| 52, P 78-79 | Caraway ......... 37 | Dogs, Foods an | Grass Hooks, etc.. 116 |
| Apples ........... 106 | Carrot . . . . . . . . . 14, 15 | Supplies ...154-158 | Grit . . . . . . . . . . . 145 |
| Apricots . . . . . . . . . 108 | Cardinal Climber.. 54 | Dogwood ......... 101 | Guinea Pigs . . . . . 159 |
| Aquariums ....... 160 | Carnation.....55, P 76 | Dolichos ......... 56 | Gynerium . . . . . . F 59 |
| Aquilegia...F 52, P 82 | Castor Oil Bean 7, | Doronicum . . . . . . P 82 | Gypsophila.F 59, P 83 |
| Arabis.....F 52, P. 82 | see Ricinus ...F 67 | Dracaena Palm..P 78 |  |
| Arsenate of Lead.. 122 | Catnip Balls, Mice. 156 | Dusty Miller (see | H |
| Arborvitae ....... 105 | Catnip Seed . . . . . 37 | Centaurea) ..... 55 |  |
| Artichoke . . . . 4 , R 43 | Catalpa .......... 104 |  |  |
| Asparagus....F'52, | Cats ............ 156 |  | Hardy Asters ....P 82 |
| S 4 \& P 74, R 113 | Cat Foods . . . 156-157 | E | Hanging Baskets.. 115 |
| Asters....51, P 78, 82 | Cauliflower...16, P 37 |  |  |
| Azalia ........... 105 | Cavies ............ 159 | Echinocystis ...... 58 | Helianthus ….... 60 |
|  |  | Egg Plant …....18 | Heliotrope. . . 59 , $\quad \mathbf{P} 78$ |
| B | Celosia $\ldots$........... ${ }^{55}$ | Egg Boxes . ....134-135 <br> Eggs, Hatching... 137 | Hellebore . . . . . . . . 121 |
| Baby Breath (see | Celery . . . . . . .15, P 37 | Egg Testers . .130, 141 | Hemp . . . . . . . . . ${ }^{150}$ |
| Gypsophila) ...F 59 | Centaurea ........ 55 | Egg Preserver . . . . 137 | Hemerocallis ....P 83 |
| Baby Chicks ..... 137 | Charcoal ......... 145 | Egg Scales . . . . . . . 1410 |  |
| Balloon Vine ..... 53 | Cheat Seed . . . . . . . 43 | Elm . . . . . . . . . . . . 104 |  |
| Balm ............ 37 | Chestnuts . . . . . . . . 104 | Emmer (Speltz) . . 47 |  |
| Balsam .......... 52 | Chinese Wool | Endive ........... 18 | Horehound ........ 37 |
| Bamboo Stakes.... 116 | Flower . . . . . . . 55 | Eschscholtzia ..... 58 |  |
| Barberry . . . . . . . 101 | Cherries . . . . . . . . 108 | Euonymous ${ }^{\text {E }}$. 100, 105 | Hollyhocks -.60, P 83 <br> Honeysuckle.....$~$ |
| Barley ........... ${ }^{44}$ | Chevril . . . . . . . . . 16 | Extension Rods... 127 | Honeysuckle ..... 100 |
| Basil ............. 37 | Chick Boxes . . . . 135 | Evergreens ....... 105 |  |
| Bachelor But (see Centaur | Chick Feed.... 143-145 | -rergreens | (see Lonicera)..... 103 |
| (see Centaurea) H 55 | Chick Greasers ... 140 | F | Hose . . . . . . . . . . . . 40 |
| Bed Bug Killer. . . 123 | Chives ............ 37 |  | Horseradish .....R 113 |
| Beet . . . . . . . . . . 9 , 10 | Cholerine . . . . . . 146 |  | Humulus . . . . . . . . 60 |
| Beef Scraps ..... 145 | Chrysanthemum | Feeders ........138-139 | Humogerm ....... 41 |
| Begonias ..74-77 B 88 | ......F 55, P $7 \dot{7} 82$ | Ferns, etc. 74 | Hunnemannia .... 60 |
| Belgian Hares, etc. 158 | Cider Mills ....... 120 | Fertilizer. $37,38,39,40$ | Hyacinth Bean 56 |
| Bellflower (see |  | Filberts . . . . . . . . 104 | (see Dolichos) .. 56 |
| Campanula) .... 54 | Cinnamon Vine ... 77 | Field Peas . . . . . . ${ }^{43}$ | $\text { Hygrometers ..... } 141$ |
| Berberry . . . . . . 99 | Clarkia .......... 55 | Fish Meal . . . . . . . 145 |  |
| Bellis ......F $52-\mathrm{P} 82$ | Clematis . . . . . . . 99 | Fish, Fish Food, |  |
| Birch ............ 104 | Clovers . . . . . . . 48-49 | Globes, etc. .... 160 | Hyslop ........... 37 |
| Birds, Seeds, Foods | Clover Cutter .... 144 | Flax, Scarlet . . . . . 61 |  |
| and Supplies | Cobea Sca | Flowering Currant. 101 | I |
| 148 to 154 | F 56, P 78 | Flower Pots, etc.. 115 |  |
| Blackberries . . . . 109 | Collards ......... ${ }^{16}$ | Fountains ....140-141 |  |
| Black Leaf '40"'. . 122 | Coleus ....F 55, P 78 | Forget-Me-Not (see |  |
| Bleeding. Heart <br> (see Dicentra) . . 81 | Columbine (see ${ }^{\text {a }} 8$ | Myosotis) . F 63, P 83 | tuft) Ipomoea $\ldots$............... 60 64 |
| (see Dicentra) ... 81 <br> Bone Meal $\qquad$ | Aquilegia) F 52, P 82 Coreopsis...56, P 82 | Four o'Clock (see ${ }^{\text {a }}$ | Iris ................. . . 88 |
| Bone Meal . . . . . . ${ }^{40} 40$ | Coreopsis....56, P 82 | Marvel of Peru). ${ }^{69}$ Forsythia | Incubator $\quad \ldots \ldots 128$ |
| Books ............ | Corn Salad ....... 16 |  | Ivy . . . . . . P 78, R 100 |
| 114-147-152-156-159 | Corn (Sweet) ..... 17 | talis) . . . . .58, P 83 |  |
| Boston Ivy (see | Corn (Field) . . . . 45 | Fruit Press ...... 120 |  |
| Ampelopsis Ve | Corn Planters..... 119 | Fruit Trees, | $J$ |
| chii) ........... 100 | Cornus-Dogwaod . 101 | .......... 106 to 114 |  |
| Bordeaux ${ }_{\text {Borage }}$ | Cosmos .....56, P 78 | Funkia ........... P 83 | Japanese Hop (see |
| Borage ${ }^{\text {Boxwood }}$. . . . . . . . . . ${ }^{3} 105$ | Cotoneasters ..... 101 | Fuchsias .........P 77 | Humulus) ...... 60 |
| Broccoli . . . . 11. P 37 |  |  | Juniper .......... 105 |
| Brussels Sprouts | Cow Peas .. | G |  |
| Brooders.... 129 to 133 | Cress ............ 16 | Gaillardia ....58, P 83 | K |
| Browallia ........ 53 | Crytomeria ...... 105 | Garden Hose . . . . . 42 |  |
| Broom (see Genis- | Cucumbers ...... 18 | Garden Stakes... 115 | Kaffir Corn ..... 47 |
| ta) ............... 101 | Cucumbers ....... 18 | Garden Tools..116-120 | Kale, Garden. 19, P 37 |
| Buckwheat ....... 43 | Cultivators . . .118-119 | Garlic ............ 19 | Kale, Stock...44, P 37 |
| Buddelia-Butter- | Currants.110, F 99-101 | Gas Balls ........ 123 | Killing Knives .... 135 |
| flv . . . . . . . . . . . . . 101 | Cuttle Bone ...... 150 | Genista $\ldots \ldots . . .101$ | Kittens $\ldots$. . . . . . . 15196 |
| Bug Death ....... 121 | Cypress Vine ....F 56 | Geranium F 59, P P ${ }_{\text {Geum }} \mathbf{7 5 - 7 8}$ | Kohl-Rabi . . . . . . . . 196 |
| utter Nuts . . . . 104 | Cypress Vine ....F 56 | Geum ......F 58. P 83 | Kochia |
|  | Cydonia-Quince .. 100 | Gladiola .......86-87 | uzu |

# INDEX TO CONTENTS - Continued 

| 工 | Page | $\begin{array}{r} \text { R-Roots. } \quad \begin{array}{r} \text { F-Flow } \\ \text { Page } \end{array} \end{array}$ | Page |
| :---: | :---: | :---: | :---: |
|  | N | $\mathbf{R}$ |  |
|  |  |  | Summer Savory .. 37 |
| Lace Flower (see | Nasturtium . . . . . 64 | Rabbits, etc. ..158-159 | Sweet Clover ..... 48 |
| Didicus) . . . . . . 57 | Nemesia ........ 63 | Radish . . . . . . . 31, 32 | Superphosphate . . 40 |
| Lactein . . . . . . W Write | Nests-Nest Eggs. 135 | Raffia . . . . . . . 115 | Sweet Peas |
| Land Plaster . . . . 40 | Nico-fume . . . . . . 122 | Rape . . . . . . . . 47, 151 | $\text { .......69, 70, 71, } 72$ |
| Labels . . . . . . . . . 115 | Nicotiana . . . . . . 63 | Raspberries ..... 111 | Sweet Potato |
| Lamps, Burners, | Nigelia . . . . . . . . 63 | Rat Traps . . . . . 120 | Plants ......... 37 |
| etc. . . . . . . . . . . 141 | Nitrate of Soda.... 40 | Rat Poison ........ 123 | Sweet Sultan (see |
| Larkspur ....61, P 83 | Nitro-germ . . . . . . 41 | Retinospora . . . . 105 | Centaurea) |
| Laurel . . . . . . . . 105 | Nozzles, etc. . . . . 127 | Rebis-Fl. Currant. 101 | Sweet William |
| Laurstinus . . . . . 105 | Nut Trees . . . . . . 105 | Reference Tables | F 68, P 85 |
| Lavender ....37, P 85 |  | Inside Back Cover | Swiss Chard (see |
| Lathyrus . . . . . . . 61 |  | Retinospora ...... 105 |  |
| Lawn Grass ..... 49 | 0 | Rhododendrons ... 105 | Syringa-Ph |
| Lawn Mowers..... 119 |  | Rhubarb..S 31, R 113 | us ........ . . 103 |
| Lawn Rollers . . . . 119 | Oat Sprouters .... 133 | Ricinus . . . . . . . F 67 | Symphoricarpus .. 103 |
| Lawn Sprinklers . 127 | Oats . . . . . . . . . . 46 | Roach Powder.123-146 |  |
| Lawson Cypress. . 105 | Oculum . . . . . . . . 146 | Rock Cress (see | I |
| Leg Bands . . . . . . . 142 | Onion Sets . . . . . . 24 | Arabis)..F 52, P 82 | Thermometers .... 141 |
| Lentils ......... 47 | Onion . . . . . . .23-24 | Roofing Paper . . . 136 | Thumbergia ..... 68 |
| Lemon Lily (see | Okra . . . . . . . . . . . 24 | Rose Stakes ..... 115 | Thyme .......... 37 |
| Hemerocallis)..P 83 | Oyster Shells . . . . 145 | Roses . . . . . . 93 to 99 | Tobacco . . . . . . . . . 123 |
| Lemon Verbena |  | Rosemary . . . . . . . 37 | Tomato .....35, P 37 |
| (see Aloysia) |  | Rubber Plant . . . . 74 | Toxal . . . . . . ...... . 123 |
| Leek . . . . . . . . . . 19 | $\mathbf{P}$ | Rutabaga ...... 37 | Tool Sharpener . . 116 |
| Lettuce . . . 20, 21, 150 |  | Rudbeckia.F 67, P 85 | Traps-Mole . . . . 120 |
| Lice Powder and | Paeonies ........ 81 | Rye ............. 47 | Rat ........... 129 |
| Liquids . . . . .1, 152 | Palms, etc. . . . . . 74 |  | Trap Nests . . . . . 135 |
| Lilac . . . . . . . . . 102 | Pampas Grass (see |  | Trowels . . . . . . . 1116 |
| Lilies . . . . . . . . . . . 80 | Gynerium) ..... 59 | S | Tree Tanglefoot... 121 |
| Limestone ....... 40 | Pansy . . . . . .65, P 78 |  | Tree Pruners .... 117 |
| Lime . . . . . . . . 40, 122 | Parsley . ........ 25 | Saxifragas ......P 85 | Tritoma...F 72, P 85 |
| Linum . . . . . . . . . 61 | Parrots, Cages, | Sage ........... 37 | Tube Roses . . . . . ${ }^{\text {T }} 79$ |
| Linden Lily of the Valley. 104 | Foods, etc. . 150-153 | Saffron . . . . . . . 37 | Tulip Trees ...... 104 |
| Lily of the Valley. 80 | Parsnip . . . . . . . 25 | Salpiglossis. F 67, $\mathrm{P}^{78}$ | Turnip .......... 36 |
| Loganberries . . . . 109 | Peaches . . . . . . . . 108 | Salsify . . . . . . . . 34 | Turnip |
| Lonicera . . . . . . 103 | Pears . . . . . . . . . 108 | Salvia ......68, ${ }^{\text {P }} 78$ | V |
| Lobelia . . . F 62, P 78 | Peas . . . . . . $28-29-30$ | Savory . . . . . . . . . 37 |  |
| Lupinus .......... 62 | Peanuts $\because \cdots \cdots 31$ | Scabiosa . . . .68, ${ }^{\text {P }} 85$ | Valeriana ....72, P 85 <br> Vegetable Plants |
|  | Pedigree Blanks .. 154 | Schizanthus . . F 67 | d Roots. . . . 37, 113 |
| M | Pelgonium ........ 154 <br> Pentstemon ..64, P 84 | Seeders . . . . . .118-119 | Verbena...F 73, P 78 |
| M | Pentstemon ..64, P 84 Pepper .....25, P 145 | $\begin{aligned} & \text { Shamrock } \cdots \cdots \\ & \text { Shasta Daisy.56. } \quad 88 \\ & 85 \end{aligned}$ | Vetches |
| Maderia Vine . . . . 77 | Petunia...66, P $77-78$ | Shears | Violet . . . . . $\mathrm{P}^{\text {P }}$ - 73 |
| Mahonia ........ 105 | Philadelphus ..... 103 | Sheep Guano . . . . . 40 | Vinca . . . . . P ${ }^{\text {V }}$ 78-85 |
| Majoram . . . . . . 37 | Phlox.. F 65, P 78-84 | Sickles .......... 116 | Veronica . . . . . . . 103 |
| Marigold $\ldots 66$ P 78 | Pigeons ....... 137 | Smilax . . . . . . . . . . 77 | Virburnum $\quad \cdots \cdots, \quad .103$ |
| Marvel of Peru... 61 | Pin-ol, Pine Oil. . 146 | Snapdragon Plants | Violets....F 73, P 85 Virginia Creeper |
| Mag-o-tite . . . . . . . . 121 Mangels | Pink (see Dianthus) | $79,78$ | Virginia Creeper <br> (see Ampelopsis) 100 |
| Mangels ........... 10 | Plan . . . . 57 P P 82 | Snowbail . . . . . . . . . 103 | (see Ampelopsis) 100 |
| Maples ........... 104 | Planet Junior . . . . . 118 | Snowberry ...... 103 |  |
| Mesembryantheum. 77 | Plant Stakes . . . . . 115 | Spirea ........... 103 | W |
| Michaelmas Daisy ${ }^{\text {61- }} 77$ |  | Spratt's ${ }^{\text {Foods, }}{ }^{\text {col }}$ | Wallflower.F 73, P 85 |
| Michaelmas Daisy <br> (see Hardy As- | Poppy . . F 66, 67, P 84 | etc. . . . . . . . . . 158 | Walnuts . . . . . . . . 105 |
| (see Hardy As- <br> ters) ......51, P 82 | Poplar . . . . . . . . . . 104 <br> Portulaca ........ 64 | Spray Pumps | Wandering Jew . . . 777 |
| Migonette . . . . . . 61 | Potatoes . . . . . . 2 26- 27 | Sprays. . . 121, 122, 123 | Water Faucets.... 139 |
| Millet . . . . . . . 47, 150 | Potash ......... 40 | Speltz . . . . . . . . . . . 47 | Watermelon ...... 23 |
| Mimulus . . . . . . . . 62 | Potato Planters... 119 | Speedwell (see Ve- | Weeders . . . . .115-116 |
| Mole Traps . . . . . 120 | Pots, Pot Labels. 115 | ronica) | Weed Killer . ... . . 121 |
| Montbretias $\ldots$. 88 | Poultry Houses.... 136 | Spinach ........... 34 | Weigelia . . . . . . 103 |
| Moon Flower (see Ipomoea) | Poultry Remedies, Foods, Supplies, | Spirea . . . . . . . . . 103 | Wheat . . . . . . . . 48 |
| $\text { Morning Glory . . . } 63$ | Foods, Supplies, 148 | Sprinklers . . . . . . 127 | Whitewash |
| Moss . . . . . . . . . . . 116 | Powder Guns . . . . 126 | Squirrel Poison ... 123 |  |
| Mountain Ash .... 104 | Privet . . . . . . . . 105 | Statice . . . . . . . . . 67 | (see Echinocystis 58 |
| Mouse Trap ...... 120 | 67, P 84 | Stocks . . . . $\mathrm{F}^{\text {c }}$ 68, P 79 | Wild Flower Gar- 72 |
| Mulford's Cultures 41 | Pumpkin ........ 31 | Stokesia, St. John's Worth | den Wicks, etc. . . . . . . . . 141 |
| Muskmelon ....... 22 | Prunes . . . . . . . 107 | (see Hyperic | Wire Baskets ... 115 |
| Muskmelon ....... 22 | Pruning Compound. 123 | (see Hypericum) 83 | Wire Nestø ..... 135 |
| Muriate Potash . . 40 | Pruning Tools.116-117 | Strawberries ..... 112 | Wistaria . . . . . . . 100 |
| Muskplant (see Mimulus) | Puppies, Foods and | Strawflower (see | Wong Bok .i.... 13 |
|  |  | Hellchrysum) .. 59 | Wonder Fertilizer . 38 Wormwood . . . . . 37 |
| Mustard |  | Sulphur . . . . ${ }^{\text {a }}$ - ${ }^{\text {-123 }}$ | Y |
|  |  | Sunflower ...S 32, 150 | Yucca... . . . . . . . 105 |
| yrtle (see Vinca) |  | Also Helianthus 60 | Z |
|  | Quince.107, F 100, 102 | Sugar Cane ...... 47 |  |

## OUR FALL CATALOG READY ABOUT SEPTEMBER 1ST

Our Fall Catalog of Flowering Bulbs, Hardy Plants and Shrubs, Rose Bushes, Fruit, Shade and Ornamental Trees, Shrubs and Vines is issued about September 1 each season. If you would like a copy, make your request at any time and we will put your name on the mailing list for catalog in season.

## ARTICHOKE

LARGE GREEN GLOBE.-The well-known French vegetable; the undeveloped flower heads, when properly prepared, make a most delicious dish.

Pkt. 15c; oz. \$1.25
White Jerusalem.-Tubers grown for stock. See page 43..

## ASPARAGUS

COLUMBIAN MAMMOTH WHITE.-Gives immense yield of large, clear, white shoots; very tender and of excellent flavor.

Pkt. 10c; oz. 20c; 4 oz. 50c; lb. $\$ 1.25$
PALMETTO.-Early, prolific; large, thick, dark-green shoots of delicious quality. The most popular commercial variety.

Pkt. 10c; oz. 20c; 4 oz. 50c; lb. $\$ 1.25$
CONOBER'S COLOSSAL.-A grood, standard large sort of approved quality. Shoots white, very tender.

Pkt. 10c; oz. 20c; 4 oz. 50c; lb. $\$ 1.25$
GIANT ARGENTEUIL.-Very early and stalks of mammoth size. Excellent quality.

Pkt. 10c; oz. 25c; 4 oz. 60c; lb. $\$ 1.50$
ASPARAGUS ROOTS.-You can save two or three years' time by buying Asparagus Roots. For prices, see Vegetable Roots, page 113.


Asparagus Tips

Packet and single pound prices only are prepaid. Add postage to 10 -lb. prices if wanted by mail.

## STRINGLESS GREFN POD

This famous Bean is unequaled as a first-early; also for main crop.

It combines unusual hardiness, extreme earliness, and wonderful productiveness with handsome appearance and finest quality of pods.

By repeated plantings pods may be had in constant succession from spring until cut off by heavy frosts in the fall. The pods are of the finest quality, of a rich green, very round and slightly curved, medium long; solid, meaty and plump. The pods are tender, brittle, and of finest flavor, always entirely stringless even when fully grown.

Large pkt. 15c; $1 / 2 \mathrm{lb} .20 \mathrm{c}$; 1b. 35 c ; 10 lbs. \$2.75.

LONGFELLOW. - Early, pods long and straight, tender and brittle. Pkt. 15c; lb. 30 c ; 10 lbs . $\$ 2.50$

EXTRA EARLY REFUGEE.-An old and popular variety.

Pkt. 10 c ; lb. 30 c ; $10 \mathrm{lbs} . \$ 2.50$

ROUTLEDGE STRINGLESS REFUGEE
An improved stringless strain. Very hardy and extremely productive. Pods round and straight, tender, brittle, absolutely stringless and of finest quality; medium early. Great improvement over Refugee or 1,000 to 1. Excellent home or market variety as a "snap," picking or canning variety.
Large pkt. 15 c ; $1 / 2 \mathrm{lb} .25 \mathrm{c}$; lb. $40 \mathrm{c} ; 10 \mathrm{lbs} . \$ 2.75$

## DWARF HORTICULTURAL

The best dwarf sort for green shell beans for the home garden and market. Plants very piuductive, pods broad and thick, with splashes of bright red on a yellowish ground. They become fit as green shelled beans early; are large, easily shelled and are about equal to the Lima in quality. Our stock is true, all dwarf and unsurpassed.
Large pkt. $15 \mathrm{c} ; 1 / 2 \mathrm{lb} .20 \mathrm{c}$; lb. 35 c ; $10 \mathrm{lbs} . \$ 2.75$

[^0]

# BEANS-Continued 

## DWARF OR BUSH-YELLOW PODDED

Packet and single pound prices are prepaid. Add postage to $10-\mathrm{lb}$. prices if wanted $3 y$ lall

## PENCIL POD BLACK WAX

## Early and Stringless

The dwarf, bushy plants produce in profusion; beautiful, long, straight yellow pods that are well rounded, deeply "saddle backed," very meaty and solici. Rich and mild in flavor and entirely stringhtess.

Pkt. 15c; $1 / 2$ lb. 20c; lb. 35c; 10 lbs. $\$ 2.75$

## IMPROVED GOLDEN WAX

Medium early, heavy cropper, vine vigorous. May be sown early or late with the assurance of a good crop. Pods are golden yellow, fleshy and solid, brittle, waxy texture and have an exceptionally rich, buttery flavor. Excellent for home or market garden.
Large pkt. 15c; $1 / 2$ lb. 20c; lb. 35c; 10 lbs. $\$ 2.50$


Routledge Stringless Wax

## ROUTLEDGE STRINGLESS WAX

An exceptionally fine, hardy, white-seeded, flat-podded wax bean of really choice quality, and most attractive appearance when cooked. The pods remain tender longer than those of any other variety, and the plants continue to bear for a long period. The pods are straight, of a bright lemon-yellow, brittle, meaty, and entirely stringless at all stages of growth. The seeds, being large and pure white, are most desirable as shell beans for both summer and winter use.

Pkt. 15c; $1 / 2$ lb. 25c; lb. 40c; 10 lbs. $\$ 3.00$

## NEW BRITTLE WAX

Extremely early and of such superb quality it might almost be called "Best of All." The plants are of vigorous growth, with large foliage, and appear completely loaded with handsome pods, which are nearly straight. Long, round, fleshy, tender, "brittle" and entirely stringless at all stages of growth. The pods are unexcelled as snap beans. Seed almost white, showing only a small dark dot at the eye.
Large pkt. 15c; $1 / 2 \mathrm{lb} .25 \mathrm{c} ; \mathrm{lb} .40 \mathrm{c} ; 10 \mathrm{lbs} . \$ 3.00$

## SURECROP STRINGLESS WAX

A prolific cropper, superlative quality, handsome yellow pods 6 to 7 inches in length, fleshy but almost round, very meaty and sweet, and perfectly stringless. Plant is free branching, but perfectly sturdy and upright. Valuable for its productiveness and disease-resisting qualities.

Pkt. 15c; 1/2 lb. 20c; Ib. 35c; 10 lbs. $\$ 3.00$

## DAVIS KIDNEY WAX

Hardy and productive. The pods are long, white, straight, good lookers, good shippers, but only of fair quality compared to Routledge Stringless Wax, which will eventually take its place entirely.
Large pkt. $15 \mathrm{c} ; 1 / 2 \mathrm{lb} .20 \mathrm{c}$; lb. $30 \mathrm{c} ; 10 \mathrm{lbs} . \$ 2.50$

## WARDWELL'S KIDNEY WAX

A popular and well-known variety; pods long, golden-yellow, brittle and stringless; seed white, with dark markings about the eye. Market gardeners find this bean one of the most profitable.
Large pkt. 15c; $1 / 2$ lb. 20c; Ib. $30 \mathrm{c} ; 10$ It $二-4$

## PROLIFIC BLACK WAX

Pods rich, creamy yellow, round, fleshy, fine quality. One of the old reliable sorts.
Large pkt. 15c; $1 / 2$ lb. 20c; lb. 30c; 10 lbs. $\$ 2.50$

## USE BUG DEATH APHIS

On bean plants to kill aphis and beetles. Also revives and aids production. Page 121.

## Two Climbing Pole Beans of Real Merit

PLANT 6 TO 8 BEANS IN HILLS 3 FEET APART. USE POLES OR HEAVY TWINE FROM OVERHEAD WIRES (HOP-YARD STYLE.)


Part of two vines, Routledge Giant


Routledge Perfection

ROUTLEDGE GIANT - Mammoth Podded Bean
If you have not grown this Bean, by all means do so this season. It is a quick grower, quite early and produces the MOST WONDERFUL LONG, PLUMP, MEATY PODS that are TENDER, BRITTLE and of DELICIOUS MILD FLAVOR when cooked.

This Bean of unknown origin is called by some Dickenson's Yount, Mother's Favorite, Oregon Giant, etc., and has been grown in a small way by those who have been fortunate enough to secure a few seeds. Grown locally it produces an ENORMOUS LOT of GIANT PODS from early until frost, but is a VERY SHY SEEDER and the seed has always been very scarce.

We have been trying for six years to grow enough seed to supply all our customers. This is the first season we have been successful. We have at last found a location where they will

## CLIMBING POLE BEANS-Continued

Although pole beans require a little more care and labor, they are, when properly grown, usually of longer bearing period than the dwarf sorts and are much more productlve.

## ROUTLEDGE GIANT-Continued

yield a fair amount of mature seed per acre.
The mammoth 10 to 12 -inch pods of ROUTLEDGE GIANT picked in their prime are EN. TIRELY STRINGLESS. The QUALITY IS SUPERB for canning or used fresh as a string bean and as a SALAD BEAN whole or sliced, and served with dressing it is DELICIOUS. The pale green pods are lightly penciled with carmine which disappears when cooked. Illustration from photo above and color plate outside front cover.

Large pkt. $20 \mathrm{c} ; 1 / 2 \mathrm{lb} .35 \mathrm{c}$; lb. 60c; 5 lbs . $\$ 2.75$; $10 \mathrm{lbs} . \$ 5.00$, postpaid


## Improved Kentucky Wonder (Asparagus)

A very popular variety; often sold as asparagus. More extensively planted than any other. Pods green, very long, round and perfectly stringless. Enormously productive and early, remaining in "fit" condition a long time. Unsurpassed for the table, being very tender and of delicious flavor.

Large pkt. 15c; $1 / 2 \mathrm{lb} .20 \mathrm{c}$; lb. 35c; $10 \mathrm{lbs} . \$ 2.75$

## Routledge Perfection White Seeded

It produces large, quick growing vines which soon cover the poles, bearing a very heavy crop of handsome green pods 8 inches in length which are very meaty, stringless and of delicious flavor. The vines produce their pods very early and continue to bear immense quantities of snap pods throughout the season. Excellent for canning. The dry beans being white and of good size when allowed to ripen on the vines, make it an excellent soup or bake bean for winter use. (See cut, page 6.)

Large pkt. 15c; 1/2 lb. 25c; lb. 40c; 10 lbs. $\$ 3.50$

## Kentucky Wonder Wax

The best wax podded pole bean. Very similar to the green podded Kentucky Wonder but the pods are a little broader. They are very fleshy and stringless as snaps and are of excellent quality. The pods are very long, handsome light yellow. Seed medium sized, oval, flattened, very irregular, usually somewhat shriveled, dark brown. Its earliness and hardlness commend this as a pole bean well adapted for Northwestern latitudes.

Large pkt. 15c; $1 / 2 \mathrm{lb} .25 \mathrm{c}$; lb. 40c; 10 lbs. $\$ 3.00$

## Harlequin-New

The finest pole horticultural variety in cultivation and on account of its wonderful productiveness and superior quality takes first rank as a late Shell Bean. Pods extra long, 6 to 7 inches, brilliantly colored with crimson carmine borne in clusters. Unequaled for tenderness and delicious flavor.

Large pkt. $15 \mathrm{c} ; 1 / 2 \mathrm{lb} .25 \mathrm{c}$; lb. $40 \mathrm{c} ; 10 \mathrm{lbs} . \$ 3.50$

## Lazy Wife

One of the best of the late green podded pole beans for snap or green shell use. The medium green pods, borne in large clusters, are five to six inches long, broad, thick, fleshy and entirely stringless. When young they have a rich, buttery flavor which is retained until they are nearly ripe. The seed is white, medium size, slightly oval or nearly round.

Large pkt. 15 c ; $1 / 2 \mathrm{lb} .20 \mathrm{c}$; lb. 35 c ; $10 \mathrm{lbs} . \$ 2.75$

## Horticultural Pole

Speckled Cranberry or Wren's Egg.-Vines vigorous, quite early. Pods short, broad, green streaked with bright red. Beans are round, splashed and spotted with red. Of fine quality, either as a green shelled bean or dry for winter use.

Large pkt. 15c; $1 / 2 \mathrm{lb} .20 \mathrm{c}$; lb. 35c; $10 \mathrm{lbs} . \$ 2.75$

## Scarlet Runner

Grown extensively for ornamental purposes, as flowers are a most brilliant scarlet and borne profusely; beans are broad and flat, and of fine flavor when cooked, same as Lima beans.

Large pkt. $15 \mathrm{c} ; 1 / 2 \mathrm{lb} .25 \mathrm{c}$; lb. 40 c

[^1]
# BEANS-Continued 



## Routledge Early Prize Pole Lima

By careful selection we now offer a strain that is much earlier than "Oregon." It will actually mature a full crop of dry beans in the early fall. The vines are vigorous and remarkably productive. The green shell beans are large, very tender and of finest quality. It has the rich, buttery flavor, always desired but seldom found.

Large pkt. 20c; $1 / 2 \mathrm{lb} .30 \mathrm{c}$; lb .50 c
Shelton, Wash., August 7, 1922.
Routledge Seed \& Floral Co.
Gentlemen: The Routledge Giant Beans I got from you are grand, also the $R$. R. Wonderful Lettuce and all else of which you sent me.

Sincerely,
MRS. A. MATTHES.

## Oregon Pole Lima

Excellent for the Northwest. Strong, vigorous grower. In July the blooms come in long panicles from the top shoots and the large, broad pods are freely produced until frost. The large, plump, white beans are of delicious quality, green, shelled or dry. They are in "prime condition" when the pods begin to turn yellow. Oregon grown, acclimated seed.
Large pkt. $15 \mathrm{c} ; 1 / 2 \mathrm{lb} .25 \mathrm{c} ; \mathrm{lb} .35 \mathrm{c} ; 10 \mathrm{lbs} . \$ 3.00$

## DWARF OR BUSH LIMA

BURPEE'S IMPROVED BUSH LIMA.-Best of the Bush Lima type. Very large, broad pods, excellent flavored beans, borne on large, vigorous plants. Extremely prolific. Pods contain from four to six very large beans of greenish white color.

Pkt. $15 \mathrm{c} ; 1 / 2 \mathrm{lb} .25 \mathrm{c} ; \mathrm{lb} .40 \mathrm{c} ; 10 \mathrm{lbs} . \$ 3.50$

## Commercial or Dry Table Beans

The stocks we offer are of known varieties, acclimated and hand-picked and grown especially for seed-by far the safest, best and most profitable in the end.

## Improved Tree Bean <br> Early, Wonderful, Productive

On account of its snowy whiteness and uniformly small size, it commands the highest price in all markets. The plants grow upright, have less foliage than most varieties and hold the pods well up from the ground, thus keeping the beans from getting dirty and discolored. The pods are very freely produced, are long and well filled. The dry bean is small, white, plump and almost round. Cooking and eating qualities are unsurpassed. The whole crop will ripen early and evenly and you can get it safely harvested before the rainy season sets in. Our stock of this particular strain is rather limited, so order early.

Prices: Large pkt. 15c; lb. 30c; 10 lbs. $\$ 2.00$. Arite for quantity price.

LADY WASHINGTON.-A great improvement over the old "White Navy," as it is much earlier; especially adapted to Western conditions.

Large pkt. 15c; lb. 30c; 10 lbs. $\$ 2.00$

## Castor Bean

Used for medicinal purposes and by some claimed to keep moles awav. Ornamental foliage, 4 ft .

To insure the greatest success


See page 41 cess

BROWN.SWEDISH. - Dry beans, rather small, round, oblong; golden brown with a white eye. As a cooking or baking bean the quality is very superior, having a richness and flavor all its own. It is unusually productive, pods long and straight and always well filled. Bush strong, healthy and vigorous. Crop matures early.

Pkt. 15c; lb. 30c; 10 lbs. $\$ 2.50$
RED MEXICAN. - An excellent dry bean for winter use. Used extensively for baking and Spanish dishes.

Large pkt. 15c; lb. 25c; 10 lbs. $\$ 2.00$
BROAD WINDSOR.-An English variety; large, broad, flat beans of delicious flavor; used as a shell bean. Good for hog pasture; very hardy.

Large pkt. 15c; lb. 30c; 10 lbs. $\$ 2.50$

## TABLE BEETS

## Routledge Favorite

The best of all for home gardens. A re-selected, improved strain of Crimson Globe. Perfectly globe shaped, with a single tap root, and of the richest color of any of the beets. It is medium early, tops are small and dark in color, a splendid keeper, remaining in prime condition a long time. The flesh, is exceedingly tender, fine and sweet and is unequaled for table use. Home and market gardeners will find our Favorite very profitable, attractive and of highest quality.
Pkt. 10c; oz. 20c; 4 oz. 60c; lb. $\$ 2.00$

## Crosby's Egyptian

Very popular, extremely early and reaches table size quickly. Beets grow more globe-shaped than the old Egyptian. Flesh sweet and tender, rich vermilion red, very attractive. Pkt. 10c; oz. 15c; 4 oz. 35c; lb. $\$ 1.00$

## Detroit Dark Red

Excellent variety, nearly ${ }^{\text {g }}$ globular, dark skin and rich red flesh, maturing early and keeping crisp and tender for a long time. Very popular with market gardeners and canneries.
Pkt. 10c; oz. 15c; 4 oz. 35c; lb. $\$ 1.00$

## Improved Early Blood Turnip

This is the ideal beet for market gardeners It is very symmetrical, with small tap root and but few fibrous roots; color outside is deep blood-red; fine grained and unsurpassed in quality. It continues to grow until late in the fall, attaining a large size and making a good selling and table beet for winter.

Pkt. 10c; oz. 15c; 4 oz. 35c; lb. $\$ 1.00$

## Early Model Beet

A fine selection of early blood-red Beet, extremely smooth, fine rich color and desirable shape. It is globe shape, color of flesh a rich blood-red, entirely free from stringiness and of excellent quality, being unusually sweet and tender. The tops are quite small, making it a good variety for bunching.

Pkt. 10c; oz. 20c; $1 / 1 \mathrm{lb} .45 \mathrm{c}$; lb. $\$ 1.25$


Swiss Chard or Spinach Beet


Routledge Favorite
HALF LONG BLOOD.-Quite popular. Excellent in shape and quality; yields well.

Pkt. 5c; oz. 15c; 4 oz. 35c; lb. $\$ 1.00$
LONG BLOOD.-The root is smooth and handsome, flesh brilliant in color and excellent quality. Good keeper.

Pkt. 5 c ; oz. $15 \mathrm{c} ; 4 \mathrm{oz} .35 \mathrm{c}$; lb. $\$ 1.00$

## SWISS CHARD, or Spinach Beet

GIANT LUCULLUS.-The leaves of this vegetable are used for "greens" and prepared in the same manner as Spinach; sometimes, however, the mid-rib is prepared like asparagus. Seed planted early in the spring will quickly produce plants from which leaves may be cut all summer. New shoots continually spring up and make a fast growth, while those plants which are allowed to grow on without any cutting will make large curly leaves, with thick, light-colored mid-ribs, which are delicious when striped, cooked and served like asparagus. You should not fail to plant at least one long row in your garden.

Pkt. 10c; oz. 20c; 4 oz. 35c. Ib. \$1.50

## BRUSSELS SPROUTS

The plants, which are very hardy, grow two or three feet high, and produce, from the sides of the stalks, numerous little sprouts, which resemble very small cabbages one or two inches in diameter. The leaves should be broken down in the fall, to give the little heads more room to grow. Grow and set out same as cabbage or kale, $21 / 2$ to 3 feet apart.

PERFECTION OR DALKEITH.-Plants are of dwarf growth and stems are thickly set with large, solid sprouts. This varioty :very hardy and even during quite se weather the plants maintain their spl ?f fact, the flavor and quality is much inuproveu by frost.

Pkt. 10c; oz. 40c; 4 oz. \$1.00
CHIVES.—See Vegetable Roots, page 37.

[^2]
## Stock Beets or Mangels

Excellent winter feed for horses, cattle, sheep, hogs and chickens. Farmers and stock raisers of the United States do not appreciate so fully the value of Mangels for feeding cattle, hogs, sheep, etc., as do the farmers of Europe. In France, Great Britain and other European countries, it is the exception rather than the rule where Mangels are not grown on a large scale on every farm. The immense yield which may be secured from an acre, with very little expense either for material or labor, makes the Mangel crop one of the most profitable on the farm. Fifteen to 20 tons of roots an acre is not an unusual yield; some specimens weigh 20 to 30 lbs . each. Where properly cultivated, seeded and harvested the cost of growing a bushel should not exceed 10c. When fed in combination with grain they are worth almost as much, pound for pound, as the grain. This statement may seem absurd, but experience has proved that Mangels so aid digestion and assimilation by keeping the animals in a healthy condition, that they increase the feeding value of other feeds consumed, beside the nutrients the roots contain. Every farmer and poultryman should raise Mangels.

## Giant Yellow Eckendorf

A new mangel of great merit. The roots are smooth, long and cylindrical in shape, very heavy, weighing up to 15 and 20 pounds each; grow two-thirds above ground. The flesh is firm, crisp and solid, white in color and of high feeding value. (See cut No. 3.)

Pkt. 5c; oz. 10c; 4 oz. 25c; lb. 65c

## Giant Half Sugar Mangel

Yields as much per acre as the best Mangels, and twice as much per acre (bulk of roots), as the rich sugar beet. Roots grow very large above the ground. Smooth, creamy white in color and very nutritious. Easily pulled. (See illustration No. 1.)

Pkt. 5c; oz. 10c; 4 oz. 25c; lb. 65c

## Mammoth Long Red

Very popular and much used. A large and heavy cropper. Dark red skin, with whitish flesh; grows one-half or more above the ground; roots quite regular; attain a very large size. (Same shape as No. 2.)

Pkt. 5c; oz. 10c; 4 oz. 25c; lb. 65c

## Danish Sludstrup

An improved variety, considered one of the best. Awarded first class certificate. Color, reddish yellow, and of a distinct type. It is very hardy, grows well above ground; is easily pulled; very nutritious. (See cut No. 2.)

Pkt. 5c; oz. 10c; 4 oz. 25c; lb. 65c

## Golden Tankard

An enormous yielder of weight per acre, and at the same time very nutritious; flesh deep-yellow, of fine shape, growing largely above ground, thus being easily harvested. (Same shape as cut .No. 3.)

Pkt. 5c; oz. 10c; 4 oz. 25c; lb. 75c

## SUGAR BEETS

Pkt. 10 c ; oz. $15 \mathrm{c} ; 4 \mathrm{oz} .40 \mathrm{c}$; lb. $\$ 1.00$
FRENCH WHITE SUGAR.-The sugar beet most generally grown for stock, as it combines with heavy sugar yield, from 10 to 13 per cent sugar.

KLEIN WANZLEBEN.-The most popular for table and sugar production. Tops rather large and slightly waved.

NOTE.-In $5-\mathrm{lb}$. or $10-\mathrm{lb}$. lots, 10 c per lb . less; write for quantity prices


[^3]
## BROCCOLI - Winter Cauliflower

Forms a head like cauliflower, but is much hardier; stands wet and cold better and gives excellent results. For fall use sow White French in March or April; St. Valentine in May or June, for late winter and early spring cutting. St. Valentine is very extensively planted by our local market gardeners for use in late winter and spring when cauliflower is out of season. Plant and cultivate same as cauliflower.

ROUTLEDGE " $H$. Q.'
(Highest Quality)

## ST. VALENTINE

In this seed we are offering our customers a very select, high-grade strain of the well-known St. ValentIne. By selecting only the most perfect heads, those showing the most desirable leaf formation for the protection of the developing head and those of large size and perfect, compact heads, free from small cen-ter-head leaflets, we have produced this superb strain. Our H. Q. St. Valentine produces larger, later and far better heads that are much superior to those produced from the average seed sold of this variety. Our "H. Q." seed will produce the highest per cent of perfect heads and bring the "top" price.

The H. Q. St. Valentine seed we are offering this year is from just such perfect heads as shown herewith. It comes from the originators of this now famous variety. Our supply is limited, so order early.
H. Q., pkt. 25c; 1/4 oz. \$1.00; oz. \$3.50.


NOTE.-Don't set plants of St. Valentine out before June-and set at least four feet apart each way. They will be ready to cut early the following spring.

## White French Broccoli

## White Cape

A select early strain, producing fine white heads of large size and excellent quality. Broccoli is hardier and earsier to grow than cauliflower, and this variety comes into head and can be cut in the fall and winter, depending on earliness of planting.

Pkt. 10c; oz. \$1.00; 4 oz. $\$ 3.50$

NOTE.-These illustrations reproduced from photographs show our "H. Q." type of a perfect cut head, also a growing plant with the large incurving leaves that are so necessary to protect the "head" during cold, unfavorable weather.

Myrtle Point, Ore., March 17, 1922. Routledge Seed \& Floral Co.
Dear Sirs: 1 wish you could see the lovely heads of Broccoli we are putting on the market raised from the $H$. Q. seed we ordered from you last year. The little melons were delicious. We also like the lettuce and Danish Ball Head Cabbage.

Yours truly,
EDW. F. HOFFMAN.
FREE BULLETINS AND PAMPHLETS on general gardening and many special crops, also spraying, etc., are issued by the Oregon Agricultural College at Corvallis, Ore. These are sent free on request. We advise our customers to secure them. THEY ARE OF GREAT VALUE.

## "Highest Quality"

CABBAGE
True and Pure
Our Cabbage Seeds come from the world's best growers-pure, true strains, of highest quality. One ounce will produce over 3,000 plants. One-quarter pound of seed will produce plants sufficient for one acre, therefore, don't practice false economy by buying cheap, lowquality seed. There is a great amount of inferior, poorly grown, mixed cabbage seed on the market this year. Beware of low prices.

## Early Jersey Wakefield

The earliest and hardiest heading of first early cabbages. Most gardeners depend upon it for the bulk of their extra early crop. Its exceeding hardiness not only to resist cold, but other unfavorable conditions, insures the greatest likelihood of profitable and satisfactory results. Our stock is grown and selected with the greatest care; there is none better, and few as good. Head conical, very compact, solid and of excellent quality. The thick, stout leaves and compact habit makes it the best sort for very early setting. HIGHEST QUALITY SEED.

Pkt. 10c; oz. 35c; 4 oz. \$1.00; lb. \$3.50

## Oregon Wakefield

A larger, most remarkable and valuable strain of Wakefield. It has the same general characteristics of other Wakefield cabbages, the heads being conical with a rounded or blunt point. It is, however, far superior to other strains, being nearly double the size and of better quality, and at the same time is almost as early. It has few outer leaves, permitting close planting.

Pkt. 10c; oz. 35c; 4 oz. $\$ 1.00$; lb. $\$ 3.50$

## Early Winningstadt

One of the best for general use, being very hardy, sweet, fine quality, and sure to head. Head regular, conical, very hard and keeps well both summer and winter. It is the hardiest, not only as regards frost, but will suffer less from excessive wet, drought, insects or disease than any other second early sort.

Pkt. 10c; oz. 35c
"CARCO" FOR ROOT MAGGOTS DILUTE WITH WATER 1 TO 125. IT IS A "LIFE SAVER" FOR PLANTS AFFECTED WITH THE DEADLY MAGGOT.



Early Jersey Wakefield

## Copenhagen Market

The earliest large round-headed cabbage yet introduced. Sure to head and every head perfect. The plant is of vigorous habit but compact, with short stem and few outer leaves which are of rather upright growth.' The leaves are medium light green, nearly round, comparatively thick and smooth. The heads are round, very solid and of exceptionally good quality. Its earliness, compact growth, uniformity and size of head, firmness and most excellent quality combine to make Copenhagen Market the most valuable cabbage of recent introduction. We recommend it unreservedly. Worth the additional price.

Pkt. 10c; oz. $40 \mathrm{c} ; 4 \mathrm{oz}$. $\$ 1.25$; lb. $\$ 4.50$

## ROUTLTDGE GEM

This NEW AND EXTRA EARLY NOVELTY from Denmark comes highly recommended and no doubt will become very popular with home gardeners where space is an important factor. This little Gem forms BEAUTIFUL LITTLE ROUND HEADS, SOLID AS A ROCK, and mature in 6 TO 7 WEEKS and will keep in perfect condition for several weeks without bursting. Can be set as close as 8 to 10 inches. Cut heads PURE WHITE, QUALITY and FLAVOR UNSURPASSED.

Pkt. 15c; $1 / 2$ oz. 40 c ; oz. 75 c

[^4]
## CABBAGE - Continued - Late Varieties

## Premium Late Flat Dutch

A low growing variety; heads large, bluish-green; round, solid, broad and flat on top; an excellent fall and winter variety, and a good keeper. It is a sure header. Our stock has been grown from carefully selected heads, and we consider it superior to any other strain of Flat Dutch cabbage on the market.

Pkt. 10c; oz. 35c; 4 oz. \$1.00; lb. \$3.50.

## Perfection Drumhead Savoy Cabbage

A variety that is much prized by those who are familiar with it; of exceptionally fine flavor, more tender and sweeter. Heads large size and quite compact, with densely and uniformly crimpled or savory leaves.

Pkt. 10c; oz. 50c; 4 oz. \$1.50; lb. $\$ 5.00$.

## Mammoth Rock Red

Best hard-headed, red variety; large heads, globular, and very deep red on top. Very tender and excellent quality, fine for cold salads on account of. its attractive color.
Pkt. 10c; oz. 50c; 4 oz. $\$ 1,50$.


## Danish Round Head

An earlier short-stemmed strain of the famous Danish Ball Head
Large and very solid round head on short stems, having the same keeping quality as the original strain of Danish Ball Head, so widely known. It is 10 days to 2 weeks earlier and is a wonderful yielder. It is especially valuable for high, dry land, producing good sized heads where other strains would be too small. For shipping in the late fall or winter there is no finer cabbage. Our seed of Danish Round Head comes direct from the originator in Denmark and is of the Highest Quality.

Pkt. 10 c ; oz. $40 \mathrm{c} ; 4 \mathrm{oz}$. $\$ 1.25$; lb. $\$ 4.00$

## Danish Ball Head--True, Highest Quality Seed

Most remarkable late cabbage yet produced, heads hard and solid-fine grained and tender. Entirely distinct. Exceedingly hardy in resisting cold and wet weather. We offer true, pure seed of the very finest medium tall or "middle-stem" type. Famous for its hard-heading qualities, which at once recommends it as highly valuable for shipping. The magnificent heads are round in form and keep in excellent condition during winter, coming out in the spring perfectly solid.

Pkt. 10c; oz. 40 c ; 4 oz . $\$ 1.25$; lb. $\$ 4.00$


Wong Bok Salad Cabbage

## WONG BOK

This Chinese Cabbage is becoming more popular each year. While it has been cultivated in China for years, it is comparatively unknown in many markets. Last season there was more than usual displayed on our "Public Market." Some gardeners had it marked Chinese Cabbage, also Sweet Lettuce, Salad Lettuce, etc.

Wong Bok produces a beautiful, crisp, blanched tall or long head, resembling a giant Cos Lettuce. As a salad it rivals the finest lettuce. Delicious sliced as cold-slaw. Boiled or steamed it makes delightful greens, more mild than cabbage, somewhat like brussels sprouts. Don't plant too early, grow it as a fall vegetable.

Plant like late cabbage, about 15 inches apart, in rows. Does its best in cool, moist weather. Will last untli freezing weather.

Pkt. 10c; oz. 40c

DO YOU SEND EAST for your Seeds? It's bad policy. Spend your money on this Coast. Here's where you sell your products. Our Seeds are highest quality.

## CARROTS

## ROUTLEDGE CORELESS

The finest early table variety grown. Handsome, meltingly tender and sweet
This new carrot is our own strain, grown from the French carrot, Nantes. You will be delighted with the melting tenderness and sweot, mild flavor of Routledge Coreless.
It is a half-long cylindrical carrot, blunt pointed, with a small tap root and small top. They run very uniform in shape and grow just the right size for table use. The flesh is of fine texture, entirely devoid of stringiness, coarseness and woody heart; color orangescarlet, very attractive, delicious and sweet flavored when cooked.

Pkt. 10c; oz. 25c; 4 oz. 60c; lb. $\$ 1.50$
Ketchikan, Alaska, March 8, 1922.
Routledge Seed \& Floral Co.
Gentlemen: Last year I ordered seed through a friend of ours from you and will say your seeds done fine. I never had finer lettuce than R. R.'s Wonderful and Routledge Prize Peas and Routledge Model Carrots are fine. So I am ordering all my seed from you this year and hope to have ground open for some flowers next year.

Yours truly,
MRS. JOHN W. QUINER.

## Early Scarlet Horn

A very fine extra early table carrot and is an excellent summer or fall sort. Tops small, roots grow about 3 inches long and of a deep rich orange, fine grained, good flavor.

Pkt. 10c; oz. 20c; 4 oz. 40c; lb. $\$ 1.25$

## Chantenay

The Market Gardener's Favorite.-Tops medium sized, necks small, top of root quite thick and tapering to a uniform stump root, smooth; color deep orange-red; flesh very crisp and tender; medium early; a heavy cropper; 5 to 6 inches long.

Pkt. 10c; oz. 15c; 4 oz. 35c; lb. $\$ 1.00$


Chantenay


Routledge Coreless-A Model Carrot
ROUTLEDGE MAMMOTH, next page

## Danver's Half Long

A great favorite; big cropper; the roots are smooth and handsome, medium size, tapering uniformly to a blunt point and of a rich, dark orange; fine for table. On account of its productiveness it is a profitable variety to grow for stock feeding.

Pkt. 5c; oz. 15c; 4 oz. 35c; lb. $\$ 1.00$

## Long Orange Improved

The best of the long carrots, fine quality; color bright-orange, with long, smooth, tapering roots, requiring a deep soil. Excellent for stock. Pkt. 10c; oz. 20c; 4 oz. 35c; lb. $\$ 1.00$

## Guerande, or Oxheart

Bright orange, broad at the top and terminates abruptly in a small tap root. Length about 4 to 5 inches; excellent for shallow soils. Pkt. 5c; oz. 20c; 4 oz .35 c ; lb. $\$ 1.00$

## Large White Belgian

Extensively grown for stock feeding; roots white; green above ground and growing to a large size; flesh rather coarse. A good cropper.

Pkt. 5c; oz. 15c; 4 oz .35 c ; lb. 90c

## CARROTS - Continued

## Routledge Mammoth Stock Carrot

The heaviest cropping carrot grown, yielding more tons to the acre than any other sort. The flesh is yellowish-white, crisp and solid, and very sweet in flavor. It is a vast improvement on the Belgian sorts, which have been favorites in the past, as it is not only much more productive, but vastly easier to handle. The roots are short and very heavy at the shoulder, rendering them easily harvested. Too much can scarcely be said of their size and great productiveness. Every farmer should grow a good supply of carrots for winter feed and Routledge Mammoth is the kind to plant. Yields reported from 20 to 50 tons per acre.

Large pkt. 10c; oz. 20c; 4 oz. 40c; lb. \$1.25; 2 lbs., enough for one acre, $\$ 2.00$.

## CELERIAC

Turnip Rooted Celery.-The roots, which are the edible portion, keep well for winter use and are excellent for soups and stews. They are also cooked and sliced as a salad. Sow seed at the same season and give the same treatment as any root crop.

LARGE ERFURT.-An improved form, producing large, smooth roots, which are nearly round.

Pkt. 10c; oz. 25c; 4 oz. 75c


Routledge Mammoth


R' R.'s White Plume

## R. R.'S WHITE PLUME

## Our Leading Early White Celery

A handsome, crisp sort, of very easy cultivation. Naturally its stalks and portions of inner leaves and heart are white, so that by tieing or by simply drawing the soil up against the plant and pressing it together, the work of blanching is completed. It is the earliest celery known, delicious and fine flavored.

Pkt. 10c; oz. 35c; 4 oz. \$1.25

## PARIS, GOLDEN SELF-BLANCHING

The finest strain of French grown seed. This splendid variety is without doubt the most popular celery grown. It is a selfblanching sort, for with a little banking or covering, even the outer ribs assume a beautiful golden-yellow, while the heart or vine stalks are dellciously tender, brittle and sweet. This variety is being very extensively grown on account of its ease of cultivation and superior quality. It is not quite so early as the White Plume.

Select quality: Pkt. 15c; 1/4 oz. 40c; oz. \$1.25; 4 oz . $\$ 4.00$; lb. $\$ 12.00$.

## Golden Yellow Self-Blanching

Same variety of celery as above, but is American grown. It is equal to most seeds offered, but not as true, dependable or of such high quality as the French grown stock. Pkt. 10c; oz. 50c; 4 oz. $\$ 1.50$; lb. $\$ 6.00$

## Giant Pascal

Excellent for fall or winter use, and has increased in popularity every year. A large, tall grower of the finest nut flavor, being free from any bitter taste. Very broad stalks, blanching very quickly with little banking up; an admirable keeper.

Pkt. 10c; oz. 35c; 4 oz. \$1.00

For complete seed and plant tables, amount to plant, etc., see complete reference tables inslde back cover. Always refer to "Index," pages 2 and 3, for anything wanted.

# "Highest Quality" CAULIFLOWER Plants, Page 37 



Routledge Snow White
EXTRA EARLY SNOWBALL (Extra Se-lected).-This is the choicest selected strain of the popular Erfurt type, and is remarkable for its extreme earliness and reliability in heading. Medium size heads. Plants quite dwarf. Pkt. 15c; 1/4 oz. 75c; oz. $\$ 2.50$

VEITCH'S AUTUMN GIANT.-A large, late variety, very hardy. The heads are well protected by the foliage, enabling it to resist unfavorable climatic conditions.

Pkt. 10c; $1 / 4$ oz. $50 \mathrm{c} ;$ oz. $\$ 1.25 ; 4$ oz. $\$ 3.50$
ALGIERS.-A very strong-growing late variety, with large leaves of a bluish cast. In cool locations and rich soil it produces very large, solid, white heads late in the fall.

Pkt. 15c; $1 / 4$ oz. 50c; oz. $\$ 1.50 ; 4$ oz. $\$ 5.00$ -

## CHICORY

WITLOOF-"French Endive" and "Christmas Salad"
It is easily grown here. Plant the seed in the spring in drills, 12 inches apart, and thin out to 3 or 4 inches apart in the row. About November pull up the roots, break off the leaves, side shoots if any, and small root end so that the roots are not over 10 inches long. At once, or later as you get time, dig a trench about 18 inches deep and reset these trimmed roots, crowns up, placing them about $11 / 2$ inches apart. Cover with loose, rich soil; the roots should be set in the trench so that the top will be covered about 8 inches. They will soon make thick shoots or top growth (below the surface), which is the edible part. Dig as wanted, cut just below the crown and serve with French or "Mayonnaise" dressing. A delicate and delicious dish.

Pkt. 10c: oz. 50c
LARGE ROOTED OR COFFEE.-Grown quite extensively for the large, thick roots, which are sliced, dried, roasted and ground as a substitute or adulteration for coffee.

Pkt. 10c; oz. 40c; 4 oz. \$1.25

## ROUTLEDGE 'SNOW WHITE'’

## The Finest Cauliflower Grown

In competition with all other strains, this cauliflower has won the approval of critical gardeners, being early and also the best main crop sort grown. It is suitable not only for early use, but is superior for late planting. The heads are large, compact, firm and solid, and do not spread as do some of the inferior sorts. No other variety surpasses it in purity of color, being clear snow white, of high quality. It is equally desirable for family use and for the market garden. The heads are largefrom 9 to 12 inches in diameter. Very resisting against unfavorable seasons and dry weather, the foliage giving a splendid protection.

Pkt. 25c; 1/4 oz. \$1.50; 1/2 oz. \$2.50; oz. $\$ 4.50$

## FARIY SNOWBAL工

This variety is much in demand by market gardeners. Its earliness, compact habit, largesized heads and snow-white color recommend it to every grower as a variety of especial merit. We have an extra selected stock of this sort, and recommend it with the greatest confidence.
Pkt. 20c; 1/4 oz. \$1.00; 1/2 oz. \$1.75; oz. \$3.00; 4 oz. \$10.00

NEW CALIFORNIA WONDER.-A late variety, forming good, large, solid heads during the winter. This variety has given great satisfaction in Oregon and California, wherever tried.

Pkt. 15c; $1 / 4$ oz. 50c; oz. $\$ 1.25 ; 1 / 4 \mathrm{lb} . \$ 4.00$

## NEW-EARLY SIX WEEKS

A new variety of proven merit. It comes from Holland so highly recommended that we bought and list it. Very hardy, compact, upright foliage, permitting close planting. Can be grown for an extremely early, medium or late crop. Said to surpass all other kinds in type and perfection. Better try it.

Pkt. 15c; $1 / 4$ oz. $75 \mathrm{c} ; 1 \mathrm{oz} . \$ 2.50 ; 4 \mathrm{oz} . \$ 8.00$

## CHERVIL

CURLED.-An aromatic herb, resembling parsley, and used for flavoring in soups and salads. Fine for garnishing.

Pkt. 10c; oz. 30c; 4 oz. \$1.00
CRESS
CURLED OR PEPPER GRASS.-Used as a salad and fine for garnishing.

Pkt. 5c; oz. 15c; 4 oz. 40c
TRUE WATER. - This is quite distinct from the former and only thrives when its roots and stems are submerged in water and delicious for small salads. Pkt. 10c; oz. 60c

## COLLARDS

TRUE GEORGIA.-Used as "greens" mainly in the South and West. As the leaves are pulled off, others grow in their places.

Pkt. 10c; oz. 20c; 4 oz. 50c

## CORN SALAD

Fetticus or Lamb's Lettuce.-This is a hardy winter salad, the small leaves being served like lettuce; does not succeed during warm weather, and the seed should be sown thinly in drills after August to supply fresh leaves during the late fall.

Pkt. 10c; oz. 25c

## SELECTED SWEET CORN-NORTHERN GROWN

Packet and single pound prices only prepaid. Add postage to $10-\mathrm{lb}$. prices if wanted by mail. Write for quantity price.


Routledge Selected Golden Bantam

## Routledge Selected GOLDEN BANTAM

Flavor. - Without exception Golden Bantam Corn is the richest in flavor of all varieties; a sweet corn of which one will never tire. The first trial of this delicious Sweet Corn creates a desire for more. The most popular corn in the Northwest.

Earliness. - Golden Bantam Sweet Corn is only, exceeded in earliness by our "Superb," but we like the quality better. It matures quickly and is suitable not only for early planting (on account of its hardiness), but a succession of sowings may be made which will give continuous supply until fall.

Color.-When picked at the proper stage of its growth the kernels are a rich, creamy-yellow and unsurpassed in quality.

Growth.-Being dwarf in its growth, with stalks small in size, it can be planted quite close, and a large c~op may be obtained on a small area. The ears are 8 to 10 -rowed, and about 6 inches long-just the right size for the table.

Remember our selected strain is Northern grown, better flavored and truer than most seed offered. There is in other yellow or golden sweet corn that can compare to our selected Golden Bantam. Try it and be convinced.

Price: Large pkt. $15 \mathrm{c} ; 1 / 2$-lb. $20 \mathrm{c} ; \mathrm{lb} .35 \mathrm{c} ; 10 \mathrm{lbs} . \$ 2.65$; 25 lbs. at 23c.

## ROUTLEDGE SUPERB

We do not hesitate to recommend this new sweet corn to our customers. Its earliness, hardiness, size and quality make it of real merit to the Western planters. It is extremely early, almost two weeks ahead of Golden Bantam and one week ahead of Portland Market. The large ears are always well filled with 12 to 14 rows of large, plump, white, sweet grains, of handsome appearance and excellent quality.
Large pkt. 15c; $1 / 2$-lb. 25c; lb. 45 c ; 10 lbs. $\$ 3.75$

## Portland Market

An Oregon introduction, a very early, large eared sweet corn and very productive. Its large well-filled ears, together with its plump, sweet grains of purest white, makes it a most profitable home or market variety. Very popular with our market gardeners.
Large pkt. 15c; $1 / 2$-lb. 20c; lb. 35 c ; 10 lbs. $\$ 2.75$

## Early Evergreen

This fine variety is 10 to 12 days earlier than Stowell's Evergreen and yields large, handsome, 10 to 12 -rowed ears. An excellent variety to follow the first early kinds. Near Portland it will make a late or main crop variety.
Large pkt. 15c; $1 / 2-\mathrm{lb} .20 \mathrm{c}$; lb. 35 c ; $10 \mathrm{lbs} . \$ 2.75$

MARKET GARDENERS who buy in 20-lb. lots or more get special prices. Write.

## HOWIING MOB

This is one of the newer varieties that has become very popular here for main or late crop. The seed we offer is Oregon Grown and acclimated. You must remember that the early corn listed by Eastern seed houses will be late here.

Howling Mob is a large-eared, vigorous grower, large and well protected with husks and having 12 to 16 rows of the sweetest flavored, tender, delicious, white corn-good for canning.
Large pkt. 15c; $1 / 2-\mathrm{lb} .20 \mathrm{c}$; lb. 35c; 10 lbs. $\$ 2.75$

## Stowell's Evergreen

A good main crop or late sort. Remains longer in green state than any other. Very large ears, with deep grains, and remarkably sweet. Locally it must be planted early to mature. Quite extensively planted by dairymen for feeding green on account of its sweetness.
Large pkt. 15c; $1 / 2$-lb. 20c;-lb. 35 c ; 10 lbs. $\$ 2.75$

## POP CORN

WHITE RICE.-Most popular and profitable kind; short ears, white, pointed kernels.

Large pkt. 15c; lb. 35c; 10 lbs. $\$ 2.75$

[^5]CAREFULLY GROWN
RE-SELECTED STOCK

CUCUMBERS
USE BUG DEATH FOR CUCUMBER BUGS


Routledge Highest Quality Cucumber

## Routledge Highest Quality

A quick grower and always commands "fancy prices" on account of its fine form and superb quality. Very productive.

It is the earliest white spine cucumber suitable for table, market or shipping purposes, under all conditions of culture, whether under glass or in the open ground.

Color a very deep green, which it retains during a long period, while in symmetry of form it is so regular, so uniform, as to create comment wherever seen.

The quality is unsurpassed, being exceedingly brittle and crisp. The flavor is delicate and entirely devoid of the bitter taste so frequently noticed in other varieties.

Pkt. 10c; oz. 25c; 4 oz. 65c; lb. $\$ 2.00$

## Arlington White Spine

One of the best sorts for table use. Vines vigorous, fruiting early and abundantly. Fruit uniformly straight, light, bright green in color, with a few white spines. Flesh crisp, tender and of excellent quality.

Pkt. 10c; oz. 20c; 4 oz. 50c; lb. $\$ 1.35$

## Improved Lrong Green

The leading large variety. Fruit from 10 to 12 inches long, dark-green, crisp and tender. A good variety for slicing, and when ripe they are the best for sweet pickles.

Pkt. 10c; oz. 15c; 4 oz. 45c; lb. \$1.25
Davis' Perfect
As now selected, the long, even fruits are of fine form, with an intensely dark rich green skin. The solid white flesh is of superb quality for slicing. So handsome and regular are the fruits, even when grown outside, that they bring an extra price on the market, often being taken for "hot-house grown."

Pkt. 10 c ; oz. 20 c ; 4 oz .50 c ; lb. $\$ 1.35$

## Gherkin for Pickling

A very small, oval, prickly variety, quite distinct from all others.

Pkt. 10c; oz. 25c; 1/4-lb. 75c
Japanese Climbing
A vigorous grower, can be trained on a trellis or the garden fence, thereby saving ground space. Fruit from 12 to 16 inches long, dark green and smooth. Flesh pure white, crisp and tender.

Pkt. 10c; oz. 20c; 4 oz. 60c; lb. $\$ 1.75$

## Lemon Cucumber

New. Highly recommended by all who have tried it for slicing and salads. Resembles a lemon both in size, form and color. Has a distinctive and delicious flavor superior to and not found in any other cucumber. A variety of real merit-try it.

Pkt. 10c; oz. 25c; 4 oz. 85c; lb. $\$ 2.50$

## Boston Pickling

A distinct variety, very popular for pickles; color bright green, a great producer and of excellent quality. It is for producing me-dium-sized pickles that this variety is so highly esteemed. If the fruits are gathered as soon as large enough, the vines will continue bearing through a long season.

Pkt. 10c; oz. 15c; 4 oz. 45c; lb. $\$ 1.25$

## EGGPLANT

Sliced and fried takes the place of meat. Culture same as for tomatoes.

BLACK BEAUTY.-The earliest and best variety for Oregon. Oval shaped, deep-purple, large size and fine flavor.

Pkt. 10c; 1/2-0z. 45 c ; oz. 75c; 4 oz. $\$ 2.50$

## ENDIVE

This plant furnishes an attractive and appetizing salad for the fall and winter months or by repeated sowings a supply may be had nearly all the year round. Makes delicious greens if cooked like spinach. Tie up the leaves to bleach the heart and make it tender, a week or two before cutting.

BROAD LEAVED BATAVIAN. - Leaves are broad, thick, green, more or less twisted and waved with white mid-ribs. Crisp, tender and fine flavor.

Pkt. 10c; oz. 15c; 4 oz. 40c; lb. $\$ 1.25$
GREEN CURLED. - Leaves beautifully curled, dark-green, tender and crisp.

Pkt. 5 c ; oz. $15 \mathrm{c} ; 4 \mathrm{oz} .40 \mathrm{c}$; lb. $\$ 1.25$
WHITE CURLED.-Very tender and light green, blanches easily, very ornamental.

Pkt. 10c; oz. 15c; 4 oz. 40c; lb. $\$ 1.25$

[^6]

## KALE, OR BORECOLE

This is a popular boiling-green resembling cabbage in flavor. The plant is entirely hardy in well-drained soil and can be grown easily from seed planted during the summer and fall months. With the tall varieties it is customary to pull off the lower leaves and let the plant grow on to furnish a continuous supply. The sweetness and flavor of these greens are improved by frost or light freeze.

## Dwarf Green Curled

Beautifully curled, bright-green leaves, tender and of fine flavor.

Pkt. 10c; oz. 20c; 4 oz. 60c; lb. $\$ 2.25$

## Tall Green Curled

Grows about 2 feet high; leaves darkgreen; curled and wrinkled; very hardy.

Pkt. 5c; oz. 20c; 4 oz. 65c; lb. $\$ 2.00$

## Emerald Isle

A very handsome variety of medium height. leaves attractive, closely, curled and of fine flavor.

Pkt. 10c oz. 25c; 4 oz. 75c; lb. $\$ 2.50$
COW KALE or THOUSAND-HEADED.
Pkt. 5c; oz. 15c. See Field Seeds, page 44

## KOHL-RABI

A delicious vegetable. In growth this is half way between cabbage and turnip; the edible portion is the large bulb which forms on the stem above the soil. By making successive sowings, tender bulbs may be had throughout the summer and fall, and are highly esteemed for their mild, delicate, cabbage-like flavor. Slice and boil, discarding the hard lower part of bulb. Sow in drills or raise and transplant like cabbage, 6 to 10 inches apart.

EARLY WHITE VIENNA. - Extremely early, medium size, excellent quality.

Pkt. 10c; oz. $25 \mathrm{c} ; 4 \mathrm{oz} .75 \mathrm{c}$; lb. $\$ 2.50$

## GARLIC

Separate the sets and plant them in drills eight inches apart and four to six inches apart in the drill, covering two inches deep. Cultivate like onion sets. When the leaves turn yellow, pull up the bulbs and dry in the shade.

Per Ib. 60c, postpaid
Write for quantity price. Requires about 250 lbs. sets per acre.

Hemlock, Ore., Jan. 16, 1922.
Routledge Seed \& Floral Co.
Dear Sirs: We had dandy luck with your seeds last year. I gave lettuce and cabbage plants away, also radishes. Now our neighbors want me to send in their names for your catalog.

Thanking you in advance, $I$ remain,
Yours truly,
MRS. J. B. PHELPS.

## LEEK

A species of onion which does not form a b,ulb, but is used for its mild and delicious root, stem or neck. Plant in rows and thin to about four inches. Hardy, and frost improves the flavor. Hill up to whiten.

## American Flag

Mild and sweet; long, large stems; hardy and of the finest quality. A favorite variety. Pkt. 10c; oz. 30c; 4 oz. 90c

## MUSHROOM SPAWN

## LAMBERT'S PURE CULTURE SPAWN.-

Mushrooms may be grown in any place where conditions of temperature and moisture are favorable. A shed, cellar or cave may be utilized to advantage for this purpose. It is essential that the temperature be maintained from 53 to 60 degrees $F$., and that the moisture be properly regulated.' Lambert's Pure Culture Spawn is far superior to the old-style varieties, and much better results can be obtained from its use. The bricks should be broken into pieces about two inches square and planted from 10 inches to a foot apart. Bricks weigh from 18 to 20 ounces. A brick will spawn 10 square feet of bed. With Lambert's Pure Culture Spawn it is impossible to raise poisonous mushrooms.

DIRECT SPAWN.--Latest and best. Mammoth White, Cream White or Bohemian Brown.

Price, per brick, not prepaid, 35c; 10 bricks, $\$ 3.00$; add postage at rate of $11 / 2 \mathrm{lbs}$. per brick. Write for quantity price.

MUSHROOM CULTURE.-We have instructive leaflets on Mushroom Culture. Free with an order of one or more bricks.

## MUSTARD

The leaves of mustard make excellent greens of sharp, pungent flavor, and are cooked the same as spinach or beet leaves.

## Southern Giant Curled

Large variety, forming a great mass of beautiful leaves, which are ruffled and finely curled on the edges; hardy, vigorous, highly recommended.

Pkt. 10c; oz. 20c; 4 oz. 35c; lb. $\$ 1.00$

## Ostrich Plume

Leaves dark-green, beautifully curled and plume-like. Very vigorous and productive, stands well. Of distinctive flavor, superior to spinach for greens and excellent for salad.

Pkt. 10c; oz. 20c; 4 oz. 50c; lb. $\$ 1.25$
WHITE ENLISH. - Light-green variety; tender leaves; seed light-yellow.

Pkt. 10c; oz. $15 \mathrm{c} ; 4 \mathrm{oz} .40 \mathrm{c}$; lb. $\$ 1.00$

## LETTUCE

## Grand Rapids

Very popular with private gardeners and as a letture for greenhouse forcing. It will stand shipping better than most curled sorts. Of quick growth and stands for some days after being fit to cut. The plant is upright, and forms a loose head or cluster of large bright-green leaves, finely crimped and ruffled; rather thin, good flavor, crisp and tender.

Pkt. 10 c ; oz. 20 c ; 4 oz. 55 c ; lb. $\$ 1.75$

## Early Prize Head

A large, clustering, non-heading lettuce, excellent for the home garden and undoubtedly the most easily grown variety in cultivation. Leaves finely curled and crumpled, bright green tinged with brownish-red, very crisp, tender and sweet.

Pkt. 10c; oz. 15c; 4 oz. 45c; lb. $\$ 1.25$

## Big Boston Improved

Plants grow large, very hardy and vigorous. leaves broad, comparatively smooth, wavy at edges, thin, very frim and crisp; color bright light-green, slightly tinged with reddish brown. Grown extensively in the South for shipment North in the winter. It usually heads up under cold weather conditions better than any other variety.

Pkt. 10c; oz. 20c; 4 oz. 50c; lb. $\$ 1.50$

## Simpsen's Early Curled

A very extensively used early loose-leaved, or clustering variety. Leaves light-green, slightly frilled, crisp, sweet and tender.

Pkt. 5 c ; oz. 15 c ; 4 oz. 45 c ; Ib. $\$ 1.35$

## Early White Cos

"Salad Romaine" or Celery Lettuce.
Heads tall and circular. As a salad lettuce it is highly esteemed for its fresh crispness and mild flavor. Give each plant about 4-in. space. By drawing the outer leaves together the center will blanch to a snowy white.

Pkt. 5c; oz. 15c; 4 oz. 45c; lb. $\$ 1.35$

R. R.'s Wonderful


Grand Rapids

## Hanson

Improved Hard Heading Stock.-A very popular head lettuce. We can recommend this as one of the very best. Heads green outside and white inside; grow to a remarkable size; very solid, and is deliciously sweet, crisp and otender. It withstands the hot sun.

Pkt. 10c; oz. 20c; 4 oz. 60c; lb. $\$ 1.75$

[^7]
## 25c Booklet for 10c

"HOW TO MAKE AND CARE FOR THE HOME GARDEN." 16 PAGES. WE MAKE THIS SPECIAL PRICE WITH A $\$ 2.00$ ORDER. Special publications, see book list, page 114.

## R. R.'S WONDERFUL

[^8]
## LETTUCE - Continued

## R. R.'s Tender Crisp

A distinct and extra choice variety for those who like curly, crisp, tender Lettuce of the finest quality.

Grows to a large size, makes most desirable heads of pleasing appearance, and retains its crispness and mild flavor to a greater degree during the hot summer months than any other crisp-head variety. While especially adapted for midsummer, it is most desirable also for string and fall. The plants are of quick, strong growth; the leaves are of a soft, bright-green, growing closely around the heads, which become quite solid. The heart blanches to a beautiful silvery white, tender yet mild flavored and unsurpassed.

Pkt. 10c; oz. 25c; 4 oz. 75c; lb. \$2.00.

> OUR MOTTO IS
> ''Highest Quality',

It's quality FIRST, then price as low as possible. The best seeds are the cheapest in the end, even though they cost a little more at planting time.

## Early May King

The plants are of quick growth, practically all head and extremely handsome. From early spring plantings in the open ground they grow quickly to a diameter of 6 to 7 inches with the broad, light-green outer leaves folding closely about the round, solid head. The inner leaves (practically the entire head), are blanched to a rich golden yellow and have a specially fine, rich, buttery flavor. Excellent shipper.

Pkt. 10c; oz. 20c; 4 oz. 45c; lb. $\$ 1.50$


Way-a-head-Extra Early

## R. R.'s Tender Crisp Lettuce

New York (Los Angeles)
A large, crisp, curly-leaf, close-heading lettuce of the finest quality. great favorite in the markets of Los Angeles and San Francisco. Carloads of this variety are shipped by California growers and it brings the highest prices.

Pkt. 10c; oz. 35c; 4 oz. 90c; lb. $\$ 3.00$

USE BLUE LABEL Slug<br>Destroyer<br>TO KEEP THE SLIMY SLUGS OFF LETTUCE SEE PAGE 121

## Way-a-head Extra Early

A new lettuce showing a remarkable combination of earliness, firm heading character, handsome appearance and fine quality. Both in cold-frames early in the spring and in the open ground-in spring, summer and early fall months-it has proved to be not only the earliest and one of the surest heading of all early lettuce, but also of the very finest quality. The tightly folded heads are of good size and handsome appearance. The outer leaves are a light green with the inner head finely blanched to a rich buttery yellow. Try this variety (see cut).

Pkt. 10c; oz. 20c; 4 oz. 50c; lb. \$1.50.

## MUSKMELON

Grow a few hills of our delicious Muskmelons in some warm, sheltered location. They do much better here than most gardeners think they do.

## POLLOCK 10-25

A melon of rather recent introduction. Now considered by many growers to be the finest commercial variety. Very productive, melons of even size, beautifully netted. Very small seed cavity with thick, Iuscious flesh of a genuine salmon tint, shading to green near the rind. A splendid keeper and shipper.
Pkt. 10c; oz. 25c; 4 oz. 75c; lb. $\$ 2.00$

## Netted Rock or Rocky Ford

An old favorite and one of the Most Popular and Best Sellers among the Rocky Ford Melons.

The fruit of Netted Rock, is oval and completely covered with a beautiful lace-like netting. The flesh very thick; light green, very sweet and delicious and of superb flavor. The fruit is wonderfully uniform in shape and quality; medium in size, a great favorite.
Pkt. 10c; oz. 20c; 4 oz .50 c ; lb. $\$ 1.50$


Pollock 10-25
A great favorite among home growers. It is 10 days earlier and a great improvement over the old Hackensack formerly sold. Of fine, large form, heavily ribbed and netted. Flesh is a beautiful light green, thick, sweet, and of finest flavor... A delicious variety. Good for this locality.

Pkt. 10c; oz. 20c; 4 oz. 50c; lb. $\$ 1.50$

## Hoodoo-"Heart of Gold"

Strong, vigorous grower and will produce an abundant crop of most delicious melons of convenient size for the table use. The skin is thickly netted, and the flesh is a rich, deep orange color, very meaty, fine grained and of remarkable sweetness.

Pkt. 10c; oz. 20c; 4 oz. 50c; lb. $\$ 1.50$ Delicious Gold Lined
Growers for home and for market will be delighted with "Delicious Gold Lined," both on account of its desirable size and unsurpassed quality. An improvement over Rockford, melons more uniform as to size and shape, nearly round, thickly covered with grayish netting. The flesh is light green, with a beautiful light golden tint next to the seed cavity. The flavor is delicious, being remarkably sweet and juicy. Vines are productive and melons mature early. Unequaled in type, beauty and superior quality. Excellent shipper. Pkt. 10c; oz. 25c; 4 oz. 60c; lb. $\$ 2.00$

## Burrell's Gem

Select Strain.-A medium-sized oval variety, well ribbed and covered with a fine grayish netting and having reddish-orange flesh of fine, spicy flavor, sweet and delicious, distinct flavor. There is a growing demand here for this fine-grained, smooth, salmon, red-fleshed Muskmelon. A good local variety.

$$
\text { Pkt. } 10 \mathrm{c} ; \text { oz. } 20 \mathrm{c} ; 4 \mathrm{oz} .50 \mathrm{c} ; \text { lb. } \$ 1.50
$$

Golden Beauty Cassaba
Fall and Winter Muskmelons
Skin wrinkled, flesh thick, excellent flavor and fine aroma. When nearly ripe pick and stow away in a cool, dark place until the rind becomes slightly softened and moist. Melons will actually keep until February.

Pkt. 10c; oz. 25c; 4 oz. 75c; lb. $\$ 2.50$


Extra Early Hackensack


## Melons-Continued WATERMELONS

## ROUTLEDGE'S OREGON PRIZE

## An Extra Early Variety

We offer this Melon with the assurance that It is not only remarkably early, but as sweet, delicate and melting in flavor as any variety grown.

The flesh is of a deep scarlet; rind thin, and on this account is not a particularly good shipping sort, but is emphatically the variety for home use and sale, It will ripen in altitudes where it has not been thought possible to mature a good watermelon. If you have been under the impression that you could not grow watermelons in your garden on account of a short season or cool nights, try our Oregon Prize. Give them a warm, sunny sheltered nook and rich, warm soil and you may be delightfully surprised.

Pkt. 10c; oz. 25c; 1/4-lb. 60c; lb. $\$ 1.75$

## Halbert Honey

An early maturing variety suited to the Northern states; vigorous and very productive. Melons 18 to 20 inches long, full and round at both ends. Skin dark glossy green, flesh beautiful crimson, tender, sweet and delicious. In a good melon district this is a wonderful cropper.

Pkt. 10c; oz. 20c; 4 oz. 45c; lb. $\$ 1.25$

## KLECKLEY'S SWEET

Medium early and unsurpassed for near markets. Vine vigorous and productive; fruit

of good size, oblong; skin dark, glossy green. The flesh is bright scarlet, crisp, sugary, and of excellent quality. Has a full, tender heart with the seeds close to the rind.

Pkt. 10c ; oz. 20c; 4 oz. 45c; lb. $\$ 1.25$
Citron, Red Seeded.-Flesh white and solid, used exclusively for pickles and preserves.

Pkt. 10c; oz. 25c; 4 oz. 50c

## True Seeds

## ONION

## Highest Quality



By T. Greiner. A new method of growing onions of the largest size and yield on less land than can be raised on the old plan. 140 pages. Postpaid \$1.25. (Other good books on page 114.)

## Oregon Yellow Danvers

This variety is very extensively planted in the Northwest, particularly in Oregon.

The largest crops of onions and the best keepers, bringing the highest prices in the Pacific Coast and Middle Western markets, are the Oregon Yellow Danvers. The bulbs are uniformly large, a full three-quarters globe shape, with small necks. It matures quite early, is the largest in size, most perfect in shape, the largest cropper and one of the best keepers, and as a market or table onion cannot be excelled. Our seed is grown specially for us and is unsurpassed. No onion grower can afford to plant anything inferior when such seeds can be obtained at the following prices:

Pkt. 10c; oz. 25c; 4 oz. 75 c ; ib. \$2.50.

ON THE FOLLOWING PAGE YOU WILL FIND ALL THE LEADING VARIETIES OF ONIONS GENERALLY GROWN FOR MARKET AND HOME USE, AND THE STOCK WE OFFER IS UNSURPASSED IN QUALITY.

## ONION - Continued

The quality of our Onion Seed is unsurpassed. It will please you

## Extra Early Red Flat

The first Red Onion to ripen. A mediumsized, flat variety; an abundant producer and verv uniform in shape and size; fine grained, mild flavored, and comes into use nearly two weeks earlier than the Large Red Wethersfield; very desirable for early market use.

Pkt. .10c; oz. 20c; 4 oz. 60c; lb. $\$ 2.00$

## Large Red Wethersfield

The standard variety of the red onions. Of large size and rather flat, a heavy yielder, and one of the best for keeping. A good shipper. Flesh white and fine-grained. Skin a deep purplish-red, smooth and glossy. This onion will produce a better crop on poor or upland soil than most varieties.

Pkt. 5c; oz. 20c; 4 oz. 60c; lb. $\$ 2.00$

## Routledge Prize Taker

This onion has become a great favorite on account of its large size and great solidity. It is perfectly globe-shaped, with straw-colored skin; the necks are very small and the onions always ripen up hard. An excellent keeper, exceedingly fine, mild flavor and a very popular and profitable variety. (See cut.)

Pkt. 10c; oz. 25c; 4 oz. 75c; ib. $\$ 2.25$

## Australian Brown

An extra early, sure cropping varietv, with long keeping qualities. A sweet, mild flavored onion, with crish, white flesh, covered with a bright reddish-hown skin. Largely used for growing onion suts and equally good for market purposes.

Pkt. 5c; oz. 20c; 4 oz. 50c; lb. $\$ 2.00$

## Southport White Globe

An enormous yielder and superb keeper; perfect globe-shaped, very large, clear white skin and considered one of the handsomest varieties grown. Planted extensively by gardeners for green onions.

Pkt. 10c; oz. 25c; 4 oz. 75c; lb. $\$ 2.75$

## White Portugal or Silverskin

The finest flavored of all the white-skinned onions. Quite early, half-globe shaped, a fine cropper; very firm and an excellent keeper. Excellent for bunching green, or for pickling, if grown close so as to hold the size down. A good all-around sort.

Pkt. 10c; oz. 25c; 4 oz. 75c; lb. $\$ 2.75$

## White Bartletta-Queen

An early white variety; prized for home gardens for pulling green or for pickling. A quick grower, fine mild flavor, excellent quality. Pkt. 10c; oz. $35 \mathrm{c} ; 4 \mathrm{oz}$. $\$ 1.00$; Ib. $\$ 3.50$

## Crystal White Wax

A large, pure white, flat onion. During the last few years it has become very popular. Extremely early and one of the mildest and sweetest of all. It is very fine for slicing, the color being so clear and pure. We offer the genuine true imported seed.

Pkt. 15c; oz. 40c; 4 oz. $\$ 1.35$; lb. $\$ 4.00$


Routledge Prize Taker
Oregon Yellow Danver.-See page 23.

## Southport Red Globe

A large globe-shaped onion and the most handsome red variety. Matures in the early fall. Flesh white, crisp and of high quality.

Pkt. 10c; oz. 20c; 4 oz. 60c; lb. $\$ 2.25$

## Yellow Globe Danvers

One of the most extensively used yellow onions. Bulbs of good size, uniformly globeshaped, with small neck, and ripen very evenly. Flesh write, crisp and of mild and excellent flavor. An enormous yielder and a fine keeper. We offer a select strain, unsurpassed. A variety always in demand.

Pkt. 10c; oz. 20c; 4 oz. 60c; lb. $\$ 2.00$

## ONION SETS

NOTE. - Onion sets subject to market changes; short crop this year.

BOTTOM ONION SETS. - These small onions are grown from seed that have been sown too thick to attain a large size. The small onions (about $1 / 2$-inch in diameter), thus obtained are planted out and are ready in a short time to pull as green onions for the table.

Per lb. 35c; not postpaid 25c; 5 lbs. \$1.00. Write for quantity prices.

TOP SETS, lb. 40c; not postpaid, 30c.
Shallots.-Valuable for bunching or for an early crop. Each bulb makes from 3 to 5 green onions. Per lb. 35c; 4 lbs. \$1.25; prepaid

## OKRA

IMPROVED DWARF GREEN.-Very productive; long, slender green pods.

Pkt. 5c; oz. 15c; 4 oz. 30c

## PARSLEY

CHAMPION MOSS CURLED.-An English strain, with beautiful moss-curled foliage; vigorous grower.

Pkt. 10c; oz. 20c; 4 oz. 50c; lb. $\$ 1.50$
ARLINGTON EXTRA CURLED.-Very choice strain, having the greatest possible curl to the leaves and the darkest green color; a very vigorous grower; will stand heat and drought better than any other.

Pkt. 10c; oz. 20c; 4 oz. 50c; lb. \$1.50


Moss Curled


Hollow Crown Parsnips

## PEPPER

Plant seed early in the spring; culture same as for tomatoes. Plants in season. See Vege. table Plant List, page 37.

## Chinese Giant

The largest, best and most profitable of all the bull-nozed varieties, thick-meated; very sweet and mild. Brilliant, glossy scarlet when ripe. Excellent for stuffing.

Pkt. 10c; 1/2-0z. 45c; oz. 75c

## Ruby King

A strong, healthy, hardy grower; very productive; fruit extra large, thick and well formed. They ripen ruby scarlet. The flesh is extremely thick, sweet and mild.

Pkt. 10c; 1/2-oz. 35c; 0z. 60c

## Anaheim Chili

New imported type, desirable above all others for culinary use because of its agreeable pungency for canning. Fruit scarlet, round and pointed, 6 to 7 inches long, 1 to 2 inches thick. Pkt. $10 \mathrm{c} ; 1 / 2$-oz. 35 c ; oz. $50 \mathrm{c} ; 4 \mathrm{oz}$. $\$ 1.50$

## Pimento

This is a sweet pepper, one you will enjoy eating in salad, either fresh or canned. Fruit medium in size, very thick flesh and wonderful mild flavor. We offer a very select strain Pkt. 10c; $1 / 2$-oz. 35 c ; oz. 60c
BULL NOSE.-An old, well-known variety. Pkt. 10c; 1/2-oz. 35c; oz. 60c
RED CHILI.-A small, pointed; bright red variety. The pods are very pungent and hot; very productive. Pkt. 10c; $1 / 2$-oz. 45c; oz. 75c

CAYENNE.-Medium long, narrow, pointed, red pods; very hot and strong; popular variety.

Pkt. 10c; 1/2-oz. 45c; 0z. 75c

HAMBURG TURNIP ROOTED.-The root is the edible portion of this variety and resembles a small parsnip in color and shape. Used extenșively for flavoring soup, stews, etc. Foliage same as plain parsley.

Pkt. 10c; oz. 20c; 4 oz. 45c

## PARSNIP

While highly appreciated for the table, the great value of the parsnip for stock feeding is but little known. The roots are very rich in saccharine food, adding to the richness of the milk when freshly dug and fed to cows.

Culture.-Sow as early in the spring as the weather will admit in drills 18 inches apart and $1 / 2$-inch deep, in a rich, deep soil; thin out 3 to 6 inches apart in the rows. The quality of the roots is improved by leaving them in the ground over winter for spring use.

## SWEET MARROW

This fine new parsnip of English origin is offered with full confidence that it will become a prime favorite with all who use it. It is very fine grained and exceedingly sweet, while the peculiar "parsnip" flavor is fully preserved. The roots are unusually smooth and attractive in appearance. Recommended for private or market gardens.

Pkt. 10c; oz. 25c; 4 oz. 60c; lb. $\$ 1.50$

## HOLLOW CROWN

The most popular variety; medium length roots, very smooth and of the finest quality. Derives its name from a depression at top of crown or root; very fine table sort.

Pkt. 10c; oz. 20c; 4 oz. 45c; lb. \$1.25


Chinese Giant Pepper

[^9]
## Highest Quality

POTATOES

## True and Pure

We offer a few varieties of special merit that we recommend. We think it is folly to plant ordinary or common stock. Many gardeners insist on the best vegetable seeds, but plant any old kind of potatoes. Get a start of some of our select seed stock and you will be more than pleased with the results.

REMEMBER.-Potato prices subject to market changes. Special prices on request. WRITE WHEN READY TO BUY AND STATE QUANTITY WANTED.

## ROUTLEDGE IMPROVED IRISH COBBLER - True Stock

The true Irish Cobbler is extremely early, large enough to eat in six to eight weeks and under ordinary field culture the vines will die down and the full crop will be matured in 10 to 12 weeks. The potatoes are medium to large, round, slightly oblong, thick and rather blunt ends; skin white, eyes strong and well developed. Eating quality far superior to most "earlies" and equal to the best of the late kinds. A good keeper and excellent baked or boiled. Vines small, but sturdy and healthy, bloom lavender pink. Can be planted close. The ideal first early potato for the home garden or commercial planter who wants to secure "top prices" for "the first early new crop."

Prices, not prepaid. 5 lbs. 50c; 10 lbs. 75c; 50 lbs. \$2.50; 100 bs. $\$ 4.50$

Note.-There is a lot of "socalled" Irish Cobbler among Oregon growers, but most are
 not early or true. Beware!

## ROUTLEDGE EXTRA EARLY - A New Potato of Great. Merit

We offer this grand new variety with the greatest confidence that it will please every grower. Originally it came from the East under the name of "Early Burpee," but by careful "hill selection" our potato expert (Mr. Dahl, of Multnomah County, who has grown it for over six years), has so improved the shape, type, color and productiveness that the original could not be recognized at all in our present stock. We have contracts covering all of this stock and from now on it will be known as "ROUTLEDGE EXTRA EARLY."

DESCRIPTION: Extremely early and unusually productive; ideal in shape and size, being round and oblong (see illustration); very shallow eyes, skin smooth and silky and clear, almost a pure white. Excellent quality, either boiled or baked; cooks quickly; is fine-grained, snowy white and fluffy. No other variety equals it in this respect. Will out-yield most other extra early kinds. Vines medium size, strong, healthy and vigorous. IT'S THE ONLY OBLONG, WHITE-SKINNED, EXTRA EARLY POTATO WE HAVE EVER SEEN.

Prices, not prepaid: 5 lbs. $60 \mathrm{c} ; 10 \mathrm{lbs} . \$ 1.00 ; 50 \mathrm{lbs} . \$ 3.00 ; 100 \mathrm{lbs} . \$ 5.00$. WRITE FOR SPECIAL QUANTITY PRICES, STATING AMOUNTS WANTED.


USE "BUG DEATH."-We believe in spraying potato vines with BUG DEATH powder to PREVENT DISEASE and INCREASE THE YIELD. See page 121.

## Potatoes-Continued

ABOUT PRICES.-Prices are sub. ject to important market changes. Ask for quotations on larger lots, when ready to buy, and state quantity wanted. Plant good, true, healthy stocks of the best named Seed Potatoes. They are always in demand.

## "EARLIEST OF ALL',

Its quick growth and early maturity, combined with its excellent cooking qualities, makes it very valuable. Summer drought does not affect it, for its growth is complete before it can be injured. Plant early to obtain large size. Ready for the table nine weeks from planting, and fully matured in twelve weeks.
"Earliest of All" is a healthy, vigorous grower, does not make a second growth. Keeps as well as any late potato. A handsome, shallow-eyed, round, flattened, white-skinned potato of the finest table quality. Price, not prepaid, add postage if wanted by mail: 5 lbs. $50 \mathrm{c} ; 10$ lbs. 75c; 50 lbs. \$2.50; 100 lbs. $\$ 4.50$.


## ROUTLEDGE FARLY OHIO Highest Quality-True Stock

On account of repeated calls for this grand old variety we imported two years ago some "Certified" Northern grown, Early Ohio fancy seed stock, and now offer our customers true, healthy, dependable stock. Our H. Q. strain is a strong. vigorous grower-two weeks earlier than Early Rose and a better producer, yielding a full crop of good size tubers of even, smooth growth. Every hill produces a fine lot of select, uniform size, very few, if any, unmarketable size. Unseasonable fall rains do not seem to cause "illshaped tubers" like in most varieties. Skin, flesh color; eyes, shallow; tubers, oblong, quite thick, with rather blunt ends. It is extra early but a good keeper. An excellent all-around potato of finest quality.

Prices, not prepaid. 5 lbs. 50c; 10 lbs. $75 \mathrm{c} ; 50 \mathrm{lbs}$. $\$ 2.50$; $100 \mathrm{lbs} . \$ 4.50$. Write for quantity prices.

## EARLY ROSE

A popular and well known variety. Potatoes long in shape, good size, and generally show traces of pink at the bud end. They cook mealy, are of fine flavor, and produce well in our valley. Try our stock of Early Ohio this year. We think you will like them better.

Prices, not prepaid: 5 lbs. 40 c ; 10 lbs .65 c ; 50 lbs. $\$ 2.50$; 100 lbs. $\$ 4.00$.

## AMIERICAN WONDER

One of the best all-around white potatoes; very popular for early main crop. A strong grower and a great producer; tubers white, generally very smooth and uniform in size, elongated, of excellent quality. Ready to use quite early.

Price, not prepaid: 5 lbs. 35c; 10 lbs. 65c: 50 lbs. $\$ 2.50$; 100 lbs. $\$ 4.00$; quantity price on request.

## IMPROVED BURBANK

The standard and most popular commercial variety. We offer improved re-selected, healthy stock, grown especially for seed purposes.

Prices, not prepaid: 5 lbs. 35 c ; 10 lbs . 65 c ; 100 lbs. $\$ 4.00$; quantity price on request.

## NETTED GEM

Also known as "Russet Burbank," "Yakima Gem," etc. A splendid main-crop variety, with a russet or netted skin; flesh white, excellent quality, shallow eyes.

Price, not prepaid: 5 lbs. 40 c ; 10 lbs. 65c; 50 lbs. $\$ 2.25$; 100 lbs. $\$ 4.00$.

## PRIDF OF NULTNOMAH

Excellent variety, somewhat similar to Burbank, strong, vigorous, late grower, producing: a large crop of large, long, white-skinned potatoes of fine quality. We offer best stock obtainable.

Price, not prepaid. 5 lbs. $40 \mathrm{c} ; 10 \mathrm{lbs}$. 65c; 50 lbs. $\$ 2.25$; 100 lbs. $\$ 4.00$.

## "Highest Quality" GARDEN PEAS Hand Picked

There is a vast difference in "strains" of garden peas. You will find our stock "very superior," healthy, vigorous and true, much better than the average seed sold by wholesale seed dealers and jobbers. Try them if you want "Highest Quality."

Packet and single pound prices only are prepaid. Add postage to $10-1 \mathrm{~b}$. prices if wanted by mail.

## Alaska

An extra early, exceedingly hardy pea. Pods of perfect shape, well filled with smooth peas of good quality. Height $21 / 2$ feet. Can safely be planted very early.
Large Pkt. 15c; $1 / 2$ lb. 20c; lb. 30c; 10 lbs. $\$ 2.25$

## Sutton's Excelsior

Very early and very hardy, may safely be planted as early as Alaska. The plants are dwarf and sturdy, exceedingly productive and the "quality" is all that could be desired. The pods are large for so dwarf a variety and always well filled.
Large pkt. 15c; $1 / 2 \mathrm{lb} .20 \mathrm{c} ; \mathrm{lb} .35 \mathrm{c} ; 10 \mathrm{lbs} . \$ 3.00$

## American Wonder

Well known and very popular; extra early, productive and good flavor; vines grow 10 inches high.

Pkt. $15 \mathrm{c} ; 1 / 2 \mathrm{lb} .20 \mathrm{c}$; lb. 35c; 10 lbs. $\$ 3.00$

## British Wonder

A new English variety, very early. A garden pea of startling merit. Its sturdy, healthy vines grow 12 to 14 inches high and produce in profusion an abundance of good-sized pods filled with dark-green peas of superb, sweet flavor. A great favorite where known. (See cut.)
Large pkt. $15 \mathrm{c} ; 1 / 2 \mathrm{lb} .20 \mathrm{c}$; lb. $35 \mathrm{c} ; 10 \mathrm{lbs} . \$ 2.75$
MARKET GARDENERS get special prices. Write stating kind and amount wanted.


Duke's Delight

## Duke's Del"ght

A very dwarf, extra early, delicious pea of great merit. Our own introduction. Each year increases its popularity. It's by far our largest selling Early Pea we have.

Our regular customers are now demanding it in preference to all other old standard sorts.

Duke's Delight easily outclasses these old popular kinds in productiveness, size and fullness of pods, color, sweetness and flavor. The sturdy, stocky, healthy vines grow about 12 to 14 inches high. Every grower praises it. Read reports below; we receive many like them.

Large pkt. $15 \mathrm{c} ; 1 / 2 \mathrm{lb} .25 \mathrm{c}$; lb. $45 \mathrm{c} ; 10 \mathrm{lbs} . \$ 4.00$

## EVERY GROWER PRAISES DUKE'S DE-

 LIGHT. READ THE FOLLOWINGMabton, Wash., March 13, 1922.
Routledge Seed \& Floral Co.
Dear Sirs: Be sure you send me more of "Duke's Delight" Peas. 1 tried this new kind of yours last year and it proved to be superior to other dwarf varieties of peas. to my delight, indeed.

Yours truly,
MRS. N. E. LITHERLAND.
Routledge Seed \& Floral Co.
Gentlemen: "I want to tell you that I think the Duke's Delight Peas the best pea I have ever planted. For canning they are the best and sweetest I ever tasted. Every jur I have opened this winter sure has been a 'delight.' Friends have asked how I canned my peas that they tasie so good. I tell them it is not how $I$ canned them, but the kind $I$ canned.
"I am always glad to speak a good word for Duke's Delight Peas and wish the Routledge Bros. much success." Very truly yours.

MRS. HERMAN L. GREENER.

[^10]
## Highest Quality Garden Peas - Continued

## Market Gardeners who buy Peas in quantity should write us for prices, stating variety and amount wanted. Single pound prices only are prepaid. Postage extra in 10-lb. lots.

## LITTLE MARVEL

Very valuable variety, especially suited to small home gardens: It matures very early and produces large crops. Vines 15 and 18 inches high. The pods are dark-green, medium size, and are closely filled with peas of extra fine flavor.
Large pkt. 15c; $1 / 2 \mathrm{lb} .25 \mathrm{c} ; \mathrm{lb} .40 \mathrm{c} ; 10 \mathrm{lbs} . \$ 3.00$

## RICHARD SEDDON

A splendid all-around early dwarf variety. On account of its immense productivity, evenness of maturity, well filled pods, excellent color and high quality, it is especially desirable for canning purposes.
Large pkt. $15 \mathrm{c} ; 1 / 2 \mathrm{lb} .20 \mathrm{c} ; \mathrm{lb} .35 \mathrm{c} ; 10 \mathrm{lbs} . \$ 3.00$

R. R.'s Prosperity


## BURPEE'S BLUE BANTAM

Unsurpassed for extreme earliness, superb quality, and unusual productiveness. The dwarf vigorous vines average 15 inches in height and carry really enormous crops of large, deep bluish-green pods. The handsome pointed pods average 4 inches long and are tightly packed with extra large, deep bluish-green peas of most luscious flavor.
Large pkt. $15 \mathrm{c} ; 1 / 2 \mathrm{lb} .25 \mathrm{c} ; \mathrm{lb} .40 \mathrm{c} ; 10 \mathrm{lbs} . \$ 3.00$

## R. R.'s Prosperity

The Earliest Large Podded, Sweet Garden Pea to date. It is hardy, can be planted very early. Is vigorous and robust grower; height $31 / 2$ to 4 feet; only a few days later than the earliest dwarf sorts.

The pods are very large, and are invariably well filled with from 8 to 10 sweet, large, tender peas of delicious flavor and quality.
The peas remain tender and sweet for some time after they are large enough to use. Its heavy yield and excellent quality makes it a most profitable market variety.
Large pkt. $15 \mathrm{c} ; 1 / 2 \mathrm{lb} .25 \mathrm{c}$; lb. $40 \mathrm{c} ; 10 \mathrm{lbs} . \$ 3.50$

## LAXTONIAN

This is an ideal market and home garden pea, quite dwarf in habit of growth but with very large pods, filled with large, dark-green peas of excellent quality. You will be pleased with Laxtonian.
Large pkt. $15 \mathrm{c} ; 1 / 2 \mathrm{lb} .25 \mathrm{c} ; \mathrm{lb} .40 \mathrm{c} ; 10 \mathrm{lbs} . \$ 3.00$

## DWARF TELEPHONE

A splendid mid-season variety, growing only about 18 inches in height, vines very stout and bear a good crop of large, well-filled, bright-green pods. The pods average 5 inches in length, containing 7 to 9 large peas which are tender and sweet.
Large pkt. $15 \mathrm{c} ; 1 / 2 \mathrm{lb} .20 \mathrm{c} ; \mathrm{lb} .35 \mathrm{c} ; 10 \mathrm{lbs} . \$ 2.75$

## GRADUS

Extra early. This popular large-podded, wrinkled pea of finest quality matures pods only two or three days later than the smallpodded extra earlies. Vines four feet high. It produces uniformly large, long pods, nearly round, and well filled with very large, handsome peas of the finest flavor.
Large pkt. $15 \mathrm{c} ; 1 / 2 \mathrm{lb} .20 \mathrm{c}$; lb. $35 \mathrm{c} ; 10 \mathrm{lbs} . \$ 3.00$

## EDIBLE PODDED OR SUGAR PEAS

A great favorite with many. In the EdiblePodded or Sugar Peas the pods are gathered, broken and cooked like string-beans when the peas start to develop in the pod or have reached about half their full size.

DWARF SUGAR.-Grows about 2 feet in height. producing a heavy crop of small, flat pods about 3 inches in length. Large pkt. $15 \mathrm{c} ; 1 / 2 \mathrm{lb} .25 \mathrm{c}$; lb. $40 \mathrm{c} ; 10 \mathrm{lbs} . \$ 3.50$

MAMMOTH MELTING SUGAR.-Grows 4 feet tall, producing very large, broad flattened pods.
Large pkt. $15 \mathrm{c} ; 1 / 2 \mathrm{lb} .25 \mathrm{c}$; lb. $40 \mathrm{c} ; 10 \mathrm{lbs} . \$ 3.50$

PEAS-CONTINUED-LARGE PODDED, LATE OR MAIN CROP
Packet and single pound prices only postpaid. Add postage in larger amounts Market Gardeners who buy in bag lots should send list for special prices


Routledge Prize

> INOCULATETHIS SEED WITH HUMOGERM

Medford, Ore., April 7, 1922.
Routledge Seed \& Floral Co.
Gentlemen: I am very well satisfied with the results obtained from seeds purchased from you and especially with Routledge prize peas and Routledge Superb Sweet Corn.

> Respectfully yours,
> EARL R. MILLER.

Everett, Wash., March 28, 1922.
Rontledge Seed \& Floral Co.
Dear Sirs: You will please find enclosed an order for one pound of your Routledge Prize Peas. I just can't do without them. They surely are the only table peas. Yours truly,

MRS. J. KINGS.

## IMPROVED STRATEGRM

A very productive semidwarf variety with large leaves and large pods. The peas are dark-green, wrinkled, and large. It is planted in large quantities by gardeners for market. In quality it is unsurpassed, the peas when cooked being of the most delicious sweetness.

Large pkt. 15c; 1/2 lb. 20c; lb. $30 \mathrm{c} ; 10 \mathrm{lbs} . \$ 2.50 ; 25 \mathrm{lbs}$. at 20c. Low price per 100 lbs.

## ALDERIIAN

Excellent market variety. The large, dark-green pods, filled with big, sweet flavored peas, bring fancy prices and sell rapidly. Vines tall and vigorous; main or late crop variety.

Large pkt. 15 c ; $1 / 2 \mathrm{lb} .25 \mathrm{c}$; lb. 40c; 10 lbs. $\$ 3.00$.

## TELEPHONE

One of the most popular and largest peas we have. Vines attain a height of $41 / 2$ feet, bearing profusely the extra long, handsome pods; tender, sweet and superb flavor. We offer a very carefully rogued, select strain of unusual merit.

Large pkt. 15 c ; $1 / 2 \mathrm{lb} .20 \mathrm{c}$; lb. $35 \mathrm{c} ; 10 \mathrm{lbs} . \$ 3.00 ; 25 \mathrm{lbs}$ at 20 c . Low 100-Ib. prices.

## Routledge Prize

A new, sweet, wrinkled mammoth podded Pea of extra value.

This new strain from New Zealand will be found true to name. A strong, sturdy, healthy, grower. Vines and pods are a rich green. A bushel of Routledge Prize pods will shell out nearly twice as many peas as a bushel of Telephone. The vines are enormously productive, being completely covered with immense long pods, well filled with from 8 to 11 large peas of the richest flavor. This variety grows 4 to 5 feet high and as an abundant cropper is superior to all other tall sorts.
Nothing in the line of peas excells the Routledge Prize in richness, sweetness and flavor. We are sure our customers will agree with us after testing this new pea. (See cut.)

Large pkt. $15 \mathrm{c} ; 1 / 2 \mathrm{lb} .25 \mathrm{c}$; lb. $40 \mathrm{c} ; 10$ lbs. $\$ 3.25 ; 25$ lbs. at 25c.

Oregon City, Ore., May 19, 1922.
Routledge Seed \& Floral Co.
Gentlemen: We purchased our garden seed of you last year and among them was the Rou $i_{-}$ ledge Prize Pea, and we thought them the best and then some. Enclosing order for more.

MR. and MRS. I. L. SINCLAIR.

[^11]

Peanuts

## PEANUTS

As we have had many calls for peanuts for planting and know that they do fairly well in the Northwest, we offer two good kinds.

Culture.-Remove the shell carefully so as not to break the skin and plant 10 inches apart in rows; cover 2 inches. Warm, sandy, rich loam soil is best. When grown, pull up and dry in the sun.

IVERSON'S IMPROVED.-Early, large and productive, yielding few imperfect pods and less "pops" than any other sort.

Large pkt. 10c; 4 oz. 25c; lb. 60c
EARLY SPANISH.-Although small, this variety is especially adapted to the North. Yields heavily; pods solid and unusually well filled. Sweeter and more delicious than the larger varieties.

Large pkt. 10c; 4 oz .25 c ; lb. 60c

## PUMPKIN

DOUBLE THE YIELD AND SIZE OF YOUR PUMPKINS by using a handful of "WONDER" Fertilizer to each hill and be sure you mix it well with top soil. (See page 38.)


## RHUBARB or PIE PLANT

VICTORIA, OR MAMMOTH.-Very large; excellent variety.
Pkt. 10c; oz. 20c; 4 oz. 50c; lb. $\$ 1.50$
RHUBARB ROOTS.-From October to June. Customers will save much valuable time by ordering roots instead of seed. For prices, etc., see page 113.

## WINTER RADISHES

The merits of Winter Radishes are little appreciated. These grow to large size and keep well for winter and spring use. Sow seed in July and August. Early planting is not advisable.

## NERIMA—Japanese Long White

A late fall and winter radish. It grows from 12 to 30 inches long and about 2 inches in diameter. Skin white and smooth, flesh firm, crisp, tender and mild.

Pkt. 10c; oz. 20c; 4 oz. 60c; lb. $\$ 2.00$
LONG BLACK SPANISH.--Very popular; latest, as well as the hardiest. Roots of medium size, oblong, black.

Pkt. 10c; oz. 20c; 4 oz. 40c; lb. $\$ 1.25$
ROUND BLACK SPANISH.-Three or four inches in diameter; flesh white; good keeper. Pkt. 5c; oz. 15c; 4 oz. 40 c ; Ib. $\$ 1.25$

CALIFORNIA MAMMOTH WHITE.-Also called Chinese White Winter or Celestial. A long, thick, stump-rooted variety. Pure white. The flesh is tender and crisp, keeping well through the winter.

Pkt. 5c; oz. 15c; 4 oz. 40c; lb. \$1.25
CHINA ROSE.-Bright rose color, flesh firm and piquant, largest at the bottom. One of the best. Pkt. 10c; oz. 20c; 4 oz. 50c; lb. $\$ 1.50$

Salem, Ore., March 25, 1922.

## Routledge Seed \& Floral Co.

Dear Sirs: Your Cauliflower, "New White," grew extra fine heads last season. Thank you. GUS FRENIARD.


RADISH-Continued
REMEMBER.-For a continuous supply of crisp, tender Radishes, sow seed every week, as they remain in "prime" condition only a few days after attaining full size. Use "C-M."
 and of delicious quality. and crisp. Very popular. A very desirable variety. mild. (See cut No. 6.)
"Highest
Quality"
R. R.'S SCARLET GEM.-The finest early strain of the round, bright-red radishes. Skin bright scarlet, flesh pure white, crisp, tender

Pkt. 10 c ; oz. $20 \mathrm{c} ; 4$ oz. 40 c ; lb. $\$ 1.25$
SCARLET TURNIP, WHITE TIPPED.-A beautiful variety; deep scarlet, with white tip. Very early, crisp and delicious. Very popular as a market sort. (No. 5.) Pkt. 10c; oz. 20c; 4 oz. 40c; lb. $\$ 1.25$

SPARKLER.-A French grown variety similar to the above but the whole lower half is pure white, upper half bright scarlet. Some market gardeners seem to prefer it. Crisp and tender, little larger. Pkt. 10c; oz. 20c; 4 oz. 40 c ; lb. $\$ 1.25$

EARLY SCARLET TURNIP.-Small top; of quick growth; mild Pkt. 5 c ; oz. $15 \mathrm{c} ; 4 \mathrm{oz}$. 35 c ; lb. $\$ 1.25$

FRENCH BREAKFAST.-Very popular; crisp, tender and mild; grows about 2 inches long, stump rooted, tipped white. (See cut No. 7.)

Pkt. 10c; oz. 20c; 4 oz. 50c; lb. $\$ 1.25$
SCARLET GIANT ("Crimson Giant").-The largest early scarlet, globe-shaped radish. Flesh sparkling white, solid, crisp, juicy and

Pkt. 10c; oz. 20c; 4 oz. 40 c ; lb. $\$ 1.25$

## EARLY SNOWBALL (Model White Box).Early, clear white, solid, juicy, crisp, tender and unsurpassed in flavor. (See cut No. 4.)

Pkt. 5c; oz. 10c; 4 oz. 35c; lb. 75c
LONG SCARLET.-Grows perfectly straight and smooth, 6 to 7 inches in length; skin scarlet, very thin; the flesh crisp, brittle and of delightful flavor. (See cut No. 2.)

Pkt. 5c; oz. 10c; 4 oz. 30c; lb. $\$ 1.00$

LONG BRIGHT SCARLET, WHITE TIPPED.-The brightest and handsomest long scarlet radish. Of excellent quality. (See cut No. 1.) Pkt. 5c; oz. 10c; 4 oz. 35c; lb. 75c

WHITE STRASBURG.-Crisp and tender; roots grow 4 to 5 inches long and about 2 inches in diameter. One of the best large summer sorts.

Pkt. 5c; oz. 15c; 4 oz. 35c; lb. \$1.00

DON'T GROW WORMY RADISHES. There is no use of it, since we offer 'Carco', Vegetable Spray. It will keep the maggots away from the roots and is very inexpensive to use. See page 121.

## SUNFLOWER

MAMMOTH RUSSIAN.-The best variety to grow for the seed, which is used as a food for poultry and parrots. It also makes a good hog feed. Sunflower seeds are rich in oil and protein. Planted in or around the pounltry runs they make a good shade during the hot summer days and at the same time produce a valuable feed.

Recently sunflowers have been grown extensively for silage feeding purposes. Yields an enormous amount of feed, said to be equal to corn; not affected so much by frost, and grows well even where corn makes a poor crop. Cultivation same as corn. For silage sow 12 to 20 lbs. per acre; for seed purposes, give more space to mature heads, 5 lbs. per acre. Heavy, recleaned seed, high germination.

Pkt. 5c; oz. 10c; 4 oz. 20c; lb. 40 c ; 10 lbs. $\$ 3.00$, postpaid. Write for quantity price


No. 1, Golden Custard; No. 2, Mam. White Bush Scallop; No. 3, Golden Summer Crookneck

## Delicata Squash

Often produces 15 to 20 fruits to a vine; very fine flavor and quality.

Ready almost as soon as the early summer sorts, and remains in perfect condition a long time. Fruit about 9 inches long (see cut). Color when ripe yellow, striped and marbled with dark olive-green.

Flesh thick, of fine texture, excellent quality, pale yellow; turns out dry, mealy and sweet either baked or boiled. Excellent for pies.
Pkt. 10c; oz. 20c; 4 oz. 60c;
lb. $\$ 1.50$

## Golden Summer Crookneck

Large size, early and very prolific. Our. strain is of the true crookneck type, heavily warted and of rich golden color. Excellent quality. A very popular summer bush squash for home and market.

Pkt. 10c; oz. 20c; 4 oz. 50c; lb. $\$ 1.25$
Golden Custard Bush Squash
A very large golden yellow, scallop variety. Often 1 foot in diameter, wonderfully productive and of extra quality.

Pkt. 10c; oz. 20c; 4 oz. 50c; lb. $\$ 1.25$

## Mammoth White Bush Scallop

Large, early, clear, creamy white. The stock we offer is exceptionally true to type. Very popular, excellent quality fried or stewed.

Pkt. 10c; oz. 20c; 4 oz. 50c; lb. $\$ 1.25$

## English Vegetable Marrow

Creamy white. A favorite English variety; 10 to 15 inches long. Flesh tender, marrowy and delicious. Use before it gets old.

Pkt. 10c; oz. 20c; 4 oz . 50 c ; lb. $\$ 1.25$


Delicata-All Season

## Banana Squash (See cut)

Grows $11 / 2$ to 3 feet in length. The skin varies from a yellow to a dark olive-green outside. Flesh firm, very thick, finest quality and rich orange. When quite young it is excellent to cook as a marrow. Ready early in the fall and will keep until late spring. In demand and a very popular variety.

Pkt. 10c; oz. 25c; 4 oz. 60c; lb. $\$ 2.00$

## Improved Boston Marrow

A popular variety for canning; large oval fruit; skin bright reddish-orange, with light cream netting; flesh rich orange, fine grained and of excellent quality. We offer a highly improved and selected strain of seed.

Pkt. 5c; oz. 20c; 4 oz. 45 c ; lb. $\$ 1.25$

## Mammoth Chili

Grows to an enormous size, of ten weighing over 200 pounds, while its rich, fine flavored flesh insures its value for all purposes. Its size makes it valuable for stock feeding.

Pkt. 10c; oz. 20 c ; 4 oz .60 c ; lb. $\$ 1.75$

## THE

GARDEN
GUIDE
and other up-todate and valuable books on gardening listed on page 114.


## Squash-Continued

DOUBLE the yield of your squash by using a cupful of "WONDER" Fertilizer to each hill. (See page 38.) You know the richer your ground, the larger the yield, and Wonder Fertilizer certainly contains more plant food than any other brand.

## True Hubbard

One of the best of the winter squashes. Vines vigorous and very productive. Fruit large, heavy, moderately warted with very hard shell. Skin uniformIy dark bronze-green. Flesh bright orange-yellow, fine grained, thick, dry and richly flavored. Can be kept in good condition until spring. Our seed is carefully sflected and is much superior to most offered.
Pkt. 10c; oz. 20c; 4
oz. 50c; lb. \$1.50

## Golden Hubbard

The same size, shape and quality as the well-known Hubbard Squash, except that it is a bright red or golden color and somewhat earlier. It is also a long keeper; considered by expert judges to be one of the very best fall and winter sorts yet introduced. Matures, before the frosts; is vigorous and wonderfully productive. In flavor it has no equal.

Pkt. 10c; oz. 20c; 4 oz. 50c; lb. $\$ 1.50$

## Delicious

Skin green or blue-black. Medium size. The shell is not very thick, but is hard and strong; small seed cavity; the flesh is very thick, of a bright yellow color, fine-grained and of splendid quality. For table use, either as a fall or winter squash, it cannot be excelled.

Pkt. 10c; oz. 20c; 4 oz. 50c; lb. $\$ 1.50$

## SALSIFY OR VEGETABLE OYSTER

One of the most desirable winter vegetables. The roots when cooked are very palatable and nutritious and are served in a variety of ways. The flavor is similar to oysters. Salsify succeeds best in a light, well enriched soil, which should be stirred to a good depth. Coarse and fresh manure should be avoided, as it will surely cause the roots to grow uneven and illshaped. Sow early and quite deep, giving the general culture recommended for parsnip. The roots are perfectly hardy and may remain out all winter. Frost does not injure the roots; may be stored in a pit or in a very cool cellar.

MAMMOTH SANDWICH ISLAND.-This variety is large and strong, growing with long, smooth, white, tapering roots, and is less liable to branch than the other sorts. It is invaluable for market gardeners' use.

Pkt. 10c; oz. 25c; 4 oz. 95c; lb. $\$ 2.50$

## SPINACH

Plant in the richest soil you have very early in the spring or not until fall for winter use, as it does not do well in hot weather.

IMPROVED THICK-LEAVED.-A variety which grows very rapidlv, forming a cluster of large, very thick, slightly wrinkled leaves of fine color and quality when cooked. Very popular variety. For spring or early fall.

Pkt. 10c; oz. 15c; 4 oz. 30c; Ib. 75c


VICTORIA.-A good long-standing all-season sort with large, thick, dark-green leaves. A favorite gardeners' variety. Pkt. 10c; oz. 15c; 4 oz. 30c; lb. 75c

NEW ZEALAND.-Unlike other spinach, it thrives during hot weather. The tender shoots are of good quality and may be cut throughout the summer. The plant becomes quite large and spreading. The leaves are comparatively small, broad and pointed. Germination of the seed can be hastened by soaking in warm water twenty-four hours. Pkt. 10c; oz. 20c; 4 oz. 50c; lb. $\$ 1.50$

LONG STANDING.-Of excellent quality; slow going to seed. Remains in good condition longer than most. Dark, rich green.

Pkt. 5c; oz. 10c; 4 oz. 25c; 1b. 60c
BLOOMSDALE SAVOY LEAVED.-Of upright growth; leaves broad and pointed, dark green, fine quality. A hardy, rapid grower.

Pkt. 5c; oz. 10c; 4 oz. 25c; 1b. 60c


## Spark's Earliana

Remarkable for its earliness, large size, uniform shape, attractive red color, and productivenes. The fruit is solid and the quality is all that could be desired. The leading early market variety. We offer a carefully selected strain of superior merit.
Pkt. 10c; $1 / 2$ oz. 25c; oz. 45c; 4 oz. $\$ 150$; lb. $\$ 5.00$

## New Burbank

A wonderful new variety, claimed to be the earliest, smoothest, solidest, most productive, "right, scarlet tomato, with a skin that will "peel" easily. Highly praised by those who have tried it.

Pkt. 10c; $1 / 2$ oz. 35c; oz. 60c; 4 oz. $\$ 2.00$

## Comet

The Best Tomato for Greenhouse Forcing.A recent variety, matchless in form and color. Beautiful, smooth, round fruit in great abundance. Color a rich scarlet red. Sets very freely in bunches. Equally good for outdoor culture as for forcing.

Pkt. 10c; $1 / 2$ oz. 35 c ; oz. 60c; 4 oz. $\$ 2.00$
DWARF CHAMPION.-Forms a strong, compact, upright, bushy plant 2 feet high; often sold as Tree Tomato. Fruit smooth, medium sized, solid and of good flavor.

Pkt. 10c; oz. 45c; 4 oz. $\$ 1.35$
YELLOW OR RED PEAR.-Used for preserves. Fruit small, distinctly pear shaped. Sweet and free of acid. Pkt. 10c; oz. 75c

Tomato Plants in any quantity.

## Routledge Special

If you want the "Best" extra early bright scarlet tomato, plant our new "Routledge Special." Our seed is grown under contract by the best tomato expert on this Coast. Compared with the best strains of other early varieties it grows a more vigorous, healthier vine, and produces more ripe fruit extremely early and throughout the entire season. Fruit medium size, almost round, very smooth and free of cracks; a beautiful bright scarlet, very solid and firm but tender meated and of superior quality. What more could you "ant? Try it and report. Only "early orders" booked for plants in season, at $25 \%$ higher than standard sorts.
Pkt. 15c; 1⁄2 oz. 40c; oz. 75c; 4 oz. \$2.50.

## Chalk's Early Jewel

Our most popular, large, smooth, fine flavored, extra early, bright red tomato. A heavy cropper, of large size; excellent fruit freely produced throughout the season. The plants are healthy and strong. Excellent market variety; very solid and deep through, being almost round; ripening to the stem without cracks or green core. The flesh is thick, solid, of fine flavor, with few seeds.
Pkt. 10c; 1/2 oz. 25c; 1 oz. 45c; 4 oz. \$1.35; lb. \$5.00

## Early Oregon

Very hardy and succeeds everywhere. Excellent in shape, size, smoothness, solidity and flavor, as well as being early and very productive. Color deep pink. Highly recommended for the home. Superior to most earlies if you don't object to pink color in place of red. Pkt. 10c; 1/2 oz. 25c; 1 oz. 40c; 4 oz. \$1.25

## Bonny Best

Highly prized by many Oregon growers. Tomatoes large, smooth and of a rich scarlet red, the color that sells quickly. Fruit thick with a small core, a profitable tomato for any purpose. Slices exceptionally well. Flesh and flavor excellent. Nearly globe shaped, slightly flattened at stem.
Pkt. 10c; $1 / 2$ oz. 25c; oz. 40c; 4 oz. $\$ 1.35$; lb. $\$ 5.00$

## Husk or Ground Cherry

Used for preserves and eating from the hand. The seed we offer is that of the true Yellow Ground Cherry, not the purple-fruited sort, which is scarcely edible.

Pkt. 10c; $1 / 2$ oz. 30c; oz. 50c
RED OR YELLOW CHERRY.-Fruit small, about $5 / 8$-inch in diameter; perfectly round and smooth; fine for pickles and preserves.

Pkt. 10c; oz. 75c

## TOBACCO

Culture practically same as cabbage.
Havana or Connecticut Seed Leaf.-Both good, hardy varieties for general planting here.
See Vegetable Plant list, page 37

For spring use sow very early in rich, loose ground. They must make a quick growth to be tender and sweet. For fall and winter use sow in July, August or early September.

## Extra Early WHITE MILAN TURNIP

An excellent table turnip, and the earliest of all varieties; adapted for very early spring or fall planting. The tops are small; the bulbs of medium size, flattened, and ivory-white in color. The flesh is fine-grained, tender, and of mild, sweet flavor. It remains in good condition for some time, but for tender, crisp roots all season, plant less at a time and every 10 to 14 days.

Pkt. 10c; oz. 20c; 4 oz. 60c; lb. \$1.75

## Extra Early Purple Top Milan

This variety is ready for table as early as White Milan; flesh white, firm and delicate. Pkt. 10c; oz. 20c; 4 oz. 60c; lb. \$1.75 Orange Jelly, or Golden Ball

Delicate and sweet, yellow flesh, medium in size, firm, crisp and most excellent flavor; keeps well and is superior as a table variety. Pgt. 5 c ; oz. 15c; 4 oz .40 c ; lb. $\$ 1.00$

## Early White Flat Dutch

A leading white fleshed variety; either for the family, market garden or field crop; it is medium size and produces a large crop; the flesh is firm, but tender, and of a superior rich, buttery flavor; a good keeper.

Pkt. 10c; oz. 15 c ; 4 oz .35 c ; lb. $\$ 1.00$

## Early Snowball

A superior table variety, meltingly tender, with snow-white flesh. Matures six weeks after sowing; medium size, smooth and perfectly globular.

Pkt. 5c; oz. 15c; 4 oz. 35c; lb. $\$ 1.00$

## White Egg

Is perfectly smooth, of a pure clear white; a very choice kind for table use; of excellent flavor, sweet and mild; pulls clean from the ground; thin, snow-white skin. Egg shaped. Excellent market variety.

Pkt. 10c; oz. 15c; 4 oz. 40c; lb. $\$ 1.10$

## Any Surplus Apples?

If you have surplus apples or fruit you ought to have a "Cider Mill." We offer a 'real"' Grinder and Press at a reasonable price. See page 120.

## Raise No More Wormy Turnips <br> USE ${ }^{66}$ CARCD ${ }^{99}$

A wonderful remedy for destroying maggots, grubs and worms which infest Turnips and root crops.

A marked increase in vigor and growth following its use. See page 121.

## Early Purple Top (Strap Leaved)

One of the best and universally grown; flesh firm, but very tender and sweet; of quick growth. As it attains large size it is profitable for stock, keeps well.

Pkt. 10c; oz. 15c; 4 oz. 35c; lb. $\$ 1.00$

## Purple Top White Globe

A very heavy cropping, globe-shaped variety, with white skin and sweet, tender flesh, excellent flavor and much in favor with the market gardeners. Grows quite large.

Pkt. 10c; oz. 20c; 4 oz. 40c; lb. $\$ 1.00$

## Yellow Aberdeen

Round, medium size, light yellow; produces a large crop; is hardy and keeps well; flesh very firm, but tender and sweet; a great favorite with the dairymen for feeding cows. Pkt. 5c; oz. 20c; 4 oz. 35c; lb. $\$ 1.00$

## Cowhorn (Long White)

Slightly crooked, pure white, except a little shade of green at the top; grows half out of the ground and is of very rapid growth. Has proved itself one of the best stock turnips ever introduced in Oregon.

Pkt. 5c; oz. 20c; 4 oz. 40c; lb. \$1.25

For valuable and "up-to-date"' books on Gardening and Poultry, see pages 114-147.



American Purple Top
Herbs in general delight in rich, mellow soil. Those marked with a (*) are perennial. All the Flowering Herbs 10c per Packet, unless Otherwise Priced

For feeding stock in fall and winter there is nothing superior to turnips and rutabagas, as they are much liked by all kinds of stock, and serve to keep them in good condition.

## Improved American Purple Top

The leading and most popular variety, being very distinct in type, attaining a wonderfully large size; immense yielder; the flesh is very firm, cream yellow, fine grained, sweet and tender. Excellent both for table and stock feeding. Keep all winter.

Pkt. 10c; oz. 15c; 4 oz. 45c; Ib. $\$ 1.25$

## White Sweet Russian

This variety is most excellent either for table or stock; it grows to a very large size; flesh white, solid, of a firm texture, sweet and rich, an excellent keeper.

Pkt. 10c; oz. 15c; 4 oz. 45c; lb. \$1.25

## HERB SEEDS

Pot, Sweet and Medicinal

## RUTABAGA - SWEDES

## Oz .

Anise.-Seeds aromatic; used medically..35c
*Balm.-For culinary purposes............75c
Basil.-Sweet; for flavoring soups.......50c
Borage.-For flavoring; also bee pasture.50c
Caraway.-For flavoring ....................30c
*Catnip.—Mild nervine ..................... $\$ 1.00$
Coriander.-Used for flavoring............. .25c
Dill.-Used medicinally and for pickles...25c
*Fennel.-Flavor of celery . . . . . . . . . . . . . 35c
*Horehound.-Bitter; for tonic. ............ . 75 c
*Hysop . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 75 c

* Lavender.-True, for fragrance........... 75 c
*Marjoram.-Sweet; for flavoring........ $\$ 1.00$
*Rosemary.—Aromatic oil ................. $\$ 1.00$ Summer Savory.-For flavoring. . . . . . . . . . 75 c
*Sage.-For tea flavorings and dressings..75c
*Thyme (broad leaf).-For soup.......... $\$ 1.00$
*Wormwood.-Medicinal use ...............75c


## VEGETABLE PLANTS

We grow large quantities of choice vegetable plants, and can supply all of the varieties listed below, in their proper season, in most any quantity. We can supply all vegetable plants in TWO GRADES-plants "PULLED" direct from the seed beds AND THOSE that have been TRANSPLANTED into shallow boxes. Transplanted plants are much stronger and better rooted, and are well worth the price, especially in the early part of the season. We can supply most any of the leading sorts. Tell us your choice of varieties, and we will send it or give you a good substitute. NO PLANTS SENT C. O. D. Write for prices on 5 to 10 thousand lots.

NOTE.-Dozen and 100 prices are postpaid; 25c less per 100 if called for. We will send 1,000 lots by express at your expense, unless you wish to send extra money to pay packing and postage.

## CABBAGE, GARDEN KALE, COW KALE Dozen 100 1,000

Early or late, transplanted.. $\mathbf{\$}$. 25 \$1.25 $\$ 8.00$ Pulled after May 15......... . . 856.00
When ordering Kale be sure and state whether the Curly Garden or Cow Kale is wanted

```
CAULIFLOWER AND BROCCOLI
    PEPPER AND BRUSSEL SPROUTS
                            Dozen 100 1,000
    Transplanted .............$ . 30 $1.50 $10.00
    Late kinds, transplanted... . . 30 1.25 8.50
    Broccoli pulled after June 1. . }85\mathrm{ 6.00
CELERY AND CELERIAC T. R.
    Dozen 100 1,000
    Leading kinds, transplanted.$ .30 $1.25 $8.50
    Pulled after May 15........ 1.00 7.50
```

TOMATOES Dozen 100 1,000
Leading kinds, our selection,
transplanted $\qquad$ \$ . 35 \$1.50 \$10.00

We do not sell 'pulled" plants. They give poor satisfaction.

Pot Grown Tomato Plants. - These large plants give the most profitable results. Cannot be mailed. Prices: $3-\mathrm{in}$. pots, 15 c each $\$ 1.50$ doz.; $4-\mathrm{in}$. pots, 20 c each, $\$ 2.00$ doz.; must go by express, charges collect.

SWEET POTATO PLANTS
Dozen 100 1,000
Sweet Potato Plants........ \$ . 35 \$1.25 $\$ 9.00$
Orders filled once every six days during May and June.

Chives (Schnittlauch).-Per bunch, postpaid, 25 c.

NOTE.-Pot grown tomato plants should have all the dirt left on the roots and are not mailable.

## WONDER ODERLESS FERTILIZER

The best fertilizer for the city gardener; clean and odorless. Remember, it's ALL FERTILIZER; a wonder in action, a giant in strength, and the small amount necessary to use makes it the CHEAPEST AND MOST EFFICIENT High Grade Fertilizer on the market, and last, but not least, IT IS ODORLESS. We buy it in carload lots.

In 'WONDER', you get the 'best"' in plant food, something which gives results, something that astonishes. This "WONDER"' fertilizer is the result of years of study and trials by a fertilizer expert. In '"WONDER"' we have a meritorious and ODORLESS concentrated fertilizer, put up in small packages, thereby making its distribution a cheap and easy matter. Being a concentrated fertilizer, only a very small amount is required to produce the largest yield. (See general directions below.) There's no use of your paying dray and freight charges on bulky fertilizers containing three-fourths sand, ash or dirt filler. 'WONDER'' is the pure 'DOPE'’-clean and easy to apply. We guarantee it to give results.

The small amount of 'WONDER', required reduces the expense of fertilizing to about one-half the cost of green manure or the average commercial fertilizers on the market. Rich in potash.

The "WONDER" fertilizer is sold only in $25-\mathrm{lb}$. white, clean canvas bags, $2-\mathrm{lb}$. odorless cartons and $125-\mathrm{lb}$. sacks.

## Price of "Wonder" Fertilizer

TWO LB. CANS, Not Postpaid, 30c (P. P. Wgt. $21 / 2 \mathrm{lbs}$.) $25-\mathrm{lb}$. DRILL BAG, $\$ 2.35$; 3 Bags, $\$ 7.00$; large $125-\mathrm{lb}$. sack, $\$ 10.50$.

Ask for
8-Page
"Wonder"'
Leaflet-It
Tells All


NOTE.-If wanted by parcel-post add postage. "Wonder" is odorless and 2-lb. cans and 25 -lb. bags can go by mail cheaper than express or freight in most cases.

## General Directions for Using Wonder

Remember, a $25-\mathrm{lb}$. bag of 'WONDER', is equal, in plant food, to 100 lbs . of most any other commercial fertilizer on the market.

For Ferns and House Plants: One-half teaspoonful to a $6-\mathrm{in}$. pot, dug into the top soil; 1 teaspoonful, heaping, when repotting, mix well through the soil.

For Vegetables: A teaspoonful to a Cabbage, Tomato, Cucumber, Pumpkin or Melon Vine. Sprinkle over the top soil before planting Radish, Lettuce, Peas, etc., or hoe in after they are up. For Flowers outside: A very little to each plant, or cultivate into the top soil before or after planting. Use 1 lb . to 10 foot square.

For the Lawn: One $25-\mathrm{lb}$. bag of "WONDER" will go over a space of your lawn $50 \times 50$ or 2,500 square feet, and is sufficient for same, applied once yearly. In dry weather always water after applying. Double the amount when making new lawns.

For Fruit, Roses, Etc.: A heaping tablespoonful for a small Fruit, Berry, or Rose Bush, a cupful for a 3 or 4 -year tree; 1 to 3 lbs . to a full bearing Fruit Tree, large Flowering Shrub or Vine.

CAUTION! Always mix the fertilizer into the top soil as much as possible, and water or sprinkle after applying it, especially on grass or tender foliage or growth.

Ask for "WONDER" 20-PAGE BOOKLET that gives plain facts and full information and directions for all purposes. FREE.

NOTE._Three sacks of "C. M.', (see next page) and one sack of "Wonder'" mixed together will make a very rich combination fertilizer that will prove highly satisfactory for all uses, as it will be very rich in plant food and supply the necessary humus for heavy soils.

Hundreds of our customers praise "Wonder"' and buy it every year. You try it; we are sure you will like it. Give us a report, PLEASE.

#  <br> Kiln-Dried Pulverized Cow Manure 

For Short, We Call It "C. ML."

This product is made of green cow manure by putting it through a dry-kiln with heat enough to evaporate the water and kill all weed seed without burning the compost or destroying the fertilizing elements. It is then ground finely and sacked.

Hundreds of our Gardeners and Farmers have discovered its great value, and are buying large quantities.

Supplies the "Humus" lacking in chemical fertilizers and the analysis shows it to be quite rich in nitrogen, potash and phosphoric acid. It will not burn or harm the most tender seeds or plants.

EIGHT TO ONE.-You can get a good idea of the value of this concentrated product when we state that it takes 8 to 10 tons, in the green or natural state, to make 1 ton ready to sack. We are offering, in a most convenient dry state, a fertilizer and compost that heretofore you have bought by
the wagon load, in a most dirty, foul and disagreeable form.

SUPPLIES THE HUMUS.-This new product supplies all the humus and fertilizing value of the old form, without the disagreeable odor, coarse straw, chaff and weed seeds. In fact you get everything in an ideal form except the live weed seed and moisture. You do not want the weeds and can easily apply water when needed. There is no use of paying dray, freight or handling charges for dirty, foul, water-soaked manure when this product can be had.

CHEAPER AND MORE CONVENIENT.The old form cow manure costs about $\$ 3.50$ a load delivered and about $\$ 3.00$ or more to get it placed and spaded under. Three sacks of our Dry-Kiln C. M., which is practically odorless and can be spread around by anyone at leisure, will cost less and give better results. It contains no live weed seeds.

## Uses and Directions for "C. M."

## FOR ROSE BEDS AND BORDERS <br> FRUIT AND BERRY BUSHES GRAIN FIELDS AND IMEADOWS

Apply "C. M." broadcast at the rate of 3 to 5 sacks per city lot; for large fields, 20 to 30 sacks per acre. It will pay to use it liberally.

## FOR SEED BEDS

As a top dressing over seed beds, where small flower or vegetable seeds are to be started, nothing else could be better, as it is full of "humus" (like leaf-mold) which keeps the top soil loose and open. Rake "C. M." into the top soil, or after seeding sprinkle "C. M." over the surface, and moisten it well.

## FOR VEGETABLES AND FLOWERS

Use "C. M." on any soil that needs loosening up and enriching. To raise choice vegetables and large beautiful flowers, the soil must' be rich, well worked and loamy. Use "C. M." in liberal quantity and you will be delighted.

## FOR LAWNS

"C. M." is just what has been wanted for years by amateur and professional lawnmakers. Heretofore on account of heavy soils that would bake and crack, the best cow manure obtainable was used to open up and keep the soil loose. It was not the plant food needed, as that could easily be applied in the form of Chemical Fertilizer, but it was the "humus" in the stable manure that was wanted, "but NOW with this Dry-Kiln, weed free, "C. M." the lawnmaker's troubles are greatly reduced.

HOW TO USE.-After the lawn has been graded, raked, seeded and rolled, spread "C. M." broadcast over the seed, covering it well. If it is dry weather, sprinkle, but sprinkle lightly, but often, so as not to wash it off. It absorbs much water, but slowly at first. After it is once wet it becomes part of the surface soil and will remain.

ANOTHER WAY.--Providing you will use "C. M." in a liberal amount, it would be better raked into the surface soil, then seed, rake lightly and roll.

## PRICES OF DRY-KILN "C. M.'' AT OUR STORE

Two Bushel (72-lb.) Sacks, $\$ 2.00 ; 3$ Sks., $\$ 5.50 ; 5$ Sks., $\$ 9.00 ; 10$ Sks., $\$ 17.50 ; 20$ Sks., $\$ 32.50 ; 28$ Sks. (1 Ton), $\$ 40.00$. Small lots—2 Lbs., 15c; 5 Lbs., 25c; 10 Lbs., 40c; 30 Lbs., $\$ 1.00$. Add postage if wanted by parcel post.

With our new fertilizer Dry-Kiln "C. M." to supply humus, and "Wonder," the strongest and richest odorless chemical fertilizer and "Ground Lime," the great soil conditioner, we have a combination that will supply every need. (See pages 38 and 40.)

The day of strong smelling, odorous fertilizers is over, we believe, at least for the city and suburban gardener.

For Liquid Manure-Empty half a sack of "C. M." into a 50 -gal. barrel and fill with water. Use this liquid straight or diluted form, for watering. The increased vigor and growth of plants will almost immediately be noticed.

## FERTILIZERS-Continued

Fertilizer prices on this page subject to market changes. Write for quantity price.

## GROUND LIME ROCK

Lime is an indirect soil improver and a very valuable conditioner, and releases the plant foods. Its application on heavy or clay soil will open it up, make it lighter and more workable. Few people realize its value. Most Western Oregon soils need lime. Use $1 / 2$ to 1 ton per acre. For heavy clay soil in the garden, double the amount.

Prices: 100 -lb. sacks, $\$ 1.00 ; 500$ lbs. $\$ 4.50$; write for ton prices.

## GARDEN LTME

(Fertilizer Lime.)-This is put through a process that makes it finer and lighter than above. Quicker in action, richer in calcium, and well worth the higher price. Excellent for moss in lawns and general garden and farm lands.

Prices: 5 lbs. 25c; 10 lbs. 40c; 50 lbs. $\$ 1.00$; 100 lbs. $\$ 1.50$; 500 lbs. $\$ 7.00$; write for ton price.

## SHEEP GUANO

One of the best natural manures, dried and ground. Concentrated, soluble, quick in action, and free from weed seed. Splendid for vegetables; fine for roses and flowers. Excellent for lawns, small fruits, berries, etc., but we really prefer "C. M." See page 39.

Prices: 100 lbs. $\$ 1.75$; 500 lbs. $\$ 8.00$; write

## NITRATE OF SODA

It is very quick in action, stimulating rapid growth. Being quickly soluble, it should not be applied until spring, on garden truck after the plants are above ground. Be careful or it will burn tender foliage.

Prices: Lb. 15c; 5 lbs. 50c; 25 lbs. $\$ 1.50$; 100 lbs. $\$ 4.50$; write for quantity price.

## LAND PLASTER

(Gypsum.)-An indirect fertilizer as it releases plant food and changes soil conditions. Used largely on grass and clover crops.

Prices: 10 lbs. $25 \mathrm{c} ; 50 \mathrm{lbs} .75 \mathrm{c} ; 100 \mathrm{lbs}$. $\$ 1.00 ; 500$ lbs. $\$ 4.50$. Low ton price, write.

## MURIATE OF POTASH

This fertilizer is especially valuable to fruit trees and berries. It increases the size and yield and makes a marked improvement in quality and color. Use about 200 lbs . per acre. Very valuable to use with stable manure, which is always shy of potash. Mix onefourth Muriate of Potash with three-fourths "C-M." for greater results on root, fruit and berry crops.

Prices: 100 lbs. $\$ 3.25 ; 500$ lbs. up at $\$ 3.00$; ton prices on application.

## SUPERPHOSPHATE

This is what is known as acid phosphate, being phosphate rock that has been treated or processed, to make the phosphoric acid available. Has become very popular among grain and fruit growers. Use at the rate of 300 lbs . and up per acre.

Prices: 100 -lb. sks. $\$ 2.35$; 5 to 20 sk. lots at $\$ 2.00$.

## BONE MEAL FERTILIZER

This is finely ground and of best quality. Used for lawns, roses, shrubs and trees. Not very quick in action and should be applied in the fall or very early spring. Use 1,000 to $2,000 \mathrm{lbs}$. per acre.

Prices: 5 lbs. 30c; 10 lbs. 50c; 100 lbs. $\$ 3.00$; ton, write.

## SULPHUR POWDER—FERTILIZER

Experiments conducted during the past few years by noted soil chemists and practical cultivators have revealed the fact that sulphur kills alkali, promotes nitrification, transforms potash and phosphates lying latent in the soil into available plant food, thereby reclaiming and stimulating the soil to produce greatly increased crops at a comparatively low cost per acre. Ask any agricultural college or experimental station. Use 200 to 300 lbs. per acre broadcast and harrow it in. It will prove a good fertilizer and act as repellent against fungus, mildew, rust, wilt and blight.

Prices: $1 \mathrm{lb} .10 \mathrm{c} ; 5 \mathrm{lbs} .40 \mathrm{c} ; 10 \mathrm{lbs} .75 \mathrm{c}$; 50 lbs. $\$ 2.25$; 100 lbs . $\$ 4.00$, subject to change. Write for quantity prices.

## SPRAY AND GARDEN HOSE



Garden and Spray Hose

## Routledge Highest Quality

(Non-Kinkable)-Guaranteed
This hose gives excellent satisfaction. Good enough for any ordinary spraying outfit, and by far the best hose for florists' or gardeners' use. One customer reports that he used a 50 -foot length of this grade for three seasons continuously, which proves that it is the cheapest hose to buy. We have this on 500 -foot reels, and cut any length wanted.

Price per foot, smooth or moulded, $1 / 2$-inch, 13 c per foot; $3 / 4$-inch, 15 c ; corrugated, 1 c per foot higher. (Couplings free on $50-\mathrm{ft}$. lengths.)

## We Recommend and Offer You



It pays to inoculate the seed of all Legumes, Alfalfa, Clovers, Garden and Field Beans, Peas, Etc.

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

Mulford Cultures are scientifically prepared and tested with the utmost care and skill. Enormous numbers of these very valuable and desirable bacteria are thus available to you in every package of Mulford Culture and may readily be applied to your seed. The sealed bottle insures purity.

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

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

Mulford Cultures are prepared for: Alfalfa, Sweet Clover, Red Clover, Alsike Clover, Vetch, Field Peas, Sweet Peas, Garden Peas and Garden Beans.

Always specify on your order what crop you want to inoculate, as there is a different strain of bacteria for each legume.

PRICES_Quarter acre size, 75 c; 1 acre size, $\$ 1.50 ; 5$ acre size, $\$ 5.00$, postpaid.
GARDEN SIZE, only for Sweet Peas, Garden Peas, Garden Beans, 35 c ; postpaid 40 c . MULFORD'S 12-PAGE LEAFLET TELLS ALL. SENT UPON REQUEST

## HOMOGERM <br> A SEED AND SOIL INOCULANT

## That Increases Crop Production and Greatly Improves the Soil



Roots like this mean bigger yields-better soil

The cost is trivial when compared with the profit it will bring you. LEGUMES ARE CLOVERS, PEAS AND BEANS, ALFALFA, SOY BEANS, VETCHES, AND OTHER PLANTS THAT GROW THEIR SEEDS IN A POD. Their roots are the home of bacteria that draw fertility-building nitrogen from the air and store it in swellings on the roots, called nodules. These nodules not only feed nitrogen to the crop they are on, but rot away in the ground and supply valuable nitrogen to the soil for future crops of grain, vegetables or fruit.

## Humogerm is Economical and Easy to Use

Humogerm carries the nitrifying bacteria in a porous humus medium which acts as a natural home for them-keeps them fresh, active and vigorous. The ventilated cans are friction top and open easily without cutting.

Place seed in pile, mo'sten slightly with water and a little sugar, pour on HUMOGERM, and plant in usual way. This gives thorough incculation, and is cheaper, safer and better than the discredited, laborious soil transfer method.

## How to Order

Specify crop and number of bushels you wish to inoculate. The can unit designations are on the bushel basis; for instance, the 1 bu . size contains sufficient culture to thoroughly inoculate 1 bu. of legume seed, any variety.

PRICES: Garden Size for Peas, Beans and Sweet Peas, 25c; $1 / 4$ bu., 35c; $1 / 2$ bu. 60c; 1 bu., $\$ 1.00$. ADD POSTAGE-5c extra on $25 \mathrm{c}, 35 \mathrm{c}$ pkgs., and 10 c on 60 c and $\$ 1.00$ size.

When more than one bushel of seed is planted to the acre, the 1 bu . size contains sufficient inoculation for the amount of seed planted on one acre.



#### Abstract

Only one grade priced, the best, choice, ciean seed. Write for prices in quantity. Single pound prices on Grass and Clover Seeds are prepaid. Prices per ten, fifty and one hundred pounds are not prepaid and are subject to market changes. For reference tables,


 amount to sow per acre, see inside back cover.
## YOU WILL ALWAYS GET YOUR MONEY'S WORTH

Prices on Grass and Field Seeds change occasionally, therefore we cannot print prices good for any length of time. When ready to buy, write us for special prices, stating quantity wanted, or order what you want at catalog prices, and we guarantee that we wili give you full value for the money sent, whether the price at the time you order be higher or lower. In other words, we will always ship seed to cover the full amount of money sent to us, or return the difference. FOR AMOUNT TO SOW PER ACRE, SEE INSIDE BACK COVER

## KENTUCKY BLUE

One of the best grasses for permanent pasture, furnishing a constant supply of the most nutritious feed during the greater part of the year.

Fancy, 10 lbs. $\$ 5.50$; per lb. postpaid 60c; 100 Ibs., write.

FOR LAWNS.-Blue Grass is used very extensively for lawns and is found in all good lawn grass mixtures.

Our H. Q. (highest quality) Extra Fancy seed is unexcelled for weight and purity. Few dealers handle this high grade recleaned seed on account of its cost. This seed, straight or mixed with Fancy White Clover, is excellent for lawns.
H. Q. Extra Fancy, 10 lbs. $\$ 6.50$; per lb., postpaid, 70c; 100 Ibs., write.

## FNGLISH RYE GRASS

A strong-growing, hardy perennial grass, noted for its nutritive qualities. It is equally valuable for both grazing and hay. It grows very rapidly and makes a good showing quicker than most grasses.
$10 \mathrm{lbs} . \$ 1.90 ; 50$ to 100 lbs . at 15 c lb.; per lb., postpaid, 25 c .

FOR LAWNS this is used and recommended by many gardeners. Unless sown thickly (1 lb. to 15 feet square), it grows too coarse. For large grounds and parks it is very successful. Often mixed with White Clover. For lawns we offer a high-grade double cleaned perennial seed.

10 lbs. $\$ 2.00$; 50 to 100 lbs. at 16 c ; per lb., postpaid, 30 c .

## CREPPING BENT.

Perennial. A grass desirable for either lawns or permanent pastures on account of the fine, firm and enduring turf it produces; especially adapted to moist situations.

True Imported, per Ib., postpaid, \$2.00.

## CRESTED DOG'S TAIL

A perennial grass, forming a smooth and lasting turf, excellent in mixtures for lawns, putting-green, and pastures. It thrives best on rich, moist land, but can accommodate itself to almost any soil, and, as the roots penetrate deeply into the ground, it can stand severe drought.

10 lbs. $\$ 7.50$; per lb., postpaid, 85c.

## RED TOP

Of great value for mixing with hay or permanent pasture grasses; will succeed in nearly any soil, but thrives best in a rich, moist soil; makes a fine bottom growth, rendering it invaluable to be sown with timothy, orchard or alsike clover.

Fancy Hulled Solid Seed, 10 Ibs. $\$ 3.50 ; 50$ to 100 ibs. at 30c; per lb., postpaid, 40c.
H. Q. Extra Fancy, for lawn seeding, 10 lbs. \$4.00; 50 to 100 lbs. 35 c ; per lb., postpaid, 45 c .

## ORCHARD

Of the greatest value in permanent pasture mixtures; thrives best in moist, shady places, but will withstand drought exceedingly well. Will do well under trees, or shady places. Valued for hay crop, as it is very nutritious if cut eary.

10 ibs. $\$ 3.00$; 50 to 100 lbs . at 28c; per lb., postpaid, 40c.

## TIMOTHY

As a hay crop, timothy is unsurpassed by any other grass. Thrives on ordinary soil, but succeeds best in a moist loam. Best to cut it when in blossom or soon after flowering. Beneficial to sow timothy with red top and red clover, as. they produce more of a bottom growth.

10 lbs. $\$ 1.50$; 50 to 100 lbs. at 12c; per lb., postpaid, 25 c .

[^12]
# GRASS SEEDS-Continued <br> Prices subject to change. Write for latest price list 

## BROMUS INERMIS

On account of its strong perennial character, and its unusual drought-resisting powers, is the best grass we have for the semi-arid regions of the Northwest. It grows luxuriantly, is freely eaten in either the dry or green state by cattle, and yields enormously, making the best of hay for horses or cattle.

10 lbs. $\$ 3.00$; 50 to 100 lbs at 25 c ; per lb., postpaid, 40 c .

## MESQUITE

It is usually sown on virgin soil, without cultivation, after the ground has been burned over.

Fancy Hulled Seed, 10 lbs. at $\$ 2.25 ; 50$ to 100 lbs. at 19c; per lb., postpaid, 30c.

## ITALIAN RYE

A quick-growing grass, attaining a height of $21 / 2$ to 4 feet; very desirable for meadows or permanent pastures; thrives best on soils that are slightly moist, and will even stand considerable overflow; grows easily and bears an abundance of foilage that makes the best and sweetest hay imaginable.

Imported Seed, 10 lbs. \$1.80; 50 to 100 lbs. at 15 c ; per lb., postpaid, 25 c .

## MEADOW FESCUE

Perennial; grows three to four feet high. Roots deep, thus resisting drought. It succeeds on any ordinary soil; a heavy cropper, excellent for hay or pasture.

10 lbs. $\$ 2.70$; 50 to 100 lbs . at 25 c ; per lb., postpaid, 35 c .

## SUDAN GRASS

## A New Forage and Hay Crop-A valuable One-Season Crop

This grass was introduced in the States by the Department of Agriculture and has proved a great success, especially for dry-land conditions, and it appears to do equally well in all parts of the Willamette Valley.

Sudan Grass is strictly an annual and dies each year. This makes it fit admirably into any system of rotation. It is a tall, quick-growing grass, reaching a height of from 5 to 7 feet. The plant stools wonderfully and yields well.

It belongs to the sorghum family, but is more slender and grassy in manner of growth, earlier and hardier, and matures in 10 to 12 weeks. Yields a good crop of first-class hay. All stock relish it green or cured and thrive on it. Yields of from two to four tons per acre are common, and under irrigation they run as high as eight to ten tons per acre.

SEEDING.-Plant late in the spring or during the summer as a catch crop. Yields best sown in drills 18 inches apart and given one cultivation. 10 lbs. per acre. If sown broadcast and harrowed in, 25 lbs. per acre. If cut early will often make 2 or 3 çrops.

HIGHEST QUALITY SEED: 10 lbs . $\$ 2.00$; per lb .30 c , postpaid; 50 to 100 lbs , write.

## FIELD AND FARM SEEDS

Single pound prices are prepaid. Ten, fifty and one hundred pound prices are NOT prepald and subject to market changes. See notes about shipping, page 42.

## WHITE JERUSALEM ARTICHOKES

Planted and cultivated for the tuber, the same as potatoes. Of great value for feeding stock. They are the best and cheapest hog feed known. They are remarkable for great productiveness, over 25 tons have been raised on one acre. Easier to grow than potatoes. They need not be dug. If hogs are turned in on them they can easily root the tubers out. One acre will keep from 20 to 30 hogs in fine condition for several months. Said to be a preventive of cholera and other hog diseases. Excellent for fattening if fed with a grain or mash ration. Plant 400 lbs. per acre early in the spring.
By freight or express, 10 lbs. 50c; 50 ibs. $\$ 1.50$; 100 lbs. $\$ 2.50$. Per lb., prepaid, 20 c ; 4 lbs. 60c. Write for quantity price.

## BUCKWHEAT

SILVER HULL.-A very good and popular variety; grain is of a light gray color; has a thin husk; matures early, and yields heavily; a good milling variety.

10 lbs. $\$ 1.25$; 100 lbs. write; per lb., postpaid, 25 c .

JAPANESE.-Good yielder, ripens early; excellent for bees to work on as it remains in bloom longer.

10 lbs. \$1.25; 100 lbs. write; per lb., post. paid, 25 c .


CHEAT SEED
Cheat seed yields a good crop of hay, especially on low or moist soil, and will stand considerable overflow without harm. Sow in the fall or early spring, the same as oats and about 100 pounds per acre.

10 lbs. 75c; 100 lbs. write; per lb, postpaid, 20c.

## Farm and Field Seeds-Continued

Prices subject to market changes. See notes, top page 42

## BARLEY Routledge Beardless

This new clean strain, grown under contract for us, we believe is the TRUEST BEARDLESS barley in the state. Agricultural agents and farmers who inspected our field pronounced it the best strain of beardless barley they had found anywhere.
A wonderful yielder, even on dry, sandy soil. Stands up well and not likely to lodge. Makes excellent hay for horses or stock, or a big crop of excellent grain. Get a start of real beardless.

By mail, postpaid, $1 \mathrm{lb} .25 \mathrm{c} ; 5 \mathrm{lbs}$. 75c; 100 ibs., write.

## COMMON BEARDLESS

Market price. Write.
Hannchen Barley. - Earliest and best of the 2 -rowed barleys. A sure and heavy cropper. Grain plump, thin hull and beards drop or break off readily. For spring planting but will do well seeded in fall where winters are mild.

Prices: 10 Ibs. 65c; 100 Ibs., write; per lb. 20c; 3 for 50c; postpaid.

WISCONSIN PEDIGREE BAR. LEY.-Six-rowed, bearded, very popular, early and prolific.

Prices: 10 lbs. 75c 100 ibs. write; per Ib., postpaid, 20c; 3 for 50c, post. paid.

H. Q. Beardless $1 / 2$ reduction)

## COW PEAS

Are really small beans of vigorous vining habit and heavy foliage of great nutritious value. Make excellent green feed cut and fed or pastured.

10 ibs. \$1.50; 100 Ibs., 'write; 1 lb. 25c; 3 lbs. 50c, postpaid.

## FIELD PEAS

Field Peas are a very profitable crop and are grown here very extensively. They can be grown alone or with oats. When planted with oats and cut green they make a large amount of very rich feed; also very valuable for enriching the soil if plowed under. The dry peas make excellent hog feed and are quite fattening. Sow, if alone, 2 bushels to an acre; if with oats, 80 lbs . peas and 2 bushels oats.

WHITE CANADIAN. - The leading and most popular kind; seed creamy white; a heavy cropper. Yields 30 to 50 bushels per acre.

10 lbs. \$1.00; 100 ibs., write; per lb., postpaid, 20c.

SWISS.-A flat or 3 -cornered variety of excellent quality for soup. Insects do not trouble this variety.

10 lbs. $\$ 1.50$; per lb., postpaid, 25 c

WHITE HULLESS or BALD BARLEY.-An excellent beardless barley for stock feeding. Grain plump, heavy, and when threshed is hulless like wheat; a heavy cropper. When grown and cut for hay it produces a crop which is very rich and almost equal to a grain feed. More productive than wheat.

10 lbs. 75c; 100 lbs., write; per lb., postpaid, $25 c$.

BLUE PRUSSIAN.-Valuable variety, seed green. Used extensively as a dry soup pea. 10 Ibs. $\$ 1.50$; per lb., postpaid, 25 c .

## Thousand-Headed Kale

JERSEY KALE-COW KALE
Recommended by agricultural colleges, granges and dairymen as one of the most valuable green forage plants for the Pacific Valuab


Thousand-Headed Kale

It grows rapidly and produces a mass of large, thick, curly green leaves, rich and succulent, which are eagerly eaten by stock and poultry. If planted early will produce valuable green feed during the dry summer months. Makes the most rapid growth if sown in the early spring, but locally it is extensively planted in summer and fall for winter feed. Will stand light freezing. Stalks can be cut off, or the larger lower leaves broken off, leaving the tops to grow. Under good cultivation plants will grow from 5 to 6 feet high. Sow 2 to 3 lbs. per acre, thinly in drills 2 to 4 feet apart and thin out. For late planting (July and August) it is better to have strong plants from earlier seeding and set out same as cabbage, 2 feet apart, in rows. Thin out later if plants attain extra large size.

Pkt. 5c; oz. 15c; 4 oz. 25c; lb. 75c, postpaid.
This cut is from photo, and gives you a good idea of the size and plant when well grown.

# FIELD CORN FOR OREGON <br> OUR OREGON GROWN ACCLIMATED FIELD CORN WILL PLEASE YOU 

If you want to raise some good Field Corn, plant our Western grown Seed Corn. The strains we are offering you are acclimated and especially adapted to our short, cool summers. Eastern and Southern grown field corn seed is all right for green fodder, but of little value on this Coast, if you want the best corn for silo, or wish to raise matured, dry ears, for winter grain.

## Routledge Pride of the West Field Corn See illustration from photograph

Oregon grown; acclimated. A grand success in Oregon. We have been raising this variety for years, and by selecting the earliest ripening and best select ears, now have a strain that is unsurpassed for a large and profitabie crop of large, well matured ears or for cutting for silo. Ask H. Dahl or R. B. Hall, our County Agriculturist, both at Gresham, Ore. They know what it is.

Routledge Pride of the West Field Corn is an early maturing variety, producing stalks from 6 to 8 and often 10 feet high, and large ears, 7 to 9 inches long. Cobs covered with 14 to 16 rows of deep, yellow kernels. It is a heavy yielder. Our strain has been greatly improved in the last few years. Plant some of this corn this season; you will be pleased with results, we are sure.
We claim this is the eariiest and heaviest yielding strain of Yellow Dent corn grown in Oregon. Try it and be convinced.

Large pkt. 10c; lb. 25c, postpaid. Not postpaid, 10 lbs. $\$ 1.50 ; 100$ lbs., write.

## Longfellow Extra Early

This valuable corn is a flint variety. The seed is a deep rich golden yellow, glossy and hard. We believe this is harder, earlier and will grow under more adverse conditions than most any other kind. The ears are 8 -rowed, from 10 to 15 inches long and, $11 / 2$ to $13 / 4$ inches in diameter. The cob is very small, kernels large, broad, glossy, deep yellow and very rich in food values. Stalks 5 to 7 feet high. Fifty ibs. of corn on the ears will shell about 40 lbs . of corn, leaving only 10 lbs . of cob, showing that the grain yield is equal, if not greater than the large-eared kinds. Northern grown seed.

Per large pkt. 10c; lb. 25c, postpaid. Not prepaid, 5 lbs. 75c; 10 lbs. $\$ 1.25$; 100 lbs., write for prices.

Linslaw, Ore., March 29, 1922.
Routledge Seed \& Floral Co.
Dear Sirs: I am more than pleased with the seeds I ordered from you some time ago. Very truly yours,

IRA JEFFERS.

## Want a Good Farm Dog?

Every farmer needs a good dog. We sell dogs and puppies of all kinds, utility and pedigreed. Collies, Shepherds, Hunters, etc. Write. See page 154.

Routledge Seed \& Floral Co.
Dear Sirs: We raised some of your Pride of the West Corn last year and it did fine, so if you want some to sell as seed I will be glad to save some next fall.

Yours truly,
JOHN MOSES.

## Minnesota No. 13

Well and favorably known in many sections of the West. Produces splendid large ears with deep kernels of bright yellow. A strong and vigorous grower with heavy foliage. Very popular variety for ensilage.

Northern Grown.-Large pkt. 10c; lb. 25c, postpaid. Not prepaid, 10 lbs. $\$ 1.25 ; 100$ lbs., write for prices.


Longfellow Extra Early Flint


Single Heads No. 1-Ciimax
No. 2-Senator
No. 3-Eclipse

## SEED OATS Certified "Shadeland"

BUY THE GENUINE SHADELAND CERTIFIED SEED OATS.-Many dealers and some seed stores are trading on the reputation of the famous "Shadeland" oats, claiming their stock is just as good, etc., and cheaper. If so, why don't they win the "first prizes" at State and County Fairs? Why didn't their stock pass "inspection" by the O. A. C. specialist?

REMEMBER, we have the originator's Shadelandgrown certified seed. ORDER FROM US AND BE SURE. "Shadeland" is a "registered" word and cannot lawfully be used on any stock but that grown by the owner.
"CLIMAX," "ECLIPSE" or "SENATOR" without the registered prefix "SHADELAND" is not the originator's home-grown true stock.

PRIZE OATS.-For 20 years Shadeland Oats have never failed to win first prizes at Oregon State and our County Fairs and Land Products shows. Increase your crop 25 to 50 per cent by planting pedigreed prize oats. See cut from photograph, seed heads only (about one-third size).

## Certified Shadeland Climax

This grand oat belongs to the tree or branching class, and is a vigorous, healthy grower of strong stooling qualities. This is one of the heaviest ylelding oats introduced to date. It does not produce much straw, but the yield of "thin hulled" plump heavy grain is amazing. For early spring planting, large yield and quick maturity, Climax is a winner. Climax can be planted in the fall in mild sections.

Prices: Per bu. $\$ 1.25$; 100 lbs. $\$ 3.50$. By mail, postpaid, 4 lbs. 50 c .

## Certified Shadeland Eclipse

"Eclipse" is the best side oat grown. Eclipse is enormously productive, early, very vigorous, and produces massive heads filled with large, plump grains of finest milling quality. Awarded three "First Special Prizes" for the best milling oat. Can be planted in the fall as it is hardy as the grey oat.

Prices: Per bu. $\$ 1.25$; 100 lbs. $\$ 3.50$. By mail postpaid, 4 lbs. 50c

## Certified Shadeland Senator

A valuable new oat, extremely early and a great producer. Matures quickly, therefore can be planted quite late. Especially adapted for rich, moist, late ground or overflow bottom lands. Senator has stiff straw, stands up well and produces handsome, large, full heads of extra large, plump grain. (See cut of single head.)

Prices. Per bu. $\$ 1.50 ; 100$ lbs. $\$ 3.75$. By mail, postpaid, 4 lbs. 50 c .

## Shadeland Hulless

Shadeland Hulless is the heaviest yielding of all hulless. This oat grows and is harvested like any other oat, but it comes from the cleaner minus the hulls and is ready to grind, roll or chop, or can be cooked whole-the quality is unsurpassed. 50 lbs. per acre.

Prices: 10 lbs. $\$ 1.25$; 100 lbs. $\$ 8.00$. By mail postpaid, 1 lb .25 c ; 3 lbs. 65c.

## WHITE SEED OATS-GREY WINTER OATS

Aside from the Shadeland Seed Stock we can supply other CHOICE SEED OATS, such as VICTORY, BANNER, SWEDISH ABUNDANCE and regular stock of ECLIPSE and CLIMAX, at market price for fancy seed stock. Order what you want at $\$ 3.00$ per 100 lbs. and you will get "full value." See note, top page 42. Write for special quotations, stating amount wanted.


## KAFFIR CORN

An excellent fodder plant. Seed small and almost round, valuable poultry and pigeon food. It does best sown thinly in drills three feet apart.

10 lbs. \$1.00; per lb., postpaid, 25c

## LENTILS

Succeed best in dry, sandy soil. A leguminous annual, the seeds of which are valuable for pigeons and are used largely for soups. The leafy stalks make good forage.

Per lb., postpaid, 35c; 3 lbs. $\$ 1.00$

## MILLETS

Sow in April, May or June, 20 pounds for seed or 35 pounds for hay per acre. Must be sown early to mature in Willamette Valley.

EARLY FORTUNE.--This variety seems to do extra well here; try it. Heads large and loose, and seed is amber red and three times as large as the Common Golden. Makes good poultry feed. 10 lbs. $\$ 1.25$; 100 lbs., write; per lb., postpaid, 25 c
LIBERTY (German).-An improved variety yielding a larger crop of seed than the Common Millet; it is also taller than the Common Golden, and yields a heavier crop of hay. Seed small, golden yellow. 10 lbs. $\$ 1.25$; 100 lbs., write; per lb., postpaid, 25c

HUNGARIAN.-A dwarf millet; excellent for hay.
10 lbs. $\$ 1.50$; 100 Ibs., write; per lb., postpaid, 30c
Seed Potatoes, pages 28-29; Sunflower, page 32


## Vetches

THE WISE ONES
Will use Mulford's or Humogerm Culture to inoculate their Vetch seed before sowing. There is no question about its VALUE. See page 41. Eightpage Leaflet on request.

## RAPE, DWARF ESSEX

We offer you true, pure seed. One of the best forage plants, on account of the large amount of green feed it will produce at a season of the year when everything else is dried up. It has yielded ten tons of green forage per acre, and has twice the feeding value of green clover. Sheep, swine, cattle and poultry eat it readily. Rape will do well on almost any soil. Prepare the ground as for turnips, and sow any time from May till September; or plant it with grain. Sow, per acre, three pounds, in drills; or if broadcast, five pounds.

10 lbs. $\$ 1.25$; 100 lbs. $\$ 9.00$; per lb., postpaid, 25 c

## SEED RYE

When ready to buy Fall or Spring Rye Seed, write us for quotations on quantity wanted or send in your order and we will give full value.

10 lbs .75 c ; 100 lbs., write; per lb., postpaid, 20c; 3 lbs .50 c

## SPELTZ-EMMER

Sow in the spring, the same as wheat, at the rate of two bushels per acre. Cut when the grain is past the middle stage of milk, when it will make splendid grain and lots of rich straw hay. Thresh like wheat, only not so closely. Can be fed whole, rolled like barley, or ground.

10 lbs. $\$ 1.00$; 100 lbs., write; lb., postpaid, 20c; 3 lbs. 50c

## SUGAR CANE OR SORGHUM

A valuable crop to grow for fodder or ensilage, as it furnishes an immense tonnage to the acre.

10 lbs. \$1.75; 100 lbs., write; per lb., postpaid, 30c

## VETCHES

OREGON VETCH (Vicia Sativa).-Oregon's greatest forage plant. Often called Fall Vetch. Grown very extensively in Western Oregon and Washington, especially in the Willamette Valley and on the Oregon Coast. It furnishes an abundance of excellent feed, either green or dried. The seed is generally mixed with wheat, oats or rye, having a stiff straw to hold it up. Sown alone 85 pounds, or 60 pounds with a bushel of grain, per acre. Sow in the fall or early spring.

Prices: 10 lbs. $\$ 1.25$; 100 lbs., $\$ 10.00$; per Ib., postpaid, 25c
HAIRY SAND OR WINTER (Vicia Villose).-This variety thrives on poor, arid, sandy soils. It is sown in the fall or spring, mixed with rye, which serves to support the plants. Sow 20 pounds per acre.

10 lbs. \$2.50; per lb., postpaid, 40c; 100 lbs., write

## SEED WHEAT

Prices subject to market changes. Will send full value of money sent. Quote prices on request for prompt acceptance.

EARLY BAART.-An excellent spring variety, fully as early as Marquis, much earlier than Bluestem. A wonderful yielder. Finest milling quality. We recommend this to you.

Per lb. 20c; 3 for 50c, postpaid; low 100-lb. prices on request.

MARQUIS. - A commercial variety of spring wheat. Excellent milling quality, matures early and yields heavily.

Per lb. 20c; 3 lbs. 50c, postpaid; low 100-lb. prices on request.

## Want a Farm Dog?

Every farmer needs a good dog. We sell dogs and puppies of all kinds, utility and pedigreed. Collies, Shepherds, Hunters, etc. Write. See page 154.

BLUESTEM. - A popular and profitable spring variety, often sown in fall where winters are mild. A strong grower and yields well.

Per lb. 20c; 3 lbs. 50c, postpaid. Low 100-lb. prices on request.

FORTY-FOLD.-A well known winter variety, excellent milling quality. Matures early, and yields well.

Per lb. 20c; 3 lbs. 50c, postpaid; 100 lbs., write.

Sheridan, Ore., Jan. 24, 1922. Routledge Seed \& Floral Co.

Dear Sirs: I want to thank you for sending me such a nice bird. He is sure a beauty and a lovely singer. The night we got him (December 20) he sang until eleven o'clock.

Respectfully,
MRS. L. M. HEPPLE.

## ALFALFA AND CLOVER SEEDS

Single pound prices on Grass Seed are prepaid. Ten, fifty and one hundred pound prices are NOT prepaid and subject to change. See notes, page 42 . For amount of seed to sow per acre, see table inside back cover.

## ALFALFA, OR LUCERNE CLOVER

Reports prove that Alfalfa will grow in all parts of the West, but requires a deep, loose soil. Will not thrive on heavy clay or where there is hard pan. As soon as cut it immediately commences to grow. Excellent hay or pasture. Alfalfa, once established, is a crop so profitable that every farmer may well take great care to get a stand. Much has been published about its high feeding, fertilizing and wonderful yield possibilities.

Price: 10 lbs. $\$ 2.80 ; 50$ to 100 lbs. at 26c; per lb. postpaid, 35c.

## DRY LAND ALFALFA

For high, dry, hot land, where irrigation is impossible.

Price: 10 lbs. $\$ 3.00 ; 50$ to 100 lbs. at 28c; per lb. postpaid, 35 c .

## GRIMIM ALFALFA

This new variety is very hardy and will stand much more tramping and root injury. In many Western sections it is out-vielding the common variety and proving much more profitable. It is a little earlier and will do well on most all soils except undrained meadows. Not affected by extreme heat or cold. and does better in a wet climate than any other alfalfa. We offer the genuine true Grimm seed.

Prices: 75c per lb. postpaid; 10 to 20 lbs. at $60 \mathrm{c} \mathrm{lb} . ; 100-\mathrm{lb}$. prices on request.

WHITE CLOVER (Trifolium Ripems)
Used largely in lawns and permanent pasture mixtures. Accommodates itself to a great variety of soils. High grade, clean seed is very scarce and high this year; beware of low-priced seed this season.

Choice Seed, 10 lbs. $\$ 7.00$; per lb. postpaid, 80 c .

For Lawns always buy our Extra Fancy Seed, which is the purest high quality seed obtainable, and the true very dwarf, hardy variety.

Extra Fancy Seed.-Per Ib. postpaid, 85c.
RED CLOVER (Trifolium Pratense)
Hardy, and succeeds well on any good soil. The most popular variety.

10 lbs. $\$ 3.00$; 50 to 100 lbs. at 26c; per lb., postpaid, 40 c .

## ALSIKE CLOVER (Trifolium Hybridum)

Valued highly for sowing with other grasses. Excellent for hay and pasture; valuable for bees; resists both drought and excessive moisture.

10 lbs. $\$ 2.60$; 50 to 100 lbs. at 23c; per lb., postpaid, 35c.

## SWEET CLOVER (Melilotus Alba)

Sweet Clover has come to stay. There is no doubt about it. Ask any farm paper, any state college, the U. S. Department, or better yet, any farmer who has grown it.

Sweet clover is used as either a feed crop or as a fertilizer to plow under to improve the soil and increase the crop to follow. It grows fast and is easy to start.

Grows luxuriantly on good soils, but it will also grow and thrive on thin, sand $T$ soil, hardpan, gumbo, rocky upland, clay and alkali land.

Sweet Clover lives two years. It makes large, rapid growth the first season and can be cut for hay or pastured the last half of the summer, but does not bloom or bear seed. The second year it blooms, bears seeds and dies. Will make two crops of hay or a crop of hay and one of seed the second year. Can be plowed under either the first or second year, but to get the full value in humus the second season is better on account of the large roots that penetrate the lower layers of soil, thereby loosening it up and adding much humus and more nitrogen.

Sown very early in the spring. It does well sown either alone or with a nurse crop of small grain. Use 15 to 20 pounds of seed per acre.

Sweet Clover makes excellent pasture for horses, cattle, sheep, hogs or chickens. A very early and continuous cropper.

Price. Per lb. 35c, postpaid; 10 lbs. $\$ 2.50$; trial pkg. 10c. Write for quantity price.


One of our Portland Bungalows with a small but beautiful lawn, shrubs and vines
Nothing adds a greater air of refinement to a home than a beautiful, well-kept lawn. "The planting of a few shrubs and roses should not be forgotten. The pretty home above is "well done."

## LAWN GRASS SEED

Though we offer, separately, seed of many of the grasses suitable for the lawn, we consider as very erroneous the somewhat prevalent idea that any single variety of grass seed is preferable or equal to a mixture.

## R. R.'s EVERGREEN LAWN GRASS

To obtain a good Lawn Grass Mixture, it is necessary that the best possible seed of fine grasses be used in the combination, embracing such varieties as are of neat, close growth, extreme hardiness, and adapted to produce a quick, permanent sod. Judicious selection of seed, knowledge of the habits, vigor, quality and hardiness of varieties used in the mixture can only be gained by thorough and practical tests under different climatic and soil conditions. After many years' experience, we offer our pure, clean Evergreen Lawn Grass Seed Mixture, composed of a thoroughly balanced combination of various native and foreign fine-leaved, deeprooting grasses of interweaving habit, that will flourish under varied soil and climatic conditions, and which may be depended upon to produce a beautiful, compact, evergreen sod that will resist tramping and hard usage, and at the same time present that handsome, velvety appearance so much desired.
R. R. EVERGREEN LAWN GRASS.-PRICE, 65 c per bl.; postage extra. Prices very unsettled; write, stating quantity wanted or size of lawn to be seeded.

Note.-You better spend a few cents or a dollar extra on the seed you buy and have a fine lawn that you'll be proud of. Sow 1 pound seed to 15 feet square for best results.

WHITE CLOVER.-Many gardeners like white clover mixed in lawn seeds and it is excellent, especially if your soil is heavy or poor. White clover grows quickly and acts as a nurse crop and protects the fine-leaved grasses. Price, 75c lb. Postage extra.

EVERGREEN LAWN, mixed with one-fourth WHITE CLOVER, 65c. Postage extra.
EXTRA FANCY KENTUCKY BLUE GRASS, for lawns, 65c lb. Postage extra.
IMPORTED CREEPING BENT GRASS, $\$ 2.00 \mathrm{lb}$; FANCY RED TOP for lawns, 40 c lb. Postage extra.

## Seeds for Lawns and Special Mixtures

SEED.-There is as much difference between clean, high-grade grass and clover seeds for lawn making and the common or ordinary grass seeds as there is between high-grade white flour and bran. You would not think of trying to make light, white bread of bran, neither should you expect to make a fine, green, velvety lawn from low grade, light weight, immature, and foul grass seeds. Weight, purity and germination is what sets the price of grass and clover seeds. We buy and use the highest grade, pure tested seeds for our Evergreen Lawn Grass Mixture. Of course, they cost more, but we know from experience that they give best results and are the only kind of seeds that it pays to use if you want a beautiful lawn. Do not buy low priced Lawn Grass Mixtures and expect good results. NO ONE gives you anything better than you pay for.

SPECIAL MIXTURES.-For all round general conditions, our Evergreen Mixture is unexcelied, but we will prepare special mixtures for shady places, low, wet soils, very dry soils and terraces. Just mention it when ordering.

## FEED THE LAWN

Do not starve the grass if you want it to look green and velvety; use "Wonder', and ''C-M,', as per directions. See pages 38 and 39.
 The following list contains a general assortment of the choicest and most popular and easiest grown flowers for conservatory, greenhouse or garden culture.

## HOW TO RAISE FLOWERS SUCCESSFULLY FROM SEEDS

The above is the title of a two-page leaflet we have issued for our customers. It tells HOW, WHEN and WHERE to plarit. It is free to all. You will find it of great value.

IF YOU WILL MEMORIZE the following definition of the flower classes THEY WILL HELP YOU WONDERFULLY in the selection of seeds and your garden work in general.

ANNUALS
These grow from seed, flower, mature their seed, and die in one year, or in other words, the same season.

Half-Hardy Annuals are those which should be started early in the house, conservatory or hotbed, and transplanted to the garden in settled warm weather.

Hardy Annuals are those which can be sown in the open ground in early or late spring, or started inside and transplanted if very early flowers are desired.

## BIENNIALS

These grow from seed, sown from June to August, flower, ripen their seed and die the next year, though some varieties bloom the same season if sown early in gentle heat.

Hardy Biennials will winter in the open ground without protection.

Half-Hardy Biennials require the protection of a cold-frame or cool-house during the winter.

## PERENNIALS

These grow from seed, and continue flowering annually for many years after the first season. Some varieties flower the first season if started very early. Sow in the fall for early flowers next year.

Hardy Perennials can remain in the open ground during winter without protection.

Half-Hardy Perennials require the protection of a cold-frame or cool-housing during winter.


Sweet Alyssum

## AGROSTEMMA

(Rose of Heaven) COELI-ROSA.-Superb free-flowering, hardy annual, rose-colored flowers; fine for cutting; height $11 / 2$ feet: July to September. Pkt. 10c; $1 / 4$-oz. 35c

## ALOYSIA

## (Lemon Verbena)

CITRIODORA.-A greenhouse shrub, valuable for the fragrance of the foliage; 2 feet.

Pkt. 15c

## AGERATUM

Half-hardy annuals, especially well adapted to edge large beds of geraniums, salvia coleus or cannas, flower continuous through the summer. 15 inches.
DWARF LITTLE BLUE STAR.-New; one of the handsomest blue-flowered dwarf edging plants; grows 5 inches high, and is just covered with small, bright blue flowers.

Pkt. 15c; 1/8-0z. $\$ 1.00$

## AGERATUM MEXICANUM.-

Dwarf, blue. Pkt. 10c; 1/4-oz. 50c
Album.-Pure white, dwarf.
Pkt. 10c; 1/4-oz. 50c
Finest Mixed.-All colors.
Pkt. 10c; 1/4-oz. 40c

## ACROCLINIUM

Hardy annual, with everlasting flowers; good for cutting; flowers double and dry nicely if cut in bud; 1 foot: July to October. Album.-Double, white. Pkt. 10c; $1 / 8$-oz. 25 c Mixed.—Double, all colors. Pkt. 10c; 1/8-0z. 25c

## ALYSSUM

One of the most popular hardy annuals, used especially for edging and also valuable for cutting on account of the fragrance of flowers.
SWEET.-Pure white; 6 inches; June to November.

Pkt. 5c; oz. 50c
LITTLE GEM.-The dwarfest and best for design bedding; plants very compact and bushy, and grow only 3 inches high.

Pkt. 10c; 1/4-0z. 35c
LILAC QUEEN.-Dwarf, compact, lilac flowers.

Pkt. 10c; 1/4-OZ. 35c
SAXATILE COMPACTUM (GOLD DUST).Hardy perennial; yellow flowers; April to June; height 9 to 12 inches.

Pkt. 10c; 1/8-oz. 40c


## ASTERS

One of the easiest and most satisfactory summer and fall flowers to grow. We take the utmost pains to select seeds from the most perfect flowers only, and wish to assure our patrons that our strains are the superiority of perfection.

## IMPROVED GIANT CREGO

The most beautiful and desirable aster we have ever seen; very hardy, free-flowering and one of the best for general planting; the plant is a strong, healthy grower, and will produce 12 to 15 longstemmed flowers of the most graceful and pleasing style (see cut.) With ordinary care you can grow flowers measuring 5 to 6 inches across. Most of the handsome large aster blooms you see in the Portland flower stores are of this kind.
Pure White, Shell Pink, Rose Pink, Purple, Crimson, Lavender or Mixed. Pkt. 10c; 1/8-oz. 35c SPECIAL.-One packet each of the six colors only 50 c .

## 1 Improved Giant Crego Aster

## Heart of France

Heart of France opens red as the ruby, deepens with age and retains its remarkable beauty to the very end. The petals appear strikingly changeable, showing, now a glow and sheen quite unique, now a soft, warm, velvety texture. In any light, natural or artificial, Heart of France is very rich, beautiful and will command instant admiration. The flowers are large and full with rarely a trace of a hollow center. The plants are of branching type and very robust habit. The stems are long and strong and have very few laterals.

Pkt. 20c; 2 for 35c; 1/8-0z. 75c

## Superb American Branching

This superb strain, of American origin, and especially adapted to our climatic conditions, is unsurpassed.

The plants form strong, branching bushes, 2 to $21 / 2$ feet high, bearing on long, strong stems their handsome Chrysanthemum-like flowers, which, under ordinary cultivation, average 5 inches across. The form of the flowers is nicely shown in the illustration, together with the length of the stems, places them at the head of Asters for cutting. They come into bloom from two to three weeks after the average type, usually being at their best during September and October.

Deep Rose, Dark Blue, Light Blue, Shell
Pink, White or Finest Mixed.
Pkt. 10c; 1/4-0z. 60c

## New Crimson Giant

A late-branching variety of upright growth with extra large, densely double flowers of rich blood-crimson; makes a brilliant bed or border and is splendid for cutting.

Pkt. 15c; 1/s-oz. 60c

## Giant Comet

A well-known variety, but with us the "Improved Giant Cregs" has taken its place.

Finest Mixed.
Pkt. 15c; 1/8-0z. 40c

## Asters, Fine Mixed

A mixture of choice kinds for all season blooms.

Pkt. 10c; 1/4-0z. 50c

## Queen of the Market

Most valuable for early cutting; the plants branch freely and produce a great many wellformed flowers nearly a month in advance of the later sorts.

White, Pink, Lavender, Crimson or
Finest Mixed.
Pkt. 10c; 1/8-0z. 30c


Superb American Branching

## HARDY ASTERS_FALL-FLOWERING

(Michaelmas Daisies)
One of the showiest of our late-flowering perennials, giving a wealth of bloom during September and October. They grow freely in any soil. If sown early they will flower the first season. 3 ft .

Pkt. 10c; 1/s-oz. 50c

ASTER PLANTS and all popular annual bedding plants supplied in season. See pages 78 to 85 .

## AMARANTHUS

CAUDATUS (Love-Lies-Bleeding). - Hardy annual; ornamental foliage plant; fine for bedding; green foliage with long, drooping crimson racemes; 2 feet.

Pkt. 10c; 1/4-oz. 35c
CRUENTUS (Prince's Feather).-Dark red foliage and feathery flowers; 2 feet.

Pkt. 10c; 1/4-oz. 35c
TRICOLOR (Joseph's Coat).-Ornamental; for foliage only; red, yellow and green. Pkt. 10c; 1/8-oz. 50c

## ANTIRRHINUM

(Snapdragon)
Half-hardy perennial and annual; blooms in July if sown early in the house; one of our finest cut flowers; 2 to 3 feet. (See cut.)
Queen of the North.-Long Spikes; pure white; superb.
Daphne.-Pearly pink.
Pkt. 10c

Golden Queen.-Rich, pure yellow. Pkt. 10c

Defiance.-Brilliant scarlet.
Pkt. 10c
Speciai-1 Pkt. each, five colors, 40c; 1/8-oz. any color, 40c.
Tall Giant, Finest Mixed.-Our seed of this is exceptionally fine; height, 3 feet.

Pkt. 10c; 1/8-oz. 35c.
Semi-Dwarf.-Fine for bedding: 18 inches. Finest Mixed.

Pkt. 10c; 1/8-oz. 35c

## AQUILEGIA <br> (Columbine)

Hardy perennials; are most elegant plants and invaluable for cutting or as hardy border flowers; beautiful and graceful; June to September. 2 to 3 feet. (See cut.)
LONG SPURRED.-Superb mixture of all the most desirable shades. Pkt. 15c; 1/8-oz. \$1.00 Single, Finest Mixed. Pkt. 10c; 1/4-0z. 60c Double, Finest Mixed. Pkt. 10c; $1 / 4-0 z .60 \mathrm{c}$ Chrysantha.-Golden yellow.

Pkt. 15c; 1/8-oz. $\$ 1.00$
Coerulea.-Violet blue and white.
Pkt. 15c; 1/8-oz. 75c
Nivea Grandiflora.-A beautiful, large, pure white. Pkt. 10c; 1/8-oz. 40c
FOR PERENNIAL PLANTS SEE PAGES 82 to 86.


Aquilegia (Columblne)

## ARABIS

(Rock Cress)
ALPINA.-Hardy perennial; pure white flowers in close head; excellent for edging rockwork or dry situations; 6 inches; April to June. Pkt. 10c; 1/8-oz. 50c


## Antirrhinum

## ASPARAGUS

PLUMOSUS NANUS.-A graceful pot plant for either house or conservatory (see illustration under Fern Plants); very finely cut, delicate lace-like foliage.

Pkt. 25c; 100 seeds $\$ 1: 00$
SPRENGERI.-_Drooping foliage; adapted for hanging baskets or cutting.

Pkt. 10c; 100 seeds 50c
BABY BREATH
See Gypsophila, page 59.

## BALSAM

(Lady Slipper)
Hardy annual, succeeding best in sunny situation, rich loam and moisture; very showy and of easy culture; $11 / 2$ feet; July to September.
PRIZE MIXTURE.-This strain will produce the most perfectly formed double flowers in the greatest variety of colors.

Pkt. 10c; 1/8-0z. 50c

## BELLIS

(Double English Daisy)
Popular spring and summer flowering perennial; fine for borders; height 4 inches. Easily raised from seed. Blooming season from April to September. Double Mixed.

Pkt. 10c; 1/8-oz. 50c L.ongfellow.--Double pink flowers. Pkt. 25c Snowball.-Free flowering; pure white.

> Pkt. 15c

Giant Red, White or Mixed.-Mammoth in size; very rare. Give them rich ground. Pkt. 25c

## BEAN

SCARLET RUNNER.-The w'ell-known, rapid growing annual climber, with bright red flowers, from July to September: height 8 feet.

[^13]

## BALLOON VINE

(Love-in-a-Puff)
A rapidly growing annual climber; succeeds best in light soil and warm situation; flowers white; seed vessels look like miniature balloons and of great interest to children; 8 to 10 feet (see cut).

Pkt. 10c; 1/2-oz. 35c

## BROWALLIA

## (Amethyst)

A very profuse blooming, half-hardy annual beddng plant, bearing during summer and autumn handsome winged flowers of different shades of blue; $11 / 2$ feet.
Finest Mixed.
Pkt. 10c; 1/8-0z. 50c

## CALCEOLARIA

Tender annual, a universal favorite for house culture; produces a mass of beautiful puffed, pocket-like flowers of brilliant selfcolors and spotted. Our strains of Calceolaria is very fine.
Hybrid Grandiflora.-Mixed.
Pkt. 25c


Canary Bird Vine

## A Beautiful Flower Garden

Perhaps you have failed before, but if you will follow our "Cultural Directions" (free on request), you will be successful.

## CALLIOPSIS

Showy and beautiful free-flowering annuals, of the easiest culture, doing well in any sunny position, blooming all summer if cut often, excellent massing (see cut).
CROWN OF GOLD.-(Coronata Maxima.) A splendid cut flower, large, pure golden yellow. All season.

Pkt. 10c; 1/8-0z. 35c
GOLDEN WAVE.-Yellow, with crimson-
brown around the eye. Pkt. $10 \mathrm{c} ; 1 / 8-0 z .25 \mathrm{c}$
CRIMSON KING.-Rich, velvety crimson or garnet.

Pkt. 10c; $1 / 8-0 z$. 30c
ROUTLEDGE PRIZE MIXTURE.-Showy new shades in all of the choicest varieties.

Pkt. 10c; 1/4-oz. 75c


Calliopsis

## CALENDULA

(Scotch Marigold)
Hardy annual; one of the most desirable garden flowers. The flowers are freely produced on long stalks; large, with flat, spread ing rays; very showy; flowers the entire season; 1 foot. Excellent for cutting, beds or borders.
Double Finest Mixed.
Pkt. 5c; 1/4-oz. 25c
LEMON QUEEN.-A select strain, large double flowers, sunflower yellow.

Pkt. 10c; 1/8-oz. 25c
ORANGE KING.-Grandiflora.-An excellent strain; large, double flowers, rich dark orange.

Pkt. 10c; 1/8-oz. 35c

## CANNA

A beautiful, large-leaved, showy flowering plant. Seed must be soaked before planting and started in a hot-bed under glass. (For Canna Roots, see page 88.)
CROZY'S HYBRIDS MIXED.
Pkt. 10c; oz. 50c

## CANARY BIRD VINE

A rapid-growing summer-climbing annual, 10 to 15 feet high; it will cover trellis work in the most graceful manner, producing hundreds of pretty winged, bright yellow flowers. Pkt. 10c; 1/4-oz. 35c

## CAMPANULA

## (Bellflower)

Well known, beautiful, hardy herbaceous perennials, bearing a great profusion of attractive bellflower's; thrives best in light, rich soil; some of the varieties flower the first season if sown early.
PERSICIFOLIA GRANDIFLORA (Peach Bells).-Undoubtedly one of the finest of the hardy Bellflowers; grows 2 to 3 feet high, with large single flowers.
Blue, White or Mixed. Pkt. 10c; 1/s-0z. \$1.00
CARPATICA (Carpathian Hare-Bell).-Freeflowering, hardy perennial, continuing in bloom the whole season; color clear blue or white; grows 6 inches high; especially good for edging.
Blue or White.
Pkt. 10c; 1/8-oz. 75c

## CANTERBURY BELLS

(Camapanula Medium)
Very ornamental garden plants of easiest culture; excellent for cutting; hardy biennial; $21 / 2$ feet high, producing large, bellshaped flowers of exquisite colors. Hardy biennials. (See plants, page 82.)
Medium Single White, Blue, Rose or Mixed.
Pkt. 10c; 1/8-0z. 45c
Double Mixed, all colors. Pkt. 10c; 1/8-0z. 50c CALYCANTHEMA.-(Cup and Saucer Canterbury Bells.)-This is unquestionably one of the finest types; they have an extra large calyx, which is of the same color as the flower, giving the appearance of a cup and saucer.
Calycanthema, Pink, Lilac, Rose or White.
Pkt. 15c; 2 for 25c; 1/8-0z. 75c Calycanthema, Mixed Colors.

Pkt. 10c; 1/8-oz. 60c
R. R.'s PRIZE MIXTURE.-A mixture which contains every color and kind of both single and double biennial and perennials.

Pkt. 10c; 1/8-0z. 50c

## CANDYTUFT - IBERIS

Very popular free-flowering annual, fine for beds or cutting; 1 foot. June to frost if sown early and late.
EMPRESS.-A large-flowered variety of purest white; grown extensively for cut flowers; very desirable. Pkt. 5c; 1/4-0z. 35c


Candy Tuft-Empress


Single Canterbury Bells
DWARF WHITE LITTLE PRINCE.-Grows but 6 inches high and throws up strong trusses of pur, white flowers; excellent for edging or bordering. Pkt. 10c; 1/4-0z. 40c
PINK BEAUTY.-Fine, true pink, an exquisite flower.

Pkt. 10c; 1/4-oz. 40c
CRIMSON OR LILAC.-Very desirable colors; your choice.

Pkt. 10c; 1/4-0z. 35c
FINEST MIXED.-All colors.
Pkt. 5c; 1/4-0z. 25c
SEMPERVIRENS. - Perennial; pure white flowers, evergreen foliage; blooms in June; fine for edging, borders and rockeries; 1 foot.

Pkt. 15c; 1-16-oz. 35c

## CARDINAL CLIMBER

This glorious and absolutely distinct new annual climber is undoubtedly the greatest acquisition to the flower world in years, and the most beautiful and brilliant climber ever grown. It is a strong and rapid grower, attaining a height of $25^{\circ}$ feet with beautiful fern-like lacinated foliage and literally covered with a blaze of fiery cardinal red flowers from mid-summer to frost. The flowers are about 1 inch in diameter and are borne in clusters of 5 to 7 blooms each. Like all "Ipomoeas," it delights in a warm, sunny situation and good, rich soil. The seed should be soaked in water a few hours before sowing and not planted outside until about May 1.

Pkt. 15c; 2 Pkts. 25c; 1/8-0z. 75c

[^14]
## CARNATION

Everyone loves Carnations. For started plants of the finest named varieties, see page 76.
MARGARET CARNATIONS.-The earliest to bloom, and producing large, double, sweetscented flowers; being half-hardy perennials, if they are slightly protected during the winter they will survive and flower profusely the next spring.
Red, White or Yellow.-Large flowers.
Choice Mixed.
Pkt. 15c; 1/s-oz. \$1.00

CASTOR OIL BEAN.—See Recinus, page 67.

## CELOSIA CRISTATA

## (Cockscomb)

Showy, half-hardy annuals of easy cultivation; 1 foot; producing large, brilliant, comblike flower heads.
Glasgow Prize.-Showy, dark crimson comb.
Pkt. 10c; 1/s-oz. 60c
Finest Mixed.-Rich mixture of finest dwarf kinds. Pkt. 10c; 1/8-0z. 40c

## Celosia Plumosa

## (Feathered Cockscomb)

The plant grows 2 to 3 feet, is of handsome pyramidal form, and the numerous massive plumes, which resemble an ostrich feather waving gracefully above the foliage, make it one of the most effective; of easy culture. Half-hardy annual.
THOMPSONI MAGNIFICA.-The most perfect feathered variety. July to November.

Golden Plume.
Crimson Plume.
Finest Mixture. Pkt. 10 c Pkt. 10c; 1/4-oz. 60c


Chinese Wool Flower CHINESE WOOLFLOWER
A new annual flower. Very showy, odd and novel. The bunches of wool-like glowing crimson flowers are produced in profusion. Flowers come early and do not fade until hit by frost. Height 2 to 3 feet. Start early and transplant after danger of frost is over. A large bed of these plants certainly produce a magnificent display and will be a dazzling blaze of color from early, until frost.

Pkt. 15c; 2 for 25c; 1/8-0z. 75c

## CENTAUREA

(Bachelor's Button-Cornflower)
Very popular annuals; will grow in the poorest of soil, either on seashore or mountains; seed can be sown either in fall or spring; sandy soil preferable; height $21 / 2$ feet.
Cyanus, Finest Single Mixed.
Pkt. 5c; 1/4-0z. 25c
CENTAUREA CYANUS fl. pl. (Double Bachelor's Button.)-Beautiful large double flowers.

Double Blue.
Double Mixed.
Pkt. 10c; $1 / 4-02.50 \mathrm{c}$
Pkt. 10c; 1/4-02. 35c
CENTAUREA IMPERIALIS (Giant Corn-flower).-The flowers are of enormous size, fragrant and of charming colors; in form they resemble the fuzzy part of the thistle bloom. In colors from white to red to purple. Excellent for cutting.
Mixed Colors. Pkt. 10c; 1/8-0z. 35c Marguerite.-Flowers 4 inches across; purest white. Pkt. 10c; 1/s-oz. 40c
MOSCHATUS (Sweet Sultan.)-Hardy annual, with very fragrant and showy flowers; $11 / 2$ feet; June to September.
Finest Mixed. Pkt. 5c; 1/s-0z. 35c
SAUREOLENS (Grecian Cornflower).-Yellow flowers, showy. Pkt. 10c; 1/s-0z. 35c

## White Leaved Centurea <br> (Dusty Millers)

These are grown for foliage only; halfhardy annuals; leaves are silver-coated.
CANDISSIMA.-Thick, white, upright cut leaves; 1 foot.

Pkt. 10c; 1/8-oz. 50c
GYMNOCARPA.-Fine, fern-like leaves, very graceful and showy; $11 / 2$ feet.

Pkt. 10c; 1/8-oz. 35c

## CHRYSANTHEMUM

These are very showy flowers of easiest cultivation, flowering from July to frost; excellent for cutting; height 2 feet. (For plants, see pages 76-82.)
Single Annual, Finest Mixed.
Pkt. 10c; 1/4-oz. 50c
Double Annual, Finest Mixed.
Pkt. 10c; 1/8-0z. 25c
LEUCANTHEMUM.-(See Shasta Daisy under Daisies, page 56 ; Plants, page 85 .)

## CINERARIA

(Hybridi Grandiflora)
We pride ourselves in offering the choicest strain of this gorgeous flower; grand, large blooms in umbel spikes are borne way above the foliage; colors and markings are superb; $11 / 2$ feet; tender annual; start under glass, pot and keep inside for pots. Pkt. 35c

## CLARKIA

This easily grown, hardy annual has been much improved in recent years, and the varieties offered below are now seen as cut flowers in most of the large cities. They do well either in sun or shade, growing 2 feet high, with leafy racemes of bright, pretty double flowers. Fine for cutting or massing in beds.
SEPARATE COLORS.-Double White, Crimson or Salmon Pink. Pkt. 10c ; 1/8-oz. 40 C ELEGANS DOUBLE MIXED.

Pkt. 10c; 1/s-oz. 25c

## COSMOS

Beautiful autumn-blooming plants. They produce thousands of beautiful flowers in pure white, pink and crimson shades, furnishing an abundance of cut blooms for autumn decorations when other flowers are scarce. Can be sown in spring in the open ground, when danger of frost is past, or if wanted early the seed should be started under cover and afterwards transplanted. Set plants not less than 18 inches apart. When about a foot high, the tops should be pinched out to induce a bushy growth. They prefer a soil rather light and not too rich, but do well almost anywhere.

## Double Crested or Anemone Flowered

A new Cosmos of merit. "Double Crested" is unique and exceedingly pretty. Flowers are of good size, with full double centers, surrounded by a row of graceful ray petals. Very dainty and attractive and bring fancy prices as cut flowers. The plants are vigorous, branching and well covered with blooms from late summer until frost. Very beautiful for garden or table decoration. This new strain is not yet perfectly "fixed," but our stock is unsurpassed, producing fully 75 per cent new type flowers. Height, 4 feet. Pink Beauty, Crimson King or White Queen or Mixed.

Pkt. 15c ; 3 for 30c; 1/8-oz. $\$ 1.00$
MAMMOTH EARLY FLOWERING.-A grand improvement over the first early flowering, Cosmos introduced. "Early Mammoth" will give you a profusion of very large, graceful, long-stemmed flowers that will come into bloom in July and last until frost if planted early and given good care. This is a decided advantage where the seasons are short and where the "Giant Perfection" fails on account of its lateness to bloom. Early White, Pink, Crimson or Mixed.

Pkt. 10c; 1/4-oz. 35c
GIANT PERFECTION.-Very large and perfect flowers often 3 to 4 inches across; plants 5 to 6 feet high; blooms do not appear until October.
Giant White, Pink, Red or Mixed.
Pkt. 10c; 1/4-0z. 25c


Cobaea Scandens


New Double Crested Cosmos

## COREOPSIS

(Lanceolata Grandiflora)
Hardy perennial, with large, showy, bright yellow flowers, produced in the greatest abundance from June till frost. As a cut flower they stand near the head among hardy plants, having long stems and lasting in good condition a week or more. Easily grown from seed, flowering the first year, if sown early under glass.
(Plants, page 82.)
Pkt. 10c; 1/8-oz. 35c

## COBAEA SCANDENS

Our most popular and rapid climbing annual, flowering the first season. Pretty, purple, bell-shaped flowers appear in great profusion during the fall months; foliage very graceful; 10 to 15 feet. Start seed under glass. (For plant, see page 78.)

Pkt. 10c; 1/4-0z. 35c

## CYPRESS VINE

A fast-growing annual vine, with feathery dark-green foliage and star-like flowers, July to October; 20 feet. Plant early in light soil and warm location.
Finest Mixed.
Pkt. 10c; 1/4-0z. 35c

## DAISIES

SHASTA DAISY.-Very popular and desirable perennial; the large single white flowers are freely produced on long stems. We offer you the best strain in plants or seed. (See cut in Plant Department, page 85.)

Pkt. 10c; 1/8-oz. 50c
Double Daisies.-(See Bellis, page 52.)
African Daisy.-(See Dimorphotheca, page 57.)

## DOLICHOS

## (Hyacinth Bean)

Annual climbers; beautiful foliage and clusters of hyacinth-like purple and white flowers, borne in clusters; 10 feet; July.
White, Purple or Mixed. Pkt. 10c; oz. 25c

CULTURAL DIRECTIONS FREE.-Our 2-page leaflet gives full instructions on growing flowers from seed. Free on request. Read it and be successful.


Deciduous-Lace Flower

## DIDICUS_'‘Lace Flower'’

## Hugelia Coerulea

## Rare, Dainty, Exquisite

A rare and lovely free-flowering half-hardy annual, growing about 18 inches high and branching nicely. Flowers light blue or lavender, very dainty and beautiful. The bloom is a cluster of tiny petaled flowers, quite full to the center, the pistils giving the appearance of dainty lace. Florists grow it under glass for cut flowers. Plants set in the garden bloom from June until late fall. A new flower here. but, a native of Australia. (See cut.)

Pkt. 20c; 3 for 50c; 1/8-0z. $\$ 1.00$

## DELPHINIUM

## (Perennial Larkspur)

(See cut, page 83.) Handsome, hardy perennial plants for the herbaceous border and shrubbery, producing a profusion of splendid spikes of flowers throughout the summer. The beautiful, graceful, long-stemmed flower spikes make handsome bouquets and last well when cut. If started early will bloom the first season from seed. (For large plants for quick effect, see page 83.)
R. R.'s PRIZE MIXTURE.-Superb Gold Medal collection of choicest hybrids; new, rare and beautiful shades. Wonderful for cut flowers and should be planted generously.

Pkt. 15c; 1/8-0z. 75c
BELLADONNA.-Very free and continuous bloomer; delicate and beautiful; clear light blue, large flowers, 4 feet.

Pkt. 25c; 1/8-oz. \$1.25
BELLAMOSUM.-This is a rich, deep blue form of the popular light blue Belladonna, having the same free-blooming and other good qualities. Pkt. 25c; 1/8-0z. $\$ 1.00$
CHINENSE (Blue Butterfly).-A distinct and neat varietv growing about 18 inches high, with fine feathery foliage, and producing freely spikes of large blossoms of intense gentian-blue.

Pkt. 15c; 1/8-oz. 50c
CARDINALE.-Brilliant 'scarlet.
Pkt. 25c

## DAHLIA

This very popular flower can easily be raised from seed; started inside in March will produce flowers in August.
CACTUS MIXED. - Double flowers with pointed petals (see cut, page 91.) Pkt. 25c

## DAHLIA - Continued

DOUBLE FINEST MIXED.-Produce flowers of the "Show" or "Decorative Class." Pkt. 15c SINGLE GIANT PERFECTION.-Single flowers of great size and beauty. Pkt. 10c DAHLIA BULBS.-Latest and best. (See pages 90 to 93.$)$

## DIANTHUS—PINKS

## (Garden Pink)

All varieties listed below are very desirable, and will flower the first season, even sown out of doors in May; they flower early and continue throughout the entire summer; they are excellent for cutting, and bedding; 1 foot. For hardy plants see page 82.
CINENSIS (Chinese Pink).-Large, showy flowers in unlimited variety of bright colors. Pkt. 10c; 1/4-0z. 50c
HEDDEVIGII. - (Japan Pink.) Beautiful rich colors. A very popular variety.
Finest Mixed. Pkt. 10c; 1/8-0z. 50c
FIREBALL.-New, extra double, brilliant, dark scarlet; very beautiful.

Pkt. 10c; 1/8-oz. 50c
SNOWDRIFT (Lancineatus). - Extra large, pure white, double, fringed. Fine for border.

Pkt. 10c; $1 / 8-$ oz. $\$ 1.00$
PRIZE MIXTURE.-Very rich mixture, all kinds. Unequaled. Pkt. 10c; 1/4-oz. 75c
SEMPERFLORENS (Perennial Hardy Everblooming Garden Pinks).-Very beautiful, sweet-scented, double, semi-double and single flowers in great diversity of colors. Pkt. 15c; $1 / 8-$ oz. $\$ 1.00$

## DIMORPHOTHECA

## (African Daisies)

Hardy annual, great favorites on account of their extremely showy flowers, which are borne most profusely all summer; neat little plants 12 to 15 inches. They do well in dry, sunny situations. (See cut.)
AURANTIACA. - Its Marguerite-like blossoms, 2 inches in diameter, are of a peculiarly rich, glossy orange-gold. Its strikingly brilliant coloring is rendered even more conspicuous by the dark colored disc surrounded by a black zone. Plants bear showy flowers very soon after being set.

Pkt. 10c; 1/8-oz. 35c
AURANTIACA HYBRIDS.-They range in color from purest white to red and bluish white tints, sulphur, lemon and bright golden yellow, golden orange, reddish yellow changing to light salmon-rose, superb shades of salmon-very light to deep or-ange-salmon. There are also varieties with different colored zones; rare shades, rich and interesting. Pkt. 10c; 1/8-0z. 25c


Dimorphotheca-African Golden Daisy

A HEDGE of Free Flowering Dahlias is AS BEAUTIFUL and more showy than a hedge of ROSES. They are in full bloom when other flowers ARE SCARCE. See pages 90 to 93 .


Digitalis-Foxglove Plant and Flower Spike DIGITALIS
(Foxglove)
Hardy perennials; very desirable for effective massing or grouping; invaluable either in the hardy border, between shrubs or in solid beds in open or shady places; 3 to 5 feet. For strong field-grown flowering plants, see page 83.
GLOXINAEFLORA.-A fine strain with handsome spotted gloxinia-like flowers.
White, Purple, Rose or Mixed.
Pkt. 10c; 1/8-oz. 35c GRANDIFLORA YELLOW.-Light yellow in good spikes.

Pkt. 10c; 1/s-oz. 40c MONTROSA (Mammoth Foxglove).-The tall spikes of flowers are surmounted by one monstrous bloom; ail colors mixed.

Pkt. 10c; 1/8-oz. 40c
BEAUTY MIXTURE.-A grand mixture of all kinds, colors and shades.

Pkt. 10c; 1/8-0z. 50c

## ESCHSCHOLTZIA

## (California Poppy)

One of the most popular garden annuals; 1 foot. Sow the seed where plants are to remain in the fall or early spring. It stands considerable cold and blooms early, profusely and continuously until July. Later sowings for late flowers. (See cut.)
New Hybrida Grandiflora Mixture.-This is a wonderful mixture of all the new colors and novelties in the erect large flowering Eschscholtzia. You will find a large percentage of soft pink, scarlet, copper-red, cream, claret, royal purple and other rich and rare tones.

Pkt. 15c; 2 for 25c; 1/4-0z. 40c Californica.-Bright yellow. Pkt. 10c; oz. 40c Alba.-Pure white.

Pkt. 10c; oz. 40c
Carmine King.-A beautiful rose carmine.
Pkt. 10c; 1/4-0z. 25c Golden West.-Very large, bright yeilow flowers with orange centers.

Finest Mixed.-All shades.
Pkt. 10c; oz. 40c
Pkt. 10c; oz. 40c


Echinocystis-Wild Cucumber

## ECHINOCYSTIS LOBATA

## (Wild Cucumber)

The fastest-growing annual vine in existence; will grow 20 feet in six weeks; pretty foliage and inconspicuous white flowers; soak seed in water over night before planting in dry weather.

Pkt. 10c; oz. 35c

## GAILLARDIA

## (Blanket Flower)

Splendid, showy plants for beds or borders; excellent for cutting; the hardy perennial varieties; if sown early will bloom the first season; July to frost; $11 / 2$ feet. (Field-grown plants, page 83.)
GRANDIFLORA SUPERBA. - Hardy perennial, splendid mixed single varieties in crimson and gold. Pkt. 15c; 1/8-0z. 40c LORENZIANA.-Hardy annual; double flowers in red and yellow shades.

Pkt. 10c; 1/8-0z. 25c


Eschscholtzia-California Poppy


Gypsophila-Baby's Breath

## GYPSOPHILA

## (Baby's Breath)

Pretty free-flowering, elegant plants, succeeding in any garden soil. Their misty white panicles of bloom are largely used for mixing with other cut flowers. The annuals should be sown early in the spring and midsummer for a continuous supply.
ELEGANS ALBA GRANDIFLORA. -Hardy annual, easily grown from seed; flowers pure white; 2 feet; June. Pkt. 10c; 1/4-oz. 25c
ELEGANS ROSEA GRANDIFLORA. - Hardy annual; flowers bright rose; very dainty; 2 feet.
MURIALS.-Hardy perennial; plants dwarf, about 6 inches; flowers shell pink; fine for borders or rock work.

Pkt. 10c; 1/8-0z. 25c
PANICULATA.-Hardy perennial; one of the finest for cutting; pure white flowers, very small, and borne in large, delicate sprays; June to September; 3 feet.

Pkt. 10c; 1/8-oz. 25c
PANICULATA FL. PL.-New, double-flowering. White. Pkt. 25c; 3 for 60c
(For strong roots of G. Paniculata for immediate effect, see page 83.)

## GERANIUM

ZONALE, MIXED.-A superb strain of the largest and finest varieties. Should be started indoors and transferred to the open in May or June.

Pkt. 25c

## GEUM

MRS. BRADSHAW.-A beautiful hardy perennial, bearing profusely showy double dark-crimson flowers all through the summer; an elegant flower for bouquets.

Pkt. 10c; 1/8-0z. 50c

## GOMPHRENA

(Globe Amaranth)
A dwarf hardy annual, with pretty cloverlike beads of purple, white and red flowers; 2 feet; flowers everlasting.
Finest Mixed.
Pkt. 5c; 1/4-oz. 25c

## GYNERIUM

## (Pampas Grass)

ARGENTEUM.-Hardy perennial; the famous Pampas Grass, with beautiful silvery plumes; 10 feet. Pkt. 10c

## GOURDS

These are desirable in many places where an immense amount of vine is wanted quickly. Most sorts are good for 20 feet in a season and the blooms of some are quite striking and handsome. With many sorts the fruit is unique and ornamental and often useful.
Calabash.-The famous pipe gourd, dipper shaped.

Pkt. 10c; oz. 40c
Egg, Orange, Turk's Turban, Pear, Spoon or Mixed, all kinds.

Pkt. 5c; 1/4-0z. 15c

## GODETIA

(Satin Flower)
This showy, hardy annual deserves greater popularity. Attractive flowers of satiny texture, from white to all shades of pink and crimson. They grow rapidly and flower profusely in poor soil, or easy cultivation. Fine for seashore or mountain resorts; 1 foot; July to October.
Dwarf White, Bright Red or Finest Mixed or Tall Mixed.

Pkt. 10c; 1/8-0z. 25c

## HELIOTROPE

Delightfully fragrant, half-hardy perennial; popular pot and•garden bedding plant; also for cutting. Some of the best plants may be raised from seed very readily; $11 / 2$ feet; start inside or under glass.
FINEST MIXED.
Pkt. 10c; 1/s-oz. 50c


Heliotrope

## HELICHRYSUM

(Straw Flower)
Monstrosum FI. PI.-One of of the best of "Everlastings." Make a fine display in the garden. Especially grown to dry and use in baskets and vases through the winter. When half open cut, strip off all leaves and hang head downward in a dark, dry place until cured; plant 12 inches apart; hardy annuals; $21 / 2$ feet.
Fireball, Goldenball, Salmon Queen, Silverball or Double Mixed.

Pkt. 10c; 1/8 oz. 35c

MORE HARDY FLOWERING SHRUBS should be planted in the West-they give no trouble, increase in size and grow more beautiful year by year. See pages 100 to 104.

## Wild Flower Gardens

Try a packet of our "Wild Flower Garden"; something new and interesting to see most every day. See page 73.

Pkt. 15c; 1/8-0z. 25c


Helianthus-New Miniature HELIANTHUS
(Sunflower)
Hardy annual Sunflowers are indispensable for cutting and a bright display of yellow flowers in the garden. Plant early in a sunny place and have a constant supply of flowers until cut down by severe frosts. We offer some improved types of special merit.
GLOBOSUS FISTULOSUS (Globe or Dahlia Sunflower). Flowers large, double, very full in the center and of a rich saffron color; 6 feet; annual. Pkt. 10c; 1/4-oz. 25c

CUCUMERIFOLIUS - STELLA (Improved Miniature Sunflower). Grows about 3 feet tall, covered with pretty single flowers of the purest golden yellow, with black disc. Fine for cutting. (See cut, next page.) Pkt. 10c; 1/4-oz. 35c
ORION.-Artistic and effective new variety of "Stella." The petals are twisted like a Cactus Dahlia.

Pkt. 10c; 1/4-oz. 35c
NEW MINIATURE MIXED.-A multitude of new varieties have been raised from the popular Min ature Sunflower, which we offer in mixture. They all differ from the parent, most of them being larger, and many with curiously twisted petals. The prevailing colors are pale yellow, golden yellow and creamy white, some with black centers. and all beautiful; for cutting they are indispensable.

Pkt. 10c; 1/4-oz. 35c
PERENNIAL MIXED.-A choice mixture of the best perennial varieties.

Pkt. 15c; 1/8-oz. \$1.00

## HUMULUS

## (Japanese Hop)

Hardy annual climber: of rapid growth; attains a height of 12 feet. Cut, opposite page.
JAPONICA VARIEGATA. - Foliage green and white: very pretty and effective; not affected with insects. Pkt. 10c; $1 / \mathrm{s}$-oz. 35c ENGLISH HOP ROOTS. Pg. 113. Each 15c

## HOLLYHOCK

One of the most majestic of hardy plants, and a clump or line in any garden gives an effect not attainable with any other plant. For planting among shrubbery or forming a background for other flowers, it is without equal. Seed sown any time before late summer will produce fine plants for flowering next year.
CHATER'S DOUBLE.-Our superb strain of this is the best that can be produced; seeds saved from the most double flowers.
White, Rose, Crimson, Yellow, Maroon or Lilac or Mixed. Pkt. 10c; $1 / 4-0 z .75 \mathrm{C}$
NEWPORT PINK.-New. The finest pure pink variety, exquisite in shade, flowers double. Pkt. 15c; 1/8-0z. 40c
ALLEGHENY. - Semi - double; mammoth flowers, having the edges of the petals finely fringed and lacinated; will bloom the first year if sown early.
Choicest Mixed. Pkt. 10c; 1/4-oz. 60c
NEW ANNUAL EVER-BLOOMING.-Seeds sown in the house in March will produce flowers in July on plants 4 feet high; however, the plants do not attain their perfection until their second year, when they grow 6 to 8 feet high, and flower continuously from June till frost.
Single Mixed. Pkt. 10c; 1/8-oz. 50c
Doubie Mixed. Pkt. 15c; 1/8-oz. 75c


Double Hollyhock

## HUNNEMANNIA

FUMARIAEFOLIA (Giant Yellow Tulip Poppy).-Hardy annual; foliage fern-like; flowers tulip-shaped, golden yellow; very showy; July to frost.

Pkt. 10c; 1/8-0z. 35c


Humulus-Japanese Hop

## KOCHIA

SUMMER CYPRESS or BURNING BUSH.Annual; forms dense bushes of upright plumage-like foliage; during the summer they remain light green and in early fall they change to carmine and blood red; 2 fert: lake a dainty and showy hedge or nice single specimens.

Pkt. 10c; 1/4-0Z. 35c

## KUDZU VINE

## (Pueraria Thumbergiana)

A twisting vine of remarkably rapid growth, attaining a length of 40 to 50 feet in one season from established roots; hardy perennial, though the vine dies down every winter in the North. Foliage large and lobed; purple, pea-shaped flowers in clusters, borne late in the season. A fine vine for arbors, verandas, etc. Easily grown from seed.

Pkt. 10c; 1/4-oz. 50c

## LARKSPUR-Annual

Unsurpassed by any other hardy annual. Seed sown in the open ground in April or May will produce flowers from July to frost. Their free, graceful habit and lovely bright flowers are very effective for beds or borders. Charming cut flowers for decoration.
DOUBLE STOCK FLOWERED.-The finest tall branching variety with splendid sprays of beautiful flowers; 3 feet. White, Pink, Lustrous Carmine-Sky Blue, Dark Blue or Mixed.

Pkt. 10c; 1/4-oz. 50c
EXQUISITE.-New, a beautiful soft pink. A charming new shade that will be highly prized by florists.

Pkt. 15c; 1/8-oz. 35c
DOUBLE DWARF ROCKET.- 1 foot; compact growing bush, splendid spikes of double flowers in all colors.
Mixed.
Pkt. 10c; 1/4-oz. 40c
EMPEROR.-Slender spikes of exquisite double flowers in unlimited quantity and of delicate shades; 2 feet.
Mixed.
Pkt. 10c; 1/4-oz. 40c
PERENNIAL LARKSPUR. - (See Delphinium, page 57: plants, page 83.)

## LINUM (Flax)

GRANDIFLORUM RUBRUM (Scalet Flax).One of the most effective and showy bedding plants, of long duration, having fine foliage and delicate stems, with brilliant scarletcrimson flowers; hardy annual; 1 ft .

Pkt. 10c; 1/4-OZ. 25c

## LATHYRUS LATIFOLIUS

PERENNIAL SWEET PEA.- Free flowering, hardy perennial climbers, bearing beautiful flowers all season.
White or Pink. Pkt. 15 c ; $1 / 4$-oz. 75c
Mixed.
Pkt. 10c; 1/4-oz. 50c

## MARVEL OF PERU

(Four o'Clock)
Hardy annual, flowering from July to October; brilliant colors; 3 feet.
Finest Mixed. Pkt. 10c; oz. 35c

## MESEIMBRYANTHEMUM

Dwarf trailing plants of great beauty blooming the whole summer, thriving best in a dry, loamy or sandy soil; half-hardy annuals; 12 to 15 inches.
TRI-COLOR.-Very dainty, pointed petaled,
brilliant salmon-pink flowers. Pkt. 15c CRYSTALLINUM (Ice Plant). - Flowers white, prized for its singular icy foliage.

Pkt. 15c

## MIGNONETTE

## (Reseda)

A universal favorite; very fragrant; no home garden is complete without Mignonette. It needs a cool soil only moderately rich; grows 8 to 15 inches high and is treated as a half-hardy annual. (See cut.)
GRANDIFLORA. - Large - flowering, sweet, fragrant, spikes of greenish yellow color.

Pkt. 5c; oz. 35c
DEFIANCE.-Giant spikes; flowers abundant and very fragrant. Pkt. 10c; 1/4-oz. 25c
GOLIATH RED.-Excellent for pots or garden; highly colored, fragrant flowers.

Pkt. 10c; 1/8-oz. 35c
WHITE PEARL.-New; the best white flower; very attractive. Pkt. 10c; 1/8-oz. 35c


Mignonette-Flower Spikes

BUY a package of WONDER ODORLESS FERTILIZER and feed your plants according to directions. YOU WILL BE PLEASED at the results. See page 38.


Trailing Lobelia

## LOBELIA

ERINUS GRACILIS.-'Trailing, excellent for vases, hanging baskets and window boxes. Bright blue flowers. Pkt. 10c; 1/8-oz. 50c
HYBRIDA SAPPHIRE (New).-This is by far the most beautiful trailing Lobelia to date; very large, deep sapphire blue flowers, with a large and clear white eye; very free and early flowering: extra long trailer, for baskets and boxes. Pkt. 25c; 1/8-oz. $\$ 1.25$
CRYSTAL PALACE COMPACTA. - Little dwarf bedding plant; dark blue flowers cover the whole plant during the entire season; very compact and used extensively in carpet bedding or edging; height 4 inches.

Pkt. 10c; 1/8-oz. 75c
WHITE GEM.-Compact little plants, covered with snow-white flowers.

Pkt. 10c
CARDINALIS (Cardinal Flower).-Hardy perennial garden plant, with spikes of deep cardinal red flowers; August and September; 3 feet.

Pkt. 15c; 1/8-oz. \$1.00

## LUPINUS

Ornamental, free-flowering, easily grown, with long. graceful, upright spikes of rich and variously colored pea-shaped flowers; valuable for mixed borders and beds.
ANNUAL TALL MIXED.-Valuable for cutting; 2 feet.

Pkt. 10c; 1/4-oz. 35c POLYPHYLLUS MIXED. - Showy perennials, growing stout and erect; good for cutting, flowers in whte, rose and blue colors; 3 feet; May and June.

Pkt. 10c; 1/4-oz. 35c

## MARIGOLDS

The African and French Marigolds are old favorite free-flowering annuals of easy culture; both are extremely effective. The African have uniformly large yellow or orangecolored flowers, and are well adapted for large beds or mixed borders; the French are dwarfer in growth, with beautifully striped flowers, and better suited for low beds or borders; they succeed best in a light soil, with full exposure to the sun. A vase or bowl of any of the rich yellow sorts, in combination with a few blue Larkspurs or Cornflowers, is very striking.
TALL AFRICAN.-(See cut.) Splendid for cutting and decoration; 3 feet.
Orange Prince.-Enormous double flowers of rich deep golden oranee.

Pkt. 10c; 1/s-oz. 25c
Lemon Queen.-Extra large double flowers of a clear canary yellow.

Pkt. 10c; 1/8-oz. 25c
Eldorado.-Double flowers of large size in all shades of yellow.

Pkt. 10c; 1/s-oz. 25c
Tall African Mixed.-All shadas.
Pkt. 5c; 1/4-0Z. 35c
DWARF FRENCH.-These form small, compact bushes about 12 inches high, covered with smaller but very rich colored flowers. Fern-like foliage.
Dwarf Golden.-Flowers ball-shaped, pure golden yellow. Pkt. 10c; 1/8-oz. 30c Dwarf Brown.-Rich reddish-brown or mahogany marked with orange; double.

Pkt. 15c; 1/8-0z. 40c
Dwarf Gold Striped.-Ver ${ }^{\prime}$ double, mahogany red, striped with gold.

Pkt. 10c; 1/8-0z. 40c
Dwarf French Mixed.-All shades.
Pkt. 5c; 1/4-0z. 35c
Tall French Mixed. - 2 feet.
Pkt. 5c; 1/4-0Z. 25c


African Marigold

GLADIOLI BULBS make a beautiful display when in bloom and are of the easiest culture and really not expensive, as they multiply rapidly. See pages 86-87.

## MORNING GLORY

(Ipomoea)
The tall varieties are popular, well known, rapid-growing climbers of the easiest cultivation; very fine for covering arbors, trellises, porches, etc.; give them rich soil and a warm situation. The Minor or Dwarf varieties flower very freely.
CONVOLVULUS MAJOR.-Tall, choice, single mixed; all colors. Pkt. 10c; oz. 35c
CONVOLVULUS MINOR. - Dwarf mixed. Very spreading; 12 inches.

Pkt. 10c; oz. 35c
IMPERIAL JAPANESE FRINGED. - These have very large fringed flowers in a great variety of the most exquisite colorings; handsome foliage.

Pkt. 10c; 0z. 50c
DOUBLE MIXED. Pkt. 15c; 1/4-oz. 35c
CHOICE PRIZE MIXTURE...This is a mixture of both American and Japanese varieties; very choice. Large Pkt. 10c; oz. 50c (Note.-Soak the Japanese Morning Glory seed in warm water for 24 hours before planting.)

## MYOSOTIS

## (Forget-Me-Not)

Few spring flowers are more admired than the lovely Forget-Me-Nots, which are especially effective when grown in masses. Hardy perennials if given slight protection through the winter.

Seed may be sown any time from spring till mid-summer. The Alpestris and Dissitiflora come into bloom in April, and are largely used for bedding between plantings of Dutch flowering bulbs. The Palustris sorts do not bloom till May, but continue till fall. Perennial plants, pages 82 to 89.
DISSITIFLORA.-Rich blue; early flowers in fine sprays; 6 inches.

Pkt. 15c; $1 / 8-$ oz. $\$ 1.50$
ALPESTRIS VICTORIA. - Of bushy habit; bearing large, double, bright blue flowers; yellow eye; very fine; 6 inches.

Pkt. 10c; 1/8-oz. $\$ 1.00$
ALPESTRIS ROYAL BLUE. - Rich indigo blue; 9 inches.

Pkt. 15c; 1/8-oz. 50c
FINEST MIXED.-A mixture of blue, rose and white varieties. Pkt. 10c; 1/8-oz. 40c
PALUSTRIS SEMPERFLORENS. - Perennial; flowers bright blue; blooms from early spring until autumn.

Pkt. 15c; 1/8-oz. $\$ 1.00$


Myosotis-Forget-Me-Not


Morning Glory

## MOONFLOWER-Ipomoea

GRANDIFLORA ALBA.-Large, heartshaped leaves, and large, pure white flowers, which open only late in the evening; 10 feet. Pkt. 15c; 1/4-oz. 25c

## MIIMULUS

MOSCHATUS (Muskplant).-A pretty, trail. ing plant with small yellow flowers, giving forth a musk-like fragrance; fine for hanging baskets, etc. Annual. Pkt. 15c

## NEIMESIA

GRANDIFLORA COMPACTA TRIUMPH. A very pretty, half-hardy, free-flowering annual; the plants grow about a foot high and the beautiful, dainty flowers are very varied in color, including rose, yellow, blue, orange, etc. An ideal bedding plant. Seed sown in the autum makes beautiful pot plants for early spring blooming. Mixed Colors. Pkt. 10c; 1/8-0z. 75c

## NICOTIANA

One of the easiest annuals to raise and one of the most effective. The flowers are long tubed, star-shaped, and are produced in great profusion. The flowers open toward evening and emit a powerful perfume.
AFFINIS.-Delightfully sweet-scented, pure white flowers, blooming continually; 2 to 3 feet. Pkt. 10c;1/8-oz. 25c AFFINIS HYBRIDA.-Splendid hybrids in blue, red and rose, etc., shades.

Pkt. 10c; 1/8-oz. 30c
SANDERAE.-Of elegant branching habit, and bearing on light, graceful stems great quantities of very beautiful rosy carmine flowers; all-summer valuable border plant; 3 feet. Pkt. 10c; 1/8-oz. 30c

## NIGELIA

(Love in a Mist-Devil in the Bush) A compact free-flowering plant with finely cut foliage and pretty feathery flowers; hardy annuals; blue and white; $11 / 2$ feet.

Double Mixed.
Pkt. 10c; $1 / 8$-oz. 15c
MISS JEKYLL.-A lovely variety with cornflower blue blossoms; splendid for cutting.

Pkt. 10c; 1/8-0z. 25c

## NASTURTIUM - TALL OR CLIMBING

The most popular and most beautiful freeflowering annual climbing vines. These are all of strong, vigorous growth, throwing out running shoots that can be trained upon strings or wires, or can be readily made to climb ordinary paling fences or wire netting. They are very showy also planted at the top of a steep slope and allowed to run down the bank. We offer only the finest strains, producing the largest and richest flowers.

Your choice, Pkt. 10c; full collection, 8 kinds, 50c; per oz., any kind, 20c.
Asa Gray.-Light yellow, almost white. Black Prince.-Velvety crimson, dark leaved. Firefly.-Bright yellow, spotted cardinal red, calyx and spur ruby; very pretty and showy.
Golden Queen.-Sunflower yellow, very fine. Primrose.-Creamy yellow, very pleasing.
Princess Victoria Louise.-Cream white, scarlet spot.
Regina.-Beautiful light salmon.
Spitfire.-Bright fiery scarlet.

## Tall Prize Mixture

Routledge Tall Prize Mixture.-This is undoubtedly the finest mixture of tall nasturtiums offered anywhere; every shade is grown separately and then mixed; dark leaved. Large Pkt. 10c; oz. 25c; 1/4-lb. 75c
Tall Choice Mixed.-A very fine selection of beautiful varieties.

Large Pkt. 10c; oz. 20c; 1/4-lb. 60c
Ivy-Leaved, Finest Mixed.-The ivy leaves, borne on very slender stems, are of a dark metallic color, which forms a striking contrast to the beautiful flowers; an excellent variety for vases, hanging baskets, etc.

Pkt. 10c; oz. 25c
Variegated Queens.-A new strain of tall Nasturtiums having beautifully variegated leaves; green, white and yellow; flowers large and of many bright colors.
Superb Mixed
Pkt. 10c: oz. 25c

## Plant Our Highest Quality Seeds and Have a Garden Worth Whle

## Meacham, Ore., March 28, 1922.

Rontledge Seed \& Floral Co.
Gentlemen: I want to tell you how wonderful your Giant Spencer Sweet Peas are. Everyone who saw my Sueet Peas last summer and the summer before thought they were the most wonderful they ever saw. They said my Spencers surpassed them all in fragrance, size and color. They bloomed from the first of July until November. Your Golden Bantam Sweet Corn is also delicious. I have tried a good many different varieties, but it is the best. Of course, all the seeds are fine that I have got from you, but the two I mentioned stood above them all.

Yours respectfully,
C. E. HANNA.

## PENTSTEMON

(Beard Tongue)
The handsome, brilliant flowers are borne on long terminal spikes, much resembling Gloxinias. Perennial; will bloom the first season if sown early; 3 feet. All colors from vellow to red and purple
HYBRIDA MIXED.
Pkt. 10c; 1/8-oz. 50c
For permanent and hardy climbing flower-
ing vines and trailers, see pages 99 and 100.


## DWARF NASTURTIUMS

These are of dwarf, compact, rounded growth and are especially desirable for planting as borders to flower-beds or along garden walks. As with all Nasturtiums, they succeed best on light, well-drained soils or in slightly raised beds.

Aurora.-Terra cotta, reddish orange.
Beauty.-Yellow and scarlet, very pretty.
Bronze.-Reddish golden bronze, rich.
Crystal Palace Gem.-Rich yellow, spotted maroon.
Empress of India.-Dark scarlet, dark leaved. Golden King.-Rich Indian yellow, dark leaved.

Vesuvius or Salmon Queen.-Salmon rose.
Price, all above Dwarf varieties, Pkt. 10c; Selection of 7 Pkts. 50c; per oz. 25c.

## R. R.'s Dwarf Beauty Mixture

Composed of new and rare sorts; exceedingly brilliant and beautiful. A mxture of very lovely, true dwarf varieties.

Large Pkt. 10c; oz. 25c; 1/4-lb. 75c
CHOICE DWARF MIXED.-Not equal to above, but far superior to most mixtures. Large Pkt. 10c; oz. 20c; 1/4-lb. 60c

## PORTULACA

Low-growing or creeping tender annual, six to eight inches high, and bearing glossy, cup-shaped blossoms in very brilliant and gorgeous colors. The foliage and stems are thick. The seed germinates slowly and should be started under glass or when the weather is hot. These flowers love the sunshine and do best on rather dry ground; excellent for embankments.
Single, Finest Mixed. Pkt. 10c; 1/8-0z. 40c
Double, Finest Mixed.
Pkt. 15c; 1/8-oz. 75c

[^15]
## GIANT PANSIES

## Pansy Plants, Page 78

This popular flower thrives best on a cool, moist, but well-drained soil enriched with well-rotted barnyard manure or fine ground bone. Seeds sown early will produce fine plants for summer blooming. The florists' method, though, is to sow in July or August, and protect the plants during the winter, and they will flower contiruously early the following spring and summer.

ROUTLEDGE PRIZE MIXTURE.-For variety of markings, beauty of form, size and splendid texture, this superb strain cannot be excelled.

Pkt. $25 \mathrm{c} ; 1 / 8-0 \mathrm{z}$. $\$ 1.25$
STEELE'S MASTODON.-This superb strain is famous among professional florists everywhere. Flowers rare and rich in colors and of giant size; Oregon grown.
Mixed.
Pkt. 20c; 1/8-oz. $\$ 1.00$
GIANT TRIMARDEAU.-The most popular bedding strain for this locality, and deservedly so, on account of the strong, sturdy plants and the enormous flowers of the greatest variety of colors.
Finest Mixed.
Pkt. 10c; 1/s-oz. 50c
CHOICE MIXED.-A fine bedding strain. Pkt. 5c; 1/8-0z. 35c

Our new product, "C-M," Dry-Kiln Pulverized Cow Manure, is the ideal fertilizer for your Pansy beds. (See page 39.) It makes those giant flowers you admire.


## New Giant Pansies of Special Merit

## Your choice, Pkt. 25c; full collection of 10 packets for $\$ 2.00$

MLLE. IRENE.-New. New color in pansies, Tango Red; a grand flower, long stem.
MLLE. ISABELLE.-Novelty, ruffled bronze and yellow; a giant in size.
VULCANO.-Novelty. A rich velvety Burgundy red; immense flowers.

PANAMA PACIFIC.-A huge deep yellow, some pure yellow, others with dark eyes.

MADAME STEELE.-A giant, true royal purple. A very profuse bloomer.

BRONZE MASTODON.-Giant, all shades from bronze to old gold; wonderful colors.


Phlox Drummondii

ADONIS, NEW.-Of huge size, light blue, baby blue and lavender shades.

PRINCE HENRY.-Giant, splendid dark blue.
MADAME PERRETT.-Distinct and beautiful type, edges filled; dark wine pink and red.

GRAND DUKE MICHEL.-A giant, pure white. The best in this color.

## PHLOX DRUMIMONDI

One of the showiest and most easily raised of all annuals. We know of nothing which produces such a continuous supply of the most attractive flowers in a most wonderful range of colors; 1 foot. Seed should be sown in the ground as soon as danger of frost is over and in a few weeks the beds are a blaze of glory.

DRUMMONDI GRANDIFLORA, MIXED.-A splendid mixture of all shades and colors. Pkt. 10c; $1 / 8$-oz. 35 C

SEPARATE COLORS.-White, Pink, Rose, Scarlet, Lilac, Primrose or Striped.

Pkt. 10c; 1/s-oz. 50c
DECUSSATA (Tall Perennial Phlox).-One of the finest perennials with its extremely large heads of the most magnificent colored flowers, blooming in August and September. Pkt. 10c; 1/8-0z. \$1.00
PERENNIAL PHLOX PLANTS on page 84.
Annuals, page 78.

PLANTS.-Large flowering, choice pansy plants, ready very early in the spring. Can be safely sent by mail.—Blooming plants, 12 in a basket, by express. See page 78.

## PETUNIA

One of our easiest cultivated and freest flowering annuals. Will succeed almost anywhere and give a continuity of the most brilliant bloom from June till killed by frost. Excellent for balcony or porch boxes. The strains we offer are the very choicest obtainable.

## SINGLE VARIETIES <br> Ruffled Giants, Prize Mixture

Ruffled Giants, Prize Mixture. - This strain produces in great profusion enormous flowers, having edges of petals beautifully ruffled and fluted; of great variety of colors, many being beautifully veined; unsurpassed for size and beauty.
Pkt. 35c; 1,000 seeds $\$ 3.00$

## New Fringed Hybrida

A lovely petunia with charming fringed flowers of exquisite forms and beautiful colors. Not equal in size to Ruffled Giant, but they are more delicate and really beautif $n l$.

Pkt. 25c; 3 for 60c
LARGE-FLOWERED FINEST MIXED.-Fine large flowers in superb mixture.

Pkt. 15c; 1/s-oz. $\$ 1.00$
FINE MIXED.-An assortment of mediumsized flowers; fine for bedding.

Pkt. 10c; 1/8-oz. 50c

## New-Separate Colors

PINK TRIUMPH-NEW.-Well named for it is a triumph of the breeder's skill. Of large size, beautifully ruffled, a clear, bright pink. A charming free-flowering variety.

Pkt. 20c; 3 for 50c
GIANT WHITE.-Unrivaled for beauty of texture and size. A glistening satiny white with yellow throat. A fine companion to the above. Pkt. 20c; 3 for 50c
BALCONY PETUNIAS.-A new and splendid free, large-flowering type for windows, baskets, vases or bedding.
Balcony, White, Rose or Deep Blue.
Pkt. 20c; 3 for 45c
ROSY MORN.-Soft carmine pink, with white throat. A wonderful bloomer and firie for border.

Pkt. 15c; 1/8-oz. 75c

## DOUBLE PETUNIAS

All of our Double Petunias are selected with greatest care, and contain as large a percentage of double flowers as it is possible to obtain.
GIANT DOUBLE, FINEST MIXED HY-BRIDS.-A new and exceptionally fine strain; unsurpassed for the large, beautifully colored double flowers.

Pkt. 50c; 500 seeds $\$ 3.00$
GIANT DOUBLE MIXED.-Large fringed flowers of wonderful form and beauty. Quite true. Pkt. 35c; 500 seeds $\$ 2.50$
CHOICE DOUBLE MIXED.-Large per cent of double flowers. Pkt. 25c; 500 seeds $\$ 2.00$

## POPPY—PAPAVER

Universal favorite of the easiest culture. They produce a wealth of the most beautiful and showy blooms. Both perennial and annual poppies bloom the first year from early-sown seed. Perennial varieties will, but annuals will not, transplant safely, therefore sow the annuals where they are to remain and thin out, giving each plant ample room to grow and develop.

FLAANDERS.-The scarlet poppy of the fields of Flanders, made famous in the song and story of the great war and familiar to all members of the A. E. F. who served in Belgium and France. Remarkable for their tenacity of growth and their profuse flowering quality. Flowers satiny, crinkled, bright scarlet, nicely poised on slender stems. About the size of Shirley. Flower first season from early-sown seed.

Pkt. 10c; 1/4-oz. 25c
CARNATION FLOWERED (Annual).-Splendid double fringed flowers. Mixed Colors.

Pkt. 10c; oz. 35c
CALIFORNIA POPPY.-(See Eschscholtzia, page 58. )

ANNUAL SUPERB MIXTURE.-A superior strain, containing the choicest of single and double varieties in all of the brightest colors.

Pkt. 5c; oz. 35c
ICELAND, OR NUDICAULE (Perennial).These are of a very graceful, neat habit, with bright green, fern-like foliage, formed in tufts, from which issue slender stalks, about 12 inches in height, bearing beautiful brilliant single flowers in endless profusion, and most useful for cutting. (For plants, see page 84.)
Yellow, White, Scariet. Pkt. 10c; 1/8-oz. 50c Single Mixed.

Pkt. 10c; $1 / 8$-oz. 35c
Double Iceland Mixed. Very choice strain, double flowers.

Pkt. 15 c ; $1 / 8$-oz. $\$ 1.00$

[^16]
## POPPY-Continued

SHIRLEY (Annual). - Charming poppies. Flowers single and semi-double, and range in color from the purest white through the delicate shades of pale pink, rose and carmine to the deepest crimson and blood-red, while many are daintily edged and shaded. The petals are like silk. Free-blooming and fine for borders or beds; $11 / 2$ to 2 feet. Mixed.

Pkt. 10c; 1⁄2-oz. 25c; oz. 75c
GIANT ORIENTAL POPPIES
Among hardy perennials these hold an unrivaled position for gorgeous effectiveness. Height 2 to 3 feet, flowers immense, often 6 inches across. Excellent cut for decoration. Plant in the open ground in June or July to bloom the following season.
Oriental Brilliant.-Bright scarlet, black spots at base of each petal. Pkt. 10c; 1/8-0z. 75c
Oriental Princess Victoria.-A beautiful salmon-pink; wonderful flower. Pkt. 25c
Oriental-Perry's White.-Very distinct, pure satiny white with a crimson-maroon block at base of each petal.

Pkt. 25c
Oriental Hybrids Mixed.-All colors.
Pkt. 15c; 1/s-0z. $\$ 1.00$

## PRIMULA

(Primrose)
The first two varieties named below are hardy, early-blooming garden plants, and the others beautiful winter-blooming house plants. Their various forms and blending of colors are exceedingly pleasing and effective. They thrive best in a rich, loamy soil.
POLYANTHUS (Veris Mixed).-Early blooming, dwarf growing plants, valuable for outdoor bedding and edging, 8 inches, perennial.
Mixed.
Pkt. 15c
VULGARIS (Veris Aureau).-Yellow, common, English Primrose; hardy garden variety; perennial; 8 inches.

Pkt. 15c
OBCONICA GRANDIFLORA HYBRIDS.-A lovely, profuse bloomer, bearing beautiful clusters of single flowers for pots only.

Pkt. 25c
SINENSIS OR CHINESE PRIMROSE.-Beautiful, large, fringed flowers; especially fine for winter and spring flowers in the house; free bloomers.
Finest Mixed.
Pkt. 35 c

## PYRETHRUM

AUREUM.-Golden Feather.-Half-hardy, perennial; valuable for edging, as their yellow foliage makes a fine contrast with other bedding plants; 6 inches.

Pkt. 10c
HYBRIDUM GRANDIFLORUM.-Produce in early spring and again in the fall, large daisy-like flowers in a wide range of colors. Excellent for cutting.

Pkt. 15c; 1/s-oz. \$1.00

## RUDBECKIA

## (Cone Flower)

BICOLOR SUPERBA. - Fine free-flowering annual variety; 2 feet; producing in great abundance on long stems its bright yellow double flowers. (Plants, page 85.) Pkt. 10c
FULGIDA.-Hardy perennial sort, producing in masses during August and September brilliant orange-yellow flowers; 3 feet.

Pkt. 10c
NEWMANI.-Perennial; large, bright orangeyellow flowers, dark centers.

Pkt. 15c


Shirley-Poppy

## RICINUS

## (Castor Oil Bean)

A magnificent and highly ornamental plant, with picturesque foliage and stately growth combined with brilliant colored fruit of the giant varieties. Grown as single specimens on lawns and on pleasure grounds, they form a striking feature; hardy annuals.
ZANZIBARENSIS, Mixed.-Very ornamental; dark bronzy green and red leaves; 8 to 10 feet high.

Pkt. 10c; oz. 35c
SANGUINEUS TRICOLOR.-Blood red stems, deep green leaves, with red veins; 6 feet. Pkt. 10c; oz. 35c

GIBSONI.-New dark red foliage; 5 feet.
Pkt. 10c; oz. 50c
FINEST MIXED.—All kinds. Pkt. 10c; oz. 25c

## SALPIGLOSSIS

Produces very showy, trumpet-shaped flowers of large size and rich, gorgeous colors; fine for beds and one of the prettiest cut flowers we have. Of easy culture and very popular half-hardy annuals. Strong plants in May
$\$ 1.00$ dozen, postpaid
EMPEROR GRANDIFLORA MIXED.-Large
flowering, of the very choicest colors.
Pkt. 15c; 1/8-0z. 75c

## SCHIZANTHUS

## (Butterfly Flower)

Beautiful garden annuals; flowers charmingjy fringed and delicately colored; 1 to 2 GRANDIFLORA MIXED. Pkt. 10c; 1/8-oz. 75c

## STATICE

Splendid hardy perennials, either for the border or rockery, producing all summer cloud-like panicles of minute flowers, which can be dried and used for winter bouquets. 2 feet. The new and improved varieties are very desirable and pleasing.
SINUATA BLUE, ROSE or WHITE. Pkt. 10c


Salvia

## SALVIA

## (Scarlet Sage)

The Scarlet Sage has long been a favorite bedding plant, bearing long spikes of brilliant scarlet flowers in great porfusion from July till frost; seed should be sown as early as possible, either indoors or in a hotbed, and the young plants transferred to their flowering quarters when the weather has become seitled and warm.
SPLENDENS COMPACTA.-A splendid, showy variety, with large spikes of bright rich scarlet flowers; 3 feet.

Pkt. 10c; 1/8-oz. 60c
ZURICH.-A splendid new dwarf, of special merit; very early, generally 10 days ahead of any other. Brilliant scarlet and very free-flowering; 15 to 18 inches.

Pkt. 20c; 1/8-0z. $\$ 1.00$
BONFIRE. - Of dense bushy yet compact growth; useful for bedding or wide borders. Flowers dark, rich scarlet, on spikes which stand clear of the foliage and attract attention at once; 2 feet.

Pkt. 15c; 1/8-02. 85c

## SCABIOSA

(Morning Bride-Pin Cushion Flower, Etc.) The hardy annuals are easily grown from seeds sown after danger of frost is over. Their beautiful, dainty flowers are freely produced from July to frost; 2 feet. For cut flowers they are wonderful, lasting for nearly a week.
SEPARATE COLORS. - Double Lavender,
Rose, Yellow, Scarlet or White.
Pkt. 10c; 1/8-0z. 35c
Finest Mixed.-Large, double flowers.
Pkt. 10c; 1/8-oz. 25c

## SWEET WILLIAM

Hardy biennial, well known and very popular. The handsome, showy heads of brilliant flowers from June to September are very effective.

Dark Crimson, White, Pink Beauty or Mammoth Single Mixed.

Pkt. 10c; 1/8-oz. 50c
Double Mixed.-All colors
Pkt. 10c; 1/8-0z. 40c

## SNAPDRAGON

See Antirrhinum.
Page 52

## SHAMROCK

TRUE IRISH.
Pkt. 25c STOCK

## (Gilliflower)

By far one of the most popular annuals for garden or greenhouse culture. They are superb for cutting and are of great value for bouquet work. Flowers are of delicious fragrance, large, mostly double, and borne on handsome spikes; all will flower the first year. They are very hardy and often remain in bloom in the yard all winter in the vicinity of Portland. Sow in February or March for early blooms and in June for fall or winter flowers, and transplant.
LARGE-FLOWERED TEN WEEKS. - A splendid double-flowered strain, especially adapted for bedding and pot culture; pyramidal spikes of brilliantly colored flowers; 2 feet.
Finest Mixed.
Pkt. 10c; $1 / 8$-oz. 75c
GIANT PERFECTION, OR CUT-AND-COME AGAIN.-Grown for us by experts and the greatest possible care is taken in the selection of good seed. Of branching habit; two feet, and 85 to 90 per cent of large, double flowers; fine for cutting and garden.
White, Light Blue, Crimson, Dark Blue, Pink, Rose, Yellow, or Finest Mixed.

Pkt. 15c; 1/8-0z. 75c
BEAUTY OF NICE.-A handsome, new winter and summer stock of quick growth; flowers of large size, double, and freely produced; 2 feet.
Mixed.-All colors.
Pkt. 15c Princess Alice.-Double white.

Pkt. 15c Queen Alexandra.-Soft rosy lilac. Pkt. 15c Beauty of Nice.-Delicate flesh pink.

## SUNFLOWER

See Helianthus.
Pages 50-60


Double Stocks

## THUNBERGIA

Extremely pretty yellow flowers with dark eye; rapid-growing annual trailers; used largely for vases, window boxes, etc.; will flower all summer till frost; 5 feet.

Finest Mixed. Pkt. 10c; 1/4-0z. 75c

# SWEET PEAS "Highest Quality" TRUE VARIETIES 

# PRIZE COLLECTION NEW GIANT SPENCERS 

Rare, Rich and Wonderful

Collection Price, 10 New, Lovely Kinds (value \$1.35), SPECIAL, \$1.00, postpaid

CHARITY.-A great advance in its color class; a flower of great size and finest form. It is worthy of a place in all first-class collections. The color is a rich brilliant crimson which does not burn in the sun. A vigorous grower; the exquisitely waved flowers are usually produced in fours on very long stems. Pkt. 15c; $1 / 2$-oz. 40c

VALENTINE.-This is a new variety of great merit. Of vigorous habit, the large flowers are a most pleasing shade of light pink. Beautifully waved and well placed on the long, stout stems. It is unsurpassed for cutting or exhibition purposes.

Pkt. 10c; oz. 60c
DOBBIE'S LAVENDER.-Undoubtedly the best of the lavender varieties, grand for exhibition and garden decoration; strong grower, gives plenty of fours.

Pkt. 10c; oz. 50c
ROYAL SCOTT.-A new, true, bright scarlet, far ahead of all others in its color. Of finest form, nicely waved and produces freely four giant flowers to the stem. An English prize-winner.

Pkt. 15c; 1/2-oz. 50c
PINK PEARL.-A beautiful shade, soft pearly pink, magnificent in form and style of flowers. A revelation of daintiness and beauty.

Pkt. 15c; 1/2-0z. 45c
KING WHITE.-Well and truly named; it certainly is "the king" of all white Sweet Peas. In color, size and beauty of flower, length of stem and vigor, King White is unsurpassed.

Pkt. 10c; oz. 50c
MRS. TOM JONES.-Bright delphinium-blue. The flowers are very large and of great substance; beautifully waved, and invariably come four on a stem of great length. A first-class rich blue has long been wanted and now we have it in this charming and beautiful novelty.

Pkt. 15c; 1/2-oz. 40c
TANGERINE.-This is the last word in orangecolored Sweet Peas. Deep orange, almost approaching the color of a tangerine-orange. Flowers of great size, beautifully waved and well placed. Pkt. 15c; 1/2-oz. 50c

PICTURE.—A wonderful new variety, a great producer of enormous, waved and frilled flowers that generally come four to the stem. The color is a charming shade of salmon-pink, suffused creamy apricot. Very rich and effective.

Pkt. 15c; $1 / 2$-oz. 60c

Inoculate Sweet Pea Seed with HUMO. GERM. See page 41.


SPITFIRE.-A wonderful flower in size and substance. Beautiful in form and solor. A rich and dazzling orange-salmon. A color always greatly admired.

Pkt. 15 c ; $1 / 2-\mathrm{oz}$. 50 c

## Early or Winter Flowering Spencer Sweet Peas

This new class of Sweet Peas is the best for the florist to force under glass or for extra early flowers outside. They grow and flower earlier than the Giant Late Spencer. Excellent for sections where the season is late and short or very hot and dry. Plant early.

PRICES.-Your choice, 10 c Pkt.; full collection of eight Pkts., 65 c ; 1 -oz. any kind, 75 c .

Early Liberty.-Large, bright crimson.
Early Lavender King.-Beautiful lavender.
Early Morning Star.-Orange-scarlet; extra.
Early Peace.-Rose-pink on cream.
Early Snowflake.-Grand, pure white.

Early Torch.-A lovely orange shade.
Eariy Spring Maid.-Light pink.
Early Aviator.-Dazzling crimson-scarlet.
EARLY SUNRISE MIXTURE.-A very select mixture of early varieties.

Pkt. 10c; oz. 50c

## UP-TO-DATE SPENCER SWEET PEAS OF REAL MERIT-Continued

We make a specialty of Sweet Peas and we classify under colors for your convenience. SPECIAL.-Make up your own collection_60c worth for $50 \mathrm{c} ; \$ 1.25$ for $\$ 1.00$


## WHITE

CONSTANCE HINTON.-A very hardy and one of the largest White Spencers to date. A beautiful, large flower. Black seed, strong Pkt. 10c; oz. 50c
KING WHITE. - See Prize Collection,
WHITE SPENCER.-A pure white, of large size and splendid substance; long, strong stems. Pkt. 10c; oz. 40c

## PRIMROSE_-YELLOW

BUTTERCUP. - New. Undoubtedly the deepest, most richly colored of all the cream varieties. Large flowers, beautifully waved, four on a stem.

Pkt. 10c; oz. 60 c
DOBBIE'S CREAM.-A lovely primrose; nicely waved, abundance of bloom; strong and vigorous.

Pkt. 10c; oz. 40c

## PINK ON CREAM

HENRIETTA.-A charming variety; the giant flowers are rich, rosy pink on cream, a bright yet delicate pink.

Pkt. 10c; oz. 60c
MARGARET ATLEE. - Beautiful large flowers of a rich cream-pink; very double and frilled extra.

Pkt. 10c; oz. 50c
PICTURE.-See prize collection, page 69.

## LIGHT PINK

ELFRIDA PEARSON.-A lovely combination of apricot and pink. Beautiful, large, wavy flowers.

Pkt. 10c; oz. 50c
MRS. RAUTZAHN.-The flowers are of extra large size, great substance, and produced in fours on long stems and in wonderful profusion. Color lovely light pink.

Pkt. 10c; oz. 40c
VALENTINE, NEW.-See prize collection, page 69.

## PINK

COUNTESS SPENCER.-Flowers extremely large, beautifully expanded, crumpled and waved. Color soft shell pink, deeper at the outer edges.

Pkt. 10c; oz. 40c
HERCULES.-A magnificent soft rose-pink self, of truly giant proportions. A flower of great substance with broad spreading and beautifully waved standards.

Pkt. 10c; oz. 50c
HALMARK PINK.-New. Bright rose-pink flushed salmon. Large free bloomer, unsurpassed for cutting or exhibition.

Pkt. 15c; oz. 75c
PINK PEARL.-See prize collection, page 69.

## LAVENDER

ASTA OHN SPENCER.-Color a beautiful lavender; flowers large, wavy and generally come four blossoms to the stem. Very popular.

Pkt. 10c; oz. 40c
DOBBIE'S LEVENDER.-See page 69.
HALMARK LAVENDER.-New. A true, clear, light lavender of giant size and perfect form. The best in this color.

Pkt. 15c; oz. $\$ 1.00$
R. F. FENTON.-The flowers are of largest size. The color is a delightful soft silveryblue or lavender; an exhibition variety.

Pkt. 10c; oz. 40c
PRIZE SWEET PEAS.-If you want to grow giant flowers on long stems, you must give your sweet peas good soil, plenty of water at the roots in dry weather, some Wonder Fertilizer, and pick the flowers often. Our 'leaflet', tells all-free with each order. Use 'C. IM.'' in the Sweet Pea trench. See pages 38-39.

## UP-TO-DATE SPENCER SWEET PEAS OF REAL MERIT-Continued

No seed house offers a more select list. We classify under colors for your convenience SPECIAL._Make up your own collection_60c worth for 50c; $\$ 1.25$ for $\$ 1.00$

## ORANGE AND SALMON

NOTE.-To get the most delicate shade in this color, flowers should be lightly shaded.

BARBARA.-Salmon, large size. It makes a "telling" bunch either for exhibition or table decoration, and is most effective.

Pkt. 10c; oz. 50c
DECORATOR.-The color is old rose with a sheen of terra cotta giving a bright orange effect. The placement and poise of the flower is perfect.

Pkt. 15c; 0z. 60c
ILLUMINATOR. - Glowing cerise-salmon. The large flowers come four on a stem. Very vigorous, profuse bloomers. Pkt. 10c; oz. 50c

TANGERINE.-See Prize Collection, page 69.
THOMAS STEVENSON. - Of largest size and finest type, intense flaming orange throughout. A grand exhibition variety.

Pkt. 15c; oz. 40c
ROBERT SYDENHAM. - A magnificent glowing orange self. Beautiful, large flowers.

Pkt. 10c; oz. 40c
SPITFIRE.-See Prize Collection, page 69.

## BLUE—PURPLE

MRS. TOM JONES.-See page 69.
NEW MARGARET MADISON. - Flowers clear azure blue self-a color that always attracts and is so effective. Pkt. 10c; oz. 40 c

ROYAL PURPLE.-A true, rich, royal purple that holds its color. Flowers of giant size and elegant form.

Pkt. 10c; oz. 40c
WEDGEWOOD.-Flowers true light. blue in color and of fine, large, full, wavy form, some duplex.

Pkt. 10c; oz. 40c

## SCARLET_CRIMSON

CHARITY.-See Prize Collection, page 69. FIERY CROSS.-Color a scorching fire-red or orange-scarlet, in bright sunlight. Shows a fire-like sheen. Classed as cerise.

Pkt. 10c; oz. 50c
MAUD HOLMES.-Elegant form and type and a beautiful crimson-scarlet, giant, wavy flowers, four to a stem. Pkt. 10c; oz. 40c

ROYAL SCOTT.—See Prize Collection, page 69.

KING EDWARD SPENCER.-Of vigorous growth, profuse bloomer, giant flowers; most popular scarlet red, long stems.

Pkt. 10c; oz. 40c
VERMILLION BRILLIANT. - An intense pure scarlet, vigorous grower, profuse bloomer. -Pkt. 10c; oz. 40c

## DARK RED_MAROON

KING MANOEL.-A giant-flowered maroon or deep wine red that is sure to please all who admire rich shades. Pkt. 10c; oz. 50c

SPLENDOUR.-Flowers of great size and perfect form. The finest deep wine-red or maroon.

Pkt. 15c; oz. 60c
WARRIOR.-Flowers large and freely produces. Deep maroon or dark wine-red.

Pkt. 10c; oz. 40c
PICOTEE AND STRIPED
SENATOR SPENCER. - Beautiful large flowers, claret and chocolate on light ground; distinct and greatly admired; a profuse bloomer. Pkt. 10c; oz. 50c

MARTHA WASHINGTON.-A most beautiful variety; blush-white with a very distinct picotee-edge of rose-pink. Light and dainty. Pkt. 10c; oz. 50c

## Rose City Mixture of Grandiflora Sweet Peas

Extraordinary care has been taken in the selection of the varieties and the quantities of each to make up the mixture, and the result is one that cannot fail to excite the admiration of every flower lover. Of course the flowers of the Grandiflora type are not as large as the "Spencers," but the range of color is complete and they are hardy and very free flowering.

Large Pkt. 10c; oz. 20c; $1 / 4-\mathrm{lb}$. 50c; lb. $\$ 1.50$
SEE 1923 SUPERB COLLECTION AND SUPERB MIXED NEXT PAGE

## Cupid Sweet Peas

Compact dwarf plants, seldom growing over 4 to 6 inches high. Flowers of good size and at the top of short, stiff stems. Try something new and showy for edgings or a border to other flowers. They are unique and pretty. Of trailing nature. (See cut.)

CUPID MIXED. - Pkt. 10c; oz. 25c; 1/4-Ib. 75c
NEW NAMED CUPIDS.-Novelties, the first of a new race.

LITTLE NELL.-A charming new early Cupid. Produces four large waved blooms on short stems; color, pink wings, white standard. Very early.

Pkt. 20c; oz. \$1.00
ROSEBUD-Vines not over 4 inches high, compact habit. Color, lovely creamy apricotpink.

Pkt. 20c; oz. \$1.00


MIDSHIPMITE. - Compact and spreading, often 18 inches. Flowers white, suffused and edged violet-blue, four to a stem.

Pkt. 20c; oz. \$1.00


## R. R.'s Superb Mixture of Giant Spencer Sweet Peas

This is our own special mixture and is composed only of the best giant orchid-flowering wavy Spencer varieties, also contains some new seedlings of promising merit, that have not as yet been named. For healthy, robust growth, wealth of blooms, size of flowers and exquisite and rare colorings, this mixture is unequaled.

Put up and for sale in sealed packages only, $1 / 2$-oz. pkts. 15 c ; oz. pkts. 25 c each; 3 for 60c; 6 for $\$ 1.00$.

## TRITOMA <br> (Red Hot Poker)

Striking and exceedingly ornamental autumn flowering plant. Showy flower spikes, shaded red and yellow; 3 feet. (See cut and plants, page 85.)

Pkt. 10c; 1/8-oz. 50c

## VALERIANA

(Garden Heliotrope)
A fine old-fashioned hardy plant; flowers have a strong heliotrope odor; showy, red or white; fine for bouquets; 2 feet.
Mixed.
Pkt. 10c; 1/8-oz. 25c


## Wild Flower Garden - Mixture

This is a mixture of easy growing, hardy annual and perennial flower seeds, embracing a wide range of different kinds and colors. Very desirable for sowing broadcast along walks, shrubbery, pathways, roadways or in the garden. With little or no care they will produce a bright effect and furnish an abundance of flowers for cutting. If you wish to get the largest returns plant in a prepared bed and when the plants are a few inches high, transplant here and there or wherever wanted. You will derive a great amount of pleasure from watching the development of the flowers from the unknown plants.

Prices-Well filled pkts. 10c; oz. 35c.

## ROUTLEDGE PRIZE ZINNIAS

The Zinnia is one of the most brilliant, showy and satisfactory annual flowers. It has long been a general favorite, but with the wonderful new and "late creations" produced by "Zinnia specialists" in the last few years it now is probably the most popular flower of the day.
For mass planting, cut flowers and decorations they are unsurpassed, producing: a wonderful display from July until heavy frosts.

## New Dahlia Flowered

This new, giant, double-flowered Zinnia (see cut) is a wonder in size, shape, new colors, perfection and profusion of flowers. Plants grow sturdy and vigorous, about 3 feet high. Flowers 5 to 6 inches across, full and deep and of the most wonderful shade. All of the usual colors and many rare, such as salmon, old rose, pink, cerise, strawberry red and autumn tints. We offer a very select strain of seed containing all novelties.
DAHLIA-FLOWERED PRIZE MIXED
Pkt. 15c; 2 for 25c; $1 / 8$-oz. 50c

## Double Giant Zinnias

## Improved Robusta Grandiflora

These are of the giant or mammoth flowering type and are in every way superior to the common kinds. Flowers are borne on long, stiff stems and are of a semi-globular form, mostly very double. Excellent for cutting. Plants grow $21 / 2$ to 3 feet high and produce very freely immense flowers, many measuring from 4 to 5 inches across and all of lovely rich and rare colors. Care, cultivation and plenty of water will increase the size of the flowers.
SEPARATE COLORS.-Giant Double White. Crimson (best red), Apricot Canary or Golden Yellow, Orange, Salmon or Purple Shades. $\quad$ Pkt. 10 c ; $1 / 4-\mathrm{oz}$. 50 c DOUBLE GIANT SPECIAL MIXED.-Our own mixture, made up from separate shades so as to produce a blend of wide range and rare and rich colors.

Pkt. 15c; 1/4-oz. 75c

## New Double Giant-_' Novelties',

We offer two rich and rare colors that our grower has "rogued" and re-selected until almost true. Shrimp Pink, Apricot Orange, Lavender Orange and Gold and the new Rose Queen.

Pkt. 20c each; all five, 75c


## Picotee Double Zinnia-New

A new, distinct and remarkable class, of large and beautiful double flowers; very effective, showy and novel, as the edges of the petals are all well marked or tipped with a distinct color, different than the body of the flower. Effective as bedders and excellent cut flowers. Plants 3 feet high.
PICOTTE DOUBLE MIXED.-Very choice, Pkt. 15c; 1/8-oz. 50c
ELEGANS TALL DOUBLE MIXED.-A choice strain of medium-sized, double flowers ( $31 / 2$ feet). Pkt. 10c; 1/4-oz. 35c

## Improved Dwarf Zinnia,

Elegans Pumila.-This improved, large flowered, dwarf. double Zinnia makes very effective plants for bedding or borders; plants 12 to 15 inches, compact and free-flowering; very desirable.

Bright Scarlet, Golden Yellow, Salmon Rose, White or Mixed, all colors.

Pkt. 10c; 1/4-oz. 35c

## VERBENA

One of the finest bedding plants and also suitable for borders, baskets and window boxes; its heads of brilliant-colored flowers produce one mass of bloom throughout the summer. Although classed as H. H. Perennials, they flower freely the first season from seeds sown early.
NEW GIANT.-The most beautiful and remarkable variety yet introduced.
Hybrida Giant Mixed. Pkt. 15c; 1/8-oz. 40c MAMMOTH.-A carefully selected and improved strain. The trusses and individual flowers are of the largest size, of brilliant colors; free-blooming and of vigorous habit. Mammoth White, Scarlet, Rose-Pink, Purple shades or Mixed. Pkt. 10c; 1/4-oz. 50c
FINE MIXED.-A choice mixture of largeflowering sorts.

## VIOLET

Viola Odorata is the well-known English Violet, a free-flowering, hardy perennial; easly grown from seed, though somewhat slow in germinating; succeeds best in partially shaded moist places.
ODORATA.-Blue or White.
Pkt. 25c

## WALLFLOWER

Very highly prized, old-fashioned plants, beautiful, fragrant, early spring flowers; half-hardy perennial varieties; $11 / 2$ feet.

Single Yellow, Dark Red or Finest Mixed.
Pkt. 10c; $1 / 8$-oz. 25c
Double, Finest Mixed.-Fragrant; 3 feet.
Pkt. 15c; 1/8-0z. \$1.00
WILD CUCUMBER
(See Echinocystis, page 58.)

ZINNIA PLANTS.-Mixed Colors.-We will be able to supply in season well grown plants from our own select seed. ORDER EARLY and we'll send in PROPER SEASON. See page 78.

## BEAUTIFUL ORNAMENTAL FERNS, PALMS, ETC.

 A home, no matter how lavishly furnished, is not complete without decorative plantsand palms. The bold, majestic palms and delicate, feathery foliage of the ferns lend a
grandeur and magnificence that cannot be obtained in any other way.
READ THIS-Specimen Plants-These are large, choice, well-shaped plants, growing in
pots, and are very beautiful. They cannot be mailed. We wrap and pack carefully and ship
by express at your expense. Add $25 c$ extra for packing, on all plants in pots less than $\$ 1.50$.
OSTRICH PLUME (See cut)-The fronds of this popular variety are the most delicate and plume-like. They are beautiful, full and fluffy, well-grown plants; are truly magnificent and last well in the house.

Choice plants, 25 c to 35 c , postpaid Specimen plants in pots, $\$ 1.25$ to $\$ 2.00$ Extra large, $\$ 2.50$ to $\$ 3.50$

BOSTON FERN-One of the most beautiful and useful of house plants. It is of easy culture, and its sword-like fronds, in large specimens, attain a length of 3 to 4 feet, produced in a bewildering mass, arching, curving and interlacing in every conceivable direction.

Choice plants, 25 c to 35 c , postpaid Specimen plants in pots, 75 c to $\$ 1.00$

ASPARAGUS SPRENGERI (Emerald Feather) (See cut No. 1)-This is undoubtedly one of the handsomest and most valuable evergreen trailing plants for the house and conservatory ever introduced. It is espe. cially valuable for pots, vases, baskets, etc., covering all with its beautiful sprays of lovely green, feathery foliage; quite hardy and valuable for hanging baskets or porch boxes in summer if given partial shade and plenty" of water.

Choice plants, 20c to 35c, postpaid
Specimen plants in pots, 35 c to 75 c
ASPARAGUS PLUMOSUS (Climbing Lace Fern) (See cut No. 3)-A finer and more delicate plant than the Sprengeri, but hardy and easily grown. Very satisfactory for window and house culture. An extremely graceful window climber, bright green, feathery foliage, as fine as the finest silk or lace.

Choice plants, 20c to 35c, postpaid
Specimen plants in pots, 35 c to $\$ 1.25$


Kentia Palm (Specimen Plant)


Specimen plant, Ostrich Plume Fern, in a fancy jardiniere

## CHOICE TABLE FERNS

These handsome little ferns are dwarf in growth and are used mostly in filling fern dishes. It requires 4 to 6 to fill the average size fern filler. You probably have an empty dish that needs filling. We offer 4 kinds at $25 c$ each, 5 for $\$ 1.00$, postpaid.

## Jardiniers, Fern Dishes, Fancy Vases, Etc.

We stock a full line of standard, fancy and new styles Jardinieres, Flower and Bulb Pots, Japan Tubs, etc. See our stock before buying elsewhere.

## KENTIA PALM

A beautiful, graceful, handsome looking, stronggrowing palm, with deep green, crisp foliage; inclined to dwarf and spreading habit. One of the most popular for home culture, as they are very hardy, and stand the dry atmosphere. If we could have but one palm, it would be a Kentia. (See cut) Prices-Small plants $\$ 1.00$, postpaid. Choice plants in pots, 18 to 24 in., $\$ 2.50-\$ 3.00$. Specimen plants, $\$ 5.00$ to $\$ 15.00$.

## RUBBER PLANT

## (Ficus Elastica) (See cut)

This is certainly one of the best plants grown for decorative purposes. It succeeds well with ordinary treatment. Its glossy, thick, dark-green leaves are not affected by dust or gas. Prices-Small plants, postpald, $\$ 1.00$. Choice plants in pots, not mailable, 15 to 18 in ., $\$ 1.50$; 2 foot up, $\$ 2.00$ to $\$ 5.00$ and up.

## REX BEGONIAS

Grown for the beauty of the foliage. The leaves are large, variegated and margined. Most varieties have a peculiar silver-metallic gloss. One of the most ornamental of wincow plants. Very popular and easily grown. Prices-25c each; 3 sorts, 65 c , postpaid. Large plants in pots, 75 c to $\$ 1.00$. Not mailable.

## FLOWERING PLANT COLLECTIONS

On this and the two following pages we offer plant collections grown especially for our out-of-town custom'ers. All orders for these plants are sent direct to the green house where they are gathered, packed and wrapped with special care so they will travel in safety by parcel post. Every plant is carefully labeled. Order any time; we'll send "in season."

## 1923 Collection-Twelve Grand Single Geraniums <br> Price 15 c each; set of 12 varieties, $\$ 1.50$ postpaid

Alice of Vincennes.-Pure white, shaded to pink and bordered with bright scarlet. A splendid fancy geranium.
C. W. Ward.-Rich salmon, shaded to orange. Large trusses on strong stalks. Magnificent zoned foliage.


Eugene Sue.-A rare color; russet orange, yellow and salmon-red.

Jacquerie.-Rich, vivid crimson; immense trusses. Excellent for bedding. Blooms freely; stands the sun well.
Mad. Chapotan.-Beautiful pink upper petals, marked with white; very pretty.

Madame Mosnay.-Peculiar shade of carmine lake, shaded to violet and white.

Maxine Kavolenski.-Odd shade of orange red, very distinctive; splendid bedder, vigorous, handsome; a dependable sort.

Miidred Rival.-Pure rose-pink, with conspicuous white blotch on two upper petals; flower beautifully formed, and the largest of its color.

Mrs. A. Blanc. - Silver salmon, shaded peach; glistening texture.
Mrs. E. G. Hiil.-Very large trusses; color clear salmon, with a white center; one of the finest varieties.

Mrs. J. M. Garr.-Beautiful free-flowering white variety, as pure in color as driven snow. Always in bloom.

Van Benders.-Fine, large flowers; lower petals rich violet, bordered with scarlet, upper petals orange scarlet; very distinct.

## Golden Dawn Collection Twelve Grand Double Geraniums

Price 15 c each; set of 12 varieties, $\$ 1.50$ postpaid

Alphonse Ricard.-Rich, velvety scarlet, extra large and brilliant.

Dr. Phillips Tissie.-Bright scarlet, shaded to pure white in center; a fine, fancy sort.

Golden Dawn.-Rich orange scarlet, bordering upon shade of yellow. The nearest approach to yellow in geraniums.

Madame Barney.-Rich, deep shade of rosepink. Very bright and effective.

Clos Fieurie.-Semi-double, orange-red, large flowers, strong, healthy grower. Rosy salmon, shaded and reticulated with white; very distinct.

Madame Landry. - Rich, bright apricot, shaded with orange; very large trusses. One of the best.

Madame Recamier.-Ivory white flowers in very large trusses. Strong, healthy grower.

Mrs. Lawrence.-Lovely satiny pink, shaded to white; its delicate color is delightful. A grand bedding variety.
S. A. Nutt.-The best of the rich, dark crimson varieties; very popular.

Scarlet Bedder.-Rich, bright scarlet; fine large trusses, borne in great freedom.

Thos. Meehan.-Rich, purplish rose color, upper petals marked with orange. A rare new color among geraniums.

Virginia. - Fine trusses of apple-blossom pink, shaded to white in center. Beautiful new sort.

## Lady Washington Collection English Show Pelargoniums

These are commonly known as Lady Washington Geraniums. Like geraniums, they flower during the summer months and are very ornamental either as house or bedding plants.

Price 30 c each; set of 6 sorts, $\$ 1.50$ postpaid

Agatha. - Pale lavender, shaded delicate pink; showy maroon blotch on two upper petals.

Duchess of Portland.-Lower petals vinous cerise, shaded with vermilion. Upper petals cerise, veined crimson, with two large maroon blotches.

Easter Greeting.-A new, free-blooming variety of the greatest merit. Flowers amaranthe red, with a well-outlined maroon blotch on each petal. Blooms very large and in good-. sized trusses.

Lavender Queen.-A choice, clear lavenderpink, with a maroon blotch on two petals.

Linda.-Bold flowers of clear salmon-pink, feathered maroon on upper petals. One of our finest sorts.

Victoria.-A beautiful variety, white, center shaded to pink. Two upper petals blotched and feathered with maroon.

[^17]
## CARNATION PLANTS

For beauty, fragrance and abundance of flowers, for its hardiness, easy culture and adaptability to outdoor or indoor cultivation, no plant excels the ever-blooming Carnation.


## Wonder Collection Carnations

Price 20c each; 10 for $\$ 1.50$, postpaid
We have selected the varieties in this collection with much pride to ourselves, believing that we are giving to our patrons a set of Carnations which for general planting cannot be excelled. All have flowers of large size, strong and healthy growth and very freeblooming qualities.

Alice.-Delicate flesh pink; very sweet.
Aviator.-Rich, bright scarlet.
Bonora.-White, flaked with scarlet.
Beacon.-A brilliant, deep scarlet.
Enchantress.-A superb flesh pink.
Harlowarden.-Deep crimson maroon.
Mrs. A. Roper.-Bright rose color.
Mrs. C. W. Ward.-Bright, glistening pink.
White Enchantress.-A beautiful white.
White Wonder.-Glistening pure white.

## 1923 COLLECTION GIANT JAPANESE CHRYSANTHEIMUMS

## Price 15 c each; sets of 10 sorts, $\$ 1.25$ postpaid

Charles Raser. - Elegant snow -white incurved blooms of fine size and build. Comes on long, stout stems, grandly clothed with luxuriant foliage.

Chrysolora.-In our field trials during the past season this variety stood out pre-eminently as the finest yellow in the collection. Large, incurved flowers, of elegant form.

Chieftain.-A beautiful broad-petaled, incurving variety, round and ruffled. One of the prettiest forms.

Greystone. - Fine, large, incurved, broadpetaled blooms of a beautiful shade of chamois bronze. Very distinct new color and much admired.

Golden Eagle.-Large in size, perfect in form and a superb golden yellow in color.

Harvard.-Produces a good, meduim-sized bloom of the darkest shade of crimson.

Orange Queen.-Broad, incurved petals of heavy substance. Very large and perfect.

Mancato.-An enormous exhibition variety with perfectly double flowers. Color, rosy purple.
C. H. Totty.-Very large, with broad, incurving petals of a rich terra-cotta color, shaded with bronze. One of the most striking sorts we have yet seen.

William Turner.-Pure white in color. It is enormous in diameter, deep in build and very perfect in form.


Japanese Chrysanthemum

## GLORY COLLECTION NEW ENGLISH GARDEN CHRYSANTHEMUMS

To those persons who have planted the late flowering sorts and failed to get them into bloom before frost, these new imported sorts will appeal. All will flower readily in the garden during September and October. Flowers smaller than above, but prettier for bouquets.

## Price 15 c each; full collection of 10 sorts, $\$ 1.25$ postpaid

Camille Bernadine.-Large, fluffy flowers of violet and carmine color, shaded with white.

Charles Gerard.-Gracefully formed flowers of a rich, bronzy yellow, overlaid with tawnyred. A beauty.

Brutus.-A very free-flowering sort of dwarf habit. Color, terra-cotta and bronze. Rich and handsome.

Glory of Seven Oaks.-Deep golden yellow, very free flowering. Excellent dwarf habit.

Groachers Crimson.-Large, handsome flowers of a rich shade of crimson. Blooms very early.

Leslie.-Light canary yellow, covered with its pretty flowers early in the fall.

Mignon.-Rosy pink, shaded silvery. Strong, vigorous grower and very free.

Nina Blick.-Rich golden bronze, shaded to yellow. Dwarf, spreading habit and free flowering.

Normandie.-Delicate shell pink flowers of wax-like texture. Fine for cut flowers. One of the best of this type.

Queen of Whites.-Showy white flowers cover the plant early in the fall. A gem in the garden.

## BEAUTIFUL FLOWERING BEGONIAS

Probably the most satisfactory class of plants for house culture obtainable. Of easiest possible culture. The waxy flowers produced in much profusion, together with their handsome foliage, make them most desirable subjects for the window garden.

Price 20c each; full collection of 6 for $\$ 1.00$, postpaid


#### Abstract

Bertha Chaterocher.-Covered all the year with bright scarlet flowers; handsome green foliage. A fine house plant.

Alba Picta.-Pretty ovate shining green foliage; myriads of pure white flowers; bushy growth. Fine pot plant.

Foliosa.-The freest-flowering Begonia we have; makes a handsome window plant; bright flowers, glossy green foliage.

Gloire de Chatelaine.-Glossy green ovate leaves, flowers white, heavily bordered with rose pink. A grand new variety from France.

Marguerite. - Foliage bronzy green, with purple cast on under side. Large, pure white flowers in good size panicles.

Thurstoni.-Large bronze green leaves, pur-plish-red on reverse; rosy-white flowers in large panicles; very choice.


REX BEGONIAS.-See page 74


Glorie de Chatelaine

## GEM COLLECTION CHOICE FUCHSIAS

This graceful class of plants make especially fine subjects for house culture as well as for planting in the garden. They are almost continuous bloomers and are very easily raised. The single varieties are the most floriferous, while the double sorts bear the larger flowers.


Fuschia

Price 15c each; collection of 6 sorts, 75c
Annie Earle.-Tube and sepals waxy white, corolla single, clear carmine; plant splendid and free blooming.

Purple Gem.-Rich, dark blue corolla, with crimson sepals. A beautiful double variety, seldom out of bloom.

Phenomenal.-Flowers very large, corolla plum color, tube and sepals crimson; one of the finest double varieties.

Little Beauty.-A dwarf growing double variety, producing with great freedom small flowers of great beauty. Purple corolla with scarlet sepals. A little gem.

Mrs. E. G. Hill.-Superb double white variety; tube and sepals bright scarlet; corolla large, double and waxy white.

Speciosa.-A winter-blooming variety of large size; tube and sepals blush, corolla bright crimson.

## DOUBLE FRINGED PETUNIAS

Double Petunias make excellent bedding plants as well as being suitable for window boxes and tubs. The flowers are quite double, nicely fringed, about three inches in diameter and are producd freely all through the summer months. We offer a set of six choice varieties.

Price 25c each; collection of 6 sorts for $\$ 1.25$

Rosabella.-Beautifully variegated white and pink.

Harold.-Pure white blotched with purple; petals heavily lacinated.

Snowball.-A beautiful pure white sort with finely fringed petals.

Undine.-Large self-colored flowers; color reddish purple. Very rich and handsome.
Gertrude.-A fine new white with a showy pink center.

Magnifica.-A lovely pink with a white edge.

## TENDER TRAILING AND CLIMBING PLANTS

Cinnamon Vine.-A beautiful vine of rapid growth, suitable for porches, trellises, etc.; pretty white flowers of cinnamon-like fragrance. One of the very best quick-growing vines. Large roots. Each 20c, 2 for 35c
Maderia Vine.-A fine, rapid growing vine producing an abundance of dense green foliage; succeeds in any location; good for rockeries, trellises and verandas.

Each 20c, 2 for 35c
Lantana Delicatissima.-The Weeping Lantana; lilac-pink flowers all season; fine basket plant.

Each 20c, 3 for 50c

Mesembryanthemum Spectabilis. - Quilled shaped, succulent leaves with large single thistle-like cerise pink flowers; fine for baskets, vases or porch boxes as well as a good bedding plant; flowers continuously.

Each 20c, 3 for 50c
Smilax.-Well known climber for house culture.

Tradescantia (Wandering Jew).-Good vase and basket vine. Two sorts, green leaved and pink variegated.

Each 20c, 3 for 50c



#### Abstract

During April, May and June we have thousands of flowering and ornamental annual plants. Write for 100 prices, naming kind and size wanted.

BY MAIL.-If you add 3 c each or 30 c per dozen we will prepay charges on above plants excepting those from pots (3 inches or over), which cannot be mailed safely and must go by express, you to pay transportation charges. NO PLANTS SENT C. O. D.


## For description see Flower Seed Department of this catalog

| rantum- | Doz. |
| :---: | :---: |
| Blue or mixed............. 3 for . 25 | 60 |
| Alyssum- |  |
| Sweet . . . . . . . . . . . . . . . . . 3 for . 20 | . 50 |
| Anthirrhinum (Snapdragon) |  |
| Mixed ...................... 3 for . 30 | 1.00 |
| Named kinds (see page 79) |  |
| Aster- |  |
| Giant Crego, white, pink, purple or mixed ............... 3 for .20 | 50 |
| Candytuft- <br> Mixed or white ............. 3 for 20 | . 50 |
| Carnation- <br> Named varieties (see page 76) |  |
| Chrysanthemum- |  |
| Named varieties (see pages 76-82) Cosmos- Each. | Doz. |
| Single-Red, pink, white or mixed ........................... . 10 | 75 |
| Double Crested-New-Mixed... . 15 | 1.00 |
| Cobea Scandens- |  |
| From 2-inch pots.............. . 20 | 2.00 |
| From 3-inch pots ............. . 25 | 2.50 |
| Coleus- |  |
| Choice colors, 2 -inch pots...... . 20 | 2.00 |
| Choice colors, 3 -inch pots...... . 25 | 2.50 |
| Dracenia Palm |  |
| Small 50c; large, 18 inches and up, 75 c to $\$ 1.50$. |  |
| Geraiums-(See collections, p. 75 Each. for named kinds. Single or | Doz |
| double varieties in scarlet, salmon pink, light pink or |  |
| white or Ivy Leaved trailing. |  |
| From 3-inch pots............ . 20 | 2.00 |
| From 4-inch pots............ . 25 | 2.50 |
| From 4-inch extra select plants in full bloom........ . . 30 | 3.00 |
| Pelegonium (Lady Washington) (See collections, page 75.) |  |
| $\underset{\text { boxes.) }}{\text { German }}$ Ivy-(For baskets and |  |
| 2-inch pots.................... . . 15 | 1.50 |
| Heliotrope- |  |
| Blue ........................ . 10 | 1.00 |
| From 3-inch pots. . . . . . . . . . . . . 20 | 2.00 |
| From 4-inch pots.............. . 25 | 2.50 |

Lobelia- Each. Doz.
Compacta or Trailing....... 3 for . 20 .....  50
Marigolds-
African-Double mixed.
French-Double, Tall or Dwarf,mixed ..................... 3 for . 20 50
Pansy- ..... Doz.
Choice plants, blooming age, postpaid ..... 60 to .75
12 in a basket, Steel's Masto-done in full bloom, by ex-press only (charges collect) 1.00 to 1.50Petunias-(See collections, p. 77.)
Single Ruffled Giants in mixedcolors only.................... . . 1075
Single, pink or purple. ..... 2.00
From 3-inch pots ..... 2.50
Phlox-
Annuals mixed ..... 60
Single, hardy perennial (Seepage 84)
Salvia (Scarlet Sage).-
Splendens, tall ..... 75
Zurich, a Fireball, new dwarf. ..... 1.00
3 -inch pots ..... 2.00
Salpiglossis- Emperor, mixed colors ..... 1.00
Stocks-
Fine mixed colors.......... 3 for . 20 ..... 75

Verbena-
From 2 -inch pots ..... 75

| Fine mixed. . . . . . . . . . . . . 3 for | .20 | .75 |
| :--- | :--- | :--- | :--- | :--- | ---: |
| From 2 -inch pots . . . . . . . . . | .15 | 1.50 |

Vinca-
Variegated, from small pots.... . 15 1.50
Variegated, from large pots ..... 2.50
Zinnias-
Giant and Dwarf Mixed.... 3 for . 25 ..... 75
Giant-Separate colors....3 for . 25 ..... 1.00
New Dahlia Flowered-Mixed.. . 10 ..... 1.00
Plant Tubs or Japanese Kegs
Filled with large flowering plants andvines for porch or garden display 3.00 to 5.00
Hanging Baskets
Filled with large flowering plants andvines. (Cannot be shipped
safely)


Snapdragon

## NEW ENGLISH SNAPDRAGON

Anthirrhinum.-These new varieties grow about $11 / 2$ feet high and flower continuously all summer. The flowers are closely set in large spikes and cover a wide range of color. Snapdragons are one of the very best bedding plants and are very popular at present. They can be planted annually like geraniums but are hardy west of the Cascades and will thrive the second year outside.
Price, 15c Each; $\$ 1.50$ per dozen; $\$ 10.00$ per 100.
Full Collection, 1 each, 6 kinds, 75 c postpaid
Enchantress.-Exquisite almond blossom pink. Very large, closely set on fine strong stalks. Early and very free blooming.

Flame.-Brilliant orange scarlet flowers in fine, strong spikes blooming with great freedom. A blaze of color.

Golden Queen.-Rich golden yellow flowers of fine size on heavy close set spikes. Very striking bedding variety.

Golden Morn.-Raspberry red and old gold with golden yellow lip. A beautiful combination of color. Very distinct.

Matchless.-Large spikes of brilliant apricot color with golden yellow throat. Very effective when massed in groups or borders.

White Queen.-Large spikes of pure white flowers, produced with great freedom. Splendid for borders and beds.

## TUBE ROSES

## AMARYLLIS

These hardy flowering bulbs are very popular for pot culture and garden. Their giant Lily-like flowers produced on tall stems are exceedingly rich and lasting. For pot culture, 1 bulb to a 6 -inch pot. In the garden, plant 1 foot apart and cover bulb about 4 inches.

BELLA DONNA.-Beautiful pink, large flowers; hardy, fall bloomer. Best for garden.

Each 35c
VITTATA HYBRIDS.--Produce superb and gorgeous flowers during spring and summer in shades of pink, scarlet and maroon, marked with white. Best pot variety.

Each \$1.00

## CALLA LILIES

The Calla is one of the best winter flowering plants for room culture, needing little care beyond abundant water and an occasional washing of the leaves to keep them free from dust. Plant one bulb in a 6 -inch pot. As soon as it starts growing bring to the light and heat and the result will be most satisfactory.

WHITE CALLA - The most extensively grown; bulbs in season from September to May. Choice buibs, 15c; large 20c Extra large, 35c; 3 for $\$ 1.00$

NEW GODFREY-Plant is more dwarf in growth; flowers lily white, very graceful and produced in astonishing numbers; come into flower quicker; will also do well in the garden for summer flowers.

Each 30c; 3 for 75c
YELLOW ELLITIANA-This new Yellow Calla is of marvelous beauty; flowers are large rich, dark golden yellow, of ten 4 to 5 inches across the mouth; leaves are beautifuly spotted with white. Bulbs in stock from November to May. (See cut.)

Select bulbs, each 35c; 3 for $\$ 1.00$

A very desirable and most easily grown summer flowering bulb. Easily recognized by its exquisite fragrance and beautiful spikes of white flowers, which are borne on long stems, making it an admirable cut flower for house decoration. If started in pots and then transplanted to open ground, can be had much earlier. For flowering in the open border, plant in the spring after the ground becomes warm.

## EXCELSIOR DWARF PEARL-

Select bulbs, each 10c; doz. $\$ 1.00$


Yellow Calla Lily

## BEAUTIFUL HARDY LILIES

These are the most fragrant, beautiful and stately of all flowers produced from bulbs; they require very little care. Do not disturb them oftener than every three to five years. Plant about six to twelve inches deep, according to size of bulb, and if the ground is not well drained use plenty of sand around the bulb, and lay it on its side. Plant in clusters or groups of six or more for best effect. They increase in size and beauty each year.

AURATUM-The gold-banded lily of Japan. Immense flowers, borne in great clusters; color, rich, creamy white, thickly spotted with crimson and brown, each petal having a golden yellow band through the center. (See cut.)

Each 35c; doz. $\$ 3.50$
SPECIOSUM ALBUM-Pure white flowers with a greenish band through the center of each petal. They are of great substance and very fragrant. Hardy and sure to bloom.

Each 40c; doz. $\$ 4.00$
SPECIOSUM RUBRUM (Roseum)-The blush pink petals are thickly dotted with rose or crimson spots. This hardy, strong growing sort is sometimes called "Crimson Branded" and is considered by many the most satisfactory for garden cultivation.

Each 35c; doz. $\$ 3.50$
TIGRINUM FLORA PLENA - The doubleflowered Tiger Lily. Bright orange colored flowers. Each 30c; doz. \$3.00
TIGRINUM SPLENDENS (Improved Single Tiger Lily)-Has very large flowers of excellent form, color orange-salmon, with dark spots; hardy and a free bloomer.

Each 25c; doz. $\$ 2.50$

## Easter Lily

Pure pearly white, deliciously fragrant, and a remarkable profusion of bloom characterize this charming and celebrated Easter Lily. Without exception, it is one of the most valuable bulbs for winter flowering in the house. It is a magnificent variety for church decoration at Easter, and tens of thousands are grown for this purpose alone. Our bulbs are the best obtainable. Popular flowering size.

Each 35c; 3 for $\$ 1.00$
Extra largs bulbs 40c


## Lilium Candidum

ST. JOSEPH or MADONNA LILY.-This is the ever-popular, fragrant, snow white, hardy garden Lily. The large, trumpetshaped flowers are produced in clusters at the top of 4 to 5 -foot stems; blooms in the open ground in June. Makes a stately, majestic display.
Mammoth Bulbs:
Large:
Each 40c
Each 30c; doz. $\$ 3.00$

## Mt. Hood Lily

## LILIUM WASHINGTONIANUM

A beautiful lily, native of Oregon. Flower of open trumpet form; white, tinted with lavender pink; grows 3 to 5 feet high. The beautiful, fragrant flowers are freely produced in graceful clusters. Few lilies surpass it and it deserves to be planted much more extensively.
Each 25c; 3 for 60c; extra large bulbs, 35c; 3 for \$1.00.

## LILY OF THE VALLEY

One of the most charming spring flowering plants, producing in profusion its delicate, bell-shaped, delightful fragrant, white flowers. Valleys thrive in any common soil, and will do well in shady situations, where few other plants will succeed. Highly prized for cutting purposes, and exceedingly well adapted for flowering in pots in the winter. Plant 6 pips to a 6 -inch pot.

They are perfectly hardy and most charming planted in beds or borders around the lawn, where they can remain, increase and bloom from year to yaer.
IMPORTED PIPS, for forcing indoors or
planting outside. Note.-First stock arrives
in December.
4 for 25 c ; doz. 75 c ; $100 \$ 5.00$

[^18]
## CHOICE HERBACEOUS PAEONIES

Fine, hardy plants, rivaling the Rose in perfection of bloom, color and fragrance. They are at home in any climate or soil, but thrive best in deep, rich, well-drained loam. They make a gorgeous display. The Paeony is perfectly hardy. Plant in the fall or early spring and do not cover the crown of the roots over 2 or 3 inches.

Our collection of varieties is unsurpassed. Every one is a beauty of sterling merit. We send out strong roots for quick results.

PRICE: Postpaid-SPECIAL_full set of 13 fine sorts, $\$ 7.25$
LADY LEONORA BRAMWELL.-A grand,


Paeony Festiva Maxima
ANDRE LAURIES.-Dense, globular blooms of largest size; color dark tyrian rose, shaded to solferino red; a fine, strong grower, flowering very late in the season. One of our best varieties.

Each 50c
DELICATISSIMA.-A fine-shaped bloom of most perfect outline and exquisitely fragrant; color, clear rose-pink, shaded to silver. A splendid bloomer.

DUCHESS OF ORLEANS.-Fine, large flower, long stem, healthy grower, profuse bloomer; color, light flesh pink, with creamy yellow center. Rarely beautiful. Each 50c

EDOUARD ANDRE.-Large, massive flowers of a deep rich crimson color. Mid-season variety of great merit.

Each 75c
FESTIVA MAXIMA.-This is not only the finest white in existence, but in most quarters is regarded as the queen of all the Paeonies; it combines enormous size with wondrous beauty, often 7 to 8 inches in diameter; color, snowy-white, flecked with an occasional clear purple spot on edge of center petals; in addition it is very fragrant. A glorious flower, impossible to describe; magnificent.

Each 75c
FLORAL TREASURE.-Very large and full, clear pink, shading lighter at center; a splendid hemisphere of fragrance; long, strong stems to uphold the big blooms, sometimes 6 inches across. Very vigorous and floriferous.

Each 75c
GOLDEN HARVEST.-Beautiful mingling of white, cream, gold and pink; strongly fragrant. A splendid free-blooming variety of the highest degree of merit.
mid-season sort, with large, massive, silverpink flowers, borne on stout stems clothed with heavy green foliage. The most fragrant of all Paeonies. One of the finest sorts extant.

Each 75c
L'ESPERANCE.-Very double; fine shaped bloom; perfect in outline; exquisitely fragrant; color clear, fine, bright pink. Each 50c

MAD. DE VERNEVILLE.-Pure white, with edges of some petals bordered carmine; early, free and exceptionally fine. One of the very finest white Paeonies. There were 65 large, perfect blooms counted on one plant last June.

Each 75c
MARIE LEMOINE.- Large, cup-shaped bloom of great substance and full, perfect form. Color milk white, with distinct sulphur yellow center. Some petals flecked with crimson. Fine, tall, erect grower, every shoot bearing several flowers. Blooms right after Festina Maxima.

Each 75c
NE PLUS ULTRA.-Exquisite peach pink, petals edged pure white. Very handsome flower, produced in great profusion. One of the best for cutting, because of its robust constitution and hardiness. Each 50c

QUEEN VICTORIA.-Large, full, compact bloom; opens flesh white, changing to pure white, center petals tipped with carmine spots. A grand white Paeony for any purpose. More of this is being planted for cut flowers than any other variety because of its lasting quialities when cut. The flowers can be kept six weeks in a cold storage room and still be fresh looking.

Each 50c


Dicentra-Bleeding Heart

## DICENTRA

## (Bleeding Heart)

An old-fashioned favorite; its long racemes of graceful, heart-shaped, pink flowers are always attractive. Perfectly at home in any part of the hardy border, and especially valuable for planting in the shade.

Small Roots 75c; Large $\$ 1.00$; very scarce

[^19]
## HARDY PERENNIAL FLOWERING PLANTS

No class of plants enjoy greater popularity at the present time than the Hardy Perennials. They have made rapid strides into public favor the past few years, until now they may be considered to have a prominent and a permanent place in our American gardens. Once planted, they require very little care, increasing in size of plant and profusion of bloom from year to year. Most varieties can be taken up, divided and reset every third year.

LARGE STOCKS-LOW PRICES-We are in a position to supply unlimited quantities at special prices and you will find our plants are strong and well rooted. Our prices must not be compared to Eastern lists, for our plants are all hardy, field grown, worth double the average stock sold. Limited space will not permit us to list all varieties we can supply. Ask for any special varieties wanted
PRICES.-All prices postpaid-10 times the each price is dozen price
Express, freight and call orders 25 c less in dozen lots


Anemone

## Anemone

JAPANESE-These beautiful Windflowers are one of the most important hardy plants. They begin blooming early in August and continue in full beauty until cut down by hard frost. Excellent for bouquets, lasting for days when cut; $21 / 2$ to 3 feet.

Each 30c; collection of 3 kinds 75c
Whirlwind-Best large pure white.
Alice-Lovely flowers, beautiful pink.
Prince Henry-Red; large, free flowering.

## Alyssum

Gold Dust (Saxatile Compactum) - Large heads of golden yellow flowers in May and June; silvery foliage; fine for rockeries; 10 to 12 inches.

Each 25c; 3 for 60 c

## Aquilegias

The Columbines are one of the most elegant and beautiful of hardy plants, producing their graceful spurred flowers on stems rising two feet or more above the beautifully divided foliage, and are highly prized for cutting: June to September.

Mixed-Very choice. Each 30c; 3 for 75c

## Asters-Hardy, Fall Flowering

Michaelmas Daisies.-Among the showiest of our late-flowering, hardy plants, giving a wealth of bloom during September and October. They grow freely in any soil. Fine for cutting. Lavender, heliotrope and blue flowers; 3 to 5 feet.

Each 25 c ; doz. $\$ 2.50$

## Arabis

Rock Cress-One of the most desirable of the very early spring flowering plants for edging and the rock garden. Forms a dense carpet, completely covered with pure white double flowers; 6 inches.

Each 20c
BLEEDING HEART.-See Dicentia, page 81.

## Bellis Perennis

English Daisy-Popular early flowering plants. Very pretty for small borders.

Double Red or White, Each 20c; doz. $\$ 2.00$
Mammoth-Extra large flowers in white or pink only.

Each 25c; doz. $\$ 2.50$

## Coreopsis

Lanceolata Grandiflora - Popular hardy plants. The flowers are a rich golden yellow, of graceful form and invaluable for cutting; the main crop comes during the latter part of June, but it continues in bloom the entire summer and autumn; it succeeds everywhere; $11 / 2$ feet

Each 25c; 3 for 65c

## Cantebury Bells

## (Campanulas-or Bellflowers)

One of the most popular hardy garden plants on account. of the beautiful clusters of long-stemmed, dainty yet large flowers. They are very showy. The "Calycanthema" are only "biennials."

PERSICIFOLA (Peach Bells)-Large clusters of drooping bell-shaped flowers during June and July; 3 feet.

Blue or White. Each 25c; doz. \$2.50
CALYCANTHEMA (Cup and Saucer Canterbury Bells)-A beautiful form of this favorite flower. (See cut, next page.)

Blue, Rose or White. Each 25 c ; doz. $\$ 2.50$

## Chrysanthemums

Thev produce a lavish profusion of blooms after most flowers are gone; very popular.

Hardy Pompom-Small ball-shaped flowers. We offer four colors. Field-grown plants. Yellow, red, pink or white.

Each 25c; 4 for 85c
BEAUTY COLLECTION POMPONS
Ten new named varieties, each distinct and beautiful. (Young plants in season from March to July). Full collection \$1.50, postpaid

## Doronicum

One of the most effective and very early spring flowering perennials, growing about 2 feet high, producing a profusion of Mar-guerite-like golden yellow flowers of much beauty and elegance. It is a splendid flower for cutting.

## Dianthus

Deltoides (Maiden Pink)-A charming creeping variety, with medium-sized pink flowers in June and July; especially suited for the rock garden or borders. Each 25c

Hardy Garden.-Mixed. Each 25c; doz. $\$ 2.50$

## HARDY PERENNIAL FLOWERING PLANTS—Continued NOTE.-25c plants are $\$ 2.50$ doz.; $30 \mathrm{c}, \$ 3.00 \mathrm{doz}$. See note top page 82

## Delphinium

## (Hardy Larkspur)

These are deservedly one of the most popular subjects in the hardy border, bold, attractive and highly prepossessing plants of easiest culture; perfectly hardy; 4 to 6 feet. Fine for cut flowers, June to November; when the first blooms are faded, cut all foliage close to the ground and a second crop will come. (See cut.)

Choice Mixed, all shades.
Each 25c; doz. $\$ 2.50$
Gold Medal Hybrids - Unquestionably the finest strain of hybrids from the best named varieties. Very large, two-foot flowers, spikes in beautiful shades of lavender, light and dark blue.

Each 30c; doz. $\$ 3.00$
Belladona-A free and continuous bloomer; flowers clear turquoise blue: very beautiful: long flower spikes. Each 30c; doz. $\$ 3.00$

Formosum-Dark blue, white centers; an old favorite; 3 to 4 feet high. Each 30c

> DICENTRA - BLEEDING HEART. - See page 81 .


Campanula-Calycanthema

## Digitalis <br> (Foxglove)

Old-fashioned, hardy, desirable plants with broad foliage and showy flowers borne on spikes. June and July; 4 to 6 feet.
Mixed colors.
Each 25c

## Forget-Me-Not

(Myosotis)
Palustris-A variety that is hardly ever out of flower; useful in a shady spot in the border.

## FUNKIA

(Plantain Lily)
Alba Variegata.-Leaves as handsome as a flower. A rosette-cluster of almost white leaves, lightly striped with green. Flowers pale lilac-pink on tall spikes. One of the very finest hardy plants. Each 25c; 5 for $\$ 1.00$

## Gaillardia

## (Blanket Flower)

Among the showiest and most effective of perennial plants, blooming continually from early summer on through the season. Grows 2 feet high. Flowers about 3 inches across,


Delphinium (Plant and Flower Spike)
dark red in center with rings of crimson and vermilion encircling same on a golden yellow ground.

Grandiflora.
Each 30c; 3 for 75c

## Geum

A showy border plant, growing about 18 inches high and producing all summer and fall brilliant double scarlet flowers in large clusters. This new variety is a fine advance from the older sorts heretofore grown. We consider this the finest red hardy plant.

Mrs. Bradshaw, Double.-Scarlet.
Each 30c; 3 for 75c Gypsophila

## (Baby's Breath)

Fine, delicate foliage. Minute white flowers borne in enormous quantity in open panicles during summer months. Be sure and have a few plants of this for cutting, as it works up beautifully in bouquets of other flowers; 3 to 4 feet.

Paniculata.

## Heuchera

Sanguinea (Coral Bells).-A compact bushy plant of robust constitution and easy culture, bearing during July and August graceful sprays of coral-red flowers in great profusion. Fine for cutting. Each 25c; doz. \$2.50

## Hemerocallis

Day Lily-Three feet; May and June. Flowers clear, full, yellow or orange; very fragrant; fine for outting.

Flava-Lemon yellow.
Each 30c
Fulva-Orange.

## Hollyhocks

Single or Double, in separate or mixed colors.

Each 25c; doz. \$2.50
Hypericum
(St. John's Word)
Moserianum (Gold Flower)-Of drooping, training nature. Fine for rockeries, etc. Free flowering. Rich golden-yellow; June to frost.

Each 25c; clumps 50c to 75c
LAVENDER.-See top page 85.

# HARDY PERNNIAL FLOWERING PLANTS-Continued NOTE.-25c plants are $\$ 2.50$ doz.; $30 \mathrm{c}, \$ 3.00 \mathrm{doz}$. See note top page 82 

## Phlox

Among the hardy perennial plants no class is of more importance than the Phlox, succeeding in almost any soil and position, and flowering through a long season. Excellent for cutting and decorating or for mass effects. Keeps well in winter.

## Standard Collection

A choice collection of standard varieties. Our selection.

Each 25c; 12 sorts, $\$ 2.50$

## Novelty Collection

New, rare and rich; flowers of largest and best types; very choice.

Your choice, each 30c; 1 plant of each variety (8), \$2.25, postpaid.

Asia-One of the most valuable recent introductions, a delicate shade of mauve, with a crimson carmine eye. Very free blooming.

Europa-A white variety with very decided crimson carmine eye; the individual flowers as well as the trusses are very large, er.tirely distinct.

Frau Anton Buchner-The finest white variety yet introduced, having the largest truss and individual flower; of dwarf habit.

General Von Heutsze-Immense trusses of very large flowers; color, the most brilliant salmon red imaginable. Simply grand.

Le Mahdi-Immense panicles of deep velvety purple flowers. Very rich and striking.

Rystrom-Exquisite rose pink, shaded to carmine. Large florets in immense trusses. A grand sort for massing.

Sir Edward Landseer-Rich bright crimson flowers in large panicles; 3 feet high. A rare and beautiful variety.

Thor-Beautiful shade of bright salmonpink suffused and overlaid with a scarlet glow. Distinct red eye and white halo. Of fine size and very free.

## Creeping Phlox

Subulata (Moss Pink).-An early springflowering type with pretty moss-like evergreen foliage, which during flowering season is hidden under a mass of pretty blossoms. Excellent for bordering, rockery and grave planting. Each 25c; 3 for 65c

Alba.-Pure white flowers Each 25c
Lilacina.-Pretty lilac.
Each 25c

## Poppy

Nudicaule (Iceland Poppy)-A beautiful class of hardy poppies. Flower stems about a foot in height, bearing elegant cup-shaped flowers, ranging in color from white to scarlet, but most valuable in the yellow and crange shades. Valuable for cut flowers, lasting well when cut.

Mixed All Colors, each 25 c; doz. $\$ 2.50$ ORIENTAL POPPIES
Fine subjects for massing or planting singly in the hardy garden; 3 feet. We offer some new kinds recently brought from England. Set of 3 sorts 80c

Salmon Queen.-Clear, beautiful salmonpink, elegant flower of fine size. Each 35c

Orientalis.-Very large flowers; bright red with a black blotch at base of each petal.

Each 25c; doz. $\$ 2.50$
Pentstemon
BFAARD TONGUE. - For description see
flower seeds, page 64.


Phlox Europa

## How's YOUR Lawn?

Read the following.
Routledge Seed \& Floral Co.
Dear Sirs: I have a beautiful lawn grown from your Evergreen Lawn Grass Seed. Others who made lawns here and bought their seeds in packages at the stores produced nothing. Their lawns were full of weeds and a failure. It pays to buy your "Highest Quality" seeds. $I$ am, respectfully,
MRS. FLORENCE STILLWELL.
LAWN GRASS and FERTILIZER.-Pages 39-49.

## Primroses Primula

English Primrose.-Pretty low growing plants bearing large numbers of beautiful flowers very early in the spring and having the old-fashioned cowslip fragrance so dear to the heart of every Englishman. The flowers are in a wide range of rich colors from golden-yellow to deep crimson maroon.

Mixed Hybrids- Each 25c; 3 for 65c
Vulgaris.-Canary yellow, very early, fragrant.

Each 25c
Obconica.-Tender house plant.
25 c to 35 c each

## Pyrethrum

Persian Daisy.-One of the most valuable of our early summer flowers; charming shades of color, and wonderful lasting properties as a cut flower; they flower in May and June and frequently in August and September the second time; the colors run into almost every shade, which makes them foremost of plants in this particular season.

Hybridium.-Mixed colors.
Each 25c; 3 for 65 c

PRICES.-All prices postpaid-10 times the each price is dozen price. Express, freight and call orders 25 c less in dozen lots.

## Lavender

Vera.-The true, sweet fragrant lavender. Flower stems always in demand.
Small plants 25c; large plants, 35c to 50c each

## Rudbeckia

(Golden Glow)
Indispensable for the hardy border; grow and thrive anywhere, giving a wealth of bloom, which are well suited for cutting.

Flowers beautiful golden-yellow; very double. Marvelous continuity of bloom from June till late fall; 6 to 8 feet.

Small plants 25c; large 35c
Saxifragas
Umbrosa (London Pride).-A low-growing, spreading sort, throwing up slender stems a foot high of pretty pink flowers in dainty clusters; small, dark evergreen leaves. A fine border for banks or rockeries.

Each 20c; doz. $\$ 2.00$
Megasea.-Very hardy and ornamental: leaves broad, round, deep green; 1 foot. Pretty flowers; very early. Each 25c; doz. \$2.50

## Shasta Daisy

Very large daisy-like flowers, often measuring 4 to 5 inches across, having three or more rows of petals of the purest white. Flowers produced in great. profusion on long strong stems. Very popular; 2 to 3 feet.

Each, small 20c, $\$ 2.00$ doz.; large 25c
Clumps 35c to 50c


Caucasica.-A choice hardy plant, thriving in any situation and producing fine umbels of beautiful lavender-colored flowers all season through; flowers very lasting, admirably adapted for cut flower purposes; grows 18 inches high. One of the finest perennials.

Each 25c; 3 for 65c

## Stokesia

Cornflower Aster (Cyana).-Handsome lav-ender-blue cornflower-like blossoms which measure from 4 to 5 inches-across. Desirable as a single plant or grown in beds 18 to 24 inches high, June to September.

Each 30c

## Sweet Williams

Of late years these have been greatly improved in form and habit. They produce a wonderful array of vivid colors in fancy patterns. Flowers in flat clusters, very showy and effective; 18 inches; are at their best during June and July.

Each 25c

## Tritoma

(The Everblooming Flame Flower)
Pfitzerii-Blooms from August to October. with spikes 3 to 4 feet high, and heads of bloom of a rich orange-scarlet, pruducing a grand effect either planted singiv in the border or in masses.

Each 30c

## Valeriana

Garden Heliotrope.-Decorative plant for the rockery, with strong heliotrope odor.

Coccinea Rubra.-Rose pink flowers; blooms in May; 2 feet high.

Each 25c

## Veronica

Rupestris.-A fine rock plant, growing 3 or 4 inches high, thickly matted deep green foliage, hidden in spring under a cloud of bright blue flowers.

Each 30c

## Vinca

Myrtle (Minor).-An excellent dwarf evergr $\quad \mathrm{n}$ trailing plant used extensively for carpeting ground under trees and on graves; small dark green 1 aves. Each 25c; doz. \$2.50

## Violets

Of all the delightful perfumes, that of the Sweet Violet is the most delicate and pleasing, and places this modest flower among our greatest favorites. They commence to bloom as soon as the cold weather comes in the fall and flower even more profusely in the spring.

Price, 20c each; collection $\$ 1.00$
Alaska.-Hardy and robust and producing in spring great masses of enormous double flowers of a deep blue-black color and powerful tragrance.

Lady Hume Campbell.-Large double flowers of a beautiful light-blue color; very free blooming.

California.-Very showy and beautiful flowers; enormous size, deep violet-blue and extremely fragrant.

Princess of Wales.-Flowers single, of gigantic size; color, a very rich shade of blue.

Peacock.-This is a charming variety and pleases everyone. It has lovely flowers of white, shaded with light blue.

Swanley White.-The finest and best double white violet in cultivation.

## Wall Flower

Double English-A tine old hardy garden plant seen in every English garden. Grows about 18 inches high and produces early in the spring, rich colored spikes of bloom in various shades of yellow and brownish red.

Yellow or Red.
Each 30c
Mixed.
Each 25c; 3 for 60c

Yucca-See Page 105
FOR BEST RESULTS, plant these hardy perennials in the fall or early in the: spring before new growth gets too far advanced.

## ROUTLEDGE SUPERB GLADIOLUS BULBS

The most popular and desirable of all garden bulbs. Nothing else that we know of grows and blooms so readily in any soil or climate. With ordinary care and attention they make a display in the garden unequaled by any other bulbous flower. For prize-winning blooms, plant in rich soil, cultivate well and give plenty of water. Can be planted at any time from March to July 4. Plant 3 to 4 inches deep and 6 to 8 inches apart.


AMERICA.-Soft flesh pink, large flowers. Panama is more popular with florists.

3 for 25c; doz. 75c; $100 \$ 5.00$
BARON HULOT.-Rich indigo-blue, gracefull spikes; a rare and attractive color. Very effective with yellow. Each 10c; doz. \$1.00

FIRE KING.-Brilliant fiery scarlet, a wonderful color. Long graceful sprays.

Each 15 c ; doz. $\$ 1.50$
HALLEY.-Large, clear coral or salmon pink, enhanced by pale yellow in the throat; graceful spikes. Early. Very popular.

3 for 25c; doz. 75c; $100 \$ 5.00$
INDEPENDENCE.-Clear salmon pink vigorous grower. Handsome blooms late in the season. 3 for 25 c ; doz. 75 c ; $100 \$ 6.00$

LIEBESFEUER.-One of the best scarlets, brilliant and effective. A prize winner.

Each 20c; doz. \$2.00
L' IMMACULER.-A grand, pure white extra long spike and many flowers open at a time. Quite early. Each 20c; doz. \$2.00

MRS. FRANCIS KING.-Very large, open flowers of great merit, light scarlet or flame color.

3 for 25 c ; doz. 75c; $100 \$ 5.00$
MRS. WATTS.-A beautiful rich velvety "Hadley Rose" red. A most pleasing flower in every way. Each 15c; doz. \$1.25; $100 \$ 8.50$

MARY FENNELL.-Deep lilac shading to lavender. Soft primrose yellow throat. Extra good.

Each 25c; doz. \$2.50
MRS. FRANK PENDLETON. - A lovely flushed salmon pink with a rich maroon blotch on lower petals; flowers of elegant form, very beautiful.

Each 15c; 3 for 35 c ; doz. $\$ 1.25$; $100 \$ 8.50$

NIAGARA. - A delightful cream shade, blending to canary yellow, throat splashed with carmine; enormous blooms.

Each 15c; 3 for 40c; doz. \$1.25; $100 \$ 8.50$
PANAMA (Improved America).-Soft, deep pink, brilliant silver-frosted effect; beautiful at night. Each 10c; doz. \$1.00; $100 \$ 6.50$

PEACE.-Immense pure white flowers with a touch of carmine in the lower petals; tall, graceful sprays.

Each 15c; 3 for 40c; doz. $\$ 1.25$; $100 \$ 8.50$
PRINCE OF WALES.-Lovely shade of apricot pink, suffused salmon-orange; handsome, large flowers. Early. Each 20c; doz. \$1.75

RED AMARILLIS. - Brilliant blood redflower of giant size and wonderful in form. The most gorgeous and attractive red; a prize winner. Delightful, graceful and showy. Each 25c; doz. \$2.50
SALMON QUEEN.-A really magnificent, salmon colored Gladioli; perfect spike and very large flower. Each 15c; doz. $\$ 1.50 ; 100 \$ 8.50$

SCHWABEN. - Magnificent, large yellow. Throat rich golden yellow, slightly shaded carmine. Wax-like flowers; most charming.

Each 15c; 3 for 40 c ; doz. $\$ 1.25$; $100 \$ 7.50$
WHITE GIANT.-A Holland introduction of great beauty and value. Large, graceful, pure white, splendid ruffled petals.

Each 30c; doz. \$3.00
YELLOW HAMMER.-Lovely pure yellow with a mark of red in throat. A beautiful variety for cutting. Each 20c; doz. \$2.00

## Gladioli in Mixtures

R. R.'s GOLD MEDAL MIXTURE.-This is a wonderful mixture of all shades and colors. Contains many high-priced varieties and novelties, all bulbs from the choicest large flowering types. Unequaled for price. Large, first size bulbs. Doz. \$1.00; $100 \$ 6.00$

PRIMULINUS MIXED.-See next page.

SUPERB CHOICE MIXED.-A very choice mixture of all colors in the large flowering popular Gladiolus and will give a wide range of color. First size bulbs. Doz. 75c; $100 \$ 4.50$

POPULAR MIXED.-A splendid mixture of many varieties. Smaller bulbs but all of blooming age.

Doz. 60c; $100 \$ 3.50$


White Glory

HIGHEST QUALITY GLADIOLI BULBS.-Remember, the Bulbs we offer are REAL "TOP", SIZE, healthy, vigorous and free of disease, WORTH DOUBLE most stocks sent out.

## 1923 RUFFLED GLORY COLLECTION

True stock direct from the originator and strictly first size bulbs.

In this Glory Collection, we offer five New Giant Ruffled Gladioli. Wonderful in size and type and really magnificent.

## ONE BULB EACH, 5 DISTINCT COLORS, $\$ 3.50$

WHITE GLORY.-A grand pure white with a beautiful delicate, iris-blue throat; a w.onderful variety. Each 60c; doz. \$6.00
ROSE GLORY.-A giant, beautifully ruffled, pure rose pink; deeper in the throat. Extra fine. (See cut, back cover.)

Each 75c; doz. $\$ 7.50$
GOLDEN GLORY.-A large, richly colored yellow with a beautiful throat. Flowers beautifully ruffled.

Each 75c; doz. $\$ 7.50$
PURPLE GLORY.-A giant, largest of all. Wonderful ruffled flowers gleaming darkly in their velvety richness; a rare color.

Each \$1.25; doz. \$12.50
ORANGE GLORY.-Grand orange color, throat lighter; very rich and striking color. Beautiful and distinct.

Each 75c; doz. $\$ 7.50$

## WONDER COLLECTION FOUR NOVELTIES

SPECIAL, 1 BULB EACH, 4 KINDS, ONLY $\$ 2.50$

WILLIS E. FRYER.-Deep violet, beautiful throat. Another new rich and rare color in much demand. The handsome flowers are large and beautiful and very graceful.

Each \$1.00; doz. \$10.00
LE MARECHAL FOCH.-Beautiful rich rose, extra long spikes, full open flowers; a strong, stately grower. Each 35 c ; doz. $\$ 3.50$

PRIDE OF LANCASTER. - A brilliant orange-salmon; rich, fiery, orange throat. Flowers beautifully ruffled on tall, massive spikes; magnificent variety, worth double the price. Each 75c; doz. $\$ 7.50$

ADRIATIC.-A new rich and rare colordeep wine blue, throat blue and red; an extraordinary variety that will attract much comment. Each 75c; doz. $\$ 7.50$

## PRIMIULINUS HYBRIDS

A new and beautiful race of Gladioli with slender, graceful sprays of dainty and delicate, yet quite large "butterfly" or hooded flowers, that are elegantly poised on the flower spike. Novel and artistic, excellent for vases. They come in varied and beautiful tints of yellow, pink and orange-salmon shades, distinct and charming, the last word in Gladioli for dainty decorations.

## Six Choice Named Primulinus

SPECIAL.-1 each kind for $\$ 2.00$; 3 each, $\$ 5.50$.
ALICE TIPLADY. - Large, choice flowers of a beautiful saffron color.

Each 35c; 3 for $\$ 1.00$
ARLON.--Very large, light salmon, grand red throat with scarlet lines; very showy. (See cut.)

Each 45c; 3 for $\$ 1.25$
FIREFLY.-Bright rich scarlet; a rare shade, very showy and desirable.

Each 45c; 3 for $\$ 1.25$
MYRA.-Large flowers for this type. Deep salmon over yellow ground, yellow throat with pink lines; very beautiful. Flower petals thin and silky.

Each 50c; 3 for $\$ 1.25$
ANITA.-Tall, graceful spike. Flowers rich canary yellow, deep yellow throat; very choice.

Each 30c; 3 for 75c SWEET ORRA.—Pale sulphur-yellow; very pretty type.

Each 30c; 3 for 75c

## Primulinus Hybrids in Mixtures

BUTTERFLY MIXTURE PRIMULINUS.-A superb mixture of the most beautiful colors and types. Many new and rare unnamed varieties

3 for 50 c ; doz. $\$ 1.50 ; 100$ for $\$ 10.00$
CHOICE MIXED PRIMULINUS.-This mixture is equal to most and superior to many.


Arlon Primulinus

[^20]
## HARDY IRIS



Double Japan Iris

## LIBERTY IRIS

## Germanica

These are among the most desirable and easiest grown of our spring flowering hardy plants, producing in May and June their showy flowers of exquisite coloring, combining the richest and most delicate tints. They thrive everywhere and are always in bloom by Decoration Day.

## Prize Collection

New and distinct varieties of great beauty and handsome, large flowers.

Each 30c; 3 for 75c; fuil prize collection (8), $\$ 1.85$; per doz. assorted or straight, $\$ 2.25$. Caprice.-Beautiful shade of rosy red.
Crimson King.-Rich claret and purple.
Flavescens.-Large, fragrant, soft wellow.
Florentina.-Most popular early white.
Gypsy Queen.-Old gold, falls maroon.
Pailida Dalmatica.-Large pure lavender.
Prince Victor.-Beautiful blue, falls violet. Queen of May.-Rosy-lavender, almost pink.
LIBERTY IRIS IN MIXTURE.-Many fine varieties. Per doz. \$1.50; per $100 \$ 10.00$.

## MONTBRETIAS

Beautiful—Graceful-Rare. Try 'em Quite rare and not generally known. Allied to the Gladioli. Perfectly hardy here, but should be given protection or removed where winters are severe.

They are very beautiful, bright and showy summer and fall-flowering bulbs, delightful for vases. Flowers freely produced on, tall, slender, graceful stems. Height 1,8 to 24 inches. Flowers brilliant orange-red or salmon color. Plant 3 to 4 inches apart. cover $11 / 2$ to 2 inches. Plant plenty. See cut.

3 for 40c; doz. \$1.00; 3 doz. $\$ 2.25$

## JAPAN IRIS KAEMPFERI

These magnificent Iris are among the most beautiful of our summer-flowering plants, and are becoming more popular each season. They commence blooming about the middle of June and continue for five or six weeks. Many of these flowers measure from 10 to 12 inches in diameter and rival the orchids in their rich and brilliant colors, from pure white to darkest purple, many beautifully veined and blended with contrasting colors, producing effects that are truly marvelous. We have some of the finest varieties obtainable.

## New Novelty Collection

Four wonderful varieties of rare and rich colors. Each 75c; Coliection of 4 for $\$ 2.60$; Dozen, \$6.00.

MAHOGANY.-Large double flower, rich dark red, shaded maroon.

ENCHANTRESS.-Exquisite silky lavenderpink, with clear halo surrounding the yellow bloteh at base of petals. Fine and large.

RUFFLED MONSTER. - Very large and striking. Deep pinkish plum, heavily veined white surrounding the yellow blotch, fine ruffled form, beautiful.

TEMPLETON.-Double. Often triple; exceeding fine form. Light violet shade, mottled reddish pink and white.

## Mikado Collection

Selected from over 100 varieties, very choice. Each 25c; Collection of 4 for $\$ 1.25$; Dozen, \$3.50.

Golden Dawn.-A fine double pure white with a beautiful center of cream and gold.

Mikado.-Delightful light blue with darker shades and markings. Center bright orange.

Pyramid.-Double, rich violet-purple, veined white in center of each petal.

Victor.-Handsome double. White, veined purple, center violet purple.

SELECT MIXED.-Splendid range of colors. Many of them are above the average in quality. Fine for group planting. 3 for 75c; Dozen \$2.75.


## TUBEROUS BEGONIAS

Begonias cannot fail to give satisfaction if given well-drained soil and partially shaded situation

Single Mixed.
35c each; $\$ 3.00$ doz.
Double Mixed.
40c each; $\$ 4.00$ doz.

## CANNAS

Everyone knows the value and beauty of Cannas for bedding. Their large, massive, tropi-cal-looking leaves and magnificent flowers cannot be equaled in any other plant of such easy culture. Plant outside after danger of frosts is past, 18 inches apart, in rich, deeply dug, wellprepared bed ( 12 plants required for a 6 -foot circular bed). Plant the taller kinds in the center.

While there are many varieties of Cannas, we offer only the "very select"; they can be depended upon to be the most showy and desirable, with giant flowers,, elegant foliage and especially adapted to Western conditions.

PLANTS IN SEASON AT OUR STORE-(after danger of frost). Plants give quicker and better resuits than dormant roots.

## Our 1923 Collection New Cannas

Prices, 30 c each; $\$ 3.00$ per dozen postpaid, except as noted; Coliection of 8 sorts, $\$ 2.25$
City of Portland.-Beautiful glowing pink, deep and brilliant; magnificent growth, attaining height of $31 / 2$ feet; immense spikes of bloom. The finest pink Canna to date. Produced by the foremost Canna specialist and named after our city. Each 40c; doz. $\$ 4.00$

Firebird.-Flowers in immense trusses well above the foliage on tall stalks; petals of great breadth and substance, forming a magnificent flower; color, clear brilliant scarlet without streaks, spots or blotches; grows five feet high. A wonderful variety.

Each 35c; doz. \$3.50
Golden Gate.-Immense wide open florets of pure golden yellow, richly rayed with orangecrimson and apricot; throat deep carmine, mammoth spikes of bloom on stalks four feet high. A rare and beautiful new sort.

Jane Adams.-Immense heads of flowers of a rich buttercup-vellow-a solid color throughout; leathery dark-green leaves. 'A wonderful Canna.

Juanita.-A grand new bronze-leaved Canna growing to over four feet high and producing fine trusses of finely-formed flowers; color bronzy-orange and chrome-yellow. A wealth of color for bedding purposes.

Rosea Gigantea. - Deep, rich, dark pink, shaded to coral; immense spikes of bloom in great freedom; 4 feet.

The President.-Fiery orange-scarlet flowers of immense size in large spikes of bloom; 3 feet. Each 35 c ; doz. $\$ 3.50$


Canna Plant Well Grown
Wintzer's Colossal.-Immense bright scarlet flowers on massive footstalks. The largest flowered Canna yet produced; persistent and prolific bloomer; 4 feet.

## King Humbert Collection of Cannas

Prices, 25c each; $\$ 2.50$ per dozen postpaid; set of 12 sorts, $\$ 2.50$

David Harum. - Foliage bronze; great bloomer; flowers orange-scarlet; 4 feet.

Egandale.-Bronzy red foliage surmounted by fine spikes of currant-red flowers of great brilliancy. One of the best.

Gladioflora.-Orange pink with dashes of golden yellow on each petal; distinct yellow, throat mottled with pink. Beautiful; 3 feet.
Gladiator.-Golden yellow netted and spotted with orange scarlet. A popular bedder. Very handsome; 4 feet.

Hungaria.-Immense spikes of bloom of a beautiful light pink color; fine leathery leaves of massive proportions; $31 / 2$ feet.

Indiana.-Giant flowers of soft orange, lightened by flecks of gold, penciled and slightly margined with deep rose; 4 feet.
J. D. Eisele.-Bright vermilion scarlet, overlaid with orange; large flowers well above the handsome green foliage; 4 feet.

King Humbert.-Immense spikes of bloom of a bright orange scarlet streaked with crimson; magnificent bronzy-green leaves with brownish-green stripes; large, bold and effective; 5 feet.

Louisiana. - Beautiful and showy; green leaves edged bronze strong and healthy; very fine bloomer. The mammoth flowers are of fine form and a vivid scarlet; 5 feet.

Niagara.-Grows 3 feet high; large green foliage; flowers very large, deep, rich crimson, widely bordered with golden yellow.

Queen Helena (Yellow King Humbert).Immense spikes of golden yellow flowers spotted in throat with scarlet; massive green foliage. A grand variety; 4 feet.

Queen Charlotte.-A bright orange scarlet, deeply edged with bright canary-yellow. The plant is of dwarf habit, with flowers from June to October.

CANNA BEDS.-Set plants 18 to 24 inches apart; 12 plants will make a six-foot bed. Circle them with Salvia, then edge with Lobelia (see Bedding Plants, page 79), and you will have a wonderful effect.

NOTE.-A sack or two of 'C-M'' in the Canna Bed will do wonders towards making elegant growth and magnificent flowers. See page 39.


PAEONY FLOWERED DAHLIAS
One of the most popular classes of Dahlias. The form and style of the flowers vary greatly; some have flat petals, others are pointed and twisted in most fantastic style. All are beautiful and produced in profusion on long, slender stems; fine for cutting.

Andrew Carnegie.-Beautiful salmon-shaded bronze-pink; flowers of fine size, borne freely on long, straight stems.

Each 35c
Anna Doppenberg. - Grand novelty from Holland; large flowers of splendid form on strong, erect stems; color, pure sulphur-yellow. One of the finest Dahlias ever introduced.

Each 50c
Baron de Grancy.-Large, fluffy, pure white flowers, rising on long, slender stems far above the foliage. A gem for cutting

Each 30c
Bloemhoven.-Massive flowers of great size and depth with wide, heavy petals. Color lavender-pink throughout. Stout stems of fine length for cutting. One of the finest sorts yet produced.

Each 60c
Freda Newman. - Bright orange-bronze, margined with old gold; fine, long, stout stems. Admirable for cutting. Each 35c

Geisha.-The showiest and most attractive of this type yet produced; giant blooms of fantastic shape with broad petals curiously twisted and curled, forming a flower entirely original; color, bright golden-yeilow, suffused and marked with Indian red; harmonious and very striking.

Each 75c
Germania. - Fine large velvety wine-red flowers beautifully suffused with golden yellow towards the center.

Each 30c
Hi Gill.-Magnificent blooms of a rich golden-yellow, shaded with deep rosy copper; flowers massive, produced on very long, stout stems with a great freedom. One of the finest varieties in any class of Dahlias.

King Albert.-Broad, twisted petals in most artistic form. Flowers very large, of rich purple color. Very distinct from all other sorts and can be highly recommended.

Each 50c
La Riante.-Lavender pink, golden yellow center. Long, graceful petals beautifully curved and twisted. An ideal bedding variety.

Each 35c
Madame Von Bystein. - Holland variety with beautiful lavender-colored flowers; of large size and excellent form on fine, long stems.

Each 35c
Monschielbe. - Giant flower with broad twisting petals of a rich golden-yellow color; fine, sturdy grower and free bloomer; undoubtedly the finest sort of the color in this section of Dahlias.

Each 50c
Polar Star.-Snowy-white flowers in great profusion; stout stems. Fine for cutting.

Each 50c
P. W. Jansen.-Color, orange-cerise shaded yellow; heavy, wide petals, nicely arranged; flowers large and freely produced on stout, long stems. Each 35c

Phenomene.-Rich, creamy pink flowers on long stems; finely formed and very free flowering. A splendid sort.

Each 35c
Van Dyke. - Lovely salmon, rose-tinted, heliotrope; of immense size, of distinct twisted form; fine, long, stout stems. A grand exhibition variety.

Each 50c
Virginia Marshall.-A beautiful and delicately colored new variety, with curled and twisted petals of great size. Colors primrose, yellow faintly overlaid with rosy-lilac.

Each 75c

## CHOICE NEW CACTUS DAHLIAS

Of the various types of Dahlias those of the well-known Cactus form are undoubtedly the most important and best liked. There is a great diversity in the forms of the various sorts, but in the main they are characterized by the long, narrow, twisted and pointed petals of the flowers. Most of the fine petaled sorts are products of English hybridists who have worked wonders with them the last féw years. Distinct from the English types are the new Hybrid Cactus sorts, most of which are coming from specialists in Holland. The following fine novelties are undoubtedly the very acme of perfection in Dahlia growing.

## WHITE

Avalanche. - A gorgeous glistening pure white flower of the same type as Kalif. Very large on long, stout stems, holding the bloom stiff and upright. One of the finest white sorts yet produced.

Each 75c
Alabaster.-Blooms of large size, just sufficiently incurved in form to show to advantage when exhibited; flowers of the purest white.

Each 75c
Captain Scott.-A beautiful free-blooming white variety of the greatest purity of color. Petals very long and narrow. A constant bloomer all through the season. Each 30c

Snowdon.-Pure white Cactus Dahlia, having all the requisites of a good garden sort. Sturdy growing, free-blooming, long, stiff stems, finest form and good size. Each 40c

Schwan.-A fine pure white, of large size, perfect form and great substance, lasting well when cut.

Each 25c

## PINK

Sir Douglas Haig.-Narrow tubular petals incurving and twisting irregularly, forming an ideal flower; color, a lovely combination of pink shades; entirely distinct from existing varieties; good stems.

Each 75c
Miss London.-Finely formed flowers with tubular incurved petals, nicely pointed; color, deep rose pink; tips of petals tinted yellow.

Each 30c
Sentinel. - Huge flowers on good stems; color, rose-pink with a prominent white disc at center of bloom. Grand exhibition variety.

Each 50c
Hugh McNeil.-Brilliant dark pink flowers on erect stems and of finest cactus form. Very free.

Each 30c
Mrs. Stranock Gaskiil.-A delicate shade of exquisite pink; large, finely petaled; a rare novelty of great beauty.

Each 30c

## YELLOW_ORANGE

Falcon. - Long, rigid stems, with strong branching growth. Flowers of finest cactus form produced in great profusion. Color, gol-den-yellow shaded to reddish-branze at tips of petals. Splendid for cutting. Each 60c

Ursa Major.-An excellent fancy cactus dahlia of free flowering habit, producing large blooms, the ground color being clear yellow with bright scarlet markings. Very distinct and a charming variety.

Each 30c
Marguerite Bouchon.-Beautiful silvery rose, petals tipped waxy white with distinct white center. Very large and perfect, of fine Cactus form. Distinct and handsome. Each 50c

Mrs. Charles Cooper.-Flowers of the largest size and perfect Cactus form with long, very narrow petals finely arranged. Color creamy yellow flushed with salmon in the center.

Each 50c
Hibernia. - Bright primrose yellow, outer petals shaded with bronze; neat incurved form and an ideal habit of growth.

Each 35c


Falcon

## SCARLET_CRIMSON

Countess of Lonsdale.-Superb free-blooming Cactus Dahlia. Color an exquisite shade of rich salmon, shaded with apricot and carmine. Each 25c
F. W. Feliows.-This variety produces huge flowers with surprising freedom; of true Cactus form, with narrow curling petals; color, bright orange-scarlet throughout. Each 40 c

Harbor Light.-Orange-scarlet; one of the finest for cut flowers; dwarf habit, free bloomer, with large, -perfect flowers on long, stiff stems.

Each 30c
Herbert Raby.-A giant among Cactus Dahlias, the flowers being of mammoth size and held upon fine, erect, wiry stems; color, rich purplish crimson throughout.

Each 35c
Empress. - Huge flowers of true Cactus form, deep and massive. Color purplish crimson of striking shade. A fine exhibition variety.

Each 30c
Kaiif.-A majestic flower of exhibition size of perfect Cactus form, carried on strong, stiff stems; color, bright scarlet.

Each 50c
Patriot.-Glorious bright scarlet flowers of most perfect Cactus forms, produced in great profusion; fine stout stems. Admirable for cutting. A fine garden variety. Each 35c
W. E. Peters.-Deep scarlet crimson flowers of largest exhibition size; long, pointed petals are beautifully arranged, forming a magnificent incurved bloom; every flower comes perfect.

Each 50c
Reliance.-Very large typical Cactus formed flowers carried erect on stout, long stems. Color, brownish crimson of great richness of color.

Each 30c
Ferdinand Olivette.-A fine deep crimson color; flowers of fine form freely produced on strong stems.

Each 30c

## Corvallis, Ore. (No date.)

Routledge Seed \& Floral Co.
Gentlemen: I want to express my appreciation of the honorable way you have treated my order. The .last shipment of Geraniums is doing fine. "I thank you and like the "Routledge way."

MRS. D. M. JOHN

Corvallis, Ore., June 13, 1922.
Routledge Seed \& Floral Co.
Gentlemen: The kitten came today and I wish to tell you that I am thoroughly pleased with it.

Sincerely,
HELEN SNYDER.

## DECORATIVE DAHLIAS

In this class of Dahlias will be found those sorts which florists and gardeners prize most highly for cut flowers. These Dahlias are characterized by their strong erect growth and their very large, loosely formed flowers on strong, stiff stems far above the foliage.

Price, Field Grown Roots, 30c each; 4 for $\$ 1.00$ (except where noted)

Berche von Heemstede.-A large size, good stem. Color rich golden-yellow.

Delice.-Pure bright rose pink; beautiful form. Good cut flowers.

Doctor Tevis.-A prize-winner. Magnificent flowers in rich blending of copper, old rose and gold. Fine for exhibition and cutting. Each 75c
Eventide.-White, flushed rose-pink. Large size, perfect form, long stems. Each 50c

Frànz Ludwig. - Exquisite lavender-pink. One of the best for cut flowers. Each 50c

Garibaldi.-Very large, full flower, good stem. Rich bright scarlet. Each 40c

Glory of Leiden.-Rich crimson scarlet of velvety texture. Petals wide and recurving. Grand for cutting.

Each 50c
Hortlanus Fiet.-Colossal flower of delicate shrimp-pink, petals tipped with gold. Each 50c

Kaiserine Augusta Victoria.-Large, snowywhite flowers in great profusion, borne on stout stems.

Mina Burgle.-Immense deep, scarlet flowers of fine cut-flower, long stems. Keeps well.

Orange King.-Large orange-colored flowers on erect stems.

President Lincoln.-A beautiful light lavender. One of the best new Holland sorts.

Each \$1.00


Decorative Dahlia-Delice
Pride of California.-Bright scarlet, gigantic size. Exhibition variety.

Each \$1.00
Willmore's Masterpiece. - Honey yellow, overlaid with golden-rose or tango color. Superb, large flowers. Each 35c

## SHOW OR QUILLED DAHLIAS

In this section we have the Dahlias of our grandmother's garden, with their richly colored flowers of rounded form and quilled petals. Some are delightfully edged and splashed with contrasting colors, and all are as beautiful as it is possible to imagine for garden decoration. Field Grown Roots, 25 c each; set of 12 sorts, $\$ 2.50$ postpaid


Grand Duke Alexis
Skagway, Alaska, Jan. 17, 1922. Routledge Seed \& Floral Co.

Gentlemen: Pardon delay in acknowledging receipt of bird. He is a little "dandy" and we think he is a fine singer. Arrived in cxcellent shape and sang as soon as we put him in his cage. Many thanks for your attention to this matter.

Bon Maza.-White ground, streaked and marbled in a curious manner with bright red. Charles Lanier. - Very large and full. Golden-yellow, edged amber.

Clara Seaton.-Very large, round golden bronze flowers. Rarely beautiful. Each 40c

Dorothy Peacock.-Fine size and elegant rounded form. Color lively rose-pink.

Each 35c
Elsie Burgess.-Lovely flower, pure white flushed with lavender-pink. A gem.

Fireball. - Large, perfect flowers, with quilled petals. Color, rich, bright scarlet.

Grand Duke Alexis.-Large flower, heavily quilled. Pure white delicately shaded with lavender. One of the best. Each 35c

Maud Adams.-Color, pure white, overlaid with a light pink suffusion.

Lady Mildmay.-Pure white, shaded to delicate lavender. Very large and full.

Storm King.-Free-blooming; popular white show Dahlia. Flowers snowy-white.

Queen of Yellows.-Bright golden yellow, flowers as round as a ball.

Stella, Wash., Jan. 23, 1922.
Routledge Seed \& Floral Co.
Dear Sirs: I received the bird and cage and they were in fine condition, and $I$ am very much pleased with them.

Thanking you for your prompt attention, I remain,

Yours respectfully,
P. O. ANDERSON.

## Choice Rose Plants

For Spring and Early Summer Planting Only and NOT for Fall Delivery
On this page we are offering four choice collections. This is the popular mail-order size that we send by mail prepaid. They are grown in 3 -inch pots, are strong, healthy and well rooted and from 10 to 12 inches high. To be planted outside in the warm spring or early summer months.

These will produce many blossoms the first season, and you will be surprised at the results you can obtain, and at quite a saving in prices. Water well and use "C. M." and "Wonder."

NOTE.-Order any time convenient and we will forward "in season," April to July. NO ORDER FILLED FOR LESS THAN TWO PLANTS.


## Columbia Collection of New Roses

## Price, 40c each; set of 6 sorts $\$ 2.00$

Lady Hillingdon.-Deep apricot yellow, long pointed bud, a fine forcing or garden rose, excellent for cutting.

Hoosier Beauty.-Glowing crimson-scarlet with maroon shadings; beautiful buds on long stems; wonderfully free in bloom. A valuable new American rose.

Columbia.-Elegant shaped buds and flowers of a rich rose-pink color. Is making a fine record about Portland.

Ophelia.-Salmon, flesh, shaded rose, base of petals apricot yellow; fine shaped flowers; excellent habit.

Sunburst.-Without doubt the finest yellow rose in existence; large buds and flowers of an orange copper color, shaded golden-yellow; superb.

Rose Marie.-Beautiful shade of light pink with silvery suffusion; finely formed buds; very free and vigorous.

## Richmond Collection Choice Roses

## Price, 35c each; set of 12 sorts, $\$ 3.50$ postpaid

Franz Deegan.-Bright golden yellow flowers on fine stems.
J. B. Clark.-Rich crimson shaded maroon; very large and fine.
Killarney.-Deep shell pink, beautiful long buds.

Radiance.-Rich, bright cerise; handsome foliage and sweet scented.

White Killarney.-Most beautiful everblooming white rose in existence.

General McArthur.-Grand crimson scarlet. One of the finest.

Mad. Abel Chatenay.-Salmon pink, shaded darker. Always in bloom.

Mad. Caroline Testout.-The famous Portland rose; large, bold, bright pink flowers.

Maman Cochet.-Beautiful rosy pink; long pointed buds.

Richmond.-Crimson-scarlet buds. A beautiful free flowering variety.

Souv. de President Carnot.-Shell-pink and fawn.

White Maman Cochet.-Pure white; elegant buds.

## Beauty Collection Everblooming Roses

## Price, 30c each; set of 10 sorts, $\$ 2.50$ postpaid

American Beauty. - Large rosy-crimson flowers; sweet-scented.

Dean Hole.-Bright carmine with silvery shadings.

Kaiserine Augusta Victoria.-Large, purewhite; very free and constant.
Lady Ashtown.-Silvery pink, shaded yellow; fine, large bloom.
Lady. Battersea. - Bright cheery crimson, long pointed buds.

La France.-Silvery pink, large and very sweet-scented.

Papa Gontier.-Cherry red, shaded yellow. Grand bedder.

Virginia R. Coxe (Gruss an Teplitz).Fiery scarlet.

Viscountess Folkstone.-Delicate flesh pink; full and handsome.

## Royal Collection Hardy Roses

Price, 30c each; set of 12 sorts, $\$ 2.50$ postpaid

Anna de Diesbach.-Beautiful clear carmine pink.

Baron de Bonstettin.-Dark, rich red; very large.

Clio.-Massive, light-pink flowers.
Conrad F. Meyer.-Beaưtiful silvery pink.
General Jacqueminot.-Bright crimson.
Glorie Lyonnaise.-Chamois yellow; full, sweet, distinct.
Margaret Dickson.-Ivory white, shaded flesh.

Mrs. R. G. J. Crawford.-Silvery pink; fine form.

Mrs. John Laing.-Soft, delicate pink; free flowering.

Paul Neyron.-Large, deep rose; double and handsome.

Prince Camile de Rohan.-The best dark maroon.

Ulrich Brunner.-Rich, glowing crimson; large.

## CHOICE OREGON - GROWN ROSE BUSHES

We make a specialty of Rose Bushes and sell thousands upon thousands. Our bushes are strong, healthy, field-grown stock, well rooted, and will produce a profusion of bloom the first season, if given good care and cultivation. We enjoy the reputation of supplying the best stock at reasonable prices. The following list is the choicest of American and European introductions. All Oregon-grown; worth double Eastern or California.

## FOR YOUR CONVENIENCE-CLASSIFICATION UNDER COLORS

This year we have arranged our Roses all under their predominating color, which appeals to us as the most convenient way. While the descriptions are necessarily short on account of limited space, you will get class (read abbreviations below), color and main points of merit. SHIPPING AND DELIVERY
We can fill orders for our large 2 -year-old Rose Bushes any time from October to Mayaround Portland the best planting time is during favorable weather from November to April, the earlier the better.

BY EXPRESS-We ship all 2-year-old Rose Bushes by express, unless otherwise in. structed.

IF WANTED BY PARCEL POST.-By request we will wrap, pack and mail Rose Bushes for 10 c each, 75 c doz., extra. DON'T FORGET THE EXTRA FOR POSTAGE WHEN WANTED BY MAIL.

## ABBREVIATIONS

T.-TEA-One of the best classes of Roses and truly ever blooming. They are hardy in this section, although during our coolest weather and in cold sections they should be protected with a covering of fir boughs, straw or burlap.
H. T.-HYBRID TEA-Most of these are as free flowering and as constant bloomers as the teas, and are hardier, stronger growers.
H. P.-HYBRID PERPETUAL-The hardiest of all roses, vigorous in growth, free blooming.

## WHITE-CREAM

British Queen (H. T.)-Pure white, large, full flowers, opening freely. One of the best white roses for bedding and cutting.

Each \$1.00
Candeur Lyonnaise (H. P.)-Pure white, sometimes tinted with pale sulphur-yellow; very large and full. Each \$1.00

Florence Forester (H. T.) - Clear snowwhite, with a lemon tinge. Perfect habit; very sweetly perfumed. Gold medal. Each $\$ 1.25$

Florence Pemberton.-Large, full flowers, beautifully formed; creamy-white, suffused pink, particularly at center. Each 75c

Frau Carl Druschki (H. P.)-A large, grand, hardy, pure white; best and most popular. Each 75c

Gloire Lyonnaise (H. P.)-White, tinted with yellow, large, full and of good shape. Very free, distinct and pleasing. Each 60c

Kaiserine Augusta Victoria (H. T.) - A strong, vigorous grower, producing buds and flowers of enormous size; color, pure white. A very popular variety.

Each 75c
Lady Plymouth (T).-Deep ivory cream, with a faint flush, large, perfectly formed flowers. Won N. R. S. gold medal. Each $\$ 1.25$

Mabel Morrison (H. P.)-Splendid white garden and exhibition rose. Flowers large, globular, full and sweet. Each 85c

White Killarney (H. T.)-Long, pointed buds of purest white and heavy, wax-like texture, opening to large, full flowers;'very lasting.

Each 85c


Florence Forester

## Don't Forget Postage

If you want rose bushes by mail add 10 c each or 75 c doz. to our prices or we'll send by express, charges collect.
White Maman Cochet-Has all the good qualities of Maman Cochet, but pure white, equally large and fragrant, hardy and productive. One of the very best white everblooming roses for bedding, flowering all season long and until late in the fall.

Each 75c


#### Abstract

PLEASE NOTE.-Should we be sold out and unable to obtain the varieties of Roses ordered, others of a similar color and type and CORRECTLY LABELED will be substituted, UNLESS OTHERWISE ORDERED.


## YELLOW ROSES

Constance-Buds long and pointed, of a rich orange-yellow color distinctly streaked and splashed with crimson near base of petals, passing to large, full flowers of bright cadmium-yellow. Very free in bloom. A glorified Rayon d'Or.

Each \$1.50
Duchess of Wellington (H. T.)-Intense rich saffron-yellow; very large and of fine form; beautiful in bud as well as open flower. One of the finest offerings of recent years.

Each \$1.00
Duchess of Normandy (H. T.)-A beautiful, large, full flower; salmon-flesh, paling to cream at edges.

Each \$1.25
Lady Hillingsdon (H. T.)-Deep apricot yellow, long pointed bud. Each $\$ 1.00$
Mrs. Aaron Ward (H. T.)-Deep goldenorange, shading out to creamy-yellow at edge of petals. Beautiful deep buds. A delightful variety. Each $\$ 1.00$

Mad. Ravary (H. T.)-Clear orange-yellow; long, pointed buds; flowers of fine form.

Each \$1.00
Miss Lolita Armour. - A magnificent new rose produced by the same hybridizer who gave us Los Angeles, one of the most popular novelties of the time. Lolita Armour is entirely distinct from any other variety in cultivation. Color chrome yellow at base of petals, shaded to coppery orange. Reflex of petals chrome yellow at base shaded to bright salmon. Flowers very large, of finest form, on stout canes. At the Bagatelle Gardens in Paris in competition with many other fine new roses this sort was awarded the Gold Medal for the year 1921. It also won the Silver Medal of the American Rose Society at the Test Gardens, Portland, Oregon. Each \$2.50

Rayon d'Or or Golden Rays (H. T.)-A gorgeous new golden yellow rose: superb.

Each \$1.00
Soliel d'Or (Golden Sun).-A superb color, varying from orange-yellow to reddish-gold, shaded with nasturtium red. Very full and double.

Each 75c

## PINK ROSES

Baroness Rothchild (H. P.)-Large size, fine globular form; color bright rosv pink. Each 75c
Clio (H. P.)-Flesh pink, center shaded rosy pink. Large, globular form; handsome foliage; vigorous grower.

Each 75c
Columbia (H. T.)-This beautiful Rose is of strong, vigorous habit of growth and exceptionally free-blooming. The flowers, which are of good size, are perfect in form, both in bud as well as when fully expanded. In color it is a most pleasing shade of rosepink and delightfully fragrant. Each \$1.25

Conrad F. Meyer.-Very hardy, free bloomer. A beautiful pure, silvery-pink. Fragrant.

Each 75c
George Arends or Pink Frau Karl Druschki -A beautiful pink variety; different in color from any other rose; a free bloomer and one of the best.

Each \$1.00
Killarney (H. T.)-Color deep shell pink; buds long and beautifully formed; open flower is very graceful in the extreme.

Each 75c


## Don't Forget Postage

If rose bushes are ordered sent by parcel post send 10 c extra, 75 c per dozen, for packing and postage, otherwise we'll send by express, collect.

Lady Alice Stanley (H. T.)-Beautiful long, pointed buds; large, well-formed flowers, of a delicate flesh-pink, outside of petals deep, coral-rose. A gold medal variety. Each $\$ 1.00$

Los Angeles-Described by the originator as 'a flame pink, toned with coral and shaded gold at base of petals." Buds long, pointed and lasting flowers. Each \$1.50

Lady Ashtown (H. T.)-One of the finest pinks of a rich, deep, silvery tone; flowers large. Each $\$ 1.00$

Mrs. Charles Russell.-Strong, rank growth, canes stout and thornless, clothed with handsome dark-green foliage. Flowers very large and massive. Form globular and very full. Remarkable for its fine lasting qualities either on or off the plant. Color bright rich cerise, shaded to scarlet at center. A continuous bloomer all season through. Each $\$ 1.00$

Madame Caroline Testout (H. T.)-Portland's famous brilliant pink rose. Each 75c

Maman Cochet (T.)-One of the finest Tea Roses. Magnificent buds opening into flowers of grand size and build; very lasting and of sweet tea scent. Color, deep rosy pink, inner side of petals shaded silvery rose. Each 75c

Mrs. John Laing (H. P.)-Very free flowering, all season. Color soft, delicate pink, with a satiny tinge.

Each 75c
Paul Neyron (H. P.)-Deep, shining rose, double and handsomely formed; blooms freely, and is unusually strong and vigorous; the largest variety in existence. Each 75c
Willomere (H. T.)-An improvement upon his famous Lyon Rose, being more vigorous in growth and free in bloom. Buds coral red, suffused with carmine, opening into a large, full flower of a rich shrimp-pink, shaded to yellow at the center. Very rich and striking variety.

Each \$1.00

## PLEASE NOTE.-Should we be sold out and unable to obtain some certain varieties of Roses ordered, others similar in color and type and CORRECTLY LABELED will be substituted, UNLESS OTHERWISE ORDERED.

## "C-M" Your Rose Beds

The most beautiful roses are produced by care, cultivation and fertilizer. "C-M" kilndried (weed free) ground cow manure, better than the raw material, will do wonders and is much cleaner and nicer to handle. See page 39 .

## TRICOLORS-SHADES OF

YELLOW, ORANGE, GOLD, RED AND PINK

Betty (H. T.)-Beautiful coppery-rose color, overspread with golden-yellow; fragrant.

Each $\$ 1.00$
Beaute de Lyon-Large, refined flower of a rich coral-red, nicely shaded with yellow. A seedling of Soleil d'Or. Very superior to that variety both in growth and flower.

Each 75c
Cheerful.-Large, full flowers of perfect shape and form, with enormous individual petals and grand general character. Color, rich orange flame overspreading the petals to a distinct orange yellow base. Each \$1.00

Gorgeous (H. T.)-Flowers large and full, freely produced on stiff, erect stems; color deep orange yellow, flushed copper yellow, and veined with reddish copper. Each \$1.25

Edith Part-Another grand exhibition rose as well as an ideal garden variety. Free branching growth with well built up flowers of great substance. Color, rich red suffused with deep salmon and coppery yellow. Perfectly shaped flowers.

Each $\$ 1.00$
Irish Elegance-Bronze orange in the bud, cpening into large single flowers of a lighter shade. Vigorous growing and perpetual blooming.

Each 85c
Jonkheer J. L. Mock (H. T.)-It is of the type of La France, with large, round blooms surmounting its stout, almost thornless, canes; color, rich bright pink, reverse of petals carmine.

Each 75c
Joseph Hill (H. T.)-Salmon pink, shaded with yellow, outer petals tinted coppery pink, long bud; very large, full flowers.

Each \$1.00
Juliet. - Flowers beautifully formed, with petals of fine shape and substance. The color is a bright orange-red on the inside of petals, while the reverse side is of a rich old-gold color. A novel combination of colors and very handsome and showy.

Each 75c
Lady Mary Ward (H. T.)—Free, vigorous and hardy; color rich orange, shaded deeper orange, with metallic veneering. Each $\$ 1.25$

Louise Catherine Breslau (H. T.)-Coral. red, shaded chrome yellow, opening to a flower of shrimp-pink, shaded coppery-orange.

Each \$1.00
Madame Edouard Herriot (T.) - Long, pointed buds, a deep coral red color, shaded to yellow at the base; flower of a rare shade of rosy scarlet, flushed with shrimp and apricot tints.


## Don't Forget Postage

10c extra, 75c per doz. extra for packing and postage on Rose Bushes

Madame Melanie Soupert.-A superb fancy, everblooming rose, of strong, vigorous growth and free branching habit. Color golden yellow shaded to orange yellow at base of petals, the whole beautifully flushed with orangepink. Fine, long, pointed buds of elegant outline, opening into a very large, fluffy flower of great beauty.

Each 85c
Madame Butterfly.-A sport from the popular new rose Ophelia, which may be said to be a glorified form of that fine variety. In this new sort all the colors are intensified, making it a rich harmony of bright pink, apricot and gold. The unopened buds are especially distinct with their lovely shades of Indian red passing to golden yellow at their base. This fine new rose is a rank grower, producing a wealth of foliage and bloom throughout the season. It is being planted by florists more largely than any other sort because of the demands for its beautifully shaded buds and richly colored flowers.

Each \$2.00
Margaret Dickson Hamill-Delicate straw color, its shell-like petals flushed at the edges on the reverse side with delicate car-mine-rose. Strong in growth, free blooming and exquisitely fragrant. Bronzy green foliage on deep crimson leaf-stalks. Very distinct and a gem among new roses.

Each \$1.25.
Mrs. P. W. Vanderbilt-Fine, long-pointed buds, full, well-formed flower, deep orangered, shaded bronzy-apricot; very free and perpetual. Very desirable. Each \$1.25

Mademoiselle Cecile Brunner (Dwarf Poly-anthus)-Exquisite little roses, buds dainty, pointed, bright salmon pink, yellow center.

Each 75c
Ophelia (H. T.)-The most popular cut flower variety today. Buds orange salmon, opening to a perfect full flower of dainty salmon pink and cream; elegant shape, fine foliage; superb.

## MOSS ROSES

Strong, vigorous growers, much admired for moss-covered buds; hardy; most varieties bloom but once in a season, but remain for a long time and very handsome.

Your choice, White, Pink or Red each 75 c. Can also supply Crested Moss-75c.

All 2-year-old rose bushes by express, unless otherwise ordered. Read about shipping, top of page 94, and inside front cover. Remember 10c extra, 75c Doz., packing and postage


Hoosier Beauty

## RED, SCARLET AND CRIMSON

Augustus Hartman-Brilliant geranium red flushed orange; very large, well-formed flowers with high pointed center.

Each \$1.00
Chateau de Clos Vougeot (H. T.)-A very rich, fiery scarlet shading to deep velvety crimison. It is delightfully fragrant, a prolific and continuous bloomer.

Each \$1.00
Captain Hayward (H. P.)-This is probably the grandest of all red Hybrid Perpetuals. The bloom is of the largest size. Color deep glowing red, flushed with crimson. A free bloomer; deliciously perfumed. Each 75c

Crimson Emblem.-A superb new Irish rose of a rich glowing crimson, heavily shaded with maroon. Buds and flowers of fine form and size, produced freely on long, stout stems. A splendid garden rose and worthy of extended cultivation.

Each \$1.00
Edward Mawley (H. T.)—Of grand size and build and a free, continuous bloomer. Color intense crimson scarlet and of velvety texture.

Each 75c
Edward Bohane.-Brilliant orange scarlet shaded crimson. Large, finely formed flowers produced with greatest freedom. A splendid garden and exhibition rose which we regard as one of the very best of its color. Each $\$ 1.00$

George C. Waud (H. T.)-Glow:ng orange vermilion, shaded bright scarlet. One of the richest colored roses in existence. A fine garden and bedding rose.

Each \$1.00
George Dickson (H. T.)-Very large, full and perfectly formed flowers freely produced. Color, blackish crimson of velvety texture, reverse of petals heavily veined with crimson maroon. A magnificent rose, invaluable for exhibition.

Each 75c
General McArthur (H. T.)-A grand crimson scarlet. Elegant long buds and the flowers are large, double, of fine form; very fragrant. Each 75c

Gruss an Teplitz (H. T.)-This is a rose for everybody, succeeding under the most ordinary conditions. Rich scarlet, shading to crimson; fragrant: a free, strong grower and in bloom all the time.

Each 75c
Hadley (H. T.)—Color beautiful rich, bright red. Very free and constant. A shapely, graceful bud and flower. One of the most charming and distinctive red roses. Each $\$ 1.00$

His Majesty (H. T.)-Produces blooms of immense size on fine long canes. Color dark crimson shaded deep vermilion towards the edges. Very fragrant. Awarded a gold medal. Each \$1.00

Hoosier Beauty (H. T.)-A grand new hybrid tea rose of American origin. Flowers dark crimson, - shaded with maroon and veined with black; petals of remarkable substance-like so much crimson velvet; buds beautifully formed, with fine, pointed shape, opening into large, double flower.

## Each \$1.25

H. V. Machin (H. T.)-A splendid new exhibition rose, because of its grand crimson flowers, wonderful size and form. Splendid high, built-up bloom of very intense coloring. Nothing finer in red roses. Each \$1.00

Hugh Dickson (H. P.)-This superb Irish Rose stands in the front rank as a producer of the very finest brilliant crimson-scarlet roses. Of strong, vigorous growth and freeflowering habits, one of our most favorite varieties.

Each 60c
Mrs. Charles Russell (H. T.)-Strong, rank, growth, canes stout and thornless, clothed with handsome, dark-green foliage. Flowers very large and massive. Form globular and very full. Color bright rich cerise, shaded to scarlet at center. A continuous bloomer all season through.

Each $\$ 1.00$
Prince Camiile de Rohan.-Very dark rich velvety crimson, passing to intense maroon, shaded black. One of the darkest roses and very handsome. Regarded as the best of its color.

Each 75c
Uirich Brunner (H. P.)-Extra large bold flowers, full and globular; color, rich glowing crimson, elegantly flamed with scarlet; a good grower and free bloomer. Each 60c

## BABY OR DWARF POLYANTHA ROSES

A type of roses which grow only a foo ${ }^{\dagger}$ or two high, bear large clustres of flowers possessing great lasting qualities, and are always in bloom. They are fine for massing in beds, for burdering large rose beds or planted singly on the lawn. Perfectly hardy. Your choice of the following, each 75 c ; doz. $\$ 7.50$.

BABY RAMBLER (Dwarf-bush type)-Not over 18 inches high, producing large trusses of light. crimson flowers; clean, dark-green foliage.

MRS. W. CUTBUSH-Clusters of pretty double, bright pink flowers, freely produced in panicles; always in bloom.

ORLEANS—Color brilliant geranium red, suffused rose, with white center, making a charming combination; bushy habit and very free flowering.

BABY TAUSENDSCHON-Pale pink flowers, becoming reflexed with carmine-rose; very beautiful.

## CLIMBING OR PILLAR ROSES - HARDY, FREE FLOWERING



Dorothy Perkins, 30 ft . High, Thousands of Blooms. A Popular Variety

## RAMBLER OR PILLAR ROSES

The following climbing Roses all grow vigorously, and are profuse bloomers and very hardy anywhere. The flowers are borne in large clusters.

Your Choice following-60c each:
Crimson Rambler-This grand rose is well known and very popular; of rapid growth. Flowers in trusses, fairly covering the plant from the ground to the top.

Count Zeppelin-Immense clusters of small double coral-red flowers borne in great profusion. Very hardy and a rampant climber.

Dorothy Perkins-(See illustration.) Flowers in immense clusters, beautiful shell pink, very double with petals artistically crinkled.

Flower of Fairfield-Brilliant crimson; base of petals white. A splendid grower and a great improvement over the old type.

Hiawatha-A beautiful single flowered variety, with flowers about $11 / 2$ inches across, hanging in long pendulous sprays over the entire bush. Color brilliant ruby-eyed with a clear white eye, the center of each flower filled with prominent yellow anthers, a striking and beautiful combination.

Tausendschon (Thousand Beauties) - Entirely distinct. Large single flowers fully 3 inches across; a delightful shade of soft pink, shaded carmine and produced in trusses of from 10 to 15 flowers, each truss a veritable bouquet.

American Pillar - Flowers saucer-shaped, three to four inches across and very lasting. They hang in immense clusters all along the branches, and make a remarkable sight, a veritable sheet of bloom. Color, clear bright, rosy pink.

Each 60c

The lavish profusion of bloom on Climbing Roses, literally hundreds of flowers on each plant, their beautiful colors and exquisite fragrance render them unequaled for covering houses, arbors, pergolas, fences and boundary walls.

Remember, 10c extra, 75c doz., for packing and postage

American Beauty.-One of the largest, sweetest and best of all hardy roses. It is a qu ck grower, constant bloomer, making magnificent buds and large, bold flowers; color, rich rosy crimson, shaded and veined in the most charming manner.

Each \$1.00
Beauty of Glazenwood.-Bronze yellow or copper and fawn color. One of the grandest pillar roses. Very hardy and free bloomer.

Each 75c
Climbing Frau Karl Druschki.-Without a doubt the finest pure white hardy, everblooming climber.

Each \$1.00
Climbing Mad. Caroline Testout.-Counterpart of our famous official pink hedge rose. Each \$1.00
Climbing Belle Seibrecht.-We regard this as one of our finest pillar roses, the flowers being very handsome. Color the richest shade of rose-pink ever seen in a rose. Each 85c

Climbing Safrano-A beautiful pillar rose, being a strong climber; color orange-yellow or deep saffron; good size, full and sweet. A favorite variety in every locality. Each 75c

Gloire de Dijon.-Noted for for the great size of its flowers, its delicate tea scent and its shade of color, being a blending of amber, carmine and cream. A magnificent climber and one of the finest varieties in existence.

Each 85c
Reine Marie Henriette.-A strong, vigorous grower; flowers large, full and of fine form. Color glowing crimson, elegantly shaded. One of the best climbers.

Each 75c
Silver Moon-A magnificent white climber, large, semi-double blooms of good substance, with golden stamens. Foliage is abundant, kronze-green, and is immune to mildew.

Each 75c
Shower of Gold-A beautiful new climber of the Wichuriana type from the gardens of the famous English rosarian, William Paul. It is of very vigorous growth, with dense, glossy green foliage. Produces masses of golden yellow flowers in large clusters.

Each 85c
William A. Richardson-Color yellow, flushed with carmine. A very beautiful variety. Extensively planted all over the Pacific Coast.

Each 75c

## TREE ROSES

Good stock has been very scarce. but this year we can supply very nice plants in following kinds: Columbia, General McArthur, Mad. Caroline Testout, Duchess of Wellington, Cheerful, Ophelia, Frau-Karl Druschki, Hoosier Beauty, Los Angeies. Prices $\$ 2.50$ to $\$ 3.50$ each, and see general list for descriptions. NOT MAILABLE.


No. 2-Mad. Ed Andrew
No. 3-Henryi.
No. 4-Jackmanii.
Panticulata - See next page for illustration made from photograph.

## Clematis

No hardy flowering climbing vine excels in beauty and effectiveness the finer sorts of Clematis. As a climber for the veranda, a screen for fences, for pillars along the garden walks, for training on walls or arbors or in masses on rockwork, it has no rival among strong growing blossoming plants. The Clematis should be grown in rich, deep, sandy loam and well mulched with rotten manure in winter. The richest sheets of bloom and largest flowers are obtained where it has partial shade and a liberal supply of water at the roots.
PANICULATA (Sweet-Scented Japan)-See cut next page. Of very rapid growth, quickly covering trellises and arbors with handsome, clean, glossy green foliage. The flowers are of small size, pure white, borne in profusion in September and October, and rf a most delicious and penetrating fragrance. Each, small plants, 35c. 'ooice, 50c; large, field-grown plants, 60 c and 75 c each.
C. MONTANA.-A hardy, rapid grower; flowers snow white; fragrant and freely produced in May and June. Strong plants, 60c to $\$ 1.00$.

[^21]Madam Ed Andrew-The best bright red; equal to Jackmanii in size.

Henryi--Fine large creamy-white flowers. A strong grower and great bloomer.

Jackmanii-Intense violet-purple; most popular variety; extra large flowers in great clusters.

Duchess of Edinburgh-A free flowering double white variety; very fragrant.

Important.-When planting Clematis and other vines be sure you spread out the mat of fine roots so that the soil comes in contact with all of them, otherwise they will dry cut and die. Be very careful with Clematis especially. Don't plant too close to wall.

## HARDY CLIMBING

## AMPHELOPSIS

VEITCHI (Boston IVy).-The most popular and desirable climbing plant for covering brick, stone or cement walls, etc. Clings to the smoothest surface. Foliage rich olive green during the summer bright crimson and scarlet in the fall. Strong plants, 50 c to 60 c ; extra strong, 75 c to $\$ 1.00$.

QUINQUIFOLIA (Virginia Creeper, or American Ivy).-One of the best and quickest growing varieties for covering treilises, arbors, etc. Its large, deep green fol age assumes brilliant shades of yellow, crimson and scarlet in the fall. Strong plants, 50 c to 60 c ; extra strong, 75 c to $\$ 1.00$.

## HONEYSUCKLE

A beautiful climber, rapid grower and very desirable. Flowers very fragrant.

Your choice of the following, 60c to 75c each; extra strong, $\$ 1.00$ :
Halleana.-Very popular; almost evergreen; flowers white, passing to yellow.
Belgica (Monthly Fragrant)-Flowers are large; color red and yellow.

## JASMINE

Graceful small-leaved climbing vines with nice clean foliage and fragrant, pretty flowers.

Beesianum.-A beautiful new variety with charming, fragrant, double, rosy-p nk flowers in profusion almost the entire season. A rapid grower and almost evergreen. Best variety for the Northwest Coast. Each $\$ 1.50$

> Nudiflorum.-Fragrant yellow flowers. Oach 75c
> Officinale.-Pure white flowers, fragrant. Each 75c


Clematis Paniculata

## VINES—Continued



Wistaria Vine in Bloom

## IVY EVERGREEN

COMMON ENGLISH - Thick, leathery, evergreen leaves. Strong grower. Good roots, each 25c; large, 50c.

## EUONYMUS

One of the finest trailing evergreen vines, with small, rich green leaves and foliage. For trailing over banks or rough walls, etc., also for vases, boxes and borders of beds.

## GREEN or VARIEGATED.

Each 50c to 75c; doz. $\$ 5.00$ to $\$ 7.50$

## WISTARIAS

WISTARIAS.-The strongest growing of all hardy vines, easily reaching the roof of a two-story building in a few years if given a chance to climb. Our illustration gives an idea of the value of these vines as a decorative subject. They are as hardy as an oak tree and will grow and bloom in any locality. The flowers appear with the first leaves late in the spring and hang like great bunches of grapes, to the admiration of all who see them. All the varieties are very sweet-scented, as can be attested to by the bees, who are attracted to them when in bloom in the spring.

SINENSIS BLUE.-A ver $v$ rapid growing, hardy climber; lovely long panicles of dark blue flowers, produced in the most wonderful profusion. Strong vines. Each $\$ 1.50$ to $\$ 2.00$.

SINENSIS ALBA.-Like the preceding, but with beautiful white flowers in long panicles. A veritable sheet of bloom in late spring. Strong vines. Each \$1.50 to \$2.00.

[^22]
## HARDY FLOWERING \& ORNAMENTAL SHRUBS

NOTE-_"D" following the name stands for Deciduous, "E" Evergreens.
SHIPPING-At the prices given we send large, well-branched bushes from 2 to 5 years old, grown in the open ground. As our shrubs are, for the most part, large and heavy, we usually send them by express or freight. By request, small sizes can be sent by parcel post, but you should ADD AT LEAST 15c TO 20c EXTRA PER SINGLE PLANT to cover packing and postage.


Fine for massing, banking, hedges or even as single specimens. Dainty, early flowers, showy, small leaved foliage and berries in the fall and winter make them verv popular.

THUNBERGII-A beautiful Japan variety of dwarf habit. Small foliage, changing to beautiful red in autumn. Bright scarlet berries all winter. Each $60 \mathrm{c}, 75 \mathrm{c}$ and $\$ 1.00$

PURPUREA (Purple Barberry)—Foliage a beautiful deep purple all the year; a splendid specimen shrub and almost indispensable in contrastive groupings.

Each 60c, 75c and \$1:00
BUDDLEYA (D) -Butterfly Bush
MAGNIFICA-The ever-blooming Butterfly Bush, being given that name through the fact that all varieties of butterflies are attracted to it in large numbers. This fine new shrub is of fast growing habit, growing several feet tall the first season. It produces long, straight, slender branches which terminate in long spikes of lilac-like flowers of a beautiful shade of lavender-blue. A single plant will often produce fifty fine flower spikes the first season after planting. Commences to bloom in June and continues until frost nips the flowers. It is a fine subject for lawn planting as well as suitable for the shrubbery plot. Flowers possess fine keeping qualities, therefore are desirable for cutting. Small plants, 50c each. Large, 75c to $\$ 1.25$.

## HAWTHORNE (D)

A beautiful flowering shrub that grows to be a fa'r-sized troe
DOUBLE WHITE or RED-4 ft., $\$ 1.00$; 6 ft. , $\$ 1.50$.

## COTONEASTER

Very popular plants with minute, deep, glossy green foliage and bright red berries that hang on all winter.

Small plants of the following, 50c to 60c; large plants, $\$ 1.00$ to $\$ 1.50$ each.

HORIZONTALIS-Of trailing or prostrate habit of growth; admirable for covering low walls or to use in rock work. Pinkish-white flowers, bright red berries.

MICROPHYLLA (E) - Smaller shrub than above variety, evergreen leaves; white bloom, berries bright red and last well.

SIMONDSII (D)-A beautiful upright growth with fruit of a rich, deep orange color.

## DEUTZIAS (D)

Their hardihood, fine habit, luxuriant foliage and profusion of attractive flowers in May and June render them among the most beautiful and most popular of flowering shrubs.

Your choice, each 60c to 75 c
GRACILIS ROSEA-Dwarf growing with sprays of pretty light pink flowers late in the spring. A beautiful shrub.

LEMOINEI-Flowers very large and produced in broad-based, cone-shaped heads of from 20 to 30 flowers each, of purest white, 3 to .4 feet.

PRIDE OF ROCHESTER-Flowers very early, double; pure white, tinged with blush; great profusion. Grows 6 to 8 feet.

## DOGWOOD (D)_Cornus

Very desirable little graceful shrubs.
Sibrica (Red Siberian Dogwood)-A rare and remarkable variety; clusters of white flowers in spring. Each, 2-3 ft., 60c to 75 c .

## FLOWERING CURRANT (D)—Rebis

Popular early flowering shrubs that do well any place. Their bright flowers are ver, cheerful. Each 60c, 75c and \$1.00

Sanguineum-Charming crimson flowers.
Aureum-Yellow flowers; spicy ordor.

## FORSYTHIA (D)_GGolden Bells

INTFRMEDIA-Blooms early in spring, before the leaves appear. when it s covered with golden, bell-l:ke flowers. 2 to 3 ft .

Each 60c to 75c
FORTUNEI - Upright; makes fine single specimens; golden flowers in profusion in April. Each 60c to 75c

## GEINSTA (E) Broom

Bushy, upright evergreens. Flowers freely in early spring.

ALBA-Pure white. Each 50c to 75c
ANDREANA - Red and yellow flowers; very pretty.

SCOPARIA (Scotch Broom)-Rapid growing; yellow flowers in May. Each 50c to 75c
SPANISH-Yellow flowers; elegant foliage: blooms all summer.

Each, 2 to $3 \mathrm{ft}$. , $\$ 1.00$

## HARDY FLOWERING SHRUBS

## HYDRANGEA (D)

HORTENSIA-One of our most popular and showy lawn plants. Often grows in pots or tubs. Ornamental foliage and beautiful flowers in large, flat trusses. (See cut.) The beautiful pink variety is most popular, but we can supply White, Pink or Blue. Young plants, 50 c . Large plants, according to size and number of flower shoots, 75 c , $\$ 1.00, \$ 1.50$. Large specimen plants, $\$ 2.50$ to $\$ 4.00$. (See cut.)


Hydrangea Paniculata Grandiflora
PANICULATA GRANDIFLORA - The grandest as well as the most popular of all shrubs, and hundreds of thousands of them are sold every year; excellent for hedges or massing; unsurpassed for the lawn; blooms in July and August, and continues in bloom for two or three months. The flowers are massive, cone-shaped, sometimes 10 inches in length, and changing from the original pure white to pink, and finally to a beautiful rich coppery red.

Young plants, 75c; strong plants, 2 feet, $\$ 1.00$.
Tree shaped, $\$ 1.50$ to $\$ 2.00$.
LILACS (D)
Everyone loves the lilac and no garden is complete without one or more. The new imported grafted varieties are very beautiful and produce magnificent, large flowers.

COMMON WHITE OR PURPLE.
Each, 3 to $4 \mathrm{ft} ., 75 \mathrm{c}$ to $\$ 1.00$; larger, $\$ 1.50$ to $\$ 2.00$.

IMPORTED BUDDED VARIETIES-Your selection following named varieties, 2 to 3 year old plants, $\$ 1.50$ to $\$ 2.00$.

GEORGE BELAIR (Single) - Beautiful flowers, purple.

MARIE LE GRAYE (Single) - Beautiful creamy white flowers of immense size.

MME. LEMOINE (Double) - Fine double white variety; very fragrant.

MICHAEL BUCHNER (Double)-The best pale lilac or lavender.

CHARLES BALTET (Double)-Long trusses; double; beautiful rosy lilac or purple.

AND ORNAMENTALS-Continued


Myarangea Hortensia
QUINCE (D) Cydonia
JAPONICA-Bright scarlet single, flowers very early in the spring, before the leaves appear. Thorny, compact growth. One of our best hardy shrubs. Small, each 60c; large, 3 to 4 ft ., each. 75 c to $\$ 1.00$.

REBIS-See Flowering Currant, page 101.


Single Lilac-Marie Le Graye

## Do You Want a

Practical Landscape Gardener-
to plan and plant your yard? Ask our salesmen about our '(New Service."'

## Don't Forget Postage

Unless 10 to 15 c per plant, according to size wanted, is sent for packing and postage, all shrubs will be sent express at your expense. Read Shipping, top page 101.

## SPIREAS (D)

Graceful shrubs, everyone should plant. They are of the easiest culture, and very desirable in collections. All the Spireas bloom with a riotous extravagance which makes them quite striking. Their individual style, color and habits of growth differ so markedly, that a collection of varieties will insure bloom the entire season.
VAN HOUTTEI (Bridal Wreath) - The grandest of all the Spireas. It is a beautiful ornament for the lawn at any season, but $\mathbf{w h e n ~ i n ~ f l o w e r ~ i t ~ i s ~ a ~ c o m p l e t e ~ f o u n t a i n ~ o f ~}$ white bloom, the foliage hardly showing; perfectly hardy and an early bloomer. (See cut.) Small plants, 60 c ; large 75 c to $\$ 1.00$
THUNBERGII - Of graceful habit; the branches are slender and somewhat drooping; foliage in autumn changes to bright red and orạnge; flowers in feathery masses, white, appearing early.

Small plants 60c; large 75 c to $\$ 1.00$
BLUE SPIRAEA (Caryopteris).-A beautiful shrub, flowering most profusely for a long time. Fragrant, bright blue flowers the entire length of its slender branches. Blooms in September and October. Very decorative and desirable.

Each, small, \$1.00; large, \$1.50
ANTHONY WATERER-Covered nearly the whole growing season with large umbels of deep crimson flowers.

Small 60c; large 75c to $\$ 1.00$, postpaid
SNOWBALI (D)
STERILIS (Common Snowball)-Blooms in latter part of May. Flowers pure white, large balls. Every one should plant a Snowball. Each, small plants, 60c; 3 to 4 ft., each, $\$ 75 \mathrm{c}$ to $\$ 1.00$; extra choice, 5 to 6 ft ., \$1.25 to \$1.50.

PLICATUM (Japanese Snowball)-One of the most charming hardy flowering shrubs in existence; bears great wreaths and clusters of pure white globular masses of flowers; covered with bloom for weeks in the spring; grows 4 to 6 feet high; entirely hardy. Each, 2 ft., $\$ 1.00 ; 2$ to 3 ft., $\$ 1.50$

## LONICERA (E)

## (Evergreen Bush Honeysuckie)

Comparatively new introduction. A very neat, medium-sized hardy shrub that is becoming very popular for mass and border planting. Very attractive.

LONICERA NITIDA.-A recent introduction. Hardy evergreen shrub of distinct habit. Erect growing and densely covered with small ovate leathery leaves that have a brilliant gloss on the upper surface. Flowers fragrant, cream white and followed by red berries. Small, \$1.00; large, \$1.50

## SYMPHORICARPUS (D)

ALBA (Snowberry) - Inconspicuous. rosecolored flowers in June and Julv, followed by large, clustered, milk-white berries, which remain far into the winter.

2 to 3 feet, each 60c to 75c
RUBRA (Indian Currant)-Similar to the Snowberry, except that its berries are red and smaller and cluster in thickly about the stems and branches.

2 to 3 feet, each 60c to 75c


Spirea Van Houtte

## PHILADEIPHUS (D)

Mock Orange-A valuable class of hardy shrubs of vigorous growth, bearing for the most part fragrant white flowers during late spring and early summer.

AUREA-Beautiful golden yellow foliage, white flowers of orange-like fragrance. Each 75 c to $\$ 1.00$.

LEMOINEI - Slender, graceful branches covered with snowy white flowers of delightful fragrance. Each 60c and 75c.

VIRGINALE-Dwarf growing syringa covered in June with pure white flowers. Very fragrant. Each 60c and 75c.

## WEIGELA (D)

Beautiful shrubs that bloom in May, June and July. The beautiful trumpet-shaped flowers are produced in so great profusion as to almost entirely hide the foliage. They are very desirable for the border or grouping, and as specimen plants.

Prices: Following, each 60c, 75c and $\$ 1.00$.
CANDIDA-Beautiful white flowers; a continuous and profuse bloomer; very hardy.

ROSEA V - Lovely, large, rose-colored flowers, borne in such profusion that the whole bush appears a mass of rosy bloom.

EVA RATHKE-This variety is quite scarce and rare. Has beautiful blood-red flowers. Free bloomer. Each $\$ 1.00$.

VERONICA (E)
TRAVERSI.-Low growing, compact shrubs of upright, neat habit of growth, small, attractive evergreen foliage and small, pure white flowers in great profusion.

Small plants, $\$ 1.00$; large, $\$ 1.50$

ALWAYS REMOVE the packing and moss from the trees before planting. NEVER put manure so as to come in contact with the roots of any plant or tree. Use only good soil on and around the roots.

## NUT TREES

RAISE ENGLISH WALNUTS-We can successfully raise English Walnuts here in the Pacific Northwest, and the quality of the nuts is superior to most other sections. Plant a tree or two at least, for your own use, and if you have a large place, plant more. While the cost of grafted stock is more, we advise you to plant them, as there is "no chance" as to quality of the nuts.

WALNUTS (D). Grafted Stock-This year we are prepared to supply you with Oregongrown trees that are extra select and ESPECIALLY FINE ROOTED, much superior to the California trees on account of the fine growth of strong, fibrous roots. The stock we offer is Voorman's famous Franquette grafted on California black walnut roots.

Prices: 4 to 6 ft . and up, $\$ 2.50$ to $\$ 5.00$ each. Write for quantity price.
SEEDLING STOCK—Not grafted. Prices: Each, 4 to 6 ft ., $\$ 1.25$; 6 to 8 ft ., $\$ 2.00$.
HICKORY NUT-4 to $6 \mathrm{ft} ., \$ 2.00$.
BUTTERNUT-\$1.00 to \$1.50.
JAPANESE CHESTNUT-3 to 5 ft ., \$1.50.

ALMONDS - IXL-Nonpariel or Ne Plus Ultra-1 year, 3 to 5 ft , each 75c; 10 for $\$ 6.00$; 100 for $\$ 50.00$.

FILBERTS-Barcelona and Du Chilly-2 to 3 ft ., each . $\$ 1.00$.

## SHADE AND ORNAMENTAL TREES

The following are our most popular varieties. If you want some other kind, inquire; we, no doubt, can supply.

NOTE-We make a packing and shipping charge on out-of-town orders as follows: One tree, 50c; 6 trees, $\$ 1.00 ; 12$ trees, $\$ 1.50$.

## BIRCH (D)

Remarkable for its elegance; very gracesul; silver bark and slender branches.

EUROPEAN WHITE. - Charming tree; gracefully drooping branches, silvery white bark and small, ovate leaves; a combination of attractive characteristics.
6 to 7 ft ., $\$ 1.50 ; 8$ to 10 ft ., $\$ 2.50 ; 10$ to 12 ft., $\$ 3.50$ to $\$ 5.00$.

Weeping Cut Leaf.-No supply.
CATALPA (D)
A beautiful shade tree. Large heartshaped leaves. White flowers in July.

SPECIOSA-8 to 10 feet., each $\$ 2.00$ to \$2.50.

BUNGEI-Grafted. Each $\$ 2.50$ to $\$ 5.00$.

## CHESTNUT (D)

Very popular, stately shade trees. Extensively planted for shade.

WHITE FLOWERING-4 to $5 \mathrm{ft} ., \quad \$ 1.00$; 6 to 8 ft ., $\$ 1.50$; 9 to 10 ft ., $\$ 1.50$ to $\$ 2.00$.

RED FLOWERING-No stock this year.
ELM (D)
One of the most popular and best shade trees. Very desirable for street.

AMERICAN WHITE - 6 to 8 ft., each $\$ 1.50 ; 8$ to 10 ft ., $\$ 2.00$.

## ITINDEN (D)

Very desirable and beautiful trees for park or street planting; large foliage; rapid growers. 8 ft . up, each $\$ 2.00$ to $\$ 2.50$.

## MOUNTAIN ASH (D)

Very ornamental trees, especially when covered with its clusters of red berries in the fall. Each, 8 to 10 ft ., $\$ 2.00$ to $\$ 3.00$.

LARGE GROWING MAPLES FOR SHADE Your choice of the following kinds: 7 to $8 \mathrm{ft} ., \$ 1.50 ; 8$ to $10 \mathrm{ft} ., \$ 2.00$; selected, $\$ 2.50$ to $\$ 3.00$.

## MAPLE

SILVER VARIEGATED (A. Negunde Var-iegatum)-No stock this year.

NORWAY-Of large, compact habit; broad, deep green shining foliage, and stout, vigorous growth.

OREGON - Wide-spreading branches and large foliage; very rapid growth.

SILVER OR SOFT-Native tree of rapid growth; foliage bright green above and silvery white beneath.

SUGAR or HARD-Of upright habit of growth; dense shade; extensively used.

ASH-LEAVED-A fine, rapid-growing variety, with handsome, light green foliage and spreading head; very hardy; desirable for street planting.

PURPLE-LEAVED SYCAMORE MAPLEA purplish tone is imparted to the tree by the purple under-surface of its leaves; the effect being very fine when the leaves are in motion.

POPLAR (D)
These well known trees are planted largely for windbreaks and ornamental purposes; very rapid growers.

CAROLINA-Pyramidal: LOMBARDY-Tall and spiral, 7 to 8 ft ., $\$ 1.00 ; 8$ to 10 ft ., $\$ 1.50$.

## TULIP TREE (D)

A rapid-growing tree, with rich, glossy foliage; flowers tulip-shape, greenish yellow; a fine shade tree. Small, $\$ 1.50$; select, $\$ 2.00$ and up.

[^23]
## EVERGREEN SHRUBS AND TREES

In moving evergreens, they are generally taken up with a ball of earth about the roots; this makes it necessary to ship them by express or freight only. The stock we offer has been moved in the nursery every two years. This insures their living, and they are worth double the ordinary stock.

Not Mailable - These stocks must go by express or freight.


#### Abstract

ABELIA A Chinese shrub of rather recent introduction that is highly satisfactory here and rapidly becoming very popular. A graceful, low growing evergreen with dark, glossy, rather delicate leaves and handsome clusters of light pink flowers that turn to rosy pink. In bloom from June to late fall. Small plants, 75c; select, $\$ 1.00$ to $\$ 1.50$.


## ACUBA

JAPONICA-Beautiful, broad-leaved evergreen, with leaves speckled and striped golden yellow; elegant shrub for specimen on the lawn or for planting among other shrubbery; bears bright red berries in winter time. 1 to $1 \frac{1}{2} \mathrm{ft}$., $\$ 1.50$ to $\$ 3.00$; very scarce.

## ARBOR VITAE

An attractive, hardy, compact, upright evergreen of beautiful appearance.

Green or Golden. Each $\$ 2.50$ to $\$ 5.00$

## AZALEA

A. CRIMSON-A hardy evergreen species. These are dwarf, compact growers. Foliage small; flowers dazzling crimson. Each $\$ 2.50$

## BOXWOOD

A compact, small leaved evergreen that can be trimmed into balls, box or pyramidal shape.

DWARF, COMMON - Fine for borders, edgings or low hedges. Hedge plants, 6 in., each 30c: per 100. $\$ 25.00$. Specimen plants Globe or Pyramid shaped. Each $\$ 2.50$ to $\$ 7.50$

## CEDAR

(Cryptomeria Elegans)
JAPANESE-A beautiful evergreen with delicate green foliage and graceful habit; color changes to reddish-brown in winter. Very satisfactory. Each $\$ 2.00 ; 2 \mathrm{ft}$., selected, $\$ 3.00$ to $\$ 5.00$.

## CYPRESS

LAWSON-Very popular evergreen; graceful feathery, blue-green foliage. Specimens, each $\$ 2.00$ up.

## EUONYMOUS

Slow growing, compact, pretty leaved shrub.

JAPONICA-Green or Variegated. Very attractive. Each \$1.50 to $\$ 2.50$

## HOLLY

Very popular everywhere.
English (Aquifolia)-Budded stock, guaranteed berry-bearing. Well balled and carefully packed. Each, 2 to 3 ft ., $\$ 2.50$ to $\$ 3.50$; specimen plants, 3 to 5 ft ., $\$ 5.00$ to $\$ 7.50$ and up.

## JUNIPER

IRISH-Very desirable, pyramidal in form, foliage light green or silvery'gray.

Each, medium to large, $\$ 2.00$ to $\$ 3.50$

## LAUREL

ENGLISH-A small tree, or bush, with handsome shining thick foliage. Excellent for large hedges or screens or as single specimens. Small for hedge, each, 75 c ; 18 to 24 inches, each $\$ 1.00 ; 2$ to 3 ft., $\$ 1.50$.

## LAURUSTINUS

Beautiful evergreen shrub with bright shining green leaves and covered in the late fall, winter and early spring with large panicles of fragrant white blossoms. Small, \$1.00; medium, $\$ 1.50$; large, $\$ 2.00$ to $\$ 3.00$.

## MAHONIA AQUILFOLIA

OREGON GRAPE-Native of Oregon, and our state flower. Very valuable and desirable on account of its beautiful foliage and clusters of yellow flowers in spring, followed by blue-black berries. Choice plants, nursery grown, each $\$ 1.00$ to $\$ 1.50$; large, $\$ 2.50$.

## PRIVET

One of the best hedge plants; has small, pointed, evergreen leaves; grows rapidly and compactly; stands severe pruning, and can be kept in fine shape with little care.

CALIFORNIA-Most common variety.
ENGLISH-Smaller leaf, darker.
Strong field plants, 12 in. up, per 10, \$1.25; per $50, \$ 4.50$; per $100, \$ 8.00$; 2 -year-old plants, 24 in., per $10, \$ 1.50$; $\operatorname{der} 50, \$ 5.50$; per 100 , $\$ 10.00$.

## RHODODENDRONS

Stock very scarce. We have a limited number of choice budded named varieties that will bloom this year in White, Lavender, Pink and Red. Very scarce. Each $\$ 5.00$ to $\$ 7.50$.

## RETINOSPORA (E)

One of our most showy and graceful evergreens. There is a large class of Retinosporas, but the most popular are those of compact, tufted character. Choice, wellshaped plants in Green or Golden, $\$ 2.50$ to $\$ 3.50$ and up.

## YUCCA

A stately foliage and flowering plant equally imposing in solitary or group plantings, always conspicuous. The broad, swordlike foliage is evergreen; while midsummer shows great erect branching stems bearing a showy display of pendant, creamy-white bells.

Prices: 2-year and up, 50c, 75c and \$1.00; 18 tn 24 in.. $\$ 1.50$

Meacham, Ore., June 19, 1922.
$\begin{gathered}\text { Routledge Seed \& Floral Co. } \\ \text { Gentlemen: The orchard trees I got from you }\end{gathered}$
Gentlemen: The orchard trees I got from you last fall are fine and I never lost one of them. They have their leaves on now and are making a fine growth for this year.

Yours truly,
C. E. HANNA.

Salem, Ore., August 15, 1922.

## Routledge Seed \& Floral Co.

Gentlemen: Our lawn from seed you sent did fine. It is beautiful and is only two months old. Everyone admires it and some want your address.

Yours very truly,
MRS. R. L. HART.

## FRUIT TREES

OUR SHIPPING SEASON for the above is from November 1 to April 1. Some seasons May 1, although it is too late for best results. We advise late fall or early spring planting while stock is dormant.

HOW WE SHIP-Unless otherwise instructed, we ship by EXPRESS OR FREIGHT, whichever is cheapest, and the buyer pays the charges.

TREES CANNOT GO BY PARCEL POST, uniess you make special arrangements by letter.
CARE OF STOCK UPON ARRIVAL-If you are not ready to plant, dig a trench and "heel" in. If ground is frozen, put in a cellar and keep roots damp.

## POSITIVELY NO NURSERY STOCK SENT C. O. D.

SUBSTITUTION When varieties of the tree ordered cannot be supplied or bought locally, others equally as good of the same season but correctly labeled, will be substituted, unless otherwise ordered.

## APPLES

| Unless otherwise priced Each | Per 10 | 100 |
| :---: | :---: | :---: |
| One year, 3 to 4 ft ..... \$ . 50 | \$4.50 | \$30.00 |
| One year, 4 to $6 \mathrm{ft} . . . \mathrm{}$. . 60 | 5.50 | 40.00 |
| Selected trees ....75c-1.00 |  |  |
| Write for our low prices per 1000. |  |  |
| SUMMER VARIETIES |  |  |
| RED ASTRACHAN-Mediu esh white, moderately juicy | deep with a | imson, agree- |

YELLOW TRANSPARENT-Medium size, roundish, slightly conical; skin pale yellow, flesh tender, juicy, sub-acid; good.

## AUTUMN VARIETIES

GRAVENSTEIN-Large, beautiful yellow, dashed with deep red and orange; tender and crisp, with a highly aromatic flavor; tree very vigorous; very popular sort.

KING OF TOMKINS COUNTY-Very large, globular: red striped; vigorous and productive; excellent quality; juicy, rich flavor.

WEALTHY-Medium, whitish yellow, shaded with deep red; flesh white, tender and juicy.

## WINTER VARIETIES

BALDWIN-Large, rounded; deep, bright red; very productive; one of the best and most popular winter apples.

DELICIOUS - A splendid apple; coming ing prominence rapidly. Tree vigorous and hardy and the fruit equals the name in every respect. Fine for market and home use; late; keeps till April.

NORTHERN SPY-Large, round, greenishyellow, stripes of purplish red; flesh white, juicy, brisk sub-acid; valuable for market and cooking.

SPITZENBERG-Large, oblong, yellowish ground with broken stripes of bright red; flesh yellow, juicy, with a delicious rich


Mukilteo, Wash., Feb. 15, 1922.
Routledge Seed \& Floral Co.
Gentlemen: Received the fruit trees today. Am very well pleased with them. Very truly yours,

MRS. J. H. BENNETT.
WINTER BANANA-Winter; yellow; blush cheek; sub-acid; medium size; a good keeper; a handsome apple; fine flavor, tender and delicious.

YELLOW NEWTOWN PIPPIN-Large, skin smooth, golden yellow; flesh firm, crisp, juicy; one of the standard varieties.

JONATHAN-Yellow, covered with red; of excellent quality and heavy cropper.

ROME BEAUTY-Large, yellow, shaded bright red; juicy sub-acid; good bearer.

WINESAP-Medium size, streaked with red; firm, crisp and excellent; widely cultivated.

## CRAB APPLES

## Each 75c; per 10, $\$ 6.00$

TRANSCENDENT-Fruit very large, skin yellow, striped with red; the best of its class for cider. September.

> YELLOW SIBERIAN-Fruit small, golden yellow: good variety. Ripens in August.

FLORENCE - Size medium; red striped; early bearer; bearing full crop each year; tree immensely productive; juicy and crisp. September.

HYSLOP-Large, dark crimson; popular; a hardy variety. Late.

## Oysterville, Wash., April 24, 1922 Routledge Seed \& Floral Co. Gentlemen: The trees 1 got from you in 1912 were fine and made the best small orchard in this part of the country. <br> Yours very truly, <br> PEARS

A. M. HOLMAN.

| Unless otherwise priced Each | Per 10 | 100 |
| :--- | :--- | ---: | ---: |
| 1 year, 3 to 4 feet.... $\$ .60$ | $\$ 5.50$ | $\$ 50.00$ |
| 1 year, 4 to 6 feet.... .75 | 7.00 | 60.00 |

Selected trees ... \$1.00-1.50
Write for low prices per 1000.
BARTLETT-Large, skin thin, clear, lemon yellow, w.th soft blush on the sunny side; flesh white, buttery, very juicy and highly flavored; the best summer pear in existence.

BEURRE BOSC - Handsome deep yeliow, slightly russet; high quality, tender, aromatic. September.

FALL BUTTER - Favorite fall pear; yellow, smooth and juicy. September.

SECKEL-Rich and highly flavored; its highly concentrated, spicy, honey flavor is unequaled; skin brownish green, russet brown cheek; flesh whitish. September.

BEURRE CLAIRGEAU-Large, yellow, shaded with orange and crimson; covered with russet dots; flesh yellowish, buttery, juicy. October-November.

BEURRE D'ANJOU-A large, fine pear; buttery and melting, with sprightly, vinous flavor; tree a fine grower and good bearer; one of the very best. October.

COMICE-A splendid commercial variety, being of fine size; good appearance; ships well; yellow, faintly blushed crimson. Octo. ber.

WINTER BARTLETT-Originated in Eugene, Ore. Fruit large, closely resembling the famous Bartlett in shape and appearance, but ripening considerably later; tender, juicy and melting and with a most pleasing flavor.

FLEMISH BEAUTY - Large, juicy, rich, very hardy, productive and profitable. Sep-tember-October.

WINTER NELLIS-Medium; skin yellowish green. dotted with gray russet; flesh yellowish white; fine grained and abounding with juice of a rich saccharine, aromatic flavor; especially adapted to th's valley, producing large crops every year; an excellent shipper and good keeper. November-December.

## QUINCE

One year old. \$1.00 each Selected trees \$1.25 each

CHAMPION - Large, yellow: flesh cooks very tender; flavor is most delicious; more productive than the orange, ripening two weeks later.

PINEAPPLE-The fru't in form and size resembles the Orange Quince. but is smoother and more globular. Makes superior jelly, possessing a most exquisite and delicious flavor. September.


Bartlett

## Two Up-to-Date Books of Great Value <br> HOME FRUIT GROWER

By M. G. Kains. A simple and practical volume for the amateur, who seeks to grow high quality fruits for home needs. Nicely illustrated. 213 pages. Prices: Paper covered, $\$ 1.10$; cloth, $\$ 1.65$.

## COMMERCIAL PLANT PROPAGATION

A new and up-to-date book so fully illustrated and plainly written that the professional as well as the amateur will find it of great value. Cloth, 180 pages, $\$ 1.90$, postpaid.

## PRUNES

| Unless otherwise priced Each | Per 10 | 100 |  |
| :--- | :--- | ---: | ---: |
| One year, 3 to $4 \mathrm{ft}. . . . \$ .45$ | $\$ 3.00$ | $\$ 25.00$ |  |
| One year, 4 to $6 \mathrm{ft}. . .$. | .60 | 4.00 | 35.00 | Selected trees .... 75 c - 1.00

Write for our low prices per 100 or 1,000 on Italians only.

GIANT-New; of immense size; dark crimson, on yellow ground; good yielder; flesh firm, rich, sweet, delicious; good shipper.

HUNGARIAN-Very large, dark red; juicy and sweet.

PETITE (French)-Small size, egg-shaped; violet purple; sweet, rich and sugary; very productive; good for drying.

SILVER-Seedling of the Coe's Golden Drop; excellent for drying or canning. September.

SUGAR-Vigorous grower; fruit large and dries quickly; flesh tender and rich in sugar; color dark purple. August.

ITALIAN (Fallenberg)-Medium, oval, tapering at both ends; dark purple; flesh greenish yellow; separates freely from the stone; best for drying. Most popular.

## CHERRIES

| Unless otherwise priced Each | Per 10 | 100 |
| :---: | :---: | :---: |
| One year, 3 to $4 \mathrm{ft....} \$$. | \$9.50 | Write |
| One year, 4 to 6 ft..... 1.25 | 10.00 | Write |
| Selected trees ........ 1.50 |  | Write |
| Cherries are very scarce. |  |  |

LAMBERT-Fruit of largest size and of fine quality; color deep, rich red; flesh firm and of fine flavor: a fine market varietv: ripens two weeks later than Royal Ann. We have a fw selected Lamberts, $\$ 1.50$ and $\$ 2.00$

ROYAL ANN (Napoleon Bigarreau) - A magnificent cherry of the largest size; pale yellow, becoming amber in the shade; richly dotted and spotted with deep red and with a bright red cheek; flesh very firm, juicy and sweet; tree a rapid grower and immense bearer.

BING-Originated in Oregon; fruit large, dark brown or black; very fine; late; a good shipping variety.

KENTISH (Early Richmond)-Light red, juicy; one of the best acid cherries and unsurpassed for cooking purposes; very productive.

LATE DUKE-Large, light red; late and excellent: sub-acid.


NEW-THE "BURBANK"-A rich, fine flavored, dark red cherry, sweeter than other early varieties; a good shipper, vigorous grower and never failing producer. Each $\$ 1.50$

MONTMORENCY-Large, sour fruit, similar though larger than the Early Richmond; quite hardy. May.

MAY DUKE-Large, rich, dark red; flesh tender, juicy and sub-acid: an excellent variety, and one of the earliest of its class.

## PEACHES

| Unless otherwise priced Each | Per 10 | 100 |
| :--- | :--- | :---: | :---: |
| One year, 3 to $4 \mathrm{ft....} \$ .60$. | $\$ 5.00$ | Write |
| Selected trees .......1.00 | 8.00 | Write |

EARLY CRAWFORD-Very large, yellow; with red cheek; flesh sweet and excellent. Our most popular peach for table and canning; freestone.

ALBERTA—Very large, bright yellow, red cheek; flesh yellow; juicy, sweet; regular bearer; fruit very showy and perfect; freestone; early.

LATE CRAWFORD-Very large, roundish; yellow, with dark red cheeks; flesh deep yellow, juicy and melting; flavor rich and excellent; very popular; valuable for canning and drying; freestone.

HALE'S EARLY-Skin greenish white, red cheek, flesh white; juicy and sweet; semifreestone; very early and good.

EARLY CHARLOTTE, MUIR, SALWAY. Unless otherwise priced Éach Per $10{ }^{\circ}$

## APRICOTS

## Apricots-Same prices as Peaches.

MOORPARK-Very large, yellowish-green; brownish red on the sunny side; flesh bright orange; fine for canning and drying; freestone.

LEWIS - One of the largest apricots known; handsome in appearance; flavor excellent. If you have room for only one apricot tree, plant the Lewis.

ROYAL-TILTON-BLENHEIM—Rich and juicy.

## PLUMS

| Unless otherwise priced Each | Per 10 | 100 |
| :--- | :--- | ---: | ---: |
| One year, 3 to $4 \mathrm{ft} . \ldots . \$ .50$ | $\$ 4.50$ | $\$ 35.00$ |
| One year, 4 to $6 \mathrm{ft...}. \mathrm{}. \mathrm{} 60$. | 5.50 | 50.00 |

Selected trees.....75c-1.00
COLUMBIA (Shipper's Pride)—Largest size, nearly globular; brownish purple; rich, sugary; freestone. August.

PEACH - Very large; skin brownish-red, slightly coarse-grained, but juicy; freestone; very popular as a home and market variety. August.

DAMSON-Small, oval; skin purple; flesb melting, rather tart. September.

MAYNARD - Very large, nearly round; crimson-purple, bears young; flesh firm, but melting, juicy and delicious. July.

SATSUMA (Blood Plum)-Japanese variety; quite popular; large, dark red from skin to pit, which is small, firm and juicy; tree productive. Early July.

## Prinlew - New Plum

A valuable new variety, produced by H. A. Lewis. A heavy and sure cropper. Plums of large size; skin yellow, overspread with bright red when fully ripe: a handsome looking plum and the rich, golden flesh is firm, but juicy; fine grained and most delicious of all, either raw or cooked. It's good as a peach. Stands handling and shipping well. Ripe in August. If you only have room for one plum, plant a Prinelew. Each $\$ 1.25$; selected trees, $\$ 1.50$.

[^24]
## BLACKBERRIES

| Unless otherwise priced | Each | Doz. | 100 |  |  |  |
| :--- | :--- | :--- | :--- | :--- | ---: | ---: |
| One year $\ldots \ldots \ldots \ldots$ | $\ldots$ | $\ldots$ | .20 | $\$ 2.00$ | $\$ 10.0 \mathrm{~J}$ |  |
| Extra strong | $\ldots$ | $\ldots$ | $\ldots$ | .25 | 2.50 | 12.5 J |

## POSTAGE

BY PARCEL POST-Add 7c each, 50c per doz., extra to cover postage and careful packing, if wanted by mail.

POSTAGE

LAWTON-The favorite market variety; large, good quality, uniform, hangs long on vine when ripe, productive and prof table. The most generally planted for commercial markets in the Pacific Northwest. Oregon's most popular kind.

EVERGREEN - Introduced from Oregon; beautiful lacinated foliage, which it retains all winter; berries long, black, sweet, rich and delicious; ripens from July to November; a fine berry for family use. Write for low price per 1,000 .

HIMALAYA GIANT-A rampant grower of a trailing nature; a heavy cropper; the berries are large, juicy, coreless, sweet and firm, with a delicious aromatic flavor. Its deep-rooting qualities enable it to produce a large, firm berry even in a very dry season.

MAMMOTH-Discarded in favor of Cory.

## MAMMOTH <br> CORY THORNLESS BLACKBERRY

The thornless blackberries are of recent introduction. They have proved to be of great value-all that has been claimed for them. No thorns, thereby easier and quicker picked, more productive, more profitable; of trailing nature.

Will out-yield and out-class any other blackberry. Larger and sweeter and having a flavor more like the wild berry; superb for jelly, jams, wine or served fresh; small core, almost seedless, firm and will ship well. Yield well the first year and come into full bearing the second after planting. (See cut.) STRONG PLANTS, each 25c; doz. \$2.50, postpaid; per 100, \$17.50. TRANSPLANTS (2 year), each 30c; doz. $\$ 3.00$.


In great demand again for canning and drying. An exceedingly strong grower and an enormous bearer. Color dark red. Has a pleasant, vinous flavor, delicious and peculiar to this berry alone; fruit ripens early. It is excellent for the table, eaten raw or stewed. and for jelly, jam or "juices" is without an equal.

TRANSPLANTS (2 year, extra strong)Prices, each 25c; doz. \$2.25 POSTPAID. Not prepaid, each 20c; doz. \$2.00; 100 \$12.00.

LOGANBERRY "TIP" PLANTS.-These are ready after March 1, but are very iender and must be handled with care. Not mailabie. Prices on request.


Cory Thornless Blackberry (illustration one-half size)-The Coming Variety
Plant a Few of These Delicious, Heavy Producing, Trailing Berries Fertilize well and trail them on the garden fence or over a trellis.

BY PARCEL POST.-Gooseberries and Currants and Grapes: Add 7c per síngle bush, 50c per doz., to cover postage and careful packing.

## CURRANTS



PERFECTION-New; a late introduction of great merit. Our grower says: "You cannot say too much about the good qualities of this grand new sort." So, whether you plant ten or a hundred, plant a good proportion of Perfection, which is the largest, most productive, finest-flavored, rich, mild, sub-acid. Fruit bright red; plenty of pulp; few seeds.
BLACK NAPLES—Very large, black; valuable for jams and jellies.
CHERRY-Large, deep red; rather acid; fine for preserving; valuable market variety.

WHITE TRANSPARENT-Large; valuable for the table and market; the finest of the white sorts.

## GOOSEBERRIES

|  | Each | 12 | 100 | 1000 |
| :--- | ---: | ---: | ---: | ---: |
| One year old... $\$ .25$ | $\$ 2.50$ | $\$ 12.50$ | Write |  |
| Two years old.. 40 | 4.00 | 20.00 |  |  | Selected, 2 yr.. . 50

OREGON CHAMPION-Berries large, round and pale green; fine for table use and pies; hardy, strong and a very prolific bearer; most popular and best commercial variety. Low prices by the thousand. Write.

## All Our Plants Are Nice

Lebam, Wash., Nov. 18, 1921.
Routledge Seed \& Floral Co.
Dear Sirs: I wish to thank you for the nice Thornless Blackberries you sent me, for they sure are nice plants. Your friend,
P. H. DENCER.

## GRAPES

|  |  | Each | 12 | 100 |
| :--- | :--- | ---: | ---: | ---: |
| One year old $\ldots \ldots . . \$ .30$ | $\$ 3.00$ | Write |  |  |
| Two year old $\ldots \ldots .$. | .40 | 4.00 | Write |  |



## DEWBERRY

LUCRETIA - Fruit ripens between the raspberry and blackberry. Berries large, handsome, sweet and luscious; trailing vines. STRONG PLANTS, each 25c; per doz. \$2.50; $100 \$ 12.50 ; 1,000$, price on request.

Selected .........50c- . 60
CAMPBELL'S EARLY.Clusters large; berries large, round, black, with purplish bloom; flesh firm, but tender; flavor rich, sweet and slightly vinous. Early.

CONCORD. - Large, round, black grape; bunches compact, quality only fair, but it is well known and very popular.

DELAWARE. - Best known of our native grapes; grows freely and is perfectly hardy; ripens early; berries small, light red; sweet.


EATON. - A strong, sturdy grower; fruit is large and handsome, firm and of the highest quality; deep rich red when fully ripe; of sprightly, exquisite flavor.

NIAGARA.-Berry large, pale greenish yellow; flesh tender and sweet; productive; the standard white grape in most sections.

WORDEN.-Bunch very large and compact; berry large, black; an improved Concord; earlier and excellent home variety.

## La France Giant Everbearing Red Raspberry

## A new variety of great merit, producing enormous crops of BIG, RTCH, SWEET, JUICY BERRIES from spring until late fall frosts

Superior to any other. Color rich, deep scarlet, very prolific, heavy cropper, absolutely hardy and free of disease. See cut.

We have watched the introduction of this berry, have tested it ourselves and secured reports of others who have tried it on the Pacific Coast. We have great faith in La France and advise you to get a good start at once. The plants multiply rapidly after the second year.

AWARDED FIRST-CLASS CERTIFICATES by New York, Massachusetts, Tarrytown, Nassau County Morris County, Westchester and Fairfield Horticultural Societies, New York Florists' Club, American Institute of New York. Also

AWARDED SILVER MEDALS by
New York, Tarrytown and Connecti-
cut Horticultural Societies.
GENERAL DESCRIPTION.-LA FRANCE is a rapid, vigorous grower. The berries are firm, twice the size of most; beautiful color, fragrant and delicious in flavor all season long.

The fruit is borne on racemes, one to three feet long, in large clusters, and the same racemes show the unusual sight of buds, blooms, fruit just setting, green berries and the ripened fruit. This condition continues throughout the entire season. The late crops, when raspberries are scarce and high in price, is heavier than the earlier ones.

While the LA FRANCE is a giant in size and a rich, juicy fruit, it has proven to be a good shipper; 24 to 36 hours under ordinary conditions and up to 4 days under pre-cooled conditions, is one report we have.

## PRICES FOR 1923

The first La France sold at $\$ 2.00$, last year at $\$ 1.50$. This season we are able, by special arrangement with the introducer. to sell at 60c per plant: 3 for $\$ 1.75$; 12 for $\$ 6.25$, prepaid. Write for special low prices per 100.

## Blackcap Raspberries

|  | Each | 12 | 100 |
| ---: | :--- | ---: | ---: |
| Two year, select $\ldots . . \$$. 20 | $\$ 2.00$ | $\$ 10.00$ |  |

BY PARCEL POST.-Add 7c each, 50c a doz.; extra to cover packing and postage.

Low prices per 1,000 . Tips in the spring after March 15. in not less than 250 lots only. Price on request.

We offer the following kinds: GREGG, PLUM FARMER, MUNGER, KANSAS or CUMBERLAND.

## Standard Red Variety

|  | Each | 12 | 100 |
| :---: | :---: | :---: | :---: |
| One year | . \$ . 10 | \$ . 75 | \$3.00 |
| Extra strong | . 15 | 1.00 | 4.00 |

Very low prices per 1,000 . Write.
BY PARCEL POST.-Add 5c each, 35c a doz., extra to cover packing and postage.

CUTHBERT-Berries very large, deep rich crimson; good for shipping; the most popular of all commercial sorts of raspberries; stands the sun and heat well; flavor rich, sweet and delicious; mid-season. Very low prices per 1,000. Write.


NOTE.-Beware of untrue stock. Wo offer the genuine LA FRANCE from the introducer.

## SELECTED 8TRAINS

## STRAWBERRY PLANTS

## NONE BETTER

Our strawberries are carefully grown, trimmed and packed in the best manner to insure their arrival in good, fresh condition. If you want good, strong, healthy, vigorous plants, and true to name, send to us. Our prices are right; our plants are certified and O. K.

## Season - Plants in season from November 1 until May


"Wellington Marvel," a home Strawberry of Great Merit

## WELITINGTON MARVEL

This new variety was originated by Wellington S. Butler, of Merlin, Ore., a Strawberry specialist.

Weilington's Marvel is almost frost-proof. The foliage is heavy and spreading, and each fruit-stalk of blossoms or fruit seems to be perfectly covered and protected. Fruiting season is very early, long and marveiously productive. A superb home berry.

The ruddy glow of the Marvel spreads evenly and leaves no white tips. It is unequaled for table and excellent for canning. The flavor is incomparably delicious and sweet. For private trade fruit juices or preserves the Marvel will bring the "top" market price.

## EVERBEARING STRAWBERRIES

This class of strawberries is becoming more popular each year. Their long fruiting season is their real value. Left alone, they will flower and fruit the whole season, but to secure a large crop in the late fall keep the blooms off until the last of June. Keep the runners off to get full crop.

## PROGRESSIVE EVERBEARING

Berries medium large, rather dark-red in color and of excellent quality. Ripens early and continuously; the fall crop is always profitable. Extremely hardy, bearing until the ground freezes. A valuable market variety, probably the most popular in the class.

## SUPERB EVERBEARING

Berries produced beneath the foliage, which protects them from frost and bad weather conditions. Come claim Superb is not so productive as Progressive, but its berries are larger, brighter red in color and of more delicious flavor. Good keepers and shippers.

Your choice, above kinds, doz. 50c; 25 plants, $\$ 1.00 ; 100, \$ 2.50$, prepaid. Not prepaid, $\$ 2.00$ per 100; $\$ 17.50$ per 1,000 . Write for special prices in quantity.

## STANDARD AND POPULAAR WESTEIN VARIETIES

PRICE LIST.-Your choice of following varieties, PREPAID, doz. 30c; 50 plants, $85 \mathrm{c} ; 100$, $\$ 1.50$. NOT PREPAID, doz. 25c; 50 plants, $60 c ; 100, \$ 1.00 ; 1,000, \$ 8.00 ; 500$ plants all one kind at 1,000 rate. Ask for special prices in 3, 5, 10 or 25 thousand lots.

OREGON IMPROVED-One of the finest and most satisfactory strawberries ever introduced. It always looks bright, fresh and attractive. The berry is very large, firm and handsome; rich, dark red, extending to the center. The flavor is rich, sweet and delicious. For table use and canning it cannot be surpassed. The "Oregon", ripens early and continues in bearing until late in the season.

GOLD DOLLAR-One of the earliest berries on the market. Fruit good, medium size, and attractive; rather tart; fine flavor; foliage heavy, large and spreading, which protects the blooms from early frosts.

MARSHALL-One of our best Western varieties and very popular wherever known. Marshall is one of the blood-red varieties that never iails to attract the eye and to satisfy the taste. It is deliciously sweet, generously prolific, and is in every way an ideal variety for extensive planting or home garden. Excellent for canning, as it holds its color, shape and flavor.

[^25]WE OFFER ONLY INSPECTED and CERTIFIED PLANTS CARRYING PROPER "INSPECTION NOTICE."

## Why Not Raise Some Asparagus and Rhubarb?

Every garden, large or small, should have at least a small supply. If you want special information on culture of these roots, we have ASPARAGUS CULTURE, by Hexamer, 174 pages, $\$ 1.25$, and NEW RHUBARB CULTURE, by Morse and Fiske, 130 pages, \$1.25.

## ASPARAGUS ROOTS

Buy Roots and Save 2 to 3 Years
One of the earliest and finest of spring vegetables; very easily grown. A bed once planted is good for years if properly attended to and well manured. Set plants 18 inches apart, in rows 3 feet apart.

ONE YEAR OLD.-_Prepaid, doz. 30c; 50 75c; 100 \$1.00. Not prepaid, doz. 25c; 100 85c; 1,000 \$7.50.

TWO YEAR OLD.-_Prepaid, doz 50c; 50 \$1.25; 100 \$2.00. Not prepaid, doz. 40c; 100 \$1.50; 1,000 \$10.00.

THREE YEAR OLD, SELECT.-Grown especially for our private trade; large and strong for auick crop. Prepaid, doz. \$1.00; strong for quick crop. Prepaid, doz. 85 c ; 50 $\$ 1.75 ; 100$ \$3.50; 500 \$8.00.

## HOP ROOTS

Oregon's Famous English Cluster Hops.
Regular Root Cuttings, 10c each, 3 for 25c; 75 c doz.; $\$ 4.00$ per 100, postpaid. Low prices by the 1,000 .

Crown Roots give quicker resuits; each 15c; 2 for 25c; doz. \$1.25; \$7.50 per 100, postpaid.

## HORSERADISH ROOTS

Plant in the spring 18 by 24 inches apart. Set the whole root small end down.

Prices: 2 for 15c; 50c per doz.; $\$ 2.00$ per 100. Low prices by the 1,000 .

Crown Root.-Quick results. 15c each; doz. $\$ 1.00$.



## RHUBARB

## PIE PLANT - WINE PLANT

Plant in the fall or early spring from 3 to 4 feet apart, in the richest soil you have, or can prepare. New book: "Rhubarb Culture," a complete guide to dark forcing and field culture (well illustrated), 130 pages. \$1.25.

## Banwine Rhubarb_A Moneymaker

This comparatively new and very profitable rhubarb is claimed by our grower to be superior to all ordinary varieties and unequalled by any known marketable sort. The trueness of the strain is unquestionable, as it is only propagated from root diversions or growing buds from stock that shows the superior merits of the parent stock.

Banwine is a quick, very early grower, producing very freely giant, heavy stalks, that are exceedingly tender, brittle and of the finest flavor and color. A "peerless" rhubarb for home gardens or for commercial plantings.

We supply strong, healthy divided roots, the only safe way. Seedlings do not come true.

SINGLE EYE.-Postpaid, each 15c; doz. \$1.75. Not postpaid, doz. $\$ 1.50 ; 100 \$ 10.00$

DOUBLE EYE._-Postpaid, each 25c; doz. \$2.50. Not postpaid, each 20c; doz. \$2.00; 100 \$16.00.

Transplants.-Grown one year from singleeye large, vigorous, healthy roots, each 35 c ; doz. \$3.00, not prepaid.

FOUR EYE.-Big clump, each 50c; doz. $\$ 5.00$.

## Riverside Giant

RIVERSIDE GIANT is very favorably known and has stood the test of time, being crisp, tender, free from stringiness with a good color and a delicious, distinctive flavor. The skin is so thin that it disappears in cooking. Riverside Giant has every good quality of a commercial rhubarb and is so vigorous and productive that over thirty-five tons per acre is a conservative estimate for the season

Prices same as Banwine above.

Rhubarb.-If wanted in larger quantities, write for special price.

[^26]
## Books You Should Read

The following list comprises the newest and best books covering the different subjects.

## Garden Guide

The amateur gardener's Handbook. Thoroughly covering Vegetable and fruit Raising. How to Plan, Plant and Maintain the Home Grounds, the Suburban Garden, the City Plot, How to care for Roses and Other Favorite Flowers, Hardy Plants, Trees, Shrubs, Lawns, Porch Plants and Window Boxes. With Chapters on Pruning, Propagation, Fertilizers, Insect Pests, Tools, Winter Storage, Canning, Birds, Garden Furniture and 1,001 Practical Pointers. Heavily illustrated with over 275 teaching plans and diagrams and reproduced photographs, all made expressly for this Standard Text Book.
Paper cover, $\$ 1.10$; cloth cover, $\$ 1.65$, postpaid.

## Milady's House Plants

This new book, written by an expert on house plants, is fully illustrated and gives the information every lover of plants needs to be successful. Don't let your beautiful palms, ferns and plants die. Cloth cover, \$1.10; paper cover, 80c.

## Practical Plant Propagation

By Alfred C. Hottes. An exposition of the art and science of increasing plants for the nurseryman, florist and gardener, amateur or professional. The text is brief and to the point. No lengthy discussions, but facts are tersely stated, so you may get the point quickly.
All amateurs have an intense desire to propagate those plants which they admire. In this book is told in simple terms how to graft fruit trees, make cuttings and layers, and sow the seeds which are often difficult to germinate. 180 pages. Profusely illustrated. Cloth binding, $\$ 2.15$.

## Home Fruit Grower

By M. G. Kains. A simple and practical volume for the amateur, who seeks to grow high quality fruits for home needs. Pruning, sprays, etc. Nicely illustrated, 213 pages. Prices: Paper covered, $\$ 1.10$; cloth, $\$ 1.65$.

## A Little Book of Annuals

By Alfred C. Hottes. This Little Book of Annuals has been written for the increasing throng of amateurs who grow flowers for the love of them. It is a reliable guide through the season of annual bloom. Carefully written and edited, freely illustrated, accurately indexed. 128 pages. Price: Paper cover, postpaid, $\$ 1.10$; cloth binding, postpaid, $\$ 1.35$.

## Practical Landscape Gardening

This new book, written by Robt. B. Gridland, is without a shadow of a doubt the best book we have read. Contains 91 illustrations, 67 sketches and 33 plans. Enamel paper, 266 pages, cloth binding. Price, $\$ 2.65$.
Other Valuable and Worth While Books
Asparagus. Hexamer .....  $\$ 1.25$
Barn Plants and Out Buildings. Powell. . 2.25
Beginners' Guide to Fruit Growing ..... 1.25
Butter Making. C. A. Publow ..... 1.25
Every Step in Canning. Grace Gray. A. book that thousands of women have wanted. 253 pages; cloth. ..... 1.50
First Lessons in Dairying. Van Norman. 1.Making the Farm Pay. Bowsfield. 311pages; cloth1.50
New Onion Culture. Greiner. ..... 1.25
Practical Fruit Grower. Maynard. ..... 1.25
Profitable Dairying. C. L. Peck. ..... 1.50
Rhubarb Culture. New. Morse \& Fiske. ..... 1.25
Silos, Ensilage and Silage. Miles ..... 1.25
Soiling Crops and the Si.o. Shaw ..... 2.25
Strawberry Culturist. Fuller ..... 50
Sucecss By Dawson ..... 268
pages ..... 1.50
Tomato Culture. Tracy. ..... 1.25
The Potato. Frazer. ..... 1.25
The Right Use of Lime for Soil Improve- ment. Agee ..... 1.50
Window Flower Gardening. Heinrich. ..... 1.25

## Chbaper than olldad's ELECTRIC LANTERN the heht of SAFETY FIRST

These are a little out of our line, but of great merit.
Dad's Electric Lantern is a full-sized searchlight lantern. It stands $71 / 2$ inches tall, $51 / 4$ inches wide, $23 / 4$ inches thick, excluding the projecting bail, headlight and handle. It's the most wonderfui light ever invented for all general purposes. It's in a class entirely by itself and should not be confused with flashlights or so-called electric lanterns using one cell.

Dad's Electric Lantern uses two ordinary standard 6 -inch dry cells (or batteries), obtainable from us by parcel post or in any town or village.

DAD'S NO. 1 ELECTRIC LANTERN (See cut).-A wideangle, real light, that you can work or read by. No matches to scratch or danger from fire. Throws a powerful, illumniating, briliant light 200 feet or more. Sure, safe and always ready for use. Ideal for Dairymen, Poultry Keepers, Camp. ers, Travelers or Autoists. We use these around the store "and on all our outing trips. We couldn't do without our "Dad."

PRICES-Dad's No. 1 General Purpose Lantern, without dry cells, $\$ 3.50$ (mailing weight $21 / 2$ lbs.) ; comp.ete with two dry cells, $\$ 4.70$ (mailing weight 7 lbs.). Add postage if wanted by parcel post. (Get dry cells at your store and save postage.)


Dad's No. 1 Eiectric

EXTRA PARTS.-Reflectors, 75c; Lens, white or red, 35c; Tungsten Bulbs, 40c, postpaid; Dry Cells (weight $21 / 2$ lbs.), 60c each.

PAMPHLET GIVING FULL INFORMATION AND ILLUSTRATIONS ON REQUEST

# Miscellaneous Supplies and Tools You Need 

Remember to add postage if wanted by mail

## PLANT AND ROSE STAKES

## Prices Not Prepald

ROSE STAKES-Painted green, white top; last and look well. Per doz. 3 ft . $\$ 1.00$; $31 / 2$ ft . $\$ 1.25 ; 4 \mathrm{ft}$. $\$ 1.50$; 5 ft . $\$ 2.00$; 6 ft . $\$ 2.75$; 8 ft . $\$ 4.00$.
BAMBOO-Inexpensive and very desirable for pole beans, etc., or flowering plants or shrubs.
Prices per dozen: $2 \mathrm{ft} .25 \mathrm{c} ; 3 \mathrm{ft} .30 \mathrm{c} ; 4 \mathrm{ft}$. 40c; 5 ft . 50c; 6 ft . 60c; 25 per cent less for pencil size green. Write for low prlce by 100 or 1,000 .
Note.-State for what purpose you want them, as we have them stained green, pencil thickness, and natural color, $8 / 8$ to $7 / 8$ inch thick.

## WOODEN LABELS

The tree and pot labels we offer below are strictly No. 1 labels, smooth and well made. The painted labels are 'really painted," not dipped in oil. Ordinary lead pencil writing on the painted labels is always readable; it will not wash off.

| Tree Labels |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| P. P. Wgt. 4 | lbs. | 12 | 100 | M |
| Painted, copper wired | $\ldots . . \$ 0.10$ | $\$ 0.50$ | $\$ 3.50$ |  |
| Unpainted, iron wired | $\ldots .$. | $: 10$ | .40 | 2.50 |

## Pot Labels <br> Wgt. per M. $12 \quad 100$ M

Painted, 4 in. (P. P. $31 / 2$ lbs.) $\$ 0.10 \$ 0.40 \$ 2.50$
Painted, 5 in. (P. P. $41 / 2$ lbs.) . 10 . 453.00 Painted, 6 in. (P. P. 5 lbs.) . 10 . 50 3.75

## Garden Labels

Same style as above, but thicker and wider. Wgt. per M. $12 \quad 100 \quad$ M Painted, 8 in. (P. P. 15 lbs.) $\$ 0.15 \$ 1.00 \$ 8.00$ Painted, 9 in. (P. P. 17 lbs.) $.25 \quad 1.5012 .00$ Painted, 10 in. (P. P. 20 lbs ) $\quad 35 \quad 2.0014 .00$

## WIRE HANGING BASKETS

Well made of heavy wire and painted green. 6-in., 20c; 8-in., 25c; 10-in., 35c; 12-in., 40c; 14-in., 50c. (Not mailable.)


## DANDELION AND WEED KILLER

A new, simple, yet practical tool that is automatic, quick and sure in its work. Cutting or pulling off the tops of weeds only makes the roots grow more vigorously; digging them out with a knife gives one the backache or lame knees, therefore use the "DandyLion" same as a cane.
You simply fill it with solution of gasoline or weedkiller, put the point on the root crown of the weed, press until the cross bar on the point (see cut), releases the fluid. (Directions tell how.) The soiution kills the root and all.
Spring vålve and base removable. Length, 34 inches. PRICE, NO. 1, Brass Covered, \$1.25; postpaid, \$1.40.

POTS AND SAUCERS



#### Abstract

No. 1 No. 2 No. 3 No. 4 Fig. 1-Fern Dish Fller; 2-Bulb Pan; 3Azalia or Fern Pot; 4-Standard Flower Pot. All styles same prices.




## JARDINIERES, ETC.

We carry in stock a large and complete assortment of the best styles and latest designs. Limited catalog space will not permit us to illustrate and describe them.

## RAFFIA

Natural color, highest quality. Very scarce. Price per lb., $30 \mathrm{c} ; 10$ lbs. $\$ 2.50$; 25 lbs. $\$ 2.00$; postage extra. Write for quantity price.

## OREGON GREEN MOSS

For hanging baskets, etc. 3 lbs., 25c; 2bushel sack, $\$ 1.50$; per bale, $\$ 4.50$.

## HALL DANDELION PULLER

Here's a tool that gets the dandelion, roots and all, and operator stands up. No wet knees or aching back


Directions. - Just push the blade down in the ground close to the weed, press towards the weed and pull up. A patent hook near point of blade does the trick. A slot prevents dirt from clogging the hook. Study the illustration carefully. Is made of polished steel and will last a lifetime. The only successful dandelion weeder to date. Wooden handle 30 inches long, steel part 8 inches. Price 75c; postpaid, 85c.

## Miscellaneous Tools That Every Gardener Needs



## GARDEN TROWELS

Add 5c for mailing
NO. 9.-Wood handle, steel blade; 6-inch blade. 50c.

NO. 10.-Very strong; all steel; 6 -inch. 50c.
NO. 12.-Best low-priced; 6 -inch blade. 25c.
NO. 13.-Maynard pattern; 6-inch; highest grade. 90c. Postpaid $\$ 1.00$.

NO. 14.-Transplanting, narrow blades, high quality, 35c; medium 25c. Postage extra.

## GRASS HOOKS or SICKIES

LITTLE GIANT.-Scythe blade, best style. Easy cutting. Each 85c; postpaid 95c.

VILLAGE BLACKSMITH. - Hand forged. Price 75c; postpaid 90c.

## PRUNING SAWS

Atkin Saw Co.'s highest quality. None better. Atkin booklet on Pruning Free. If wanted by parcel post, add 10c extra for mailing.

NO. 20.-California, curved 12 -inch blade, \$1.35; 14 inch,, \$1.50.

NO. 18.-Smaller to above, better handle grip which can be loosened and folded under cutting edge for carrying in your pocket. 16inch, $\$ 1.50$; 18 -inch, $\$ 1.65$.

NO. 3.-Duplex blade; 12 -inch $\$ 1.50$; 14inch, $\$ 1.65$. Most popular. (See cut.)

NO. 1.-Table pruner, open handle grip. Extra quality. 12 -inch blade, $\$ 2.00$.


No. 3-Duplex Blade

## "ALCA" GARDEN TOOL

Best all-round tool made. This remarkable combination tool is a trowel, fork, hoe, weeder and dibble-all in one. A spring releases the particular tool you desire. Light but strong and handles nicely. ( 15 inches long--see cut.) Price 75c; postpaid 80c.

## LUTHER KNIFE AND TOOL SHARPENER

Every Farmer and Household can Use One to Advantage
A genuine Luither Tool Grinder for household use. A sturdy and well built, one-piece case grinder, that will last for years. Equipped with a $4 x^{3} / 4$-inch tool wheel and a special knife and scissors sharpener attachment. See cut. Finished in rich Harding blue, baked by special process. Smooth and easy running. Parcel post weight, packed, 5 lbs. Price only $\$ 3.00$. Add Postage if wanted by mail.

## Miscellaneous Supplies and Tools You Need high grade pruning shears

We offer a good assortment for every purpose for both professional and amateurs. PRICES POSTPAID.

NO. 44 (see cut).-Professional, Henkel's highest grade, best style and design; full polish, double brass springs, adjustable lock nut, $81 / 2$-inch. Price $\$ 5.75$.

NO. 44A.-Same general style as above, Swiss style, full polish, $81 / 2$ inch. Price $\$ 3.75$.

NO. 46 (see cut).-Excellent style. full polish, strong and serviceable; 9 -inch. Price $\$ 2.50$.

NO. 48 (see cut).-Large, strong, durable, black handle, polished blade, 9 -inch. Price $\$ 1.50$.

NO. 49.-Same style as 48 but full polish, handles nicely, 8 -inch. Price \$1.75.


NO. 50 (see cut).-Henckel's high-grade, full polish. Lock-nut, easy to handle, strong and easy cutting; $81 / 2$-inch. Price $\$ 3.25$.
NO. 52 (see cut).-A good, low-priced shear, spiral wire spring; 9 -inch. Price $\$ 1.00$.

NO. 54 (see cut).-Nickeled finish, highest quality, excellent cutter; patent lock; 8 -inch. Price \$3.25.

## Pruning Shears

NO. 56 (see cut).-Nickel finish, excellent quality, for light pruning or cutting flowers; $51 / 2$-inch. Price $\$ 1.75$.

NO. 56A.-Same style as 56 but larger; 61/2inch. Price $\$ 2.75$.

NO. 56B.-Same as 56 but larger and stronger, handy size; 7 -inch. Price $\$ 3.00$.

NO. 58 (see cut).-Extra springs. Each 25c.

## TREE PRUNERS

Long handle tree pruners, indispensable for pruning tall trees. Reliable make, with spring; 6 feet, $\$ 1.75$; 8 feet, $\$ 2.00 ; 10$ feet, $\$ 2.25$; 12 feet, $\$ 2.50$. Extra blades 35 c each. See cut

## HALL'S GARDEN TOOLS

Very popular, handy, light and good
HALL'S NO. 1.--This has 5 adjustable steel spring teeth or cultivators. Spread 7 inches; length 6 inches; height 6 inches; 4 -foot handle. (P. P. wgt. 3 $1 / 2$ lbs.) Price, \$1.25.
HALL'S NO. 2.-Same as above, only 3 prongs. A smaller and lighter tool for small gardens or narrow rows. (P. P. wgt. 2 lbs.) Price, $\$ 1.00$.


HALL'S NO. 4.-A double tool; a square hoe blade $41 / 2$ inches wide on one side and 2 cultivator teeth on other end. Full length handie. (P. P. wgt. $21 / 2$ lbs.) Price, $\$ 1.00$.
HALL'S NO. 5.-A double tool; a square 3inch hoe tapering to a point on other end.

Full length handle. (P. P. wgt. $21 / 4 \mathrm{lbs}$.) Price, 85 c .
HALL'S NO. 6.-A combination tool; a 6 -inch hoe blade on one side and a 4-tooth hoe or rake on the other end. Full length handle. (P. P. wgt. 5 lbs.) Price, \$1.25.

PULL EASY ADJUSTABLF GARDEN TOOL


Study the illustrations above carefully and you will understand the make-up of this new tool. For raking, cultivating, leveling and preparing the soil it has no equal. You can do more and better work with this tool than with any other that we know of. No. 1 is adjustable from 6 to 18 inches in width. No. 2, adjustable 3 to 6 inches. The construction of the teeth keeps it in the ground, and you can cultivate between the rows as fast as you can walk. Polished hardwood $41 / 2$-foot handle. NO. 1 PULL EASY.- 9 teeth (P. P. wgt. 4 lbs.), \$1.75. NO. 2 Jr.-4 teeth for narrow rows (P. P. wgt. 3 lbs.); price, \$1.35.

## Standard Hill and Drill Seeders

These up-to-date Seeders are made by the American Fork and Hoe Co. None better-fully guaranteed.
 VATOR.-Fills all the needs of the planter whose work does not justify buying separate tools. Drills the seed perfectly or drops in hills $4,6,8,12$ or 24 inches apart; covers and rolls it down. Rotary force feed, seed drops in plain view. For cultivator equipment, see illustration. Quickly changed from a seeder to a single-wheel cultivator. Weight, boxed, 50 lbs. Price,

## Standard No. 14 Hill and Drill Seeder

Same as No. 12 above, without cultivator attachments. Weight, boxed, 40 lbs . Price, $\$ 12.00$.

## Standard No. 9

Hill and Drill Seeder, and Double Wheel Cultivator. Like No. 12, with extra wheel to make a double wheel cultivator. Wgt. 60 lbs. Price, Complete, \$18.00.

## Planet Jr. Seeders

If interested, send for illustrated catalog and price list.

Wheel Garden Cultivator
Just the right size and the right price for the average garden maker. Everyone who makes much garden should have one, as it reduces the labor one-half. Makes gardening a pleasure.
NO. 20. SINGLE WHEEL CULTIVATOR. A popular and efficient
large wheel cultivator that runs easily, steadily and In perfect balance
on a light, strong, 24-inch steel bushed wheel; adjustable oak handles.
Not equalled by any other cultivator, at anywhere near its price. At-
tachments tool steel, hardened and polished. Tools Furnished. Plow,
for hilling, plowing, covering seed; a combined cultivator Rake and
Sweep for cultivating, harrowing and cutting weeds; Reversible Dia-
mond Point for marking seed rows, etc. Price complete, 55.25.


No. 20-Single Wheel Cultivator
NO. 13. DOUBLE WHEEL CULTI-VATOR.-An ideal outfit with 4 cultivator teeth, 2 hoe weeders, 2 shovels or hillers, 2 leaf guards, all highest quality. Price complete, $\$ 11.00$.


No. G-2X-Single Wheel Cultivator

NO. 22, SINGLE WHEEL CULTIVATOR.-An excellent tool for close, fine work. Easy running. Equipment, 3 cultivator teeth, 1 standard plow, 1 pair hoe weeders, all of highest quality steel; wheel 16 inches. Price $\$ 8.50$.
No. 22 A .-Same equipment as above, less the plow. Price $\$ 8.00$.


No. 13-Double Wheel Cultivator
"FAIRY," NO. G-5.-Makes cultivating a delight. Five adjustable "invincible" best steel cultivator teeth that can be adjusted to cultivate narrow or wide rows. Long adjustable ash handles, 14 -inch wheels. With "Fairy" you can cultivate as fast as you walk and do it ten times easier than hoeing. Price, only $\$ 4.25$.


Fairy G-5

## LAWN MOWERS

We do not carry a large variety, but we do offer the makes that run easily, wear well and do satisfactory work. Order early, prices liable to advance.

GREAT AMERICAN BALL-BEARING.-Open cylinder, five blades, 10 -inch wheel, solid cast steel butting knives, hardened in oil; steel balls of highest grade, placed in dust-proof steel cup; cuts close; easily adjusted. 15 -inch, $\$ 18.50$; 17 -inch, $\$ 20.00$.


Great American Ball Bearing

## DURHAM WATER-WEIGHT LAWN ROLLERS

Best lawn roller made. Steel drums can be filled with sand or water to make them heavier. Roller-bearing, easy running. Every lawn, new and old, needs rolling. Ask your gardener. We offer the two popular sizes.

| Drum | Weight | Filled |  | Portland |
| :---: | :---: | :--- | :---: | ---: |
| Size | Empty | Water | Sand | Prices |
| $18 \times 24 \mathrm{in}$. | 80 lbs. | 300 lbs. | 500 lbs. | $\$ 22.25$ |
| $24 \times 24 \mathrm{in}$. | 125 lbs. | 500 lbs. | 800 lbs. | 25.95 |

## CYCLONE SEEDER

The best broadcast hand shower in the market. Guaranteed to sow perfectly all varieties of farm seeds, such as clover, tim othy, alfalfa, oats, rye, wheat, etc. Can be regulated to sow any amount per acre. It is strongly built and mechanically perfect. The bag holds $1 / 2$ bushel. Easily operated. (Mailing weight 4 lbs.) Price, $\$ 2.25$. Don't forget postage if wanted by mail.


## Corn and Potato Planters

Save time, labor and backache. Add postage if wanted by mail
ACME CORN PLANTER.-(See cut No. 6.) A twohandled planter, light and durable. Adjustable from popcorn to large kidney beans. (P. P. wgt. 6 lbs.) Price, \$1.50.

EUREKA TUBULAR POTATO PLANTER.-(See cut No. 7.) Plants any size seed, and at an adjustable uniform depth. Opens automatically by forward movement; most satisfactory in every way. (P. P. wgt. 5 lbs.) Price, $\$ 2.00$.

PINGREE POTATO PLANTER.-(See cut No. 8.) Similar to the tubular, but has no tube. You lift the planter up to drop in the potato. (P. P. wgt. 5 lbs.) Price, \$1.35.

ZENITH BALL-BEARING. - Latest improved type, best quality steel, more superior, 5 cutting blades. 16inch \$18.00; 18-inch, \$20.00.

NORTHERN KING.-Open cylinders, 4 blades, good quality and best medium-priced mower. 14 -inch $\$ 12.00$; 16 -inch. \$14.00.

## Grass Catchers

SUCCESS. - Perforated metal bottom, canvas sides. Adjustable for 14 to 18 -inch mower. Price, $\$ 2.25$.

FULL CANVAS.-Good quality, wire frame. Give blade measure for size. Price, \$1.25.

Grass Hooks or Sickles.-See page 116.

13


Lawn Roller
R. R.'s EVERGREEN LA W N GRASS (page 49) and WONDER and "C-M" FERTILIZER (pages 38 and 39) make those beautiful green, velvety lawns so much admired.


## MOLE AND GOPHER TRAPS

EUREKA CLINCH TRAP.-An inexpensive but efficient wire trap. Set a trap each way in the runway and you catch 'em going or coming. Price 25 c ; 2 for 40 c , postpaid.

CHUBBUCK DOUBLE CATCH TRAP.(See cut.) This box trap is to be set in the runaway. It has double steel springs that are sure to catch and hold either small or large gophers. Simple, safe and sure. Price 75c; postpaid 80c; 2 for $\$ 1.50$.


REDDICK.-Well known and popular. This is the spear type. The $2-\mathrm{ft}$. plunger has 6 steel wire spear points that are sure to catch the mole as he passes under the trap, no matter which way he is going. Price, each, \$1.10; postpaid, \$1.30.

## OUT O' SIGHT MOLE TRAP

This has been the Standard Mole Trap for many years. It is absolutely reliable.

Directions for setting and full explanation of the mole's habits furnished with each trap. Heavy, powerful spring, mallable iron jaws.

Price, \$1.25; postpaid, $\$ 1.35$.


## GET RID OF RATS

Absolutely deadly to rats and mice but harmless to cats, dogs, poultry or human beings. See page 123.

## "OASIS" CIDER MILLL AND FRUIT PRESS

For Apples and All Kinds of Fruits and Berries

The "O asis" Cider Mill and Fruit Press is equipped with a large self-feed, non-clogging hopper. The grinder is adjustable for all sizes of fruits, berries and apples. This is a "REAL OUT. FIT." The grinder prepares the fruit in ideal condition for pressing. It is well geared and has a large balance wheel and conveniently located crank, making it easy to operate. The 40 -inch frame is of tapering de-
 sign for added strength, and is made of heavy selected hard wood. The tub is 12 inches high and 14 inches outside diameter and is firmly riveted to withstand hard service. The mill can readily be taken apart for cleaning, all parts being accessible. Capacity is one to two barrels of cider per day. Press screw is made of $11 / 4$-inch steel and operates through a heavy iron cross-head, which enables great pressure to be exerted without danger of breakage. Weight, 150 lbs. Price, Grinder and Press complete, $\$ 22.50$. Press only, without grinder, wgt. 85 lbs., Price $\$ 13.00$.

## Cider Maker's Handbook

This is a complete guide, giving full information on best varieties of apples, straining, filtering, fermentation, pasteurization, etc. 119 pages, $5 \times 7$, illustrated. $\$ 2.00$ postpaid.

## PEERLESS AUTOMATIC RAT AND MOUSE TRAPS

## The Best Trap Ever Invented-The First Cost is the Last

Every rat that enters to get the bait, resets or reopens the trap door for "his friend" as he slips from the upper "chute" into the tank of water.

These traps are not only sanitary, but rapid exterminators, saving their cost in a very short time.

There are no complicated parts to get out of order, the method of operation being exceedingly simple. Fully guaranteed.

The rodent entering the trap causes the door to close, which scares the rat, and it runs forward up the wire-covered passage through a catch-door to the balanced chute. Once on the chute, the animal is, by its own weight, thrown into a tank of water. The downward movement of the chute reopens the door, and thus the trap is reset.
The more that enter this trap the greater is the attraction for others. Full directions on each trap.


## SPRAYS, INSECTICIDES, ETC.

DON'T WAIT until the fungi, such as mildew, rust, black spot, etc., have attacked your roses and trees; the fungicide sprays are merely preventatives and should be used in the fall or early in the spring. After the disease has developed, it may be too late to save the plant.


A Real Root Maggot Remedy. Not injurious to Plant Life, but on the contrary is a valuable stimulant and fertilizer in powder form.

It Insures a Good Crop of Radishes, Kale, Cabbage, Onions, Turnips, Cauliflower, Etc.

You can now grow any of these crops and be certain of protection against the destructive Root Maggot if you use Mag-o-tite as directed.
"MAG-O-TITE" is to be sprinkled in and over the drills when seeding, and again after the plants are up. Mix a teaspoonful with the soil when setting cabbage plants or over the soil close to the stem if plants are set.

PRICES: Add postage if wanted by mail. $2-\mathrm{lb} . \mathrm{pkg} .35 \mathrm{c} ; 4-\mathrm{lb}$. pkg. $60 \mathrm{c} ; 8$ - lb. pkg. $\$ 1.00$; $25-i b$. sks. $\$ 2.50$; $100-\mathrm{lb}$. sks. $\$ 8.50$. Add postAdd postage if wanted by mail.

## VEGETABLE SPRAY

## A SUCCESSFUL REMEDY FOR CABBAGE MAGGOT

For destroying and preventing maggots, grubs and worms that infest turnips, radishes, beets, rutabagas, cabbage and cauliflower, etc., also recommended for combating crown borers in strawberries. Applied when setting plants or sprayed along the rows. "Carco" is highly concentrated; use 1 part "Carco" to 100 to 125 parts of water. Descriptive pamphlet and testimonials on request.

Prices: $1 / 2$ pint 50 c ; pint 75 c ; qt. $\$ 1.25$. $1 / 2$ gal. $\$ 1.75$; gal. $\$ 2.75$. BY MAIL: $1 / 2$ pint 60 c ; pint 90c, postpaid.

## CALCIUM ARSENATE POWDER

For all chewing and leaf-eating insects. It may be used on apples, pears, grapes and shade trees. For most chewing insects use at the rate of 1 to 2 lbs . to each 50 gallons of water with about 2 to 3 lbs. of lime. It may also be used combined with Bordeaux Mixture and Lime and Sulphur Solutions. Prices, $1 / 2-\mathrm{lb}$. pkg. 35 c ; 1 lb . 65 c ; 5 lbs. $\$ 3.00$.

## HELLEBORE-Key-Brand_Powdered

For the destruction of slugs, currant worms, etc. Poisonous to insects but not to human beings, therefore safe to use when fruits or vegetables are nearly ripe. Use as a powder or spray, 1 oz . to 3 gal. of water. Price, $1 / 2-1 \mathrm{~b}$. 40 c ; 1 lb. 75 c .

POWDER BLOWERS, SIFTERS, etc.,
page 126. page 126.

BLUE LABEL
SLUG DESTROYER
Kills slugs by contact and keeps them away frol to delicate foliage.
For Sweet Peas, Pansies and all garden truck, sprinkle lightly on and liberally around the plant.

Price: 1 lb. pkg. $25 \mathrm{c} ; 6 \mathrm{lb}$. pkg. 75c. Postage extra.


## Bug Death

Non-poisonous to Humans, Birds or Animais, but it sure gets all chewing insects on vegetables, plants or trees. The only effective powder that destroys that little black bug or beetle that pesters and destroys tomato, bean and vine plants.

Use it freely on any vegetable-absolutely non-poisonous to humans, but destroys the bugs and prevents blight, revives and adds in production and healthy growth.

Write us about Bug Death for Potatoes if you want wonderful results.

Prices, 1-1b. cans with perforated shaker tops, postpaid, 35 c . Not prepaid, $1 \mathrm{lb} .30 \mathrm{c} ; 5$ lbs. $\$ 1.00$; 10 lbs. $\$ 1.75$; 25 lbs. $\$ 4.00$. 100 lbs. $\$ 15.00$. Add postage if wanted by mail.

## BUG DEATH ALPHA

Similar to above but fluffier and lighter. It stays, sticks, stimulates and saves. Regular Bug Death forms the basis, but it also contains other ingredients to make it especially effective against aphis, iice and sucking insects on rose bushes, plants or trees. Nonpoisonous. An excellent fungicide for mildew and blight.

Prices, $12-\mathrm{oz}$. cartons 35 c , postpaid. Not prepaid, 5 lbs. $\$ 1.00$; 10 lbs. $\$ 1.90$. 25 lbs. $\$ 4.25$. $80-\mathrm{lb}$. keg $\$ 13.50$. Add postage if wanted by mail.

## WEED KILIER_Liquid

For Lawn Tennis Courts, Paths, Roadways and any other place where you do not want grass or weeds to grow.

Guaranteed to destroy weeds, grass, poison ivy and all undesirable vegetation. Keeps roadways and paths free from weeds. Cleans tennis courts and ball diamonds. An effective combination of high grade chemicals which diluted in water at 1 to 40 destroys the roots as well as the tops of all vegetation. One gallon diluted will cover 1,000 square feet; and one or two applications are sufficient for an entire season. (Not mailable.) Most effective when ground is damp-use an ordinary sprinkling can.

Price: Qt. 75c; gal. \$2.00; 5 gals. \$9.00. Write for price per barrel.

## TREE TANGLEFOOT

A sticky compound, easily applied in a band around the trunks of trees as a protection against all crawling insects. One pound makes about 10 lineal feet of bands and one application remains sticky 3 months or longer, rain or shine. Apply with a wooden paddle. Excellent to apply over fresh cuts after pruning or trimming. Keeps well. Prices: 1-lb. can 50c; 5 lbs. $\$ 2.25 ; 10$ lbs. $\$ 4.25 ; 20$ lbs. $\$ 8.00$.

Spray material subject to market changes. Write for quantity prices. Poisons not mailable. Add postage if small package of mailable sprays or powders are wanted by mail.

## Sprays and Insecticides-Continued

The best and most economical method of spraying is with a hand or power sprayer.

## ARSENATE OF LEAD

For spraying trees and shrubs or plants against the attacks of leaf-biting or leafeating insects of all kinds, such as green worm, slugs, etc. Especially valuable for spraying to prevent the coddling moth on Apple and Pear, and should be used just before the calyx cups close, for eating insects, whenever they appear. Can be combined with other sprays.

SHERWIN-WILLIAMS' DRY POWDERED ARSENATE OF LEAD.-Has many advantages over the paste, easier to mix and requires less, is more efficient on account of its extreme fluffiness and will adhere longer. Does not deteriorate. Use 1 to 2 lbs. to 50 gallons of water. 1 to 2 tablespoonsful to a gallon. Full directions on packages.

Price, $1 / 2$ - lb. can $30 \mathrm{c} ; 1 \mathrm{lb} .50 \mathrm{c} ; 5 \mathrm{lbs}$. $\$ 2.25$. (Not mailable.) Quantity price on request.

## LIME AND SULPHUR SPRAYS

Particularly effective in the control of the following: San Jose Scale, Oyster Shell, Bark Louse, Scale Insects, Fungus Diseases such as Peach Leaf Curl, Apple and Pear Canker, Apple Scab, Brown Rot of Peach or Plum, Blister Mite, etc.

LIME AND SULPHUR SOLUTION. - The original and old form liquid spray for San Jose Scale. Use 1 part of this liquid to 9 parts of water for dormant spraying. We offer high grade quality. (Not mailable.)

Price, qt. 30c; gal. 75c; 5 gals. $\$ 2.50 ; 10$ gals. $\$ 4.50$. Write for price per barrel.

DRY LIME-SULFUR. - Sherwin-Williams' high grade dry powder. Overcomes disadvantages of the liquid material such as the possibility of freezing, leaky packages, hauling bulky packages, extra freight, etc. Has all the insecticidal and fungicidal qualities of the liquid material. Is absolutely safe and effective. From 12 to 15 lbs. Dry Powdered Lime-Sulfur dissolved in 50 gallons of water should be used as a dormant spray; from 3 to 4 lbs. to 50 gallons of water in combination with the usual proportion of arsenate of lead should be used for summer spray on all seed fruits such as apples, pears, etc. One-half this amount for peaches, plums, and all stone fruits.

We can mail this-postage extra.
Prices, $1 \mathrm{lb} .35 \mathrm{c} ; 5 \mathrm{lbs}$. $\$ 1.50$; 10 lbs. $\$ 2.50$. Write for quantity price.

## SCALE DESTROYER

"TARGET BRAND."-A soluble oil spray of decided merit for San Jose Scale, the most effective for leaf roller, all tree infesting scale and most soft bodied sucking insects. Has many advantages over Lime and Sulphur Solution, as it spreads more readily, getting into every little crevice. Will go twice as far. Has no bad odor, does not discolor and much more agreeable to apply as it does not burn the eyes and skin; no clogging of nozzles, mixes easily. Use 1 gallon to 20 of water, after the leaves are off and up to time buds appear. For sum mer spray use 1 gallon to 100 gallons of water. (Not mailable.)

Price, qt. $75 \mathrm{c} ;$ gal. $\$ 2.00 ; 5$ gals. $\$ 8.00 ; 10$ gals. $\$ 13.50$. Write for price per barrel.

## S. W. PESTROY-(Insects)

This combines the insect. destroying properties of Arsenate of Lead and the fungus preventative qualities of Bordeaux Mixture. It is put up in dry, powdered form for convenient use, and can be used for either dry dusting or wet spraying. It is safe and efficient. Used as a powder just as it comes from the package, or in a solution, same strength Arsenate of Lead Powder.

Price, $1 / 2 \mathrm{lb} .30 \mathrm{c} ; 1 \mathrm{lb} .50 \mathrm{c} ; 5 \mathrm{lbs} . \$ 2.00$.

## BORDEAUX MIXTURE

For Blight, Mildew, Rust and Fungus Diseases. Also prevents and cures Biack Rot and Scab, and acts as a deterrent for insects on fruits and vegetables.

BORDEAUX MIXTURE - POWDERED. This is a perfect dry Bordeaux Mixture concentrate in a dry powder. It is scientifically founded to insure perfect results, stays in suspension well and adheres to the foliage. It can be used in combination with other insecticides with an extraordinary degree of safety. For general winter use, 8 lbs. to 50 gallons of water; one-half strength for summer. (Not mailable.)

Price, $1 / 2 \mathrm{lb} .30 \mathrm{c} ; 1 \mathrm{lb} .50 \mathrm{c} ; 5 \mathrm{lbs} . \$ 1.75$; 10 lbs. \$2.75.

## CUT WORIM KILLER_Key-Brand

A very effective poison bait against cut worms, slugs, etc. Place it around plants subject to attack. Worms prefer it to vegetation. Prices: $1 \mathrm{lb} .40 \mathrm{c} ; 5$ lbs. $\$ 1.75$.

## BLACK LEAF ' 40 ',

A concentrated solution of nicotine sulphate containing 40 per cent nicotine. Indorsed by the foremost experts of the U. S. for red bug, green and wooly aphis, thrip, plant lice, codling moth, pear, psylia and all sucking insects.

Also an excellent dip for animal parasites, such as scab and lice on sheep and cattle, sheep ticks, etc. (Poison, not mailable.)

Price, 1-oz. bottle 30c; makes 5 gal. spray; $1 / 2$ - lb. can $\$ 1.25$, makes 47 gals. spray; 2-lb. can $\$ 3.50$, makes 240 gals. spray; $10-\mathrm{lb}$. can, $\$ 13.50$, makes 1,000 gals. spray. Full instructions with each can.

NOTE.-Fish oil soap (see next page), mixed in this solution makes it more effective and is necessary for perfect results. It makes it stick and last longer. Use 4 lbs. to 50 gals. solution. Full and detailed instructions with each can.

## NICO-FUME

The purest and most highly refined nicotine product offered for spraying, vaporizing and fumigation in Green Houses.' Our Florists like NICO-FUME better than other preparations.

NICO-FUME LIQUID for spraying or vaporizing; $1 / 4-\mathrm{lb}$. tin $75 \mathrm{c} ; 1$ - lb . tin $\$ 2.25 ; 4$ - lb . tin $\$ 8.00$; 8 lbs. (gal.) $\$ 15.00$. (Cannot mail.)

NICO-FUME FUMIGATING PAPER.Quick, safe and effective for greenhouse work. Used and recommended by all large florists Price per can of 24 sheets $\$ 1.25$ (wgt. 1 lb. ); 144 sheets $\$ 5.50$ (wgt. 4 Ibs.); 288 sheets, $\$ 10.00$. (P. P. wgt. 8 lbs.) Add postage if wanted by mail.

NICO-FUME TOBACCO POWDER.-Very effective for fumigating in greenhouses. Pour powder on bare ground or cement walk and light. Full information on cans. 1-lb. can \$1.25; 5 lbs. $\$ 4.75$; 10 lbs. $\$ 8.50$; postage extra.

## Sprays and Insecticides-Continued

## SULPHO-TOBACCO SOAP

For spraying or sponging or dipping ferns, palms or potted plants, or spraying roses, shrubs or vines it is invaluable. Kills Aphis, Red Spider, Plant Lice and Sucking Insects. Acts quickly and effectively against these pests. Will not injure the tenderest plant. Two ounces of soap make a gallon of solution. Non-poisonous, perfectly safe and yet very efficient.

Prices: Postpaid, 3-oz. bar 15c; 8-oz. bar 25c.


## Destroys Rats and Mice

"RAX."-While it is absolutely deadly to rats and mice, it is harmless to human beings, dogs, cats, poultry and birds. It may be used anywhere with complete. safety.

Rats Leave Before They Die
RAX causes rats and mice to become sick and die, first transmitting the virus to others, causing the spread of the disease, thus increasing the mortality of the undesirables. They leave buildings and seek the open, where they remain until dead.

A veritable "flu" to rodents. Full directions each bottle. Price: 75c; postpaid 80c.

## "'WOOD-LARK',

## Squirrel and Gopher Poison

Guaranteed quick and sure, also very effective on wood rats, mice, etc. Use it so that the chickens or birds will not get it. Prices, by express oniy: $1-\mathrm{lb}$. can 50 c ; 10 lbs. $\$ 4.50$; 25 lbs. \$9.25.

## SUNSET RODENT KILLER GAS BALLS

A new product of real merit to eradicate ground squirrels, prairie dogs, rabbits and pocket gophers. When these gas balls are lighted and rolled down into the burrow they produce a deadly, poisonous gas that carries
 death to any living rodent in the burrow.

They are non-explosive and non-poisonous to handle. Use one or two balls per burrow. Safe, sure and inexpensive. Descriptive Leaflet and Testimonials on request. Full directions with each order. Price, 6 for 30 c ; doz. $50 \mathrm{c} ; 3$ doz. $\$ 1.25$, postpaid. Carton of 125 balis, $\$ 3.00$. Wgt., 14 lbs. Postage extra.

COMET GAS BALLS.-Smaller balls than above, to be used the same way. Pkg. of 12 , 30 c ; postpaid 35 c .

SULPHUR CANDLES.
Each 10c; postpaid 15c; 3 for 35c
TOBACCO DUST.-Valuable as an insecticide.

Lb. 15c; 10 lbs. $\$ 1.25$
bLUE STONE-VITROL.
1 lb .25 c ; 10 lbs. market price


Kills Flies, Moths, Mosquitoes, Roaches, Bed Bugs, Ants, Fleas, Lice and Spiders.
A new kind of spray that instantly seeks out the pests, forces them out of hiding and quickly kills them without the slightest danger as it is non-poisonous to human or animal life.

TOXOL will not stain walls, woodwork or clothes; odor is pleasant and quickly passes away when windows are opened. Leaflet tells all and gives full directions for using.

PRICES: $1 / 2$-pint 45 c , postpaid 50 c ; 1 pint 75 c , postpaid 85 c . Not prepaid, qt. $\$ 1.25$; $1 / 2$ gal. \$2.25; gal. \$4.00.

SPECIAL OFFER.-1 pint can and a good tin sprayer in a carton, only $\$ 1.00$; postpaid for $\$ 1.15$.

## TALBOT'S ROACH POWDER

The most effective Roach Powder. Pkgs., 30c and 55c, postpaid.

## TALBOT'S ANT POWDER

Excellent repellant and destroyer. Pkgs., 30c and 55c, postpaid.

## TALBOT'S BED BUG POWDER

Sure to get them. Pkgs., 30c and 55c, postpaid.

## PRUNING COMPOUND OR PAINT

This paint has a heavy oil body which dries on the cut with a rubbery, elastic film that will last as long as a paint can be made to last. It will thoroughly seal up the open wound. It is dark olive green in color, comes ready to use with a stiff brush. Its low price and merit should appeal to every orchardist.

Price, qt. 65 c ; gal. $\$ 2.25$

## GRAF'IING WAX

We sell Target Brand, a high-grade preparation. Easy to handle. For pruning or grafting or for covering fresh cuts.
$1 / 4 \mathrm{lb} .20 \mathrm{c} ; 1 / 2 \mathrm{lb} .35 \mathrm{c} ; \mathrm{lb} .60 \mathrm{c}$; postage extra.

## PARIS GREEN

Poison, be careful. Usually four to six ounces to fifty gallons of water will be satisfactory. Price, $1 / 4 \mathrm{lb} .25 \mathrm{c}$; $1 / 2 \mathrm{lb} .40 \mathrm{c} ; 1 \mathrm{lb} .75 \mathrm{c}$.

## FISH OIL SOAP

For aphis, plant lice, etc. Best grade, $1 / 2-\mathrm{lb}$. bar 15c; 1 lb .25 c ; 10 lbs. $\$ 2.00$; 100 lbs market price.

UNSLACKED LIME.-For making whitewash, etc. (For garden lime, see page 40.)

Price, 5 lbs. 25c; 10 lbs. 40 c . Add postage. Barrel prices on request.
SULPHUR POWDER.
Lb. $10 \mathrm{c} ; 3$ lbs. $25 \mathrm{c} ; 100$ lbs. $\$ 4.00$

[^27]
## SPRAY PUMPS AND SPRAYERS

Our experience shows us that if you get a good outfit, one large enough to do your work, you will spray well and as often as necessary; but if you get a cheap outfit or one that is too small, you will become disgusted, throw it aside and let this most important work go undone. HARDIE MFG. CO.'S HANDSOMELY ILLUSTRATED SPRAY PUMP CATALOG ON REQUEST.


No. 6 Hardie

| Catalog |  | Capacity |  |
| :---: | :---: | :---: | :---: |
| No. | Plunger | per Hour | Price |
| No. 5 | 2 in. | 50 gal. | \$15.00 |
| No. 6 | 2 in. | 75 gal. | 18.25 |
| No. 7 | . $21 / 2 \mathrm{in}$. | 100 gal. | 20.50 |



No. 40-A Utility

## UTILITY NO. 40-A SPRAY OUTFIT

A very useful and convenient portable outfit for all-round spraying, whitewashing or disinfecting. Outfit only 28 inches wide, permitting its use in narrow passageways.

Tank, 18-gal. capacity, made of heavy galvanized iron, reinforced at top and bottom. Frame made of steel tubing, well braced, to insure strength and rigidity. Tank when filled hangs in a vertical position and is easily removed. Wheels, 18 -inch diameter by $21 / 2$-inch face.
The air pressure tank is so constructed that a sufficient pressure may be attained and considerable spraying done with one pumping. Tank is supplied with pressure gauge and drain plug.

Equipment, 10 feet of $1 / 2$-inch, 5 -ply hose, 4 feet spray rod, and No. 65 shut-off, selfcleaning, adjustable nozzle. Weight crated, 100 lbs . Price $\$ 40.00$.


Hardie Wheel Outfit No. 21
WHEEL OUTFIT NO. 21
A most satisfactory outfit and one of our best sellers. Especially designed to meet the needs of the small fruitgrower, gardeners and florists, for all-round spraying. It has the capacity and power to do good work rapidly. Dairymen, poultry keepers and farmers will find this outfit most useful for whitewashing, disinfecting and general spraying. The 30 gallon barrel is mounted on strong wroughtiron wheels, 26 inches in diameter, with $11 / 2-$ inch tires. No. 5 pump, 5 feet best hose and couplings, 8 -foot bamboo rod and leakless stopcock. 1 Vermorel nozzle. Price $\$ 40.00$


Price, including No. 4 Pump, one 5-gallon heavy wooden bucket, three feet best $1 / 2$-inch hose, one spraying lance 18 inches long, one Vermorel nozzle, price $\$ 13.50$.

To reach the tops of tall trees, you should order, extra, an extension rod. For price of extension rods, see page 127.

[^28]
## LOWELL FOUNTAIN SPRAYER

Every city gardener, florist and poultry keeper needs a Lowell Fountain Sprayer; clean and easy to operate; no need to get any spray on your hands or clothes; will last for years with reasonable care.


Lowell Fountain Compressed Air Sprayer

Special Features: Capacity 3 gallons; can be carried by the handle (see cut), or a shoulder strap. The automatic controlling valve under the handle gives instant and perfect control of the spray and don't waste any. The air pressure pump is outside where you can get at it, the filler plug is well made and fits tight. The tank after being seamed and riveted is dipped into molten solder, making it absolutely air tight and the strongest Air Pressure Sprayer made, standing five times the air pressure necessary to operate.

Hose with a 4 -inch rod, 2 nozzles and filler funnel, with each outfit. For reaching the under side of leaves of low bushes, use the vine attachment extension rod. For high spraying use as many two-foot extensions as needed. Descriptive booklet on request.

Prices: No. 111 brass tank $\$ 9.50$; No. 110 galvanized tank $\$ 6.75$. (Wgt. boxed 14 lbs .)

Extras-2-foot brass extension rods, each 75 c ; vine attachment, 2 -foot extension with bent neck, each \$1.00. (P. P. 1 lb.)

NO. 26 O. K. BUCKET PUMP
(See cut.) - Constructed entirely of brass. It is furnished with three feet of best quality rubber hose, detachable; malleable iron stirrup, three interchangeable brass nozzles which throw a fine mist, coarse spray or a solid stream. Pump is provided with large air chamber, with brass ball valves and valve seats. Throws a continuous spray; neat in appearance as well as durable in construction. Much superior to most pumps of this class. (Wgt. 8 lbs.)

Price $\$ 5.00$

O. K. Bucket Pump

NO. 29, BRASS BUCKET PUMP
The best low-priced spray pump on the market. Double air chamber enables the operator to keep constant pressure with little effort. One fine, one coarse nozzle, 3 -foot hose. (Wgt. 7 lbs.)

Price $\$ 4.00$

## NO. 32, BRẠSS BUCKET PUMP

Well made; all working parts brass; larger capacity; bulb air chamber produces continuous spray; works easily; two nozzlinc (wrt. 12 lbs.$)$

Price $\$ 6.00$


No. 29

## UTILITY COMPRESSED AIR SPRAYER

This type of sprayer is the most popular for all general work requiring a sprayer. It is adapted for spraying, whitewashing, disinfecting, for the application of glue sizing, etc. Size, $71 / 4$ by 20 inches; capacity $31 / 2$ gallons. Side seam closely riveted and all joints well soldered and tested. Pump cylinder made of brass with bronze ball check valve, which will not deteriorate like rubber; hose, $1 / 2$-inch, 5ply, attached to tank by means of a standard hose connection of brass. Filling cap of ample size, easily removed without use of a wrench. Angle automatic shut-off nozzle, made of brass, new design with extension feature, equipped with strainer, and fine, medium and coarse spray nozzle caps.

Weight boxed, 12 lbs.
Prices: GALVANIZED TANK \$6.75; BRASS TANK \$9.50. (Add postage if wanted by mail.)

## NO. 28, WHIRLWIND WHITEWASHER <br> Made especially for whitewashing

Galvanized tin, brass plates, steel footrest, 3 ft . hose, double nozzle. (Wgt. 5 lbs.) See illustration, page 140. Price $\$ 2.75$


No. 32

## SPRAY PUMPS-Continued

## PERFECT SPRAYERS

The "Perfect" Sprayers offered below are well and properly constructed of heavy, highgrade material. We offer "Highest Quality," far superior to most makes. Full size, 20 inches long, capacity 1 quart. Adapted for all kinds of general spraying. Your choice of styles.


No. 7 Perfect
No. 6 or No. 7 (P. P. weight 2 lbs.), your choice, each 50 c . Boxed and postpaid 75 c .


## No. 6 Perfect

NO. 126 GALVANIZED.-Same style as No. 6. More durable. Each 75 c ; postpaid $\$ 1.00$

MIDGET SPRAYER.-Same style as No. 7. Perfect, but smaller; capacity, pint.

Each 40c; postpaid 60c

## RAISE MUCH FRUIT?

If you have any amount of fruit to pick you need one of our new Fruit Picking Bags and a good, safe, handy ladder. Write for descriptive leaflet and prices.

## NO. 5 CONTINUOUS SPRAYER

Improved 1922 style. Has 2 spray caps for spraying up, down, straight ahead or at any angle and is so constructed that it not only sprays on the downward stroke of plunger, but also when it is drawn back, thus causing a continuous mist-like spray, enabling one to spray three times as fast and with one-third the labor. Length 20 inches. Capacity, one quart. (P. P. weight, 2 lbs.)

Each, TIN, \$1.00; GALVANIZED, \$1.25; BRASS, \$1.50. Boxed and postpaid, 25c extra.


No. 5 Continuous Sprayer


## NO. 3 GLASS TANK

Well constructed, the glass reservoir which is a quart Mason jar, is not affected by any kind of spray. You can have several jars of different sprays (already prepared) and when you wish to change, take out one and put in another. No delay. Extra long air chamber, special plunger and throws a strong, fine spray in any direction. (P. P. weight, packed, 5 lbs ) Each $\$ 1.00$; Boxed and prepaid, $\$ 1.35$

## Powder Sprayers, Blowers and Dusters

These are used for applying Sulphur, Bug Death, Dry Bordeaux or insect powder of any kind. Add postage if wanted by mail.


This new powder blower is the This new powder blower is the Works perfectly. Reservoir is a 1-pint Mason Jar, therefore easy to fill. Amount of powder spray regulated by operation of plunger. Spray nozzle reversible, enabling operator to spray P an direction. Length over all 22 inches. (P. P. Wgt. $21 / 2 \mathrm{lbs}$.) Price $\$ 1.00$; postpaid $\$ 1.25$

## LOWELL POWDER GUN NO. 108

Double tubes, gives dense spray, good force. All metal, 22 inches long, capacity $3 / \neq$ pint. Price 75c; postpaid 90c

## Small Dust Guns

For applying lice powder upon birds or poultry these little guns are unsurpassed and almost a necessity.

DEFENDER
Holds about 1 oz. 20c; postpaid 25 c .

WHIRLWIND
Holds about 4 oz . Larger, better. 35c; postpaid, 45 c .

UTILITY POWDER DUSTER NO. 170.Capacity 1 quart. Double dust nozzels, geared force fan sprayer for trees or large fields. Descriptive leaflet on request.

Cut Price, $\$ 10.00$


DICKEY BUG DEATH DUSTER.-For using when applying lime, dust or powder of any kind. For use on small gardens this is very handy. Saves powder, puts it on evenly and just where you want it.

Price: Each 60c; postpaid 70c


ACRE AN HOUR DUSTER OR SIFTER. Bucket shaped straight sides, made of heavy tin, good handle, holds 5 lbs. powder. A simple twist of the wrist does the work. As its name implies, you can cover an acre of plants in an hour.
Each 90c; postpaid $\$ 1.15$

Dry power insecticides are becoming more popular each year as very effective results can be obtained.

## THE RAIN KING SPRINKLER

Puts the water where you want it-keeps it off the sidewalks, porch, etc.
A real innovation, radicaily different, the most wonderful combination, circular or sta-tionary-fine or coarse, fast or slow-for large or small lawns.

Nozzles adjustable and turn in any direction. Spray will cover from 8 to 70 -foot circle, long narrow parkings, or into square corners. Operates on a low or high pressure, this with the almost unlimited adjustments makes a sprinkler far in advance of all others.

Nothing to get out of order, easily operated and sold at a price within reach of ail.

Size-base $6 \times 6$, height $5 \frac{1}{2}$ inches. Weight, packed for parcel post, $31 / 2$ lbs. Price, \$3.75; add postage.

Garden and Spray Hose.-See page 40.
Lawn Rollers and Mowers, page 119.


## BAMIBOO EXTENSION RODS AND EXTRAS

These are necessary for spraying trees. Our stock is made up in the best possible manner. No. 1 bamboo poles lined with either aluminum or steel tubing, screw threaded into brass connections at either end. Stopcock or cutoff necessary to make connections complete.

BAMBOO
EXTENSION
ROSE AND PLANT STAKES,
WEED KILLERS, ETC., see pages
115 to 123 .


Fountain Sprinkler


Busy Sprinkler


Pluvius Sprinkler

NOZZLES, SPRINKLERS, HOSE MENDERS, EXTRAS, ETC.

LAWN SPRINKLER
Don't waste time holding the hose nozzleuse lawn sprinklers, and change positions as often as necessary.

Pluvius Lawn Sprinkler.-11 inch, upright standard, 3 brass arms. (P. P. 4 lbs.)

Each \$2.00
Monarch or Midget.-Same style as above, $51 / 2$ inch. (P. P. $21 / 2 \mathrm{lbs}$.)

Each \$1.50
Busy Lawn Sprinkler.-Covers 25-foot circle. Very desirable for medium-sized yards. (P. P. 3 lbs.)

Each \$1.25
Fountain Sprinkler.-Circular brass tube. Large \$1.25; Small, sprays square, 75 c ; Half Circle 65c (postage 10c; any style).

Little Wonder.-_Cheap, but good. Excellent in small yards. Covers 20 feet. (P. P. 1 lb.) Each 50c
No. 31-Diamond Hose Nozzle.-Best for sprinkling; adjustable from solid stream to a fine spray. (P. P. $1 / 2 \mathrm{lb}$.)

Each 75c

Fountain Shower Hose Nozzle.-Makes a very fine mist-like spray. 25c; 30c postpaid No. 41-Dandy Hose Clinchers.-Best mender made, simple and quick; nothing to catch; sure to hold. Postpaid $1 / 2$ in., $15 \mathrm{c} ; 3 / 4 \mathrm{in}$., 20c

No. 40-Garden Hose Connections. - Both male and female couplings.
$1 / 2$ in. or $3 / 4$ in., pair 40c ( 6 oz .)
Hose Washers.
Doz. 10c, postpaid
No. 45-Metal Mender Tubes.
$1 / 2$ in. or $3 / 4$ in., each 10c, postpaid
No. 42-Hose Clamps, single band.
$1 / 2$ in. or $3 / 4$ in., each 10 c , postpaid
No. 44-Hose Clamps, double band. $1 / 2$ in. or $3 / 4$ in., each 15 c , postpaid

## SPRAY PUMP NOZZLES

Single Bordeaux (Best for Whitewash).. $\$ 1.25$
Single Vermorel (Very Fine Spray)...... 1.00

SPRAY AND GARDEN HOSE
See page 40

PLANT SMALL FRUITS around your garden. What's nicer than delicious fresh fruit, fresh from your own garden? See Fruit Department, pages 106 to 115.

# QUEEN INCUBATORS 

## Recognized today as the World's Standard Hatching Machine

EVERY MANUFACTURER CLAIMS HIS MACHINE IS THE BEST. The most extravagant claims are generally made for the cheapest and most flimsy machines. Unfortunately, there is at present no law to protect the public against irresponsible exaggeration, and it is wise for you to make thorough investigation.

WE WELCOME ANY SUCH INVESTIGATION and comparison, for you will find MORE GENUINE VALUE IN THE QUEEN, for the amount of money you pay, than in any other incubator on the market. Our guarantee and 20 years' experi. ence prove it.

Caldwell, Idaho, April 10, 1922. Routledge Seed \& Floral Co,
Gentlemen: I wrote you once concerning the Queen Incubator. I wish to report results. It hatched every egg with full-grown chicks, but 13. It is a $400-\mathrm{egg}$ size. It hatched a day ahead of time. Respectfully,

MRS. L. WOODHOUSE.

## Wonderful Hatchers

Queen Incubators are famous for big hatches of strong, healthy chicks that live and grow. The QUEEN is accurately regu-lated-taking care of a temperature variation of 70 degrees without danger. It is built of genuine California Redwood-very scarce in these days of imitation and cheap substitution. Redwood does not absorb the odor from the hatching eggs. Cheaper woods, and pasteboard lining in most other makes, retain the odors which certainly weaken and kill the hatching chicks.

## Prices, 1923 Queens

We order in carload lots and can make prompt shipments. All machines fully guaranteed.

We pay the Freight to your station.
No. 1 Standard Queen- 85 egg ...... $\$ 30.50$
No. 2 Standard Queen - 135 "...... 41.00
No. 3 Standard Queen - 180 "،.... ... 48.25
No. 4 Standard Queen- 275 "...${ }^{\prime}$.. 62.50
No. 5 Standard Queen- 400 "،...${ }^{\prime} .73 .75$
No. 25 Standard Queen- 600 "، .......116.00
No. 35 Standard Queen- 800 " ........144.50
No. 45 Standard Queen-1000 " ....... 173.00

## Style K Queen Incubators

These are built to sell at a lower price and are, we believe, the equal of any other incubators sold with the exception of our Standard Queen line. They have double walls, copper pipes and heater, same style regulator, but of lighter construction, double doors, etc. Queen catalog tells all.

We pay the freight to your station.


## No. 4 Queen, 275 Egg

## Hot Water Heating Systems

The Queen Heater, tank and water pipes are made of genuine copper, the best material for this purpose. Every outfit tested under heavy pressure and guaranteed perfect.

The QUEEN Hot Water System eliminates the injurious drying out tendency found in all hot air incubators and provides a soft, uniform heat over every part of the egg chamber that is most natural for the hatching eggs. This form of heat under ordinary conditions makes unnecessary the application of moisture.

The QUEEN is not a cheap incubator compared with many of the cheaply constructed machines on the market, but it is the "Best Bargain," as it will be turning out high percentage hatches years after the cheap machine have been junked.

## Queen "Electric" Heater

Recognizing the growing demand for incubators heated by electricity the Queen Incubator Company have had their experts at work testing out various methods and now have devised a heater that will fit any Queen Incubator from 70 to 1,000 egg size and use only the necessary heat to maintain 103 degrees, and do it at a minimum cost. The electric attachment is a great success, quickly attached by anyone. The only essentials to operate, with electric current, are that you must be 24 -hour electric service and of 110 volt alternating current or 32 volt if direct current. This attachment simply takes the place of the lamp and works automatically. Has safety fuse and pilot light. It's great if you have electric service. Price, Electric Outfit, $\$ 15.00$. QUEEN CATALOG SHOWS ILLUSTRATIONS AND TELLS ALL
You buy the regular Queen outfit and get
the electric heater extra, either now or later. You have the lamp extra for use at any time.

## 1923 QUEEN BROODER STOVE

## The only Coal Burning Brooder Stove with Automatic Control of Both Check and Draft

Don't Hatch Chicks and Loose Them. If you can get good coal, by all means use a Queen
The Queen burns most any kind of coal, but chestnut sizes in all kinds of hard or soft coal or coke is best. Briquettes burn equally well. Of course, hard coal will not cause the pipe to become sooty as quickly as others.

Without a question the "Best" coal burning brooder stove on the market today. Note the improvements-the self-feeding, straight flaring fire bowl, no clogging like in the old bar-rel-shaped bowls. A full-size rocker grate, a real automatic wafer regulator that really works in connection with a right-principle damper or check valve. A fire-proof, ventilated stove base and a collapsible, four-piece hover.

The QUEEN Colony Brooder is a new and improved design of brooder stove. It is made of HIGHEST QUALITY IRON CASTINGS that will wear and last indefinitely.

While the opening of the draft to increase the fire is located on the top of the stove, it opens into the fire at the base through an opening extending down the side to the bottom. This feeds the draft into the fire from underneath with no opening below the hover. When the fire is too hot, the wafer automatic regulator expands and closes the draft and opens the check, but if at any time it gets too cool, the wafer contracts and closes the check and opens the draft. This keeps an even heat all the time, both night and day, in cold weather or warm, and does it automatically. You don't have to pay any attention to it whatsoever after once adjusted. The grate in the Queen stove is the rocker type and strikes the fire at four points. BEST COAL GRATE MADE.


The hover used on Queen stoves is collapsible and made of four pieces of galvanized iron. Comes knocked down, with holes punched and stove bolts attached, ready for putting together. This enables you to save room when storing and lessens the danger of damage when not in use. This hover has a castiron ring on top which sets firmly around the top of the stove. It is furnished with a wire hook to which rope and pulleys may be attached, but it is not necessary to raise the hover to put in coal.

The Queen stove provides a constant, correct heat, and a constant distribution that makes the chicks develop into STRONG, HEALTHY CHICKS. By brooding with a "Queen," the chicks get plenty of pure, fresh air, plenty of exercise, and there is no POS. SIBLE CHANCE OF THEM CROWDING OR SUFFOCATING.

## Queen Brooder Prices for 1923 Queen No. 2 Brooder Stove

This is the most popular size and will brood any number of chicks up to 1,200 . Diameter of grate, $103 / 4$ inches; diameter of hover, 52 inches. Price $\$ 29.50$. Freight paid.

## Queen No. 1 Brooder Stove

This size is made for those who have limited room and do not need so great a capacity. No. 1 will brood any number of chicks up to 600. Diameter of grate, 9 inches; diameter of hover, 42 inches. Price $\$ 23.75$. Freight paid.

NOTE.-Order what 3 -inch stovepipe you need at 30c; 2-foot length; elbows, 40c.

## Queen Electric Brooder

The Queen Electric Hover is what many of our customers supplied with "Electric Service" have been waiting for, It is a real efficient 36 -inch hover, made of galvanized iron, equipped with a safe and automatic electric heater and large enough to hover from 100 to 500 baby chicks. It's "all hover," no center space is lost to heater or other devices. It comes highly recommended and we know the "Queen Company" would not let it go out unless it was O. K.

PRICE QUEEN ELECTRIC BROODER, $\$ 29.00$.

Queen Catalog tells all. Copy on request.

Every chick hatched represents possible profit. The work laid out before you is to get this chick into a vigorous laying hen, or fit for market in the SHORTEST TIME possible. Start and finish them with 'Queens." WE PAY THE FREIGHT.

## NEWTOWN COLONY BROODER

## BROODS LIKE A COAL BURNER

Wickless burner; burns coal oil (kerosene) with a steady blue flame. There is no smoke, no odor, and is absolutely noiseless in operation. No wick to trim-no vaporizing ring.

The Newtown is giving efficient service in every state of the Union. It is simple, safe and durable-a real practical device.

The illustration shown is from a "flashlight" photograph taken at night and shows just how the baby chicks rest in comfort. NO CROWDING or PILING UP in the center.

NOTE the metal heat deflector and ventilator under the top. It's the secret of the Newtown's success. A patented feature found in NO OTHER brooder of this type.

Automatic Regulator.-The flow of oil through the sight feed dropper is automatically controlled by a powerful thermostat under the hover. This dropper is also provided with safety adjustments which make it impossible to feed too much or too little oil to the burner. This not only insures safety, but provides a constantly correct brooding temperature.


Newtown Colony Brooder Metal Hover up, Showing 750 Day-old Chicks

Don't use cheap coal oil. "Elaine", brand or a grade equal to it will give the best satisfaction.

Heat properly distributed.-The construction of the Newtown Heater is such that the highest temperature is maintained near the outer edge of the deflector. There is no hot center, and consequently there is no crowding or piling up. The chicks hover in a circle around the outside edge of the deflector. This feature gives absolute comfort and fine growing conditions. Air always fresh and pure.


The Glass Oil Fount is easily filled, holds one gallon, and is located outside the hover. This prevents any possibility of over-heating the oil and absolute safety is the result.

The Heat Radiator is bolted into the top of the deflector. The heat from the burner passes into this radiator which assists the deflector in distributing it evenly over a large floor space. It also provides a larger radiating surface, and consequently insures the maximum heat with the minimum amount of fuel.

The Blue Flame Wickless Burner.-It burns coal oil (kerosene) with a steady blue flame. The burner is surrounded by a safety jacket.

## Reduced Prices for 1923

## F. O. B. PORTLAND

Each brooder is shipped with everything complete in one crate, all ready to operate. A thermometer and full instructions for operating are furnished with each brooder.

| No. Hover Diameter Chick Size | Price |  |
| :--- | :--- | :--- | ---: |
| 218 | 36 inches 300 to 500 | $\$ 16.00$ |
| 225 | 52 inches up to 1,000 | 24.00 |
| Descriptive leaflet on request. |  |  |

## SEARCHLIGHT EGG TESTER- <br> Portable Electric

If you have electric service this is the only egg tester to use. The demand from poultrymen who have heard of this new tester has caused us to stock it. You move the "searchlight" over the eggs; a novice can test 50 eggs per minute. The searchlight effect on the air cell illuminates the entire contents and as the germ always rises to the top it instantly and clearly appears in plain view. Weak or dead germs, blood spots, cracked shells and clear, unfertile eggs are instantly detected after the third or fourth day of incubation, up to which time eggs need not be turned.

Unfertile eggs tested out the third or fourth day have a market value. The price of this tester is soon saved. Absolutely guaranteed and used successfully by the largest California hatcheries. Price $\$ 5.00$, postpaid. DESCRIPTIVE LEAFLET ON REQUEST.


## KRESKY'S "Pride of Petaluma" BROODER STOVES

They burn oil, are self-regulating, work automatically, and give perfect satisfaction
The Kresky large room brooders are recognized on the Pacific Coast as the successful and most economical method of brooding and raising chicks on a large scale. Our largest and most successful poultrymen are operating Kresky's. They brood from 500 to 1,500 chicks per brooder.

We highly recommend these brooders and have sold hundreds. Properly installed in correctly constructed houses they are unsurpassed.

We cannot in the limited space on this page give you the details of construction of these wonderful brooders, but we do show you illustrations to give you an idea of what they are like.

KRESKY'S IDEA.-If you would like to learn more, about the "Pride of Petaluma's" and "Kresky's Idea" of the proper method of brooding chicks, write and we will mail Kresky's large illustrated and descrip. tive 30 -page catalog.

NO. 2-B AND NO. 4-B are the most popular styles and most in demand, the only difference between these two is that the size of the radiator No. $2-\mathrm{B}$ is 42 inches and No. $4-\mathrm{B}$ is 50 inches.

THE MODEL 12-A is also an excellent outfit and will give perfect satisfaction. Many prefer it and it sells at quite a little less. These three sizes always on display at our Portland stores:

## KRESKY'S REDUCED PRICES FOR 1923

## F. O. B. Portland or Petaluma

No. 2-B, 42-inch Radiator, all complete.
$\$ 54.50$
No. 4-B, Northwest, 50-inch Radiator. $\$ 57.00$
No. 12-A, Model, 42-inch Radiator. $\$ 47.00$
Order early and don't wait until your chicks hatch.

## Stove Pipe Combination for Kresky's

You will need this equipment to set up your outfit properly and you better order it with your stove, as Kresky's stove pipe is heavier and the seams are sealed, very important in the operation of the draft.

Outfit consists of one 24 -inch and 130 -inch galvanized 5 -inch pipe, five 24 -inch extra quality black pipe, one saddle or one roof plate (state which you want and pitch roof), one hood for pipe and one ceiling plate.

Price Complete, $\$ 5.50$


Style No. 2-B and No. 4-B


Kresky No. ${ }^{12-A}$


EQUIPMENT.-Kresky's No. 2-B, No. 4-B and No. 12-A Brooder Stoves have the same automatic regulator, oil tank, oil pipe and thermometer. The complete outfit consists of one 15-gallon oil tank and pipe, latest improved automatic regulator, special tested Kresky thermometer and all accessories needed to install and operate, except the stove pipe combination, which is not included in the price of the stove but can be supplied. See note above.

Full and complete directions for installing and operating are furnished free and found contained in the oil tank.

## Kresky's 1923 New Model Brooders

KRESKY'S NO. 2-C.-The illustration herewith shows the radically new working principles developed in this late creation. It is especially designed for those who demand a brooder stove that is practical for 250 to 600 chicks from the time they are hatched until they are ready to go on the roosts in unheated houses. It is a high class, efficient outfit at a reasonable first cost and will operate at a very low cost. It is really a little "Marvel," the most practical, reliable, economical, cleanest, easiest operated and without question the safest brooding device ever offered in this class and size.

PRICE, NO. 2-C, as herewith illustrated, F. O. B. Portland, or the NEW TYPE NO. 2, F. O. E. Petaluma, $\$ 39.50$.

[^29]
## INTERNATIONAL SANITARY HOVER

The one perfect hover. A sanitary, successful, economical brooding device. Safe and sure. All metal and fire-proof. Used and recommended by thousands of poultry raisers throughout the United States.

Use these Sanitary Hovers and every chick will have a warm retreat during the day, sleep comfortably during the night and come out healthy, happy and hungry in the morning.

BEST BY TEST.-Many tell us that they raise $94,96,98$ and some even 100 per cent of the baby chicks put under this hover. It has many advantages that the old hen does not have. It's always warm and ready to "brood" the chicks; "no lice or big feet."

The air is kept wholesome by diffusion through the cloth curtain. There are no drafts under the hover.


Large, 8-page leaflet of interesting "facts" pertaining to the Sanitary Hover on request.

SANITARY HOVERS are as practical for the small back-yard poultry raiser as for large poultry plants. They are usable anywhere, ready for business wherever placed. All that is necessary is to place the Hover where you want and light the lamp. It's so easy to care for; no lneeling in litter and dust to get at the lamp as you lift it up and out by the handle on top.

## CORRECTLY CONSTRUCTED

It is the warmest near the curtain.-This causes chicks to distribute themselves around the edge of the curtain, where they have plenty of room and fresh air as well as warmth. No deaths by crowding of the chicks to the center.
sELF MAILWIN ELECTRIC BROODER ${ }^{\text {THERMostat }}$
OPERATING

The Mailwin will raise more chicks and with less trouble, attention and expense than most other brooders. It is absolutely safe, sanitary, and requires no care to operate. While mothered, the chicks are not subjected to mites and other diseases so prevalent when raised by the live birds. Can be attached to any light outlet, and on any electric current available.

IT HAS THERMOSTAT CONTROL, insuring safety and economy. The cost of brooding 600 chicks for six weeks is approximately $\$ 5.00$. Made of galvanized steel and asbestos


Mailwin Electric Brooder
lined, retaining the heat internally, thereby cutting down amount of electricity used. Of fireproof construction.

SAVES TIME, LABOR AND TROUBLE.-A turn of the switch and the heat is on and the self-operating Mailwin does the rest.

Sanitary in every respect; can be easily raised and cleaned or moved to another place.

Temperature always the same under the hover. No matter what the outside temperature, the desired degree of heat is easily maintained under the hover. The pilot light going; on and off shows at a glance that everything is working $\mathrm{O} . \mathrm{K}$.

TO SUM UP.-The Mailwin Electric Brooder never causes loss by fire. It is not considered a fire hazard in any respect. This is a strictly up-to-date self-operating brooder.

| Prices F. O. B. Portland |  |  |  |
| :---: | :---: | :---: | :---: |
| Size | Capacity | Diameter | Price |
| No. 1. | 150 chicks | 30 in . | . $\$ 15.00$ |
| No. 2. | 300 chicks | 38 in | 21.00 |
| No. 3. | 600 chicks | 52 in . | 31.00 |

## OAT SPROUTERS

The Perpetual Poultry Silo-grows green feed while you wait-makes two to four bushels of feed from one of grain-runs up the egg yield-cuts down the feed bill-insures the health and vigor of your poultry. Ask any authority or poultryman who has fed Sprouted Oats.

Every poultryman should feed Sprouted Oats, and the only satisfactory way to produce them is in a correctly-built, lamp-heated, sectional oat sprouter.

No other green feed takes the place of the wonderful quickening virtue of the young, growing oat sprouts.

The State Experiment Stations and the national egglaying contests all feed Sprouted Oats.

If you want lots of eggs in winter when the price is high and in summer when the grass is dry, feed Sprouted Oats.

If you want fertile eggs in spring and strong, virile chicks, feed the hens Sprouted Oats.

## Progressive Grain Sprouter

## For 500 Hens or Less

This is an ideal sprouter for large flocks. It contains a soaking tank at the top and when ready to empty the soaked grain into the top section, the tank is easily inverted as shown in the picture. The grain and extra water is dumped into the top section and the extra water drains down through the other sections, moistening the grain, and then out through a drain pipe in the bottom.

Each of the four sprouting sections contain removable metal, perforated bottoms, and the oats are lowered each day from one section to the other by removing the bottoms to each section. On the fourth morning the grain is ready to take off and is in the lower section. Lamp is removed and box inserted, removable bottom pulled out and sprouted grain drops into the box ready to feed.

EASILY CLEANED.-Any good sprouter should be so arranged that it can be thoroughly cleaned, as slime and mold from the oats will in time cause sickness among the flock. This sprouter can be washed out with a hose and thoroughly cleaned, and it will last for years, as it is made of metal with exception of frame on outside.

EASILY HEATED.-One filling of the lamp of oil wll generally last for seven days, as very little heat is required with this sprouter. Each lamp is furn shed with the O. K. Safety Air-Cooled Burner. The metal air shaft in the back of the sprouter carries warm, moist ar to all the sections and also furnishes a mild heat to the soaking tank.

Sprouter is 60 inches high, 24 inches deep and 15 inches wide. Full capacity of this sprouter is about 28 quarts of dry oats, which would be sufficient for from 400 to 500 hens, depending on the system of feeding other foods. Furnished with thermometer, large capacity safety lamp and instruction sheet. Price $\$ 18.50$.

## Feed your sprouted oats in Sanitary Feeding Pans. See pages 138-139.




## Up-to-Date Shipping Coops

These coops are really "up to date" and will give your customers that impression of you if you use them when shipping. Buyers who pay fancy prices for thoroughbred birds like to see them come in a nice coop-not some old cracker box or oil case. These coops are light, but strong. The ends have the cleats nai ed on. We ship in the flat to save charges, but it's an easy matter to nail them together, for each part is marked.

|  | Width | Length | Height | Each | Doz. |
| :--- | :---: | :---: | :---: | :---: | ---: |
| No. 2 | $101 / \mathrm{in}$. | 18 in. | 24 in. | 60 c | $\$ 6.60$ |
| No. 4 | $101 / 2 \mathrm{in}$. | 24 in. | 24 in. | 75 c | 8.25 |
| No. 6 | $191 / 2 \mathrm{in}$ | 24 in | 24 in | 05 c | 8 | $\begin{array}{lllllr}\text { No. } 6 & 191 / 2 \mathrm{in} . & 24 \mathrm{in} . & 24 \mathrm{in} . & 95 \mathrm{c} & 10.75\end{array}$ For Parçel Post-No. 2 weight 10 lbs.; No. 4, 12 lbs.; No. 6, 18 lbs.

Capacity.-No. 2 suitable for single birds or pair Mediterraneans. No. 4 for Asiatic male, American or Mediterranean pair or small trio. No. 6 for a pen of five birds, any varietv.

## Egg Carriers For Commercial and Hatching Eggs

POSTAGE.-In ordering above egg boxes by mail or P. P., be sure you add extra money for postage. RATE TABLE PAGE 1. P. P. stands for parcel post weight, not PREPAID.

## Dia-

CUSHION<br>FRAME,<br>LIGHT,<br>STRONG,<br>AND<br>SAFE



THE DIAMOND EGG CARRIER is a superb packer entirely different and in a class by Itself. It naturally costs more, but it is worth double the price of other kinds. In the end they are the cheapest carrier to use as there is no breakage of eggs and no severe jarring to injure eggs shipped for hatching purposes. The " $V$ " shaped fillers hold the egg in suspension, in other words the "cushion frame" protects them perfectly.


## Routledge ''H. Q.'' Highest Quality Merrill, Ore., March 20, 1922. Routledge Seed \& Floral Co. <br> Dear Sirs: I have had wonderful success with your "Chick Starter" and other feeds so far, and would like another order. Yours truly, MRS. N. H. BOGUE.

See Poultry Feeds, pages 142 to 144.

## Up-to-Date Egg Carriers

Do not class these "Up-to-Date" boxes with the cheaply constructed egg boxes that are made along similar lines. These are double strength and cushion frame on all sides. Note the illustrations carefully. Safe and reliable, for the mailing or expressing of "fancy eggs" for hatching.


15-Egg Size. Open Corner Showing Egg Cells.

| Size | Weight, Empty | Each | Doz. |
| :---: | :---: | :---: | ---: |
| 15 egg | $1 \quad$ lb. each | 25 c | $\$ 2.75$ |
| 30 egg | $11 / 2 \mathrm{lbs}$. each | 40 c | 4.50 |
| 50 egg | $21 / 4 \mathrm{lbs}$. each | 60 c | 6.25 |

Add postage if wanted by mail

## Up-to-Date Parcel Post Egg Carriers

These egg packers are made just like our "Up-to-date," see cut above, but of different capacity, and have a folding top in place of the "slip-on" cover. Perfectly reliable for sending eggs by parcel post. Egg-sell.-Very similar, better in some ways-at same price.

|  | Dozen size. | Each 25c | Doz. | \$2.75 |
| :---: | :---: | :---: | :---: | :---: |
| 2 | Dozen size | Each 35c | Doz. | 4.00 |
| 3 | Dozen siz | Each 50c | Doz. | 5.50 |
|  | Dozen siz | Each 60c | Doz. | 6.50 |
|  | Dozen size. | Each 75c | Doz. | 8.00 |

[^30]
## Up-to-Date Baby Chick Boxes

## These insure the safe arrival of your chicks


#### Abstract

Well made, properly ventllated, made from the best grade of corrugated cardboard. Shipped in the flat, but quickly set up by anyone. The use of this box has made long distance express shipments of live baby chicks possible and safe.

Don't wait until your chicks hatch to order your boxes. Order early and be sure of stock when you want it.


| Size | Weight, Empty | Each | Doz. |
| :---: | :---: | :---: | ---: |
| 25 Chick | P. P. $11 / 4$ lbs. | 25 c | $\$ 2.50$ |
| 50 Chick | P. P. $21 / 4$ lbs. | 35 c | 3.50 |
| 100 Chick | P. P. 3 | lbs. | $50 c$ | 4.50



The Ideal 12 Egg Packer

## Ideal Egg Box

Every poultry keeper who sells eggs should use these folding cardboard egg boxes to deliver eggs in. They are folded flat, but the corners are locked, all ready to open up and drop the eggs in. No errors in counting, as each holds just one dozen.

Price-Per doz. 20c (P. P. 13/4 lbs.); 100 for $\$ 1.25$ (P. P. 11 lbs.); 1,000, write for price.

## Buck 12-Dozen Egg Crate

Made of wood, cardboard fillers. Very light, but strong; metal corners; holds 12 dozen eggs; lock wire bale, wooden handle. (P. P. weight $51 / 2 \mathrm{lbs} .$, set up.) $12-$ Doz. Size, Each 75 c ; Six Doz. Size, Each 60c.

## LIME AND GLASS EGGS



OPAL GLASS NEST EGGS.-Best grade heavy glass, correct shape. 3 for 10c; doz. 40c, postpaid 50c. Low price per gross.

LIME NEST EGG.-Preferred by many; non-breakable. More natural.

Each, 3 for 15c; 12 for 50c. (Wgt. 2 lbs. per dozen.) Add postage.

Medicated or Lice Repelant.-Sale discontinued; government agents condemn them.

GALVANIZED HEN NESTS


Galvanized Hens' Nests
GALVANIZED BOX NESTS.-T.atest and best, full size, five compartments. Price: \$3.50 each

POULTRY KILLING KNIVES


ANGULAR.-Nickle plated handle......600


FRENCH.-Nickle plated handle........60c


RUSSELL.-This is a very popular style. Full size, good grip, $41 / 2$-inch wood handle, highest quality 3 -inch steel blade. Postpaid 75c

## COPPER WIRE NESTS



Wire Nest

Sanitary, no place for lice to hide, easily cleaned, strong and well made. Hang on the wall or between 2 poles or gas pipe. Each 25c; dozen, $\$ 2.50$. Postage 10c each, 50c doz. extra.


## ROUTLEDGE SANITARY TRAP NEST

Correct in design, well made of strong, galvanized ironsimple in construction, yet positive in action. Nests roomy, well ventilated. Wire screen ( $1 / 4$-inch mesh), bottom prevents the hen from scratching. Door well supported when open, sure to close as hen steps* in (a 2-1b. weight will trip it). Positively guaranteed in every way. No flimsy catches, hooks or wire to get out of order. Inlustration (with corner cut out) gives you a good idea of this "up-to-date" sanitary nest. Five nests, $10 \times 12$ inches each, in a set. Price Per Set $\$ 8.50$. Quantity price on request.


NEW MODEL CLOVER CUTTER
You need it.-See page 144.

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'OASIS'' FRUIT AND CIDER PRESS
Of interest to many.-See page 120.
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## ROOFING PAPER

Every poultry-keeper, every farmer and many of our customers have use for a good roofing paper. Easily and quickly put on, lasting and low in cost.

## Certain-teed Talc-surfaced

Best by test, none better at any price; guaranteed to last 5,10 and 15 years, according to weight.

No. 1-Light (about 35 lbs.), roll...... $\$ 2.00$
No. 2-Medium (about 45 lbs.), roll.... 2.55
No. 3-Heavy (about 55 lbs.), roll...... 3.10
Note.-108 sq. feet per roll.

## Major_Standard Quality

The equal of any brand except Certain-teed, good for 4,8 and 12 years, according to weight.

No. 1-Light (about 35 lbs.), roll...... $\$ 1.55$
No. 2-Medium (about 45 lbs.), roll.... 2.10
No. 3-Heavy (about 55 lbs.), roll..... 2.65 Note.-108 sq. feet per roll.
Prices subject to change without notice. If you want large quantity, write stating amount.

Sample of above paper on request.

## Certain-teed Plastic Cement

Mends, insulates and water-proofs metal roofs, sky-lights, troughs, boiler settings, flumes, etc., etc. Pamphlet on request. Price, 1 -lb. cans 25 c ; quantity prices on request.

## Routledge Poultry and Brooder House Plans

A great many of these houses have been built in Portland. You can look through them if you intend to build. By Geo. L. Routledge-Expert Poultryairian


## Routledge Model Poultry House

## ROUTLEDGE BROODER HOUSE

In general construction and outside appearance it is similar to our Model Poultry House, but the inside, of course, has special ventilation and extra constructions - two rooms, one used for the brooder stove and the other as cooler, feeding and exercise room. Both rooms have adjustable ceiling and a panel front so that after chicks do not need stove heat, the house is made into a roosting and rearing house, and later a laying house if you wish. In other words, it is a " 3 -in-1", house, brooding, rearing and laying. We constructed several of these last spring and they have proven economical and very successful.

Remember-For profitable and satisfactory results baby chicks must be correctly hatched, brooded, fed and reared.

The incubator, the brooder, the ventilation of the brooder house and the feed are mighty important.

## Five Dollars Worth for One

We have made large Blue Print Plans of both of these model, up-to-date houses and furnish with them a printed bill of lumber needed, amount of hardware, number and size of sash, etc., and special building instructions, so that you will have no trouble in construction.

Price Complete, either plan, $\$ 1.00$
Blue Print Plan only, 50c postpaid
The above prices only cover cost; we ask no profit.

## ROUTLEDGE POULTRY HOUSE

A modern Poultry or Laying house embodying all the latest improved ideas in the construction so as to keep the fowls healthy and free from colds, roup, etc., by proper ventilation without drafts.

Our aim has been to save labor in the building of the house and to make it easy to keep clean and free from vermin, as well as a labor saver in the daily care of the birds.

The nests, dropping boards, roosts, etc., are well and correctly placed. The birds have the use of the full floor space. Has open front, yet no rain nor wind can touch the birds or the floor.

The standard size of this house is $20 \times 40$ feet and will accommodate up to 400 hens very nicely. You can follow the same construction and make it smaller if you wish.

The birds are kept inside entirely. No outside runs are necessary. This makes it ideal for any place or location in the city or country.

LET US HELP YOU with your poultry problems-start you right. Our experts will give you very valuable service. WE WANT YOU TO SUCCEED.

## Caponizing Instruments

Poultrymen can double their profits by Caponizing the young cockerels. The operation is easily learned. The instructions are so full and explicit that any one, after a careful reading and a little practice, will be able to caponize.
The object of caponizing is to largely increase the weight of fowl, and to make the meat very juicy and tender. Caponize the males when they weigh about $11 / 2 \mathrm{lbs}$. and sell them at 8 to 10 lbs . at a "fancy price." We offer good, practical outfits. Full directions with each set.
VALENTINE'S.-Made of high quality materials for a local breeder, who claims it is the most practical set yet offered. Illustrated leaflet on request. Price $\$ 3.50$, postpaid.


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PHILADELPHIA is O. K. and has many admirers. Price, cardboard box, \(\$ 2.75\); wooden box, \$3.25.
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CORNELL.-One of the new sets. Highly recommended. Price $\$ 5.25$.

## Egg Preservers



Pre-Egg-Server-Soluble Water-Glass. This powder comes to us highly recommended, equal in every way to the old form liquid Water-Glass. Will keep eggs fresh for a whole year. One package to 10 quarts water is enough for a 5-gallon crock, or 15 dozen eggs. Full directions on each package. Price postpaid 25 c per package.

Yankee Egg Preserver.-Comes in flat tins and you simply rub it on the eggs, a child can do it. It will preserve the eggs for nine months or longer. No cold storage or special care required.
Price: Per Tin (enough for 3 doz. eggs), 40c, postpaid.
Water-Glass (Liquid).-This is the old, well-known egg preserver in liquid form. Use 1 part Water-Glass and 9 parts water to make the solution to cover the eggs. (Cannot be mailed.)

Prices: Qts., 40c; 2 qts., 70c; gal., \$1.15; 5 gal., $\$ 4.50$.
Note.-If you want 5 or 10 -gal. stone jars, write for prices.

## Baby Chicks, Poultry and Eggs, Pigeons, Etc.

We'll send you any priced stock you want. Remember, Quality makes the price

## Baby Chicks

## Routledge "'Egg Producing Strain',

We are giving special attention to the three leading breeds: S. C. White Leghorns, Barred Plymouth Rocks and Rhode Island Reds. Our special stock will come from flocks that are PROPERLY MATED and have passed our inspections for TYPE, VITALITY and PRODUCTION.

NOTE.-No shipping order accepted for less than 50 chicks and all chicks shipped direct from incubator on days hatch is off. We will not ship weak chicks.

## Single Comb White Leghorns

EGGS.-Per setting, 15, $\$ 2.50 ; 100, \$ 12.00$.
BABY CHICKS.-Doz., \$3.00; 100, \$20.00; 1,000, write.

## Single Comb Rhode Island Red White or Barred Rocks

EGGS.-Setting, 15, \$3.00; 100, \$15.00.
BABY CHIĆKS.-Doz., \$3.25; 100, \$25.00; 1,000, write.

TERMS.-Order early and be sure of stock. We want 20 per cent deposit with order, and balance 10 days before delivery, or if sent C. O. D. for balance, you pay for colle.tion.


Poultry, Pigeons, Ptc. All Breeds in all Classes
We are in a position to supply you with most any breed of fancy pure bred poultry, eggs or breeding stock. We know good stock and who keeps it, and due to our business connections can generally get our pick of the breeder's flock, so when you need any, give us your order and we will select the best bird possible for the money you wish to pay and will ship it guaranteed to please you.

PRICES.-Good Utility Stock for Egg Production, range as follows: Males- $\$ 7.50$ to $\$ 15.00$ each; FEMALES- $\$ 2.50$ to $\$ 3.00$ each.

FANCY SHOW BIRDS by quotation.

Keep your Poultry healthy and profitable by feeding Cholerine in Buttermilk, Sour Milk or H. Q. Wet Buttermilk Mash. You try it; we have proved it. Page 144.

## Up-to-Date Sanitary Drinking Fountains and Feeders

Increase your profits by saving the chicks. Start now by ordering sanitary, economical, up-to-date Fountains and Feeders. Note-When wanted by parcel post, add postage.

## STANDARD FOUNTAINS NO. 1, NO. 2

Made in two parts, pressed out of heavy galvanized iron; will last for years. Easy to clean inside and out. (See cut.) Price, 1-qt., 40c; 2-qt., 50c; 4-qt. 75c. (Add postage at 2 lbs . each if wanted by mail.)

## SANITARY STONE FOUNTAIN NO. 3

An old and popular style that keeps the water cool; see cut. (Not mailable.) Price, 1-qt. 50c; 2-qt., 75c; 4 -qt., $\$ 1.00$; 8 -qt., $\$ 1.50$. (Cannot send parcel post.)

Store price, not pácked, $45 \mathrm{c}, 65 \mathrm{c}, 85 \mathrm{c}$ and $\$ 1.25$.

## STAR CHICKEN SERVER NO. 4

Star shaped pan, very desirable; made from 1 piece of non-rusting metal; for chick feed or water. Any size in Mason jar fits it. Price, (without jars), 15c each; \$1.50 doz., postpaid.

## OAKES CHICK SERVER NO. 5

These consist of a 6 -inch scalloped pan and a collar to fit any size Mason jar. You fill the jar, screw on the pan and turn it over. Perfect for small chicks, for they can't get wet. Price (without jar), 15c each; postpaid 20c each; $\$ 2.00$ per dozen.

## WALL FOUNTAINS

Very desirable for adult fowls; hang up on the wall or set on a platform out of litter and dirt; made of heavy galvanized iron.

NO. 7. CYPHER'S STYLE.-Very popular and satisfactory. Price, each, $1 / 2$-gal. (P. P. 2 lbs.), 70 c ; 1 gal. (P. P. 3 lbs.), $90 \mathrm{c} ; 2$ gal. (P. P. $31 / 2$ lbs.), $\$ 1.25$.

## CHAMPION TELESCOPE FOUNTAINS

This is the best and most popular style. The full length telescope top pulls out, making it easy to clean inside.

NO. 8 CHAMPION. $-1 / 2$ gal., 90c; (P. P. Wgt. 21/2 lbs.); 1 gal., $\$ 1.20$, wgt. $31 / 2$ lbs.; 2 gal., $\$ 1.50$, wgt. 5 lbs.; 3 gai. with 3 cups, $\$ 2.65$, wgt. 10 lbs.; 3 gal. with 4 cups, $\$ 2.90$, wgt. 11 lbs. (Wgts, include packing for P. P.)

## GALVANIZED FEEDERS

Made of galvanized iron; soon pay for themselves in preventing waste. Sanitary, closed top self-feeders for granulated bone, beef scraps, grit, shells, charcoal, dry mash, etc. If these necessary foods are kept before your fowls they will eat just what their systems require for profitable results; in other words, properly balance their rations. Hang up out of the litter.

NO. 9 CHAMPION FEEDER.-Two compartments, one holds 3 qts., the other 6 qts. (P. P. wgt. $41 / 2 \mathrm{lbs}$.). Each $\$ 1.50$. (See cut.)

NO. 9-X CHAMPION FEEDER.-The same shape as No. 9, wtih one large 9 qt. compartment, good for dry mash. (P. P. wgt. 4 lbs.) Each \$1.35.

NO. $9 \times X$ CHAMPION FEEDER.-Extra large size of above style. One 12 qt . compartment. (P. P. wgt. 5 lbs.) Each \$1.65.

NO. 10 CHAMPION FEEDER.-(See cut.) Has 3 compartments, each holding about 1 qt. (P. P. wgt. 4 lbs.) Each \$1.00.

NO. 11 MOE'S.-Extra strong and well made; the feed trough at bottom is round. 3 Section, 3 pints each. ( P . P. wgt. 4 lbs.) Each \$1.10. 4 Sections (P. P. wgt. 5 lbs.) Each \$1.45.

## MOE'S CHICK SERVER

NO. 12.-(See cut.) Practical and a great saver of feed. Chicks cannot get into it. For water or feed. Small, Each 25c; Large, Each 35c, postpaid.


## SANITARY FOOD HOLDERS



Sanitary Food Holders
12 -in. Chick size (P. P. wgt. 11/4 lbs.)..... 50c
18 -in. Chick size (P. P. wgt. 2 lbs.)..... 75 c

For Poultry and Ducks of All Ages.-They are especially recommended for use in feeding mashes of any kind; steamed alfalfa or sprouted oats or dry grain. Saves 15 to 25 per cent in foodstuff. The top-guard keeps the fowls out, is removable, making them very easy to clean. Made of heavy galvanized iron; safe, sanitary, saving and serviceable.
$24-\mathrm{in}$. Hen size (P. P. wgt. $21 / 2$ lbs.) .... $\$ 1.25$
30 -in. Hen size (P. P. wgt. 5 lbs.) .... 1.50

## NEW ALUMINUM FEEDER

The great advantage of this new feeder is that it is safe to feed Buttermilk in and the slip-on-the-top (see cut) is removable for washing, and it also keeps the chicks out of the feed, milk or water. Prices: No. 69-10-inch, 55c; 65c postpaid. No. 70-20 inches long, $\$ 1.00$; $\$ 1.10$ postpaid.


Aluminum Chick Feeder


No. 36 Mash Hopper

## DRY MASH HOPPER

The curved bottom of the Hopper keeps the feed within easy reach of the birds. The gradual enlargement from the top to base prevents clogging. The wire grid and the wires running from the flange through the wire grid prevent any chance of the fowls throwing out or wasting the feed. The sloping cover prevents the birds from roosting on the Hopper and when both covers are closed, it is rat and mouse proof. A trial will convince you that it is a Hopper of the greatest merit. Made of heavy galvanized iron.
No. 35. $81 / 2$ in. wide, capacity 12 qts. (Wgt. $41 / 2$ lbs.) Each $\$ 1.75$.
No. 36. 12 in. wide (Wgt. $71 / 2$ lbs.), capacity 18 qts. Each $\$ 2.25$.
No. 37. 24 in. wide (Wgt. 12 lbs.), capacity 36 qts. Each \$3.25.

## AUTOMATIC WATER VALVES

THE GUARANTEED.-The makers claim all the best features known are built in this fountain. Fills the pans or trough so full and no more. Equipped with a governing stem or screw that controls the water flow automatically and locks or acts as cut-off if weight of trough is removed. (See cut.) Descriptive leaflet on request. Price $\$ 1.50$ each, postpaid. PIPE CONNECTIONS to fit $1 / 2$ or $3 / 4$-inch pipe, 25 c extra.

KRESKY'S AUTOMATIC WATER VALVE.-Claimed to be the only correctly designed and most satisfactory to date. Illustration and full description on request. Price $\$ 1.75$.


Moe's Feeder

VEGETABLE
RACK AND
FEEDER FOR POULTRY AND

RABBITS


Vegetable Rack


Just the thing for feeding greens, beets, cabbage, kale, etc. Don't throw them on the ground or litter. This feeder holds them firm and the birds pick through the front wires. See illustration. Sanitary and worth the price. 9 inches wide, 13 inches high. (P. P. wgt. $21 / 2 \mathrm{lbs}$.) Each 85c.

## MOE'S FEEDER AND EXERCISER

The best combined feeder and exerciser. Cannot clog. Swinging deflector scatters the grain all around, a little at a time. Holds enough to be of real service. Can be set to feed little or much. Hang in the scratching pen with straw on the floor. With this feeder, a good water fountain and dry mash hopper, you can leave your chickens for a day or two and know that they are provided for.

No. 53, holds $1 / 2$ bu., 28 in. high, wgt. 9 lbs. Each.............. . 2.25

[^31]

## AUTOMATIC CHICK GREASER

(See illustration.) Let every chick rid itself of head-lice. The large lice that collect on the heads of young chicks cause them to droop and die. Save time and chicks by using an Automatic Chick Greaser. Saturate the wick with Conkey's Head Lice Ointment or a mixture of two-thirds lard and one-third kerosene, then put feed in the pan and every chick will get its head thoroughly greased in a very few minutes.

Can be moved from one pen to another.
Price $\$ 1.50$; $\$ 1.60$ postpaid. Head-Lice Ointment, 10c and 25 c tube, postpaid.

## STOVER GRINDING MIILLS

In these mills are embodied all the good features of other hand grinding mills to which have been added universal burrs, or grinding plates, that are quickly adjusted and locked for grinding coarse or fine. These mills will grind any kind of grain or seeds, dry bone, oyster or sea shells, crockery, etc. Made of high-grade castings of tested strength and excellent finish. Not suitable for green bones. DESCRIPTIVE CIRCULAR ON REQUEST.

No. 32.-Has a 16 -inch fly-wheel and is light' running; the capacity is not equaled by any other of the same size. Weight 40 lbs . Price $\$ 8.00$.

No. 32-D.-Fills a long-felt need in every kitchen or poultry yard; large capacity; has all the good features of No. 32, but is made with a clamp to fasten to the table top and a hand crank in place of flywheel; 16 inches high; weight 25 lbs. Price $\$ 7.50$.

No. 33.-About the same capacity as No. 32, but of heavier construction; fitted with a hardened steel worm, larger opening, more adaptable for grinding dry bone and oyster shells than No. 32. Size of flywheel, 18 inches; weight 45 lbs. Price $\$ 9.25$.

No. 35.-Larger capacity than No. 33; 20 -inch flywheel; weight 55 lbs. Price $\$ 11.25$.

No. 35-B.-This mill is equipped with combination flywheel and pulley; can be operated by hand or power with simple adjustments; weight $60^{\circ} \mathrm{lbs}$. Price \$14.75.

## EGG SCALES

All up-to-date poultrymen are now grading their eggs. Large eggs bring extra fancy prices and profit to the producer.

GILT EDGE (See cut).-Used throughout the United States. Extra well made, yet simple in construction; quick and easy to operate; weighing capacity, 18 to 29 ounces per dozen. Price $\$ 1.75$, postpaid.

STANDARD.-Very simple in construction, yet very accurate and quick. Made in two sizes, 19 and 22 ounce grades. As they are so inexpensive and it is so handy to have the two graders all set, everyone should have one or more of each size. Price 60c each; 2 for $\$ 1.10$, postpaid. State which grade or size is wanted. See illustration.

## WHITEWASHING AND WHITEWASH

The illustration here shows our No. 28 Whirlwind Sprayer in operation. No. 28 is made especially for whitewashing. See page 125 for price, etc.


Stover Grinding Mills


Gild Edge Egg Scales


Standard Egg Scale


Without a reliable, accurate thermometer an incubator is practically worthless. Hundreds of hatches fail every year because of inferior thermometers and large numbers of brooder chicks are destroyed for the same reason.

We sell the "Tyco's" tested, recognized as the most dependable.


## INCUBATOR THERMONETERS

TYCO'S CERTIFIED.-Same style as No. 22. Scale is etched on glass tube as well as metal back. "Certified correct," worth the price. Each \$1.25.

NO. 22 "TYCO'S."-Very popular. Generally suspended on string or wire on level with eggs. Each \$1.00; wire hanger, 10c extra.

NO. $221 / 2$ MODEL.-Same shape as No. 22, but not as high grade. Each 75 c.

NO. 20.-"Tyco's Tested," used in Buckeye and Queen incubators. Each \$1.25.

NO. 23 TYCO'S.-Has folding legs, adjustable; to be set up in egg tray. Postpaid $\$ 1.25$; Model, same style, 75c.

## Brooder Thermometers

NO. 291/2.-Tyco's high-grade, white figures on black metal scaled from 60 to 130 above; temperature readable from above the hover. Postpaid, each \$1.50.

NO. 29.-Same style, silver face, black figures. Price $\$ 1.25$.

NO. 30 (see cut).-Long, round, wood holder. Used in Cyphers and International hovers, also brooder houses. Postpaid, each $\$ 1.00$.

NO. 28 NEWTOWN (see cut).-To hang under the large hover; high grade, desirable style; scaled. \$1.00.

KRESKY'S SPECIAL.-Extra large. Price $\$ 1.00$.

No. 5120.-For general household use or brooder houses. Scaled from 10 below zero to 120 above. Metal face, wood back, 8 inches. Price $\$ 1.50$.

NO. 5121.-Same as above; scaled from 10 above zero to 100 above. Price $\$ 1.25$.

NO. 5420.-Black japanned, 8 -inch case; scale ranges from 20 below to 120 above. For household or brooder house. Price \$1.25.

## INCUBATOR HYGROIVETERS

NO., 40 (see cut above).-"Moisture Indicator." Millions of chicks die in the shell every year for want of proper moisture conditions. Use a Hygrometer to show you proper conditions. Price with full directions, $\$ 2.25$. Extra wicks, 15 c each. Descriptive booklet on request.

## X-RAY EGG TESTER



## OAKE'S HYDRO SAFETY LAMPS

Made especially for incubators and brooders. Fill the water jacket full of cold water to keep the oil and burner cool and perfectly safe. Economical and satisfactory in every way. The best incubator and brooder lamp made.
No. 1-71/2 in. high; $5 / 8$ in wick (P. P.
wgt. for mailing, $11 / 2$ lbs.)............ $\$ 1.50$
No. 2-8 in. high; 1 in. wick (P. P. 2 lbs.) 2.00
No. 3-9 in. high; $11 / 2$ in. wick (P. P. 3 lbs.)
2.25

Add postage for mailing.

## LAMPS, BURNERS, FTC.

Queen Lamp, 6x4 inches, complete....... $\$ 2.50$ State size of burner or wick wanted.
Queen Lamp, $7 x 10$ inches, double burner for 25,35 or 45 incubator.
Queen Lamp Burners (state size)....... 1.00
Queen Lamp Flue (chimney)............ . . . . 50
Queen Wafer Regulator .................... 1.25
Cypher's No. 2 or 3 Lamps, complete.... 3.00
Cypher's Lamp Burners, Nos. 2 or 3...... 1.00
Cypher's Gas Burners for incubator..... 1.25
Lamp Wicks (state size), each 5c; doz... . 50

## Leg Bands for Poultry and Pigeons



This band (see illustration above) is made in one piece and adjustable to fit any fowl. They will stay where you put them. Held by double lock. Made of aluminum with
raised figures. Not made for baby chicks or pigeons. After fitting, clip surplus end off with shears.

This is our most popular numbered band. Put up in packages numbered 1 to 12,13 to 25,26 to 50,50 to 100 , and boxes 101 to 200 , 201 to 300 , and in even hundreds up to 1,000 . NOTE.-We do not break these packages. PRICES: 12 for 20c; 25 for 35c; 50 for 60c; 100 for 80c; 500 up at 70c per 100.

## SPIROL-COLORED LEG BANDS.



You have no ends to fasten together-made on the same principle as a key ring. Once put on they stay till taken off and do not chafe the leg.

Durable, Practical, Economical. They provide instant identification without handling the birds. You can identify birds as far as you can distinguish colors, which will show you according to your markings the early or late hatched pullets, the yearlings or two-year-olds, your different matings, and so on. Fine for baby chicks. Made in ten colors: Red, White, Pink, Yellow, Light and Dark Blue, Black, Purple, Green and Garnet. They do not fade and are weather-proof. We offer Highest Quality only.

## ORDER BY NUMBER, AND STATE COLOR WANTED

NOTE.-No. 1, Baby Chicks; No. 2, Pigeons and Bantams or half-grown chicks; No. 3, Leghorns, all Mediterraneans and Spanish; No. 4, Rocks, R. I. Reds and American classes; No. 5, Asiatic clases and Ducks; No. 6, Asiatic Males, Turkeys and Geese.

PRICES: Any Color Poultry Size.-12 for 20c; 25 for 35c; 50 for $60 \mathrm{c} ; 100,85 \mathrm{c}$; 500 up , at 75 c per 100 . Postpaid.

BABY CHICK Size.-12 for 20c; 25 for 30c; 50 for 50 c 100 for $60 \mathrm{c} ; 500$ up, at 50 c per 100. Postpaid.


## ECONOMY-COLORED LEG BANDS

Handsome, two colored, $1 / 2$ inch wide, aluminum back, celluloid face, well made and durable. Large, plain, duuble numbers from 1 to 300 in red, green, pink, blue and black. Fasteners very secure if doubled back and pressed tight. We can supply these only in Leghorn and Rock sizes.

Prices: 12 for 35c; 25 for 60c; 50 for $\$ 1.00$; 100 for $\$ 1.75$, postpaid.

## ECONOMY-COLORED PIGEON BANDS

Same width and style as above, with double numbers up to 100 ; single numbers above 100, as the band is not long enough to take the large numbers. Same colors as above. This band comes in pairs only.

Prices: 6 pair (12 bands) 30c; 25 pair 75c; 50 pair $\$ 1.40$.

## SURE CLINCH ADJUSTABLE BANDS

This new aluminum band is very neat, smooth and well made, $3 / 8$ inch wide, adjustable to 3 sizes. Note the 3 holes in illustration. We offer this band as superior to the old-style double clinch. Numbers from 1 to 1,000.

Prices: 12 for 20c; 25 for 35c; 50 for 60c; 100 for $85 \mathrm{c} ; 500$ up at 75 c per 100.

## POULTRY MARKERS



## Ideal Poultry Punch

Used for marking the web between the toes of baby chicks, if you wish to know different strains or stocks. Colored leg bands are now more popular.

Stearns'-Similar to Ideal. Postpaid, 40c.
Ideal-See illustration; good size, well made; does neat work. Each 50 c , or 55 c postpaid.

## Routledge H. Q. Poultry Feed

"H. Q.'’ DENOTING HIGHEST QUALITY

"The Feed That Proves You Fed"

It has always been our aim to supply the poultry-keeper the best feeds and supplies obtainable and now we offer you a line of Poultry Feeds that our years of experience lead us to believe will please the most critical and prove the most economical and profitable to use.

We have planned a long time to offer Poultry Feeds under our own brand and formulas, but before doing so, had to prove it correct-prove that it would give better results at a less cost than others now on the market. We figure if one can't go a little further and do a little better than the other fellow, we can't expect big resuits. Give our Feed a fair trial and we are confident you will then agree that we have gone a long way in helping you to success. Quality and analysis guaranteed on all our Feeds.

PRICES: Poultry food prices SUBJECT TO MARKET CHANGES in grains and are continually changing. We keep our prices low as possible. WRITE OR PHONE FOR LATEST PRICE LIST.

OUR 25c AND 50c PACKAGES are put up DAILY at oniy a small advance over 100-lb. prices. FULL VALUE.


Look for this style sack, "machine sewed" top. TAKE NO OTHER.

## H. Q. SPECIAL CHICK STARTER

Feed After 48 Hours to 10 Days ROUTLEDGE SPECIAL H. Q. CHick STARTER. The first few days, that is, after at least 48 hours from the shell, a chick should have a very light diet. Regular chick mashes are too strong. Routledge H. Q. Special Chick Starter is to be fed the first three to four days exclusively. Feed very sparingly four to five times daily on paper plates. Add a pinch of Chick Grit to every plate, but do not over-feed on Grit. When chicks are four days old, alternate with Routledge H. Q. Chick Scratch. When one week old gradually change from H. Q. Special Starter to Routledge Buttermilk Chick Mash in addition to "Chick Scratch."

Prices: 25c and 50c pkgs.; 100 lbs., write.

## H. Q. CHICK SCRATCH <br> Feed After 60 Hours to 8 Weeks

ROUTLEDGE H. Q. CHICK SCRATCH. It is vitally important to feed baby chicks only the purest of grains. Weed seed and undeveloped or shriveled grains are like poison to chicks. Avoid trouble and a death loss by feeding only Routledge H. Q. Chick Scratchit's extra clean and contains only the purest of grains. Should be fed several times daily in addition to our Buttermiik Chick Mash.

Prices: 25c and 50c pkgs.; 100 ibs., write.
Ask for our free pamphlet on Care and Feed. ing of Baby Chicks.

## H. Q. DEVELOPING SCRATCH <br> Feed from 8 Weeks to 4 Months

ROUTLEDGE H. Q. DEVELOPING SCRATCH is a combination of cracked grains between Chick Scratch and Scratch Feed. It is especially made to feed growing chicks from eight weeks to four months. This feed contains the ingredients necessary to build tissue and fibre, and should be fed along with Routledge H. Q. Developing Mash to produce vigorous birds. It's a feed that's right.

Prices: 25c and 50c pkgs.; 100 lbs., write.

## H. Q. BUTTERMILK CHICK MASH

 Feed from 10 Days to 8 to 12 WeeksROUTLEDGE H. Q. BUTTERMILK CHICK MASH. We are not guessing when we say this is one of the best "if not the best" on the market today. It contains the very best grade of digestible ground grains with dried butter. milk added. The quality of ingredients is ecual to any used for human consumption. Feed after 10 days, starting gradually and increasing slowly until they have it before them in dry form continually when two weeks old. Feed in addition our H. Q. Chick Scratch in straw litter three times daily. This combination should be fed for 8 to 12 weeks-then follow with Routledge Developing Mash and Developing Scratch.

Prices: 25c and 50c pkgs.; 100 lbs., write.

## H. Q. DEVELOPING MASH

Feed from 8 Weeks to 6 Months
ROUTLEDGE H. Q. DEVELOPING MASH. Growing chickens require a mash that is rich in food value for growing muscle, bone and a strong, vigorous body-nature will do the rest. Rich protein or pasty feed is very detrimental. Start feeding Routledge H. Q. Developing Mash at 8 weeks, gradually increasing until fed straight at 12 weeks and on until pullets are six months old, then gradually change to Egg Mash. Routledge H. Q. Developing Mash and Developing Scratch will produce vigorous, healthy pullets that will enter the laying year in the prime of condition. There is no substitute for Routledge H. Q. Feeds.

Prices: 25c and 50c pkgs.; 100 ibs., write.

## H. Q. BUTTERMILK DEVELOPING MASH

Fed Same as Developing Mash
ROUTLEDGE H. Q. BUTTERMILK DEVELOPING MASH. The same high grade feed as our plain Developing Mash, only we add the proper amount of high grade Dried Buttermilk. It is highly recommended to be fed where liquid buttermilk is not ohtainable The chickens relish it and thrive on lt.

Prices: 25c and 50c pkgs.; 100lbs., write.

FEEDING.-Scatter all grain feeds in straw and keep all Mashes in dry form, in Automatic Feeders before your poultry at all times.

## Routledge's "H. Q." Poultry Feeds-Continued

PRICES: Poultry food prices SUBJECT TO MARKET CHANGES in grains and are continually changing. We keep our prices low as possible. WRITE OR PHONE FOR LATEST PRICE LIST.


Our H. Q. Feeds are all put up in printed sacks, as shown above, and "machine sewed." Take no other.

## H. Q. SCRATCH FEED

## Feed from 4 Months On

ROUTLEDGE H. Q. SCRATCH FEED. It's different and better than most others. It does not contain "filler" or grains like Kaffir, Milo-Maize and Egyptian or any shriveled grains. It is a clean, wholesome feed that the chickens relish and eat all of it. No waste. It builds the body and egg organs up so the hen lays eggs because she is in prime condition. Experienced poultrymen recognize it as the best Scratch the market supplies.

Prices: 25c and 50c pkgs.; 100 lbs., see note above.

## H. Q. EGG MASH <br> Feed from 6 Months On

ROUTLEDGE H. Q. EGG MASH. Fills a long-felt want for an Egg Mash that is made only of such grains as contain egg-building materials in sufficient quantity without any flller or heavy fibre contents. Hens fed this Mash will eat the proper amount without harmful effects and will surely shell out the eggs. It contains the highest quality of materials pomsible to buy and is ground just right to give best results. The animal protein is extra fine quality, not fertilizer grade. Quality and analysis guaranteed on all our feeds.

Prices: 25c and 50c pkgs.; 100 lbs. up, see note above.

## H. Q. BUTTERMILK EGG MASH

Feed from 6 Months on
ROUTLEDGE H. Q. BUTTERMILK FGG MASH is the same correct formula as our Egg Mash with a very high grade Dried Buttermllk added to it. The action of Buttermilk is very beneficial to the hen, providing it is the right quality and amount. This feed has proven its merits and we recommend it highly. Prices: 25 c and 50 c pkgs.; 100 lbs., see note above.
OUR 25c AND 50c PACKAGES are put up DAILY at only a small advance over 100 lb. prices. FULL VALUE.

## H. Q. DRIED BUTTERIMILK

## For Poultry, Pigs and Hogs

This year we are using and selling Dried Buttermilk in place of semi-solid. It answers every purpose and will never spoil if kept in a dry place. The lactic acid contained in this product we offer is unsurpassed.

Mix 5 to 7 lbs to 100 lbs . of ground feed or mash and it will give wonderful results. Out-of-town customers who cannot secure prepared Buttermilk Feeds but get the ground mill feeds, can prepare their own Buttermilk Mashes.

Price per lb. $15 \mathrm{c} ; 10$ lbs. $\$ 1.25 ; 20$ to 50 lbs. at 12 c ; 100 lbs. $\$ 10.50$.
~n
Canby, Oregon, June 10, 1922.
Routledge Seed \& Floral Co.
Gentlemen: I have used your chick foods and nothing else and have never had such strong chicks. I shall continue to use it right through. Yours very truly,

MRS. W. RANDALL.
Hoquiam, Wash., February 10, 1922. Routledge Seed \& Floral Co.

Dear Sirs: Please send me a 16-oz. bottle of Cholerine. I find it is just fine for little chicks. I raised a hundred and fifty last year and they did fine. I am getting two hundred next week and would like to get the Cholerine in time for them, for I don't think $I$ could raise them without it.

Yours truly,
MRS. LAURA HOWARD.

"New Model" CLOVER CUTTER "You Need This"

The "New Model" Clover Cutter cuts EITHER GREEN OR DRY, such growths as clover, alfalfa, kale, vegetable tops, etc., into $1 / 8$-inch lengths. These growths are the cheapest and most productive egg-forming poultry foods. They return big profits when reduced to a FINE, EASILY DIGESTED MASS. It's great for cutting dry straw for chick litter.

The cutting mechanism cuts perfectly at all times, because the cutter bar is adjustable and easily accessible, and the four 7 -inch spiral steel knives can readily be removed for sharpening. Those who are familiar with the "ordinary"' Clover Cutter construction will appreciate these improvements.

Made only of iron and steel. It is a strong feeder, has large capacity, runs unusually easy and will do perfect work indefinitely. Mount on a box or bench at any height to suit the operator.

Length over all $281 / 2$ inches. Weight 70 lbs . Price $\$ 22.50$.

Descriptive leaflet on request.
$\mathrm{F}^{\prime \prime},{ }_{1} N G$. . Scatter all grain feeds in straw to make them scratch and keep all Mashes in dry form in Sanitary Feeders (see page 138) before your poultry at all times.

## Routledge H. Q. Poultry Feeds-Continued

Don't invite disease and loss by using old pans, open dishes or wooden troughs. See page 138.


The poultryman who feeds the "Highest Quaiity" poultry foods, even though it is a little higher in price, makes more profit than he who is content with cheap mixtures or low grade grains because it costs less.

The demand for our poultry foods is enormous among the poultry raisers, for they have found out that we supply only highest quality foods. They also appreciate the fact that we give them wholesale prices in 5,10 or 20 bag lots.

ABOUT PRICES: All prices are subject to important market changes and F. O. B. Portland. Write for latest Price List or order at following prices. If prices have dropped we will refund, if higher we will bill you for balance due if you'll remit. Instruct us, please.

## FISH MEAL-H. Q.

The grade we sell is the best obtainable, it contains nothing but pure fresh fish properly processed and will not taint the eggs. Fish Meal is rapidly taking the place of Beef Scraps, Beef and Meat Meal, Blood Meal, etc., as it contains more available animal protein.

Prices: 5 lbs., 35c; 10 lbs., 65c; 50 lbs., $\$ 2.25$; 100 -lb. sk., $\$ 4.50 ; 5$ to 20 sacks at $\$ 4.20$.

## BEEF SCRAPS

Our "Highest Quality" beef scraps are rich in materials which make bone, muscle and lean meat. They insure health, thrift and vigor, and satisfy the natural craving of the bird's system for flesh-food in some form. Rich in protein. Can be fed dry or with cooked rations. Don't waste any, feed in one section of Sanitary Feeder. See page 138.

Price: lb., 10c; 5 ibs., 45 c ; 10 lbs., 75c; 50 lbs., $\$ 3.00$; 100 lbs., $\$ 5.75$; 5 sks. up at $\$ 5.50$.

## GRANULATED BONE_''SPECIAL''

We offer only highest quality, white, pure and clean. Rich in phosphates, lime and protein. Should be kept before your chickens at all times. Feed in a. Sanitary Shell and Grit Box. (See page 138.)

Price: 5 lbs., 25c; 10 lbs., 50c; 100-lb. sk., $\$ 3.10 ; 5$ to 20 sks. at $\$ 3.00$.

## OYSTER SHELI, CRUSHED

Best grade pure hard Eastern oyster shell, crushed and sifted. Supplies lime material for egg shells. Does not take the place of Grit as some think. Hens must have both shell and grit. Oyster shells should be within reach of your hens at all times.

EASTERN: 3 lbs., 10c; 8 lbs. 25c; 100-lb. sk., $\$ 1.75$; 5 to 20 sks. at $\$ 1.65$.

WESTERN: 100 lbs. \$1.50.

## GRIT-Best Grade

Every poultry raiser should keep a supply of this grit in each pen. Baby chicks and ducklings must have it. Made in three sizes, chick, pigeon or broiler and hen size. We always send hen size unless otherwise ordered.
Price: 4 lbs., 10c; 12 lbs., 25c; 100-lb. sks., $\$ 1.50 ; 5$ to 20 sks. at $\$ 1.40$.

## ALFALFA MEAL—CLOVER

The best substitute for green food for winter feeding; helps keep the egg basket full; mixed with the soft feed is good for large or small chicks; endorsed by leading experts. Price: $1 \mathrm{lb} ., 10 \mathrm{c} ; 5 \mathrm{lbs} .25 \mathrm{c} ; 100 \mathrm{lbs} ., \$ 1.75$.

## ALFALFA LEAVES AND BLOSSOMS

10 lbs. 60c; 100 lbs. $\$ 3.50$.

## CHARCOAL

Our stock is prepared especially for poultry and of highest quality obtainable; a preventive of bowel trouble, sour crop and indigestion; a health preserver. State size wanted. A for mash, B for chicks, C for large chickens or hens.

Price: $1 \mathrm{lb} ., 10 \mathrm{c} ; 3 \mathrm{lbs} ., 25 \mathrm{c}$; 10 lbs., 75c; 50 lbs., $\$ 2.50$; 100 lbs., $\$ 4.75$.

## POULTRY PEPPER

A good tonic and invigorator. Ground.
Price: 1 lb., 30c; 5 lbs., \$1.35.

POULTRY BOOKS. - New and up-todate, worth many $\$$ to you. See page 147.


Red Mite
Natural size almost invisible

## Routledge Lice and Mite Liquid

KILLS BY CONTACT.-We recommend this liquid for use in poultry houses, barns, stables, coops, etc., as a killer and preventive. Spray walls, crevices and corners where they hide and breed.

FOR LICE AND MITES paint the roosts and spray thoroughly the drop boards and walls to kill the mites and eggs. It penetrates and lasts. Used occasionally and thoroughly it will absolutely keep the houses free of mites or lice.

Spray or paint the inside of nest boxes once every thirty days. This also helps to keep the lice off the hens. It will not taint the egg.


Body Louse greatly enlarged

FOR FLIES.-It is excellent as a "Fly Spray" and it really "Kills 'Em." Spray lightly over the animal twice a day. Do not soak the hair clear to the skin, as too strong a use might be harmful. Spray the stable before milking time.

FOR MOTH OR WEEVIL.-In drawers or bins where seeds, feeds, etc., are kept, paint inside with Routledge Mite and Lice Liquid once every six months to keep the weevil and moth out. It does not destroy germination of seeds or hurt the feeds after it gets dry.

GUARANTEE.-If after using Routledge Fly, Mite and Lice Liquid you are not satisfied, we will refund the money cheerfully. Use as directed.

PRICES.-By Express or Freight (not mailable), Quart cans, 50c; 2-quart cans, 80c; gallon, \$1.35; 5 -gallon, $\$ 6.50 ; 10$-gallon ( 25 -gallon cans in case), $: 12.00$.

## OCULUM FOR POULTRY

We have sold this for several years and have many customers who praise it highly.
"Oculum" is not a stimulant but is a scientific germicide. It destroys disease germs in the bowel and keeps fowls healthy.

Feed one drop of "Oculum" a day to each grown fowl (or 10 drops to each pound of feed), 5 drops to a quart of water. A teaspoon holds 60 drops.

Mix the "Oculum" with water (just enough to sprinkle), and sprinkle the feed with the mixture, stir it and cover it up and the "Oculum" will penetrate the feed in thirty minutes.
PRICES: Trial size, 1 oz . (240 feeds), 15c; 50 c bottles, 60 c postpaid; $\$ 1.00$ bottles, $\$ 1.10$ postpaid; by Express, Pints, $\$ 2.00$; Quarts, $\$ 4.00$; Gal., $\$ 10.00$. Extra Glass Syringes, 15 c .

Ask for pamphlets giving full Information and testimonials.

## OCULUM OIL FOR STOCK

"Oculum Oil" is a scientific germicide for animals. Used in feed, it kills germs and worms in the organs of animals.
Sick hogs and sick sheep quickly relieved by its magic power. Sick horses and sick cattle made well again by its use.

PRICES. Trial size, 60c, or Half Pint, $\$ 1.15$, postpaid; by express, Pints $\$ 1.50$; Quarts, \$2.50; Gal., \$7.50.
SPECIAL SYRINGE FOR ANIMALS, 25 c .

## CHOLERINE

The Greatest Specific and Conditioner for Poultry.
Millions of Baby Chicks Die Annually. White Diarrhoea kills them.

White Diarrhoea is a Germ disease. Science has proven this, and has located the microbe. This disease is not only prevented but eradicated by CHOLERINE.
Ghick "'Life Insurance' ' is cheaply bought by using Cholerine.



CALF MEAL
"Highiss
QUALITY'
AN-FO CALF MEAL is a food that nourishes calves practically as good as whole milk at one-quarter the cost. Start calves on whole milk, leave out the milk a little at a time, replacing with AN-FO Calf Meal and water. When four weeks old all calves need is AN-FO Calf Meal, water and hay. AN-FO CALF MEAL is the richest in fat food. Used with skim milk it substitutes other digestible fats for the butter fat, making a food closer to whole milk in food value. AN-FO CALF MEAL does not scour, but acts to stop scour.

Prices: $25-\mathrm{lb}$. sacks, $\$ 1.50$; $50-\mathrm{lb}$. sacks, $\$ 2.75$; 100 -lb. sacks, $\$ 5.25$. Sample, 10 c .

## PINE-OL-PINE OIL

## Wonderful Germicide

Disinfectant, Germicide, Deodorant, Antiseptic. Has Fragrant Pine Odor
Emulsifies in water. One part Pine-Ol to 100 of water makes a solution sufficiently powerful for ordinary use. Adapted for Stock Farms and Poultry Ranches; also in Hospitals, Sanitariums and similar institutions. Excellent for home use.

PINE-OL has many uses, but the chief one for the poultryman is in connection with coids, roup, canker, chicken pox, etc. We recommend it highly.

PRICES: 35 c bottle, postpald 45 c ; and 60 c bottle, postpaid 70c; Quart $\$ 1.00$; $1 / 2$-Gal., $\$ 1.55$; Gal. $\$ 2.75$. Full directions with each container. Quantity prices on request.

## Other Germo Remedies

GERMO LICE POWDER.-Most effective lice powder on the market. Highest per cent of active ingredients. Prices: $1 / 2-\mathrm{lb}$. cans 60c; 1-lb. can $\$ 1.00 ; 5$ lbs. $\$ 4.75$. Postage extra.

GERMO ROACH POWDER.-Will rid your place of roaches or water bugs if used according to directions. Prices: $21 / 2 \mathrm{oz}$. 25 c ; $51 / 2 \mathrm{oz}$. $50 \mathrm{c} ; 1$ - lb. cans $\$ 1.50 ; 5 \mathrm{lbs}$. $\$ 7.00$. Postage extra.

CHOLERINE.-The greatest specific and conditioner for poultry. We highly recommend it. Fowls fed Cholerine will keep healthier and produce more eggs during the season. The mortality will be much less and they will go through the moulting season in far better condition.

For Baby Chlcks.-We recommend it as a preventative and specific for white diarrhoea, cocidiosls (bloody diarrhoea), cholera, roup, limber neck and other germ diseases, intestinal troubles, indigestion and worms. Use it from the start as a preventative. Feed Cholerine in sour milk or buttermilk daily for four days at the rate of two tablespoonfuls to a gallon of buttermilk-water will answer. After the fourth day, feed Cholerine three times a week as long as you keep them. It will pay big returns. They will brood better and have more "pep" and grow into more profitable birds.

For Laylng or Breeding Fowls.-Feed in sour milk or buttermilk as first choice and a moist mash or water as second choice. Use six tablespoonfuls Cholerine to one hundred birds, a pint to five hundred birds, three days a week. Many of the largest poultrymen on the Coast and throughout the United States are contInuous feeders of Cholerine. We recommend It, for indigestion, liver and kldney troubles in fowls and as an excellent preventative of pox, roup, worms and kindred diseases. It will aid fowls to obtain full nutriment of food consumed.

PRICES: 6 oz. bottle 40c; postpald 45c;16 oz. bottle $70 \mathrm{c} ;$ postpald $80 \mathrm{c} ; 1$ gal. $\$ 2.50 ; 5$ gal. $\$ 11.25$. Full directions on each container. Barrels-Prices on request.



#### Abstract

Poultry Books of Real Value.-There is money in "Poultry" Is you know how. Read what It has taken others to learn from years and years of time and experience. We offer only the lastest editions.


## USE OF ARTIFICIAL LIGHT TO

INCREASE WINTER EGG PRODUCTION
The best book on this subject-in fact, THE ONLY COMPLETE ONE. Gives complete information on every important detail of the practical use of lights. Special attention to methods in use in the Northwest. Grant M. Curtis, 120 pages, $9 \times 12$ inches, profusely illustrated. $\$ 1.50$.

## PROFITABLE CULLING AND

SELECTIVE FLOCK BREEDING
By Homer W. Jackson. Nothing equal to this money-making book has been published in years. Only complete work published on culling. Fully describes all approved methods of selecting layers. 120 pages, $9 \times 12$ inches, illustrated with 18 color plates and many halftone engravings. $\$ 1.50$.

HOW TO FEED POULTRY
FOR ANY PURPOSE WITH PROFIT
By John H. Robinson. Complete, authoritative book on feeding all kinds of poultry- 1921 issue and down to date in every respect. Tells what to feed and how to feed. Complete table showing nutritive values of all poultry feeds. 112 pages, $9 \times 12$ inches, beautifully illustrated. $\$ 1.25$.

## SUCCESSFUL BACKYARD

POULTRY KEEPING
New 1921 book, and a most practical guide for those who are keeping fowls in limited space, whether to supply eggs and poultry for the family table or as a source of income. Every beginner and city poultryman should have one of these valuable books; over 100 illustrations. 103 pages, $9 \times 12$ inches. Price, $\$ 1.00$, postpaid.

## FUNDAMENTALS IN POULTRY BREEDING

The author, J. H. Robinson, has made a life study of this important subject and experts proclain it a masterpiece. Remarkably illustrated by F. L. Sewell. The most complete book ever published on poultry breeding. Size $81 / 2 \times 12$ inches, 160 pages. $\$ 2.00$.

THE CHICK BOOK.-Learn how to hatch and rear your chicks without loss. 80 pages, $9 \times 12$. 50 c .

## POULTRY HOUSES AND FIXTURES

Shows plans of low-cost, practical, and labor-saving houses, designs for inside fixtures, roosting coops, and coops for young chicks, and appliances for the poultry yard. 1920 edition; completely rewritten from cover to cover, 112 pages, $9 \times 12$ inches. $\$ 1.00$.

## HIGH EGG PRODUCTION

BY INDIVIDUALS, PENS AND FLOCKS
Generally speaking, the foundation on which the commercial poultry industry rests is egg production. The only complete book on this subject. By Curtis and Jackson. Size $81 / 2$ by 12 inches; 128 pages, profusely illustrated, including two three-color charts. Art cover by Sewell. Price, $\$ 2.00$, postpaid.

## POULTRY FOR EXHIBITION

Growing, conditioning, training, showing and judging. The one complete book, published on this subject. To have "winners" you must raise them right and show them right. This 1921 edition tells you how to do it correctly. Size, $81 / 2 \times 12,176$ pages. $\$ 2.00$.

## ARTIFICIAL INCUBATING AND BROODING

New edition, rewritten from cover to cover. Tells how to obtain strong-germed, fertile eggs; how to operate incubators and brooders. If you want to get good hatches and raise the largest possible percentage of chicks hatched, you need this down-to-date book. 112 pages, 9 x 12 inches. $\$ 1.00$

POULTRY BREEDING AND MANAGEMENT
By James Dryden. This book is written for the man or woman on the farm who is interested primarily in making poultry pay. It gives in detail the latest and best systems of poultry farming, breeding, housing, feeding and incubation. Illustrated. $51 / 2 \times 71 / 2$ inches. 416 pages. Cloth, $\$ 2.50$.

## THE CALL OF THE HEN

Walter Hogan. Very valuable information, profusely illustrated. 130 pages, cloth bound, $\$ 2.00$.
AMERICAN STANDARD OF PERFECTION Cloth, $\$ 2.50$.
EGG RECORD AND ACCOUNT BOOK 45 c .

SUCCESS WITH HENS
Very interesting. 234 pages. By Robert Joos. Cloth bound, $\$ 1.35$.
THE "BREED" BOOKS, ALL LATE AND "UP-TO-DATE"

Price, Postpaid
Asiatics. 100 pgs., $9 \times 12 \ldots . .$. ........... $\$ .75$
Campines. 88 pgs., $9 \times 12 . . . . . . . . . . . .$.
Leghorns. 144 pgs., $9 x 12 . .$. . . . . . . . . . . . . . . . . 1.00
Orpingtons. 80 pgs.; $9 \times 12 . .$. . . . . . . . . . . . 75
Plymouth Rocks. 144 pgs., $9 \times 12 \ldots . . .$.
Rhode Island Reds. 88 pgs., $9 \times 12 \ldots . .$. . . . 75
Turkeys. 96 pgs., $9 \times 12 . . . . . . . . . . . . . .$.
Wyandottes. 160 pgs., $9 \times 12 . . . . . . . . .$. . . . 1.00
Ducks and Geese. Revised edition ready
about April 1, 1923. Price............. 1.50

## SONG AND CAGE BIRDS

We are the largest importers and dealers in Birds and Gold Fish in the Northwest. This department of our business has grown rapidly and we have incorporated the Routledge Bird, Pet and Animal Company and opened an East Side Branch under this name at East Oregon and Union Avenue, and we now carry large and complete stocks of cages, supplies and foods and all birds in their season.

We Guarantee Our Singers and Will Exchange if Not Satisfactory Imported and American Canaries


## OTHER CAGF BIRDS

We do not always have all the following birds on hand, but can get them quickly on anders. For further information, write.

AUSTRALIAN SHELL PAROQUETS.Often called Lovebirds, look like a miniature parrot, a little larger than a canary; plumage green, very intelligent and beautiful. Each, \$5.00; pair, \$10.00.

FINCHES.-Strawberry, black headed Nun, Society, European gold, all $\$ 5.00$ pair; chestnut, Tricolor-Nun, Diamond, $\$ 8.00$ pair, Zebra, musk and black throat, $\$ 10.00$ pair: Gould Finches, $\$ 1 \overline{0} .00$ pair. each.

Their cheery song is like sunshine to the soul; their bright plumage, active ways and cheerful dispositions make them great favorites. For your convenience we have inclosed with glass "Bird Parlors", on our first floor. You are welcome any time. Come in and see our birds and hear them sing.

ST. ANDREASBERG. World-renowned and the sweetest singers on earth. These birds have been given a musical training; their song is sweet and soft with many rare and pleasing notes, thrills, rolls, etc. Imported, Singers, $\$ 10.00$ to $\$ 15.00$; American raised, Males, $\$ 7.50$; Females, \$2.50.

HARTZ MOUNTAIN ROLLERS. Beautiful and incessant singers, always bright, active and cheerful. Some singers in this class are almost equal to the above, especially where they have had special training. Imported. Males, $\$ 7.50$; selected Singers, $\$ 10.00$; Females, $\$ 2.00$.

HARTZ MOUNTAIN SINGERS. The well-known and popular American-bred canary. Males, $\$ .00$ : Females, $\$ 1.00$; Selected Femates, $\$ 1.50$; Young Ma.es. August and September only, not yet in song (no exchalige). \$3.51

We please others and we can please you. Let us try


Our New East Side Store and Shipping Department

## ROUTLEDGE BIRD, PET AND ANIMAL COMPANY

The illustration aboye shows the new East Side Store; where we will have ample space to keep larger stocks of Birds and Pets and have room for the manufacture and packing of our H. Q. line of Bird and Pet Remedies, Feeds, etc. Part of our City Nursery and Plant Department will also be conducted there.

## CANARY BIRD CAGES

We believe we carry the most complete line of plain and fancy cages on this Coast. Limited space in this catalog will not permit us to illustrate all, but if further interested send for our SPECIAL CAGE CATALOG. We offer herewith three of our most popular and best sellers. Prices subject to change in metals.

## LA FAVORITE BRASS CAGES

This is one of the new, late models; very popular and one of our best sellers. The full, graceful design at the top adds greatly to its general appearance. Handsome, bright finish, extra well made. (Wgt. boxed, 10 to 14 lbs .) See illustration.

| No. |  | Size, Inches | With <br> Guard | Without <br> Guard |
| ---: | :---: | ---: | ---: | ---: |
| 7004 | $\ldots \ldots \ldots$ | $1 / 8 \times 61 / 2 \times 123 / 4$ |  |  |
| 7006 | $\ldots \ldots .40$ | $\$ 3.95$ |  |  |
| 7008 | $\ldots \ldots \ldots$ | $101 / 8 \times 71 / 8 \times 131 / 4$ | 7.45 | 4.85 |
| 7010 | $\ldots \ldots$ | $13 \times 73 / 4 \times 131 / 2$ | 8.70 | 5.85 |
| 70 | $\times 81 / 2 \times 143 / 4$ | 9.70 | 6.95 |  |

NIAGARA BRIGHT STEEL CAGES
These new metal cages are finished in bright steel and look real nice. Non-corrosive, neat, bright, well made cages, same style as La Favorite. See illustrations. Mighty good value for the price. (Weight boxed, 10 to 14 lbs.)

| No. | Size, Inches | With Guard | Without |
| :---: | :---: | :---: | :---: |
| 7104 | $91 / 8 \times 61 / 2 \times 123 / 4$ | \$3.90 | \$3.15 |
| 7106 | $101 / 8 \times 71 / 8 \times 131 / 4$ | 4.15 | 3.25 |
| 7108 | $103 / 4 \times 73 / 4 \times 131 / 2$ | 4.40 | 3.45 |
| 7110 | $13 \times 81 / 2 \times 143 / 4$ | 4.95 | 3.80 |
| ECONOMY ENAMELED CA |  |  |  |

These cages are extra good value for the price. Well made and properly finished so that the enamel will not chip off. Color, pure white. For a lowpriced cage, it would be impossible to find better value anywhere. A person often has use for a second cage for young birds or perhaps an extra one, and these are just the thing. See illustration. (Weight boxed, 10 to 12 lbs .)

| No. and Price | Size | No. and Price |
| :---: | :---: | :---: |
| With Guard | Inches | Without Guard |
| 265...... $\$ 4.00$ | $93 / 4 \times 63 / 4 \times 151 / 2$ | 165.......\$2.35 |
| 266...... 4.90 | $101 / 2 \times 7 \times 16$ | 166...... 3.15 |
| 267...... 5.40 | $11 / 2 \times 711 / 2 \times 163 / 4$ | 167...... 3.45 |
| 268...... 6.15 | $121 / 4 \times 81 / 4 \times 171 / 2$ | 168. . . . . . 3.80 |
| 269...... 6.75 | $13 \times 83 / 4 \times 18$ | 169...... 4.25 |



Bird Bath House


## Extra Cage Supplies

Canary Bath House. - Enameled frame, removable glass lights, size about $4 \times 5$ inches. Open the cage door and hook on. "His majesty" steps in when he is ready. Price \$1.25; postpaid \$1.40.

Tonic or Medicine Cup.-Slips in between the wires. Ideal for feeding "extras." 15c; postpaid 20c.

Cage Cups.-For water or feed. Open or closed; half egg-shape, in plain glass or opal. Each 20c; postpaid 25c. Breeding Cage Cups, 20c each; 25 c postpaid.

Bathing Dishes.-Opal or plain glass, 25c; postpaid 30c.


Economy Enamel, without Guard

## Breeding Cages

All metal, enameled white, all complete.


## Wall Brackets

Swinging Arm, heavy nickle-plated wire 8 in., $30 \mathrm{c} ; 10 \mathrm{in} ., 40 \mathrm{c} ; 12 \mathrm{in} ., 60 \mathrm{c}$. Brass, 8 in., 40c; 10 in., 45c; 12 in., 65c.

Screw Wall Bracket.-.Cast iron, fancy design, brass plated; 12 in., $\$ 1.50$.

Bird Nests.-Wire 20c; willow 25c.
Nesting Hair. - 15c pkg.; 2 for 25c, postpald.
Cage Suspension Springs.-Single, light, 25c; heavy, 35 c ; Double, 50 c ; Single with adJustable chain, 50 c .
OUR CATALOG of Cages and Supplies Illustrates these supplies.

Note.-Bird cages can be sent by parcel post, if necessary, providing you add postage at weights given. However, we advise express, as it is a much safer way.

## Routledge H. Q.-"Highest Quality"-Bird Foods

We are making a specialty of Bird Foods and Remedies and carry in stock the largest and only complete line in the Northwest. Our rapidly increasing trade shows that the public appreciates the opportunity to get H. Q. "HIGHEST QUALITY" foods and remedies of "MERIT" for their pets. Read about the new East Side Store of the ROUTLEDGE BIRD, PET AND ANIMAL COMPANY, 174 Union Avenue North, corner Oregon.

## H. Q. ROLLER BIRD SEED

Our own special mixture for American, Hartz Mountain and St. Andreasberg Canaries; especially prepared for the singers. Contains no hemp, but the correct proportions of highest quality recleaned Canary, Sweet Rape, small Golden Millet and a few other seeds to give health and "pep" to the singers.

It is no wonder that thousands of canaries die annually from the effects of common Bird Seeds put up by grocery and drug companies. It is generally old, musty or dusty, inferior seeds, and not correctly mixed.

Try a package of our H. Q. and note the difference and also the saving, even though it is a little higher in price.
"H. Q." sold only in sealed 1-lb. cartons Price, large full pound carton, with small envelope of Bird Sand and piece of cuttlebone, 30c lb. Add postage if wanted by mail.
H. Q. HEMP SEED.-Hemp is the large, round, dark-grey seeds found in all cheap mixtures. It is very heating and fattening and should be fed sparingly and not to singers at all.

Lb. 20c; 10 lbs. $\$ 1.25$
H. Q. CANARY.-There is a big difference in the stock and quality of canary. Buy our recleaned Sicily seed. Quantity price on request. L.b. 20c; 10 lbs. at 15c
H. Q. MILLET.-Small golden soft shell, fresh and recleaned. Lb. 20c; 10 lbs. at 15c
H. Q. SWEET BIRD RAPE.-Easily detected by the sweet taste. Beware of cheap rape. Lb. 25c; 10 lbs. at 20c
"H. Q." CRYSTAL AGATE BIRD GRAVEL. -A new and ideal product, becoming very popular with bird fanciers. 2-lb. carton 15c
H. Q. SILVER BIRD SAND.-White and clean; put up in $2-1 \mathrm{~b}$. cartons, 15c; in bulk 5 lbs., 30c; 10 lbs .50 c .

RED BIRD GRAVEL.-Preferred by some of our customers.

2-lb. box 20 c


Design Copyrighted
This illustrates our new H. Q. Bird Seed Carton - Highest quality seed obtainable. (Green, yellow and red box, yellow bird.) Take no other. Ask your dealer to stock it and send us his name and we will do the same.

## MAW.-(Poppy.) Bird tonic. 40c lb.

LETTUCE SEED.-For birds. 35c lb.
CUTTLE BONE._High grade, large size. Each 10c, or 2 for 15c, postpaid; with patent fasteners or holders, 10 c and 15 c , postpaid.

## NOTE.-Add postage to all foods above when ordering by mail

## Parrot Foods, Tonic, Etc.

> H. Q. Mixed Parrot Seeds.-This is our own mixture of clean, well cured sunflower, hemp, pumpkin and corn, properly mixed. Your "Polly" will like this. 25c lb.; 5 lbs. for $\$ 1.00$; postage extra.
> H. Q. Sunflower.-We offer only large, plump, full-meated seed properly cured and of the right age for health. Far superior to the average stock sold. 20c Ib.; 5 lbs. for 90 c ; postage extra.

> Routledge General Parrot Tonic.-Prepared by us expressly for parrots afflicted with indigestion, diarrhoea, catarrh and being off feed. Postpaid 30c.

> Parrot Corn.-Best quality for parrots. 15c lb.; 4 lbs for 60c; postage extra.
> M. G. Parrot Spray.-Will cure Parrots of the habit of biting off their feathers. Per bottle 50c: postpaid 65c.
M. G. Mixed Parrot Seed.-Properly mixed for good health and plumage. Full and valuable directions on the care of Parrots on each box. Per carton 30c; postpaid 35c.
M. G. Prepared Corn, for Parrots.-To be given in addition to the seed. Per carton 20 c ; postpaid 25c.
M. G. Parrot Biscuit, for old and young, to keep them in good health and plumage. Per carton 30 c ; postpaid 35 c .

Parrot Tonic.-Unexcelled for young Parrots, cures catarrh, bowel trouble, etc. (M. G.) Per bottle 35 c ; postpaid 40 c .
M. G. "Health Food for Parrots, for health and fine feathers. Per carton 30 c ; postpald 35 c .

Plumage Restorer (K).-For Parrots, Paroquettes and birds that pick and bite thoir feathers. 30 c ; postpald 35 c .

NOTE.-Add postage to all prices not marked Prepaid if wanted by mail.

## Routledge H. Q. Bird Remedies-Continued

These H. Q. remedies are our own preparations and fully guaranteed. Our own experts and our Veterinarian know pet stock, their ailments and best cures. Consultation free. Complete instruction in each carton.

NOTE.-Following prices are postpaid. 5c less per package if calied for. Complete Directions in each package.

A "Tonic" or "Medicine Cup" (see page 149), is the ideal way to feed these special foods. Only 20c, postpaid.

ROUTLEDGE SONG RESTORER.-For loss of voice and song. A wonderful preparation in dry granulated form. Used in conjunction with our liquid Song Tonic, alternating daily, invariably restores the song quickly. Postpaid 30c.

ROUTLEDGE HEALTH FOOD.-Feed in. "tonic cup" twice a. week. Especially compounded to combat intestinal ailments of birds, a trouble not generally understood but is the cause of many birds dying yearly. Postpaid 30 c .

ROUTLEDGE GENERAL TONIC.-Made to meet a demand for helping birds in a rundown condition where there is no definite ailment existing, but still there is need for a tonic. Gives quick results. Put in water cup. Postpaid 30c.

ROUTLEDGE MOULTING FOOD.-Supplies the necessary elements of food value required by a bird at the beginning and during moulting time. The bird will repay you many times over with its sweet song for your thoughtfulness in supplying it with this food. Postpaid 30 c .

ROUTLEDGE SONG TONIC.-For loss of voice and diseases of the respiratory organs. Stimulates peristaltic action and organs of the circulation. Put in water cup. Postpaid 30c.

ROUTLEDGE COLD REMEDY.-Birds suffering from colds, asthma and kindred troubles must have immediate attention or they are very apt to be lost; at least the song will be destroyed greatly if not entirely Keep this remedy on hand. Postpaid 30c.

ROUTLEDGE DIARRHOEA REMEDY.The best that money and skill can produce without a peer for quick and healthful results. Use our Bird Laxative first. Postpaid 30c.

ROUTLEDGE BIRD LAXATIVE.-Composed of vegetable oils, effective but harmless. Postpaid 30c.

ROUTLEDGE BIRD OINTMENT.-To keep down the unnatural dryness of the epidermis. Don't neglect the bird's feet and legs. Use this ointment for scales, roughness and leg mites. Postpaid 30 c .

ROUTLEDGE BIRD LINIMENT.-One of the greatest remedies for diseases of the feet and legs of birds, also for skin troubles. Postpaid 30 c .


Look for this style carlon. Three colorsgreen, yellow and red.

ROUTLEDGE DISINFECTANT CAGE WASH.-There is a great demand for a disinfectant to use when washing cages that will destroy all disease germs, lice and mites. Will not harm the finest cage, either brass or wicker. Use a tablespoonful to a quart of water. Use Routledge BIrd Soap to make a lather and clean the cage at the same time. Rub the cage dry with a soft, dry cloth, and it will shine like a new cage. Postpaid 30c.

ROUTLEDGE SPECIAL BIRD SOAP.Prepared especially for washing bird's legs and feet, feathers, also if bird doesn't bathe, and cages, cups and perches. Unsurpassed for human use and can be used on the most delicate skin. Postpaid 30c.


Read our book, "Care, Feeding and Breeding of Canaries'; worth a dollar; price 30c, postpaid. See next page.

ROUTLEDGE H. Q. HEALTH FOOD.-See description above. Best by test. Try it.
"PEP."-The same kind of a tonic and conditioner as above. Also put up in the same style. Very popular seller and we prefer it in some ways to Manna. Per cake, 15c; postpaid, $20 \mathrm{c} ; 2$ for 35 c .

BIRD MANNA.-A combination of seeds, herbs and roots that nature intended birds should have. Food and medicine combined. A tonic and conditioner. Comes in half-round cakes, made to fasten on the cage wires. Per cake, 15c; postpaid 20c; 2 for 35c.

CANARY HIGH BALLS.-Another article of "Manna" merits. Highly praised. Comes in ball form and hangs in the cage. "Mr. Bird" eats it as he needs it. Each 15 c ; postpaid 20 c ; 2 for 35 c .

SPRATT'S COD LIVER OIL NESTLING FOOD.-A food for young birds. A substitute for boiled eggs. An excellent food for old birds in the moulting season. Per pkg. 25c; postpaid 30c; 2 for 55 c .

## Mite and Lice Powders

Watch out for lice on the birds and the little red mites that hide in the crevices of the cage or walk during the day and live on the birds at night. Your bird cannot be contented and happy with these pests.

Bird Lice Destroyer (H. Q.)-Put up in powder guns ready to shoot. 35 c ; postpaid 40c.

Bird Insect Powder.-Very effective, if dusted on the bird. Pkt. 15c postpaid. Large box, 30 c postpaid.

Note.-Insect powder blowers at 25 c each postpaid. You need one to apply powder effectively. See page 126 .

ROUTLEDGE DEPLUMING MITE LIQ-UID- Fمr destroying the depluming mite which causes the feathers to come out around the neck and on the back of the head. Postpaid 30c.

Canary Leg Bands, doz. 50c
Bird Cages and Extras
Illustrated Bird Cage Catalog on request.


Two is Company, Three is a Crowd

## Max Geisler-Kaempfers-Philadelphia Bird Remedies

In addition to our own H. Q. preparations we also sell other leading Bird Food companies' F'eeds and Remedies.

Price, Postpaid
To conserve space, we will designate the different stocks as follows: (G) for Max Geisler, ( $K$ ) for Kaempfers, ( $F$ ) for Philadelphia Bird Co.'s, (S) for Spratt's.

NOTE.-The following prices are all postpaid, 5c less per package if called for. Prices subject to market changes.
Bird Seed-Mixed
Geisler's Roller, 12-oz. pkg.............. . . 40c
Philadelphia B. F. Co.'s, 14-oz. pkg. . . . 40c
Routledge H. Q., see page 1.
Bird Soaps-See page 2.
Song Restorer (Kaempfer's), large size 55c
Song Restorer (Excelsior)
Song Restorer, Drahota (P)
Song Restorer (S)
Song and Moulting Foods (G)
Treatment A.-(Sóng Restorer) (G)
Treatment B.-(Digestive Trouble) (G)
Treatment C.-(Cold Cure) (G)
Treatment D.-(General Tonic) (G)

Price, Postpaid
Bird Biscuit (G) Plain 25c; Medicated 30c Vegetable Extract (G) general tonic 40c Moulting Pepper (P), moulting season 40c Asthma Tablets (K)

30c
Canaradyne (S), for asthma 30c
Diarrhoea Tablets (K) 30c
Constipation Tablets (K) 30c
Bird Bitters (P), general tonic 40c
Nestling Food (P), for young birds 30c
Plumage Restorer (K), a spray 30c
Food Ointment (K), for sore feet 30c
Bird Liniment (K), for scaly legs 30c
Color Food, Red or Orange, gives feathers
better color. Fine for young birds or
after moulting. (S) 30c; (P) 40c
Nesting Hair (P), for nests 15 c
MOCKING BIRD FOODS.-For Mocking
Birds, Robins, Thrushes and all soft-billed birds.

Spratt's Defiance, large cans 75c
Ruhe's, 1-lb. cans 70c
Geisler's, $3 / 4$-lb. 50 c

## Up-to-Date Pet Stock Books

"CARE, FEEDING and BREEDING of CANARIES," by Geo. L. Routledge, gives a volume of real information regarding Canaries. Also informs you how and what to use to overcome disease and trouble. It is based on many years of experience and study; 48 pages nicely illustrated and well printed on heavy book paper. Worth a dollar, but priced at 25c; postpaid, 30 c .
Feathered Pets.-140 pages on breeding, care and food for Canaries, Finches,
Parrots and all cage birds. Postpaid..40c
parrots and Talking Birds................. . 50c

## CAT BOOKS

Cat Culture, Spratt's, 15 c ; Domestic and Fancy Cats, by Jennings, covers all subjects, 85 c , postpaid.

## BOOKS ON DOGS

Amateur Dog Book.-(Bruette)-Train-
ing, care and treatment, 150 pages.... $\$ .60$
Amateur Trainer.-(Haberbein) ......... 1.25
Airdale Terrier Standard.-Simplified... 2.20
Airedale Terrier.-(Buckley) ........... 2.20
Boston Terrier-All About It-(Axtell).. 2.60
Common Sense Dog Doctor.-Spratt's... . 60
Fox Terrier.-(Dalzeil) . . . . . . . . . . . . . . . . . . 85
Practical Dog Breeding-(Haynes)....... . 1.25
The Collie-(Dalziel) .................... 1.00
Shepherd Dogs.-Schooling and training.. . 85
Dog, Cat, Rabbit Pedigree Blanks-
............................10c each; 6 for .50

## PARROTS

We handle more young parrots than all other Northwestern dealers combined. The young parrots arrive during July and August, but we aim to have stock on hand at all times. Price of trained talkers on request. We offer hand raised, not the wild, trapped, unmanageable birds.

PANAMA PARROT. - The most popular parrot with our trade. Of quite large size, gentle disposition, easily taught and become great favorites. Deep green plumage. They often show a yellow spot on the back of the head. Young, 6 to 8 months old, each $\$ 25.00$ and $\$ 30.00$; extra select, $\$ 35.00$; Old barrots, Trained Talkers, $\$ 50.00$ and up.

B B OR DWARF PARROTS.-These cute little parrots make great pets. They are active, bright and wideawake They are not much on the talk, but can be trained. Their dark green plumage is always smooth and pretty. Their gentle disposition and winning ways make them great favorites. Each, $\$ 7.50$ and $\$ 10.00$.

CUBAN PARROT. - Medium size, green plumage, red tips on wings, light face, gentle, fine pets, good talkers. Note below.

MEXICAN RED.HEADED PARROTS.Medium size, trim and active, make fair talkers, gentle. Green plumage, bright red on head, blue in wing and tail.

NOTE.-Cubans and Mexican Parrots are cheaper in price than Panamas but not as good talkers. They were not to be had last year, but may be obtainable this coming fall. Write for prices.


Mouiding Base Nos. 101 to 103

## FANCY SQUARE CAGES

Made of extra heavy tinned wire, zinc base, strong self-locking feed cups. They also have a slide cleaning pan on the bottom and wire grating to keep bird from getting down on the dirt.

| No. |  | Size | Height | Price |
| :--- | :--- | :--- | :--- | ---: |
| 115 | $\ldots$. | $163 / 8 \times 111 / 2$ | in. | 23 in. |
| 120 | $\ldots$. | $171 / 2 \times 14$ | in. | $25 \mathrm{in}$. |



These are extra strong, large and roomy, well finished and of the latest and best designs of Parrot Cages on the market. Our Special Cage Catalog will show larger cuts of the three styles, extra cups, etc.

MOULDING BASE SQUARE CAGES
Made of extra heavy tinned wire, new style moulding base, with removable cleaning drawer, and also has wire grating to keep bird from getting down on dirt. Tinned iron, self-lockiny feed cups. (See cut.)

| No. | Size |  | Height | Price |
| :---: | :---: | :---: | :---: | :---: |
| 101 | 151/8×14 | in. | 27 in. | \$14.75 |
| 102 | $1 \% 5 / 8 \times 151 / 8$ | in. | 28 in. | 16.95 |
| 103 | 211/4×171/2 | in. | 31 in . | 22.45 |

## ROUND PARROT CAGES

These are very popular on account of the low prices. Our advice is to get the largest cage you can afford, as it gives "Polly" more room for exercise and less danger of spoiling the tail feathers. Heavy tinned wire. strong and well made; zinc bases, self-locking feed cups.

| cups. | Diameter | Height | Price |
| :---: | :---: | :---: | :---: |
| No. 50 | 13 in. | 193/4 in. | \$ 5.65 |
| No. 55 | 14 in. | 21 in. | 6.75 |
| No. 60 | 151/2 in. | 23 In. | 8.85 |
| No. 65 | 17'2 in. | 28 in. | 12.30 |
|  | PARROT | ANDS |  |

vour parrot has become ta well trained, a parrot stand is very desirable. It gives more freedom and the bird greatly enjoys it, and can keep his plumage in much better condition. Keep Polly chained when you leave.

No. 1.-Finished in black enamel. Complete with feed cups, tray and chain. Good heavy base, so it will not tip river. Tray adjustable to any height. Price $\$ 16.40$. Stand Covers, \$11.25.

PARROT FOODS.-You must remember that your parrot does not get all the foods nature intended it should have, therefore give "Polly" a treat by feeding our Health Food, Parrot Biscuits, Etc. See page 150.

## PUPPIES AND DOGS

Buy your child a puppy and let them grow up together. Aside from the protection and companionship, educational experts advise that all children are better by having pets.


Bring the kiddies to see the puppies in our window (West Side store), and visit our kennels at our Pet Stock Store on the East Side. See page 148.

Most buyers prefer a pup so it can be raised and trained to suit, but often someone wants a full-grown dog; we sell both. Our largest demand is for Fox or Irish Terriers, Toy, Boston and English Bulls, Airedales, Spitz, Cocker Spaniels and Scotch Collies, but we can also supply Setters, Pointers and most other breeds.

دrices.-If out-of-town customers will write and tell us what they want-breed, color and sex and what stock, fancy, pedigreed or just good, fairly pure strain, we are sure we can please you and give you extra good value. Prices on the different breeds and stock range from as low as $\$ 7.50$ to $\$ 15.00$ and up to $\$ 50.00$ to $\$ 75.00$.

## MISCELLANEOUS DOG SUPPLIES

LEATHER MUZZLES.-75c to $\$ 1.50$.
DOG COLLAR BELLS. -25 c , Locks 35 c to 75 c .

DOG COMBS.-Nickle plated, cөarse $\$ 2.00$, medium or fine $\$ 1.65$, flea $\$ 1.85$.

DOG COATS or Slip-On.- $\$ 2.75$ t $\$ 3.75$.
SWEATERS, with legs.-Wool, $\$ 3.25$ to $\$ 4.50$.
FELT BLANKETS.-Shaped and strapped, $\$ 2.25$ to $\$ 4.00$.


## Dog Remedies, Dog Soaps and Deodorizers



## ROUTLEDGE DOG WASH

A disinfectant and germ destroyer. This is especially prepared to meet a demand for a real germ destroyer and disinfectant. It kills fleas by contact, relieves irritation and itching skin and if used regularly as a wash and spray will prevent most contagious germ diseases. Use 1 tablespoonful to a gallon of water. Prices: $3-\mathrm{oz}$. bottle 25 c , postpaid 35 c ; pint 75 c ; quart $\$ 1.25$.

## ROUTLEDGE PUPPY WASH

For Toy Dogs and Puppies. An excellent disinfectant and a germ destroyer. Kills all dog odor and fleas, improves the skin and coat. Use in bath water with H. Q. Dog Soap. 1 tablespoonful to a gallon of water. Price: $3-\mathrm{oz}$. bottle 25 c , postpaid 35 c .

## ROUTLEDGE SPECIAI DOG SOAP

Made to meet a demand for all kinds of animals or fowls, cats, dogs, chickens, etc. It has the proper ingredients to get results in all general conditions, still be harmless to the animal whieh it is used on. It is nonpoisonous and ron-irritating to animals or humans.

Price per cake, 25c; postpaid 30c.

## ROUTLEDGE MEDICATED DOG SOAP

This soap is prepared from the formula of a celebrated physician and combine all healing and purifying ingredients possible in a soap. Its power to fortify and protect the user or animal from contagion is truly wonderful.

This soap will remove dandruff, stimulate hair growth, prevent most skin eruptions, and destroys most germ diseases conmunicated by contact. One washing generally kills all the fleas on an animal, leaving the skin and fur in the best of condition. We advise its use freely on either man or beast. It is especially fine to use on animals before and after shows to prevent disease, fleas, mange, etc., from getting a start.

Price per cake, 50c; postpaid 55c.

## PEDIGREE BLANKS

For Dogs, Cats and Rabbits. Right size and style, superb, heavy white plate paper, printed in 2 colors. Prices: State kind wanted, 10c each; 6 for 50c; 12 for 85 c.

NOTE.-We wouid be very glad to mear from any reljable breeders of Dogs, when they have stock to sell. Give us Iull intormation in the first letter, BREED. WHAT KIND OF STOCK, AGE, SEX and NEI PRICE TO US.

## DOG SUPPLIES, REMEDIES, ETC.

We carry in stock the largest and best assortment of Dog Collars, Chains, Leads, Muzzles, Sweaters, Blankets, Brushes, Combs, etc. Our new display boards in our salesroom show at a glance all styles, sizes and kinds. If you can call, do so. Below we illustrate and describe a few popular sellers for our out-of-town customers:


## DOG COLLARS

Sizes given include first hole; the holes vary from $1 / 2$ to 1 inch apart, so that the collar is adjustable to a larger size. Collars returned in good order can be exchanged if postage and difference in prices is sent.

CUT NO. 2.-S.olid tan leather-studdedvery serviceable.

Price
No. 128-Length $131 / 2$ in., width $11 / 4$ in... $\$ 1.25$ No. 129—Length $151 / 2$ in., width $11 / 4$ in... 1.50

CUT NO. 4.-Solid black leather-studded and spiked-extra strong.

Price
No. 110 -Length 13 in., width 2 in..... . . $\$ 4.50$ No. 109-Length 17 in., width 2 in........ 4.75

CUT NO. 6.-Leather-felt lined and studded.

Price
No. 71-Length $121 / 2$ in., width 1 in....... . $\$ 1.00$
No. 72 -Length $141 / 2$ in., width 1 in....... 1.25
No. 73-Length $161 / 2$ in., width 1 in........ 1.50
CUT NO. 8.-Black leather—studded blue stones-non-breakable.

Price
No. 51-Length 11 in., width $11 / 4$ in....... . $\$ 3.75$
No. 52 LLength 13 in., width $11 / 4$ in....... 4.00
No. 53-Length 15 in., width $11 / 4$ in........ 4.25
CUT NO. 10.-Solid tan leather-studdedlight but strong.

Price
No. 36-Length 11 in., width $1 / 2$ in. . . . . . . $\$ 0.60$
No. 37 -Length 12 in., width $1 / 2$ in......... . 70
No. 38 -Length 13 in., width $1 / 2$ in......... . . 80
CUT NO. 12. -Solid leather-studded-black outside showing red edge and red leather lined. Strong, handsome style.

Price
No. 92 -Length 12 in., width $11 / 4$ in....... $\$ 2.75$
No. 93 -Length 13 in., width $11 / 4$ in....... 3.25
CUT NO. 14.-Solid black leather-fancy brass and glass studded, non-breakable-a beautiful, rich style.
No. 111—_ Price
wiath $11 / 4$ in....... $\$ 3.25$
No. 112 -Length 13 in., width $11 / 4$ in...... 3.50
No. 113-Length 15 in., width $11 / 4$ in...... 3.75
CUT NO. 16.-Tan leather-brass studded, felt lined.
No. 3-Length 9 in., width $1 / 2$ in........ $\$ 0.75$
No. 4-Length 11 in., width $1 / 2$ in.......... . 8.85
No. 5-Length 12 in., width $1 / 2 \mathrm{in} . . . . . . .{ }^{2} 1.00$


## DOG HARNESS, CORRECT STYLES

CUT NO. 28.-Genuine tan leather, felt lined. Light weight for small dogs. Sizes given is body measure taken right back of the fore-legs, around the body over the back.

> Price

Size for 14-in. body, straps $1 / 2$ in......... $\$ 1.75$ Size for $16-i n$. body, straps $1 / 2$ in......... 2.00 Size for 18-in. body, straps $3 / 4$ in......... 2.25 Size for 20 -in. body, straps $3 / 4$ in........... 2.50

CUT NO. 30.-Strong, and well built. Black leather outside, red edge and red leather lined. Metal studs and name-plate; neat.

Price
Size for 16 -in. body, straps $1 / 2$ in......... $\$ 4.00$
Size for 18 -in. body, straps $3 / 4$ in......... 4.25
Size for 20 -in. body, straps $3 / 4$ in......... 4.75
CUT NO. 42.-Extra strong, solid black leather, all straps nicely studded, including breast strap. Strong and serviceable. Top shield strap $11 / 2$ inches.

Price
Size for 22 -in. body, straps 1 in......... $\$ 5.50$
Size for 24 -in. body, straps 1 in.......... 6.00
Size for 26 -in. body, straps 1 in......... 6.50

## LEATHER BACK DOG BRUSHES

CUT NO. 32.-A high grade leather back with hand strap. A good and serviceable brush. Small, 75c; Large, $\$ 1.00$.

## DOG LEADS AND CHAINS

All stvles equipped with swivel snaps and hand-hold. High grade and well made.
CUT. NO. 22.-LEATHER STRAP LEADS All Strap Leads $41 / 2$ feet long
Flat, black color, $3 / 4$-inch., Price. . . . . . . . $\$ 2.00$
5/8-inch, Price......... 1.50
Flat, $\tan$ color, $3 / 8$-inch, Price......... 1.50
$1 / 4$-inch, Price. . . . . . . . . . . 1.00
Flat, red or green, $3 / 8$-inch, Price......... 1.50
$1 / 4$-inch, Price. . . . . . . . 1.25
CUT NO. 24.-ROUNDED LEATHER LEADS
All Round Leather Leads $41 / 2$ feet long
Round, black, $3 / 8$-inch diameter, Price.... $\$ 2.25$
Round, tan, $3 / 8$-inch diameter, Price.... 3.00
Round, tan, $1 / 4$-inch diameter, Price. . . . 2.50
CUT NO. 26.-CHAIN LEADS
Chains 6 feet long-swivel snaps
NO. 20-Light weight, Price............. $\$ 0.75$
NO. 21-Medium weight, Price......... . . . 85
NO. 22—Heavy weight, Price............. 1.00
KENNEL CHAINS
These have swivel snaps on both ends and are 6 feet long. We have three different patterns, $\$ 1.00, \$ 1.15$ and $\$ 1.25$ each.

# CHAMPION DOG AND PUPPY BISCUIT 



## Right in line with Routledge H. Q. Foods Good enough for human consumption

Champion Biscuits are made in the most modern, sanitary, and best equipped plant of its kind in the wrold.

Only clean, sweet meats and choice cereals are used in the manutacture of these foods. The proportions are scientifically blended, so as to produce a thoroughly balanced ration-rich in protein-containing all the elements necessary to keep the dog in the best physical condition.

We recommend Champion Biscuits as we feel assured that they are the best obtainable. They are nourishing, complete; contain no waste products, and are wholesome and sanitary, appetizing and READILY EATEN.

Their exclusive use will assure proper nutrition, health, glossy coats, regular habits, and natural sleep.

PRICES: Champion Dog Biscuits, $31 / 2 \mathrm{lbs} .50 \mathrm{c} ; 61 / 2 \mathrm{lbs} . \$ 1.00 ; 25 \mathrm{lbs} . \$ 3.50 ; 100 \mathrm{lbs} . \$ 12.50$. Puppy Biscuits, $31 / 2 \mathrm{lbs}$. $50 \mathrm{c} ; 6 \mathrm{lbs}$. $\$ 1.00$; 25 lbs. $\$ 3.75$. Add postage if wanted by parcel post.

## SIXTY MINUTE WORM REMEDY

## GUARANTEED ACTION OR YOUR MONEY BACK

A wonder in action, yet perfectly harmless to the dog or pup. There is no danger or bad after effects from this remedy-it is a vegetable compound and produces unfailing results within 2 hours, generally within 30 or 40 minutes. Use Sixty Minute Worm Remedy and nothing else. Keep your pets free from worms and you will greatly reduce the danger of Distemper, Paralysis, Eczema, etc.

Every pup should be wormed when weaned and again every 2 to 3 months. The latter applies to dogs and bitches. Ninety per cent of pups are born with worms. If your pup or dog gets sick, use Sixty Minute Worm Remedy first-ten to one, you will stop the trouble. If not, then consult a Veterinary. Sixty Minute Worm Remedy is perfectly safe for Cats also. We have had nothing but wonderful reports from Dog and Cat owners. Full instructions with every container. Prices postpaid-Small carton, 6 Doses, $50 \mathrm{c} ; 15$ Doses, $\$ 1.00$; 36 for $\$ 2.00$; 75 for $\$ 3.75$; Kennel size, 110 Capsules, $\$ 5.00$.

## KA-DENE OINTMENT

Gives relief to superficial varieties of Mange in dogs and cats, most sores, cuts and bruises on all animals. Ear canker on Dogs, Cats and Rabbits-kills fleas and vermin. Pamphlet free. 2 Sizes- 50 c and $\$ 1.00$, postpaid.

## MILNSHAW MANGE MEDICINE

Can be used in severe cases of Folicular or Sarcoptic Mange. Quickly cures ordinary cases of Mange or Skin Diseases. Highly recommended. Prices- 85 c and $\$ 1.60$ per bottle, postpaid.


## Catnip Mice and Balls

Catnin Mice and Catnip Balls make cats playful, healthy and wide awakethey love the smell of catnip, crave it, and need a little occasionally to keep in good health.

CATNIP MICE
Made of cloth, same size, shape and color of a real mouse, and stuffed with dried catnip leaves. Kitty will play for hours with th:3 mouse and then should be given a little dried catnip. Price, postpaid, 20 c .

SPECIAL.-1 Catnip Ball, 1 Catnip Mouse and 1 pkg. Catnip, postpaid, for 50 c .


These are hollow wooden $11 / 2$-inch red balls, filled with catnip. It's great sport for the cat. A wonderful toy for cats. Price, postpaid, 20 c .

CATNIP LEAVES
Catnip leaves, properly cured and dried. Always keep a package on hand to treat Kitty with. Price, postpaid, 20c.

## Persian Cats or Kittens

These long, fluffy, silky-haired pets are great favorites with the ladies, and with their bright intelligence, affectionate dispositions, cleanliness and beautiful appearance it is not to be wondered at. Most of the stock we offer is from pedigreed stock and eligible to registration.

PRICES-Young Kittens: Males, $\$ 10$ to $\$ 20$; Females, $\$ 7.50$ to $\$ 15$; Old, 6 months or over, prices on request.

ROUTLEDGE SPECIAL CAT SOAP.-We have prepared this especially for cats. It is high grade, non-irritating, delicately perfumed and will clean the skin and fur and eliminate cat odor, disease and vermin without injury to cat, if you follow directions on the carton price, 25c: postpaid 30 c .

CAT COMBS. $-\$ 1.75$ to $\$ 2.00$ each. For Cat Food and Medicine, see next page.

## Spratt's Pet and Poultry Foods, Remedies, Etc.

Known and used the world over. None better. We have hundreds of customers and now buy in carload lots. Prices subject to market changes. Spratt's descriptive Dog Culture Book and Catalog free.

## Spratt's Dog Foods

NOTE.-ADD POSTAGE on all sizes if wanted by parcel post and allow a little extra for weight of packing.
SPRATT'S DOG CAKES.-A properly balanced meat, grain meal and vegetable compound that will not spoil with age. Known rind recommended the world over as a complete and constant food for dogs. Most owners of dogs rely on scraps from the table as "dog feed." This is all right as far as it goes, but to be on the safe side and for vacation trips, etc., always keep a supply of Dog Cakes on hand.

DOG CAKES (Whole).-2-1b. cartons, 35c; $5-\mathrm{lb}$. bags, $80 \mathrm{c} ; 10-\mathrm{lb}$. bags, $\$ 1.50$; $25-\mathrm{lb}$. bags, $\$ 3.50$; $50-\mathrm{lb}$. bags, $\$ 6.75$; $100-\mathrm{lb}$. bags, $\$ 12.50$.

KIBBLED DOG CAKES.-Nut size, 2-1b. carton, 35 c ; 5 -lb. bags, 80 c ; $10-\mathrm{lb}$. bags, $\$ 1.55$; $25-1 \mathrm{~b}$. bags, $\$ 3.50$; $50-1 \mathrm{~b}$. bags, $\$ 6.50$; $100-1 \mathrm{~b}$. bags, $\$ 12.75$.

COD LIVER OIL BISCUITS are invaluable for old or delicate dogs or those recovering from sickness. Dogs eat them without coaxing.

Prices: 2-1b. cartons, 40c; 5-1b. bags, 90c; $10-\mathrm{lb}$. bags, $\$ 1.70 ; 25-\mathrm{lb}$. bags, $\$ 3.75$; $50-1 \mathrm{~b}$. bags, $\$ 7.00$; $100-\mathrm{lb}$. bags, $\$ 13: 75$.

FIBC for Puppies or Growing Dogs.-For shy feeders or those recovering from sickness, or as a change of food at any time for all dogs. Small nut size.

Prices: $21-\mathrm{lb}$. cartons, $40 \mathrm{c} ; 5$-lb. bags, 90 c ; $10-\mathrm{lb}$. bags, $\$ 1.70$; $25-\mathrm{lb}$. bags, $\$ 3.75$; $50 \mathrm{H}-\mathrm{lb}$. bags, $\$ 7.50$; $100-1 \mathrm{l}$. bags, $\$ 14.50$.

## Spratt's Puppy Foods

A perfect and whole food for puppies of all breeds. Puppies should be started on these biscuits when about one month old, and they should be continued until such time as their teeth become sound and strong, usually when they are about six months old.

PUPPY CAKES.-2-1b. cartons, 40c; 5-1b. bags, $85 \mathrm{c} ; 10-\mathrm{lb}$. bags, $\$ 1.60$; $25-1 \mathrm{~b}$. bags, $\$ 3.75$; $50-\mathrm{lb}$. bags, $\$ 7.00$; $100-\mathrm{lb}$. bags, $\$ 13.00$.

MIDGET FIBERINE and MIDGET CHARCOAL BISCUIT, per 2-lb. carton, 45 c .

BONE MEAL FOR PUPPIES.-The strong frame builder. $3-1 \mathrm{~b}$. tin can, 40 c .

## Spratt's Cat Foods - Remedies

Spratt's Cat Food.-A complete food for cats. Used at the leading catteries throughout the world and daily becoming more popular among the fancy. Small pkg. (P. P. 1 ib.), 25c; large pkg. (P. P. $23 / 4$ lbs.), price 40 c add postage.

Vermifuge Capsules for Cats. Postpald 50c.
Distemper Tablets for Cats. Postpaid 75c.
Tonic and Condition Tablets for Cats. Postpaid 50c.


## SANITAS ANIMAL SOAP

This is a soft soap for keeping the skin and coat in healthy condition, for destroying fleas, dressing cuts, wounds and sores. A high class antiseptic, soft soap, soothing and heal-ing-fragrant pine odor.
Price-50c per jar, or 60 c , postpaid.

## - Spratt's Remedies and Medicines

DOG SOAP (White).-Kills lice and fleas prevents skin diseases and leaves the coat smooth and glussy, contains no tar, nicely perfumed. Per cake, 25c; postpaid, 30c.

Antiseptic Soap (Black).-For cuts, wounds, ulcers, etc., disinfectant and germicide. Cake, $50 \mathrm{c} ;$ postpaid, 55 c .

Chronic Skin Disease Tablets.-Postpaid 60c.

Alternative Cooling Tablets.-For heated blood, etc. Postpaid 60c.

Digestive Tabiets.-For severe cases of indigestion. Postpaid 60c.

Diarrhoea Tablets.-To relieve diarrhoea. Postpaid 60c.

Distemper Tablets.-For toy dogs and puppies. Postpaid 85c.

Ear Canker Ointment.-Postpaid 60c.
Eye Lotion (tablet form.)-Postpaid 60c.
Eczema Remedy.-Postpaid 60c.
Hair Stimulant and Restorer.-Postpaid 60c.
L.iver Tablets.-Postpaid 50c.

Locurium Ointment.-For wounds, cuts and bruises. Postpaid 50c.

Purgative Tablets.-Perfectly safe and effective. Postpaid 60c.

Tonic and Condition Tablets.-For toy doge and puppies. Postpaid 60c.

Worm Capsules.-Dog's remedy for Round, Maw, Tape Worms. Postpaid 60c.

Worm Capsules for Puppies.-May be given with perfect saffty. Postpaid 60c.

Vermifuge Uapsules.-For toy dogs and puppies. I ostpaid 50c.

Mange Remedy.-Pints 50c; prepaid 65c.
Dry Cleaning Powder.-Postpaid 50c.

## RABBITS - BELGIAN HARES

We keep on hand at our East Side Pet Stock Store about 30 pens of Rabbits of different breeds and can bring in on short notice most any stock wanted in this line.

## New Method of Pricing

Hereafter we intend to buy and sell Rabbits by the pound; it seems the only fair way to us, and by this method we hope to please our customers and put the Rabbit Industry on a sound basis.

## Young Rabbits, Utility Stock

Two months or over, $\$ 1.50$ each.
Breeders, Utility Stock
Six months or over, 50 c lb .

## Pedigreed Breeders

Eight months or over, 80 clb .

## Prize Show Stock and Registered Prices by correspondence.

Mature stock is 8 months or over, and welght given is the average.

HIMALAYANS. - Fur bearing. Very attractive; body white, with black nose, ears, feet and tail. The fur is heavy, fine and of recognized value. Weight 4 to 5 lbs.

FLEMISH GIANT-BELGIAN.-Very popular on account of their large size and quick growth, which makes them valuable for market. Color, light squirrel grey to solid black. Weight 8 to 12 lbs .


Flemish Giant Buck
WHITE ENGLISH.-Very popular pets with children as their white coats and pink eyes make them so attractive. Always in demand as Easter Rabbits. 6 to 8 lbs.

RUFUS RED BELGIANS.-Improved strain of the common Belgian Hare. Color, greyish red; coat fine and soft; weight, 8 to 9 lbs.

NEW ZEALAND REDS.-A hardy, sturdy strain, very popular and much in demand; meat fine in quality and flavor. Color, red. Weight, 8 to 10 lbs .

- ? NOTE.-Don't breed under 6 months of age; 8 to 10 months is better.

If you don't understand the price list above, write, stating just what you want to buy and we will quote net prices on stock on hand.

Special Note.-The cheapest and quickest results can be obtained by the beginner by buying one or more Bred Does and an extra Buck, not related. Utility Buck service, \$1.00; Pedigreed, $\$ 2.00$. Send or bring your does to our East Side Store, 174 Union Avenue North, corner Oregon.

## UP-TO-IATE BOOKS ON RABBITS



GIBSON'S NEW RABBIT BOOK.-The latest and most complete information ever published about rabbits. Gibson is an international judge and has had twenty years' experience with all varieties. Over forty illustrations and fuli information on housing and hutches; proper handling and selection; breeding, feeding, selling, shipping and exhibition. This book covers all breeds and gives tested recipes for cooking and serving as food; fur proposition, etc. Latest edition, 200 pages, 5x7; well printed on white book paper. Price paper cover, \$1.10, postpad; cloth cover, \$1.60.

WESTERN RABBIT BOOK.-Complete text book on the rabbit industry by C. A. Richey, Los Angeles, Cal. Well printed and nicely illustrated. Covers about the same subjects as the above book but is not as complete in all departments. Very valuable for the beginner. Size $6 \times 9$ inches; 70 pages; paper cover. Price, 75c; postpaid, 80c.

THE RABBIT COOK BOOK.-The most complete and up-to-date book of the kind printed. Containing over 115 recipes of the very latest, on preparing and serving rabbits. Without one of these books you cannot realize the value of this most nutritious meat. Size $5 \times 7$; paper cover; 64 pages. Price, 60c; postpaid, 65c.

THE BELGIAN HARE GUIDE.-Valuable instructive book, devoted to the care, feeding, breeding, housing and diseases of the Belgian Hare, complete and up-to-date. One chapter on Flemish Giants. Good value for the price. Size 6x9; 48 pages; illustrated; paper cover. Price 35c, postpaid.

RABBIT CULTURE AND STANDARD.This is a bcok full of valuable information covering rabbits of all kinds, their breeding, rearing, diseases, remedies, housing, etc. This book gives standard weights and measurements. color and all points of all modern breeds; 132 pages. Price, 60 c ; postpaid, 65 c .

SAVE LOSS, TIME AND MONEY by reading these practical and up-to-date books. Did you ever stop to think that a few hours' reading now and then will give you valuable information that it has taken others years of labor and experience to obtain?

## Rabbit Foods, Remedies, Supplies

## Pigeon Fanciers

Tack these Pet-licks


## Leslie Pet-licks

Salt and.Sulphur
Rabbits, Cavies and Pigeons nead salt for best results and it should be before them at all times so they can get what they need. We recommend Pet-licks, which are of highquality salt and the correct per cent of sulphur. Nail or wire up out of the litter, but within easy reach.

Prices: 10c each; screw-top carton of 10 cakes (wgt. 2 lbs.) 85c; add postage if wanted by mail.

## FEHR'S SALT BLOCKS

Square blocks, $1 / 2 \times 2 \times 2$ inches, pure salt. Each 10c; doz. 75c, postpaid.


## Routledge H. Q. Rabbit Feed <br> Excellent for Guinea Pigs

This is a real feed prepared especially for Rabbits and Guinea Pigs. It is a mixture of ground and rolled grains, alfalfa meal and molasses. It will give good results.

Price: 4 lbs. 25c; 10 lbs. 50c. 100 lbs. $\$ 3.85$.

## Caldwell's Rabbit Remedies

All tried and tested, of real merit. Full directions on each package.

Slobber Remedy.-Sure cure.
Prices Postpaid
35c, 50c, 75 c
Eye Remedy.—Wore ears.
Sore Hock Remedy.
50c, 75 c
50c, 75 c
Vent Remedy.-Very valuable.
Dlarrhoea Remedy.
50c, 75 c
Mange Remedy.
50c, 75 c
Snuffle Remedy.-Colds, etc.
75c

Tonic.-Keeps the males in vigor
ous, healthy condition. $\$ 1.00$ pkgs.;
postpaid
\$1.10
RABBIT TATTOO EAR MARKER.-Complete with ink. Postpaid, $\$ 1.00$. Ink only, 25 c .

## Rabbit and Cavie Feeders

MOE'S RACK.-Use this sanitary feeder. Put hay, vegetables or green feed in the top and grain in the bottom. 12 in . high, 9 in. wide. (P. P. wgt. $21 / 2 \mathrm{lbs}$.) Price 85 c .

Note.-This is also an excellent feeder for poultry. See page 139.

FEHR'S I MPROVED SELF-CLOSING WIRE HAY RACKS.-Very convenient; keep the hay off the floor. Each 35 c ; doz. $\$ 3.50$.

## Ideal Feed and Water Dishes

No. 2.-Earthenware, heavily glazed; the incurving. top rim prevents the noseing out of feed. Will not tip over.

Prices: 6-inch, 25 c each, $\$ 2.50$ doz.; 8 -Ineh, 30c each, doz. $\$ 3.25$. If wanted by parcel post, add 8e each or 50 c dez. for safe packing and postage at 2 lbs. each.

No. 5.-Heavy galvanized half bowl shape, to hang on cage door or partition. Our new style, cannot drop or be knocked off. Each 30c, dez. $\$ 3.25$. Mailing wgt. 1 lb . each. Postage extra.

## Cavies - Guinea Pigs

Bright, active and harmless pets. They are in much demand and money can be made raising them. They come in combination colors of brown, white, yellow, black and tan, generally spotted and nrettily marked. Solid colors are not always obtainable and are higher in price.


English Cavy (Guinea Pig)

ENGLISH.-Smooth, short hair; hardy and bealthy. Young Females, $\$ 1.00$; Young Males, 75 c and $\$ 1.00$; Old Females, $\$ 1.50$. Males, $\$ 1.00$ and $\$ 1.25$. A select breeding pair. $\$ 2.50$.

Cavies or Guinea Pigs, nicely illustrated; complete, (Parker), 85c, postpaid.

Cavies.-Breeding and management, by House; new edition; $\$ 1.50$.

ROUTLEDGE H. Q. BIRD AND PET FEEDS AND REMEDIES
Take no chance by buying ordinary atocks. Insist on ''H. Q.', brand, "Best by Test.', The Routledge Bird, Pet and Animal Company (see page 148) supply all kinds of Birds and Pets, Feed, Remedies, Books and Pet Stock Supplies. Call, write or order through your dealer.

## GOLDFISH, GLOBES, FOOD, ETC.

We are the largest retail and wholesale dealers in Fancy Gold Fish in the Northwest, often having a thousand or more on display in our large aquarium at our store.


An aquarium is a beautiful ornament. It suits everywhere-parlor, library, dining and sitting-room, and may indeed be introduced in apartments of the sick. The bright, active Gold Fish are very interesting, a perpetual source of amusement for both old and young folks. Children are always delighted with them.

CARE OF GOLD FISH.-Very simple and little trouble. The water in the aquaria must be changed from one to six times a week, depending on the size of the globe, number of fish and the temperature of the room. When fish come to surface and gasp for air, they should be given fresh water. Keep the aquariums out of hot sunlight and in a cool place.

## Price List of Fish.

AMERICAN GOLD FISH.-Very hardy and lively. Each, very small, 25c; small, 35 c ; medium, 50c; medium large, 60c; large, 3 to 4 inches, 75 c ; extra large, $\$ 1.00$; extra large breeders, $\$ 2.00$ to $\$ 3.00$; fancy tri-colored, 50c to $\$ 1.50$ and up.

COMMON SILVER FISH.-Same as above, except they are silvery white. Each, medium, 25 c ; large, 50 c to 75 c and up to $\$ 1.50$.

JAPANESE GOLD FISH-FAN-TAILS.These have spreading tails of a delicate lacelike appearance, very showy and attractive. Price, small, 35 c ; medium, 50 c ; large, 75 c to $\$ 1.00$ and up to $\$ 3.00$. Tri-colored, goldenred, pearly-white and black, showing two or all three colors, 75 c to $\$ 1.50$ each.

COMET.-Similar to the American, but the tail is very long, graceful and delicate. Price each, $50 \mathrm{c}, 60 \mathrm{c}, 75 \mathrm{c}, \$ 1.00$ and $\$ 1.50$.

CHINESE TELESCOPE.-Color black, curious and attractive on account of the large, elongated eyes, having the appearance of a telescope. Flowing double tails. Very rare. Price .each, 75 c to $\$ 1.00$.

TADPOLES.-Desirable as scavengers for the aquaria. They consume the decaying matter and help keep the water pure. Price each, 15c.

## Gold Fish Food

FEEDING.-The only safe diet is our prepared Fish Foods, fed daily and only what they will eat up quickly. More fish die from over-feeding than from any other cause.

RICE WAFER OR FLAKE.-Best and most popular; large box, enough food for four fish for six months, 25 c, postpaid. Directions for feeding and care on each box.

SPRATT'S.-Baked and reground to pinhead size. Per can, 15c; postpaid 20c.

DRIED ORIENTAL FLIES.-For a change. Pkt., 25 c .


## Fish Globes

## Cannot be mailed

This style can be set on the table or sideboard, or suspended by brass chains; the most popular and best seller. Note.-Packing charge 25 c per gal. extra.

BLOWN GLOBES.-These are the highest quality of glass blown-smooth and perfect. Each, 1/2 gal., \$1.40; 1 gal., $\$ 2.00$; 11/2 gal., \$2.60; 2 gal., $\$ 3.25$; $21 / 2$ gal., $\$ 3.80$; 3 gal., $\$ 4.40$.

MOLDED GLOBES. - Clear white, heavy glass, popular sellers. Each, 1 pint, 25 c ; 1 qt., 35c; 1/2 gal., 60c; 1 gal., \$1.40.

SQUAT AQUARIUMS.-Latest style, wider and flatter than above; not so easy to tip over. Each, 1 qt., 65c; $1 / 2$ gal., $85 \mathrm{c} ; 1$ gal., \$2.00; 2 gal., $\$ 4.25$; 3 gal., $\$ 6.25$.

STANDARD OR FOOTED GLOBES.Write for prices. We are out of most sizes. Not popular.

SQUARE AQUARIUMS. - Prices on request.

## Aquaria Castles

As ornaments to set in the globes. Prices range from 50 c and up to $\$ 2.00$ each. In ordering state size of globe.

## Aquaria Plant or Fish Moss

This water plant improves the appearance of the aquaria or globe and helps purify the water, also keeps the water fresh longer. Price per bunch, 25c, postpaid. Cannot supply in July or August.

BOOK.-"The Aquaria and Care of Fish"; paper cover, 35c, postpaid.

NOTE.-ALL SHIPMENTS (outside of the city) must go by express. A charge of 40 c is made to cover cost of Shipping Bucket, holding from two to eight fish. Gold Fish can be shipped safely overland hundreds of miles. They cannot be sent by mail.

[^32]
# have a conkey corner IN YOUR POULTRY HOUSE 

## Keeping Poultry Well-The Key to Success

RAISING poultry is pleasant and profitable when "good luck" is with you. Good luck, however, is not merely a matter of chance, but of BEING PREPARED.

For more than twenty-five years Conkey has been THE POULTRY DOCTOR. Take his advice. Install a Conkey Corner of remedies in your poultry house as insurance against disease, trouble, loss and disappointment.

We sell Conkey's Poultry and Stock Remedies on the following guarantee: Money refunded cheerfully if any Conkey remedy does not satisfy.



When Roup breaks out there's no time to experiment-start treatment at oncethe disease is very contagious.

Cold, rainy, muggy weather and changeable conditions intensify Roup. When birds begin to sneeze, froth in eyes, run at nose or show other symptoms of a "cold," put Conkey's Roup Remedy in the drinking water. Sick birds doctor themselves and others are protected from catching the disease. Better still, always at the first sign of "roupy weather," place Conkey's Roup Remedy in fountains-it's a great preventive. Packages 30c, 60c, $\$ 1.20, \$ 2.50$; breeder size, $5-1 \mathrm{l} ., \$ 5.75$, all postpaid.

Conkeys roup PILLS are for treating individual cases and for use at shows when birds develop colds. Packages $30 \mathrm{c}, 0 \mathrm{c}, \$ 1.20$ postpaid; breeder size ( 1000 pills) $\$ 3.00$, or $\$ 3.10$ postpaid.

## Conkeys canker and bronchi-

 TIS REMEDY checks cankerous growths and sores and soon restores the bird to normal. This remedy is Conkey's specificfor bronchitis. Also desirable in treating individual cases of Roup and for use at shows when birds develop colds. Package 60c postpaid.
Conkeys poultry worm REMEDY rids birds of many troublesome worms, thus promoting a return to healthy conditions. Give it as soon as you suspect worms-it will help the whole flock. Packages, 30c, 60c, postpaid. Breeder size, $5-1 \mathrm{~b} ., \$ 2.75$, postpaid, \$2.85.

## Conkeys scaly leg remedy

 applied to birds legs will in a few treatments kill the parasites responsible for the trouble and heal up the legs with a healthy lustre. Package 30c postpaid.Conkeys cholera remedy So-called Cholera, bowel troubles, indigestion, diarrhea and kindred ailments often kill a whole flock in a few days. Diarrhea, a drowsy, listless appearance and great thirst-these are the signals to put Conkey's Cholera Remedy in the drinking water. It usually cools heated membranes and stops the trouble if given in time. Packages $30 \mathrm{c}, 60 \mathrm{c}, \$ 1.20$, all postpaid. Breeder size, $\$ 3.00$; postpaid, $\$ 3.15$.

## Conkeys poultry laxative

Wherever a laxative or purgative is needed this remedy is just the thing for birdsby varying the dosage you can produce either a mild or a strong effect. Works without a debilitating after-effect. Experts say, and we have found through experiments that a poultry laxative given every week or two not only keeps birds in better condition, but increases the egg yield very materially. Poultrymen who now use Conkey's Poultry Tonic, with such splendid results, will find regular use of Conkey's Poultry Laxative very beneficial. If you are not employing this method, try it and be convinced. Packages, 30c, 60 c , postpaid. Breeder size, 5 lbs., $\$ 2.75$; postpaid, $\$ 2.90$.

For Conkey's' Full Line of Poultry Preparations see pages 1 and 161. For Symptoms of the most prevalent Poultry Diseases and Ailments see page 162. It's worth reading and keeping for reference.

## Conkeys POULTRY TONIC



EVERY bird from chick to maturity will be more productive, healthier and more profitable if given a good tonic and regulator. Conkey's Poultry Tonic helps birds get more out of their feed. They produce more eggs and better flesh on LESS FEED, by better digestion and assimilation. Don't keep lazy hens eating their heads off when with a little assistance they can become layers instead of loafers.

Conkey's Tonic is all medicine-free from filler, red pepper, and "hot stuff" to overstimulate the birds and break down their health. Conkey's builds on a natural, healthy basis, inducing steady and persistent laying. Keeps the young chicks growing, makes molting easy, strengthens the bird for bad weather and generally maintains a high health average.

|  |  |  |  | 12-1b. Pail | -1b. Pail |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| *Price <br> Shipping Weight | $\begin{gathered} 30 \mathrm{c} \\ 3 \text { lbs. } \end{gathered}$ | $60 \mathrm{c}$ $5 \text { lbs. }$ | $\begin{aligned} & \$ 1.20 \\ & 101 \mathrm{bs} \end{aligned}$ | $\begin{aligned} & \$ 2.00 \\ & 16 \text { lbs. } \end{aligned}$ | $\$ 3.50$ 31 lbs. | $\begin{gathered} \$ 6.00 \\ 50-\mathrm{lb} . \mathrm{bag} \end{gathered}$ | $\begin{gathered} \$ 11.00 \\ 100-1 \mathrm{~b} . \mathrm{bag} \end{gathered}$ |

COAKOyf SORE HEAD (CHICKENPOX) REMEDY-Don't let this disgusting and highly contagious disease get a start. Many a fine bird has been permanently ruined by neglect. Little brown or black warty spots appear on comb, face and wattles. Under these warts is a pocket of virulent pus. Conkey's Sorehead Remedy attacks the trouble from two angles-a powder for the blood and a salve for rubbing on affected parts. Both treatments in package-for one price. This remedy is used for pigeon pox, Pian, warts and similar afflictions. Packages, 30 c and $60 \mathrm{c} ; 35 \mathrm{c}$ and 65 c , postpaid. Breeder size ( 1 lb. salve, 5 lbs . powder) $\$ 3.50$; ( 10 lbs . powder only,) $\$ 3.50 ; \$ 3.65$ postpaid.
COMAEyS BLACKHEAD REMEDY-Turkey breeders should have a package ready for instant use, for Blackhead is very hard to cure in an advanced stage. When used soon enough, Conkey's Blackhead Remedy is ordinarily effective. Package 60 c ; 65 c postpaid.
COIKEHFi POULTRY CONDITIONER-Highly concentrated fowl regulator, blood purifier and nerve food, to build up birds in rundown condition, or for fowls recovering from disease. Splendid for putting birds in condition for shows and sustaining them during exhibition. Package, 30c and 60c; 35 c and 65 c , postpaid.
COMACZIS LIMBERNECK REMEDY (Ptomaine Poisoning) should be kept on hand as Limberneck is an ailment which must be treated promptly. Conkey's seldom fails to give relief if used in time. Packages, $60 \mathrm{c} ; 65 \mathrm{c}$ postpaid.
CONAETS FLY KNOCKER-Few preparations have the reputation of this wonderful fly repellent. It is a "fly chaser" that does all claimed for it. Dairymen, drivers, horsemen, stock raisers, cattlemen, sheep raisers declare this remedy the best investment they make-animals free from insects do better in milk and butter fat production, while growing stock unquestionably fattens faster when relieved from biting, stinging, disease-spreading insects.

|  | Quarts | Half Gallon | Gallons | 5 Gallons | 10 Gallons |
| :--- | :---: | :---: | :---: | :---: | :---: |
| *Price | $\$ 1.15$ | $\$ 1.75$ | $\$ 8.00$ | $\$ 15.50$ |  |
| Shipping Weight | 41 c | 10 bs. | 10 bs. | 15 lbs. | 58 ibs. |

CORFELIS COW SPECIAL-Used as a tonic to build up cows in run-down condition and as an aid to food assimilation. Packages, small 60 c ; large $\$ 1.20$, postpaid.
COHKELS STOCK TONIC-A general conditioner of real merit for live stock. Not a food, but a medicine-all pure medicine, without any filler. Mix it with regular feed. This makes your own stock

## food at home. <br> Price <br> 30c <br> 60c <br> 51 c . <br> 12-1b. Pail $\$ 2.50$ 16 lbs. <br> $\underset{\$ 4.25}{25-1 \mathrm{~b}}$. Pail <br> $\$ 6.25$ <br> Shipping Weight <br> 3 lb . <br> COnKEyis LICE PREPARATIONS <br> 31 lbs. <br> 50-1b. bags

$\$ 11.50$
100-1b. bags

COITKEyS LICE POWDER is for dusting hens, nests, growing chicks and for use wherever body lice must be overcome.


COHKCUIS LICE LIQUID is for painting roosts, fittings, the inside of house, nest boxes, and wherever mites congregate.
*Price
Shipping Weight

Quarts
60c
4 lbs.

Half Gallon 90 c
10 c bs.

Gallons
$\$ 1.50$
15
1bs.

5 Gallons
\$ 7.00
54 lbs.

COIREIS HEAD LICE OINTMENT is for overcoming and preventing the murderous headlouse, which "eats-up" baby chicks. Packages, 15 c and 30 c , postpaid.
COMKEVIS LICE FIX is a preparation in ointment form, for fighting body lice. This method is advocated by some authorities as preferable to powder. One application lasts a month. Packages, 30c and 60 c , postpaid.
*Weights here given are for parcel post shipments. Weight limit is 70 pounds or less for zones up to and including the third, and 50 pounds or less for zones up to and including the eighth. Larger shipments are sent express or freight collect. In remitting with order, consult weights and add postage for your zone. Postmaster can tell you in what zone you live from Portland.

## REFERENCE TABLES

Quantity of Seeds to produce a given number of plants or to sow an acre

## Vegetable Seeds



## Field, Farm, Grass and Clover Seeds



## Suitable Distance for Planting Trees and Plants

Note.-Depending on method of cultivation. In planting in the home garden for hand cultivation you car set plants or trees closer.


## Number of Trees or Plants On An Acre

| 1 | by 2 feet. | 80 |
| :---: | :---: | :---: |
| 1 | by 3 feet. | 14,520 |
| 1 | by 4 feet. | 10,890 |
| 112 | by 2 feet. | 14,520 |
| $11 / 2$ | by 3 feet. | 9,680 |
| 2 | by 3 feet. | 7,260 |
| 2 | by 4 feet. |  |
| 3 | by 4 feet. | 3,630 |



12 by 12 feet. . . . . . . . . . . . . 802
15 by 15 feet. . . . . . . . . . . . . . 193
16 by 16 feet. . . . . . . . . . . . . 170
18 by 18 feet. . . . . . . . . . . . . . 135
20 by 20 feet. . . . . . . . . . . . . . 109
25 by 25 feet. ................ 70
30 by 30 feet. . . . . . . . . . . . . 48
40 by 40 feet...................... 27

RULE.-Multiply the distance in feet between the rows by the distance the plants are apart in the rows, and the product will be the number of square feet, for each plant or hill, which, divided into the number of square feet in an acre $(43,560)$, will give the number of plants to the acre.

## Higriest Quality

?



[^0]:    Market and Truck Gardeners should write us for special prices and state quality and kinds wanted. We'll save you money and you will get "Highest Quality" Seeds.

[^1]:    Packet and Single Pound ONLY are postpaid. Add postage if wanted in $10-1 b$. lots or by mail. Inoculate Bean Seeds with Humogerm or Mulford's. See page 41.

[^2]:    OUR GARDEN CULTIVATORS are priced very low and will save you much work in the garden. See pages 119 and 120.

[^3]:    Write for quantity prices. For amount of seed per acre, any kind, see "Seed Table," inside back cover.

[^4]:    CABBAGE PLANTS.-During planting season we aim to have on hand large quantities of Cabbage and Vegetable Plants. (See page 37.)

[^5]:    FIELD CORN.-Don't overlook what we have to offer in OREGON-GROWN FIELD CORN; "the best ever." See page 45. For HAND CORN PLANTERS see page 119.

[^6]:    USE WONDER.-So many of our customers tell us of the wonderful results, the increased yield and quick growth obtained by using our Odorless "Wonder" Fertilizer, that we again call YOUR attention to it. Remember you can get it by parcel post. See page 38.

[^7]:    Entiat, Wash., April 22, 1922.
    Routledge Seed \& Floral Co.
    Gentlemen: I do not wish to be without the R. R.'s Wonderful lettuce. We think it the most wonderful head lettuce; in fact, is the only lettuce we ever had success with in getting it to head, and it sure is a fine lettuce. Yours truly,

    MR. O. E. DICK.

[^8]:    A re-selected, hand-picked strain of the original New York or Wonderful. Our grower has given this stock special attention and it is a wonderful strain. It produces immense heads of closely folding ruffled leaves. The heart blanches beautifully and is crisp, tender and delicious. A robust variety, rooting deeply and thus able to resist hot, dry weather; slow to seed and a sure header. The outer color is of a distinct apple-green. A rapid grower and unsurpassed as a home or market lettuce.

    Pkt. 15c; 1/2-oz. 25c; oz. 50c; 4 oz. $\$ 1.50$; 1b. $\$ 4.00$.

[^9]:    DO YOU SEND EAST for your Seeds? It's bad policy. Spend your money on this Coast. Here's where youl sell your products. Our seeds are highest quality, priced right.

[^10]:    Be sure you read about inoculating pea seed. It increases the yield and improves the soil. (See page 41.) Plant extra early, early and late varieties all at same time for a succession of prime pods. Special low quantity prices-write.

[^11]:    Remember, a little extra cost at planting time will bring "dollars" or greater satisfaction at harvest time. Packet and single pound prices only prepaid. Write for quantity price.

[^12]:    BUY A BROADCAST SEEDER
    IT WILL SAVE TIME AND SCATTER SEED OR GRAIN EVENLY. PAGE 119.

[^13]:    USE "WONDER."-The best Fertilizer and plant food known. A teaspoonful to a plant does wonders. See page 38.

[^14]:    GREAT FOR FLOWER BEDS.-Read page 39, which tells all about our new product_' 'C-M', -Kiln-dried Pulverized Cow Manure.

[^15]:    GROW "PRIZE FLOWERS" by using "WONDER ODORLESS FERTILIZER." But do not use 'TOO MUCH, it is very RICH. See page 38.

[^16]:    PLANT COLLECTIONS FOR HANGING BASKETS.-We will send a fine collection of eight choice trailing plants for 75 c postpaid.

[^17]:    USE "WONDER"—The best Fertilizer and plant food known. A teaspoonful to a plant does wonders. Descriptive pamphlets on request. See page 38.

[^18]:    Note-Give lily bulbs good, rich ground, well drained. Put a small stake by each bulb when planted so the sprout will not be broken in cultivation.

[^19]:    NOTE-CUTTING PAEONIES.-Cut the flowers in bud when half open and let them open in water. Keep from sunlight. Don't cut all the stems off or you will injure next season's crop.

[^20]:    NOTE.-Take your Gladiola Bulbs up after first frost, dry them and pack away in a dry, cool cellar where they will not freeze.

[^21]:    LARGE FLOWERING - The following kinds bloom early and remain a long time. Very large and showy. Your choice of the following strong, two-year-old, field-grown roots, $\$ 1.00$ each, postpaid:

[^22]:    "MAKE 'EM HOP.'——If you will mix a cup full of $\mathbf{W}$ onder Fertilizer with 5 lbs. "C-M"' and work both thoroughly into the soil around your climbers, you will get wonderful growth and lovely flowers. See page 39.

[^23]:    TRANSPLANTING-When transplanting trees of any kind, trim and prune off onefourth to one-third of last year's growth; the cut roots cannot support the full top the first season.

[^24]:    *RAISE YOUR OWN FRUIT-EEvery owner of a home should set out fruit trees and berries. Don't delay, start this year.

[^25]:    BANNER-An excellent shipping and market variety. Of great beauty, delicious flavor, uniform size and rich, dark, glossly red color. Vigorous, early and abundant producer.

    Doz. 50c ; 100, \$2.00; 1,000, \$15.00

[^26]:    COW MANURE.-It is troublesome, disagreeable and expensive for the city gardener to get it. We offer "C-M," THE REAL PRODUCT, in most convenient form, free from weeds. YOU NEED THIS AND ALSO "WONDER," page 49, FOR YOUR ASPARAGUS AND RHUBARB.

[^27]:    FREE ADVICE.-If you will write and teil us what insects or plant diseases you want to combat, we will advise you to the best of our ability.

[^28]:    LARGER PUMPS.-For larger pumps and power outfits ask for Special Spray Pump Cata-log-Free on request.

[^29]:    NOTE.-We aim to have in Portland stock ail Kresky's goods listed in this catalog. if out, will wire the factory to ship direct.

[^30]:    CHOLERINE.-The perfect remedy-is a guaranteed preventative and specific for White Diarrhoea, Cholera, Roup, Limberneck, and all other germ diseases afflicting chickens, ducks, geese, turkeys and pigeons...We buy cholerine in carload lots. You will use it sooner or later. Start today by ordering a supply. See page 145.

[^31]:    DAD'S ELECTRIC LANTERNS.-Every poultry keeper needs one. It's always ready-no danger of fire; makes a REAL LIGHT. See page 114.

[^32]:    WHEN? We have the largest supply of Gold Fish on hand during the FALL, WINTER and EARLY SPRING. It is not safe to ship fish during the hot summer months.

