Historic, Archive Document

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

62.71
COMPLETE ANNUAL CATALOGUE

ESTABLISHED
1893

1927

PORTLAND SEED CO.

Offices and Warehouse East First & Alder Sts. Retail Store 187 Sixth St.

PORTLAND, OREGON

Our 1927 Superb Collection of Spencer Sweet Peas

The Finest and most complete range of colors, newest and best varieties

15 Very generously filled packets, regular value \$1.95, special postpaid price **\$1.50**

One packet each of the following

Daffodil—Black Seeded Cream.....	Pkt. 15c	Royal Sovereign—brilliant orange-salmon.....	Pkt. 15c
Mary Pickford—light dainty cream-pink.....	Pkt. 15c	Doreen—large bright carmine.....	Pkt. 15c
Miss California—orange-salmon, cream-pink.....	Pkt. 15c	Crimson King—rich deep clear crimson.....	Pkt. 10c
Pink Perfection—rose-pink on cream ground.....	Pkt. 15c	Jack Cornwell—deep navy-blue.....	Pkt. 10c
Hebe—largest and best rose-pink.....	Pkt. 10c	Austin Frederick Imp.—large clear lavender.....	Pkt. 10c
Charming—a rosy cerise.....	Pkt. 15c	Wembley—clear pale-blue lavender.....	Pkt. 15c
George Shawyer—a large orange-pink.....	Pkt. 10c	Constance Hinton—best black-seeded white.....	Pkt. 10c
Gloriosa—brilliant orange-scarlet.....	Pkt. 15c		

For complete descriptions and full list of sweet peas see pages 40, 41, 42

Portland Seed Company's

Complete Seed Annual and Planters Guide for 1927

WHOLESALE WAREHOUSE AND MAIL ORDER DIVISION

A "Third of a Century" of Service

Established in 1893, for over 34 years we have been giving the best service we know how to give, and constantly use our utmost endeavors to merit the name of "The Premier Seed House of the Northwest."

Use Our Service Department

Our experience for 34 years enables us to help you in many of your problems in growing, also in raising poultry, bee keeping, etc. Write us and we will gladly advise with you—a service that is free to you.

Our Mail Order Division

Orders by mail receive prompt attention in this special department of our business. Every order from smallest to largest has careful personal attention and is just as important to us as it is to you. We seldom make errors on orders but if we do tell us at once; we want everything to be satisfactory and pleasing between ourselves and our friends.

Our New Sixth Street Store

Has been established in the heart of the shopping district as a convenience to our customers, and affords a beautiful store for the display of seeds, bulbs, plants, ferns, flowers, etc., also for song birds, gold fish, fine dogs and pet stock. Come in and see the new store. Experienced men are at your service.

OUR NEW RETAIL STORE AT 187 SIXTH ST., BETWEEN YAMHILL AND TAYLOR STS., IN THE HEART OF THE SHOPPING DISTRICT

Our Own Exclusive Seed Laboratory

To protect the interests of our customers and maintain our standard of excellence, we have installed and have for several years maintained a complete modern SEED LABORATORY equipped as recommended by the U. S. Department of Agriculture, with a certified seed analyst in charge.

The Only Commercial Seed Laboratory in Oregon

maintained by a private company. This laboratory is installed in our warehouse and just as soon as a lot of seed is received samples are taken to the laboratory, examined under powerful microscopes, the true seed separated from chaff and other seed and weighed on the most delicate scales for percentage of purity, etc., before the seed is accepted. After the seed is examined the samples are then placed in the germinators on trays like the one below and after germinating, is inspected and the germination test recorded.

What It Means to You

When the seed has passed the tests for purity and germination and is found of high quality, the complete lot, from which the samples were taken is, if necessary, taken to our cleaning department where 18 large machines have been installed at a cost of over \$60,000.00 for the purpose of cleaning out the chaff and foreign seed. Some of this machinery has been developed for our exclusive use by our experts. Many seeds such as peas, beans, etc., are sent to our hand-picking and sorting rooms where the seed passes before our operatives on belts and is thoroughly recleaned. Few people realize the care we use in giving them seed that is, as far as humanly possible, true pure seed. However, our reward lies in the fact that our customers know the high quality of what they receive and are assured that when they use seed that is labeled **DIAMOND QUALITY** it's the best obtainable.

See Page 2 for Directions for Ordering
Index on Page 96

WHAT OUR DIAMOND TRADE MARK STANDS FOR

By reason of our business standing and the experience gained by a third of a century of success in serving the growers of the Northwest, we have established trade relations with the world's best producers and sources of supply. Only by such connections is it possible, in the seed trade, to obtain the select stocks—the best of the season's production; and when you see our DIAMOND Trade Mark on your packet of seeds or item of merchandise you can feel that it is a mark of real quality—THE BEST OBTAINABLE. In common with all other responsible seed houses, however, we sell our goods subject to the disclaimer adopted by the American Seed Trade Association.

INSTRUCTIONS

When to Order

Send in your combined order for seeds, plants and supplies, etc., at once, and if you do not want all sent now we will send part now and the balance later. The advantage of this is that your order is entered and filled or stock is reserved so you will be assured of receiving your complete requirements when you want them, without delay or omission. If you want part or all of your order held, state distinctly when shipment is to be made. All orders for potatoes, plants and other perishable goods are carefully booked on receipt and filled in rotation as soon as weather permits. If shipped early they are at purchaser's risk.

When Ordering

Use our order blank if you have one. Be sure that your name, complete address and shipping instructions are filled in. Keep a copy of your order so you can check goods when received. We use the greatest care in filling orders and mistakes are rare, but may occur.

Prices and Terms

Prices in this catalog are those prevailing when catalog goes to press and are subject to market changes. Your order will be figured at prices prevailing when it is received and where lower you will be protected and refund made. As prices usually advance on many items toward the planting season, it is to your advantage to order early. Terms are cash with order where arrangements for credit have not previously been made.

Parcel Post Rates

Seeds and Plants weighing 8 oz. or less are mailable at 1 cent for each two oz. or fraction thereof, regardless of zone. Packages weighing over 8 oz. are charged at ZONE rates.

Zone	Distance	First lb. or Fraction Thereof	Ea. Additional Pound or Fraction	Weight Limit
Local.....	Portland & Portland Rural Routes	\$0.07	\$0.00½	70 lbs.
1st, 2nd Zones.....	to 150 miles	.07	.01	70 lbs.
3rd Zone.....	150 to 300 miles	.08	.02	50 lbs.
4th Zone.....	300 to 600 miles	.09	.04	50 lbs.
5th Zone.....	600 to 1000 miles	.10	.06	50 lbs.
6th Zone.....	1000 to 1400 miles	.11	.08	50 lbs.
7th Zone.....	1400 to 1800 miles	.13	.10	50 lbs.
8th Zone.....	Over 1800 miles	.14	.12	50 lbs.

The 8th zone rate applies to ALASKA, HAWAII and the PHILIPPINES, with 20 lb. weight limit—TO CANADA, MEXICO, CUBA and PANAMA, when over 4 oz. and not exceeding 4 lbs. 6 oz. Twenty lbs. can be sent to MEXICO and PANAMA as Foreign Parcel Post.

Our SEED GROWING Division

Diamond quality seeds are grown especially for us from selected strains, varieties that years of trial have proven to be most satisfactory for home and market gardens. Many of our seed crops are grown under our personal supervision—over 4000 acres being under contract to us last year in the Northwest—others come from the world's greatest centers of seed production of Europe and America where conditions are most favorable for their perfect development.

If you live in Northwestern Oregon or Washington you will have better success with your garden by planting early maturing varieties after the spring weather is settled and the ground warm, than if you planted very early, as many seeds will not give the best results in the cold damp of the early spring, and even if they live, the plants may be stunted and not grow. These suggestions are only general, as you will note that many special sorts can be planted very early.

Our POTATO Division

Our "Vine Tested" seed potatoes are again tested after harvest, for soundness and uniformity of condition, over specially built grading machines where an "honest pack" is assured our customers.

Parcel Post Shipments

We send all vegetable and flower seeds in quantities of 10 pounds or less by mail, post paid, to and including the fourth zone, at the prices named in this catalog unless otherwise stated. For points beyond the 4th zone include additional postage. An additional remittance of 5c will insure any mailed package. We do not guarantee replacement of the goods sent by mail unless insured.

Express or Freight

Express or freight shipments are F. O. B. Portland, and purchaser pays transportation charges. On moderate sized orders we advise express shipments. Our responsibility ceases on delivery in good order to transportation company and every purchase should be carefully examined for loss or damage before accepting it. In case of loss or damage, purchaser must have notation of such loss placed on his freight or express receipt, and may then file claim with his station agent or send the necessary papers to us and we will gladly enter claim, remitting to the purchaser as soon as claim is paid.

Pre-pay Stations

On orders to go by freight or express be sure to add money enough for transportation charges if your station is a pre-pay point, which is always the case when there is no regular agent.

Complaints

Should there be any error in your order or if you are not pleased with some article, advise us promptly, giving order number, and we will make every effort to please you. Do not return any goods until you hear from us.

Special Quotations on Large Orders

Any dealer, market gardener, institution or individual wishing seed in large quantities, is requested to mail us a list of what is wanted, and we will promptly return it with the very lowest market prices. A letter of inquiry may save you dollars if you want to buy in quantity. If in need of something pertaining to agriculture not herein listed, write us before ordering elsewhere.

How to Remit

Send money by Postoffice or Express Money Order, Bank Draft or Registered Letter. Postage stamps accepted for small amounts, two-cent stamps preferred. Money sent in mail is at sender's risk. Send plenty of money for purchase and transportation charges if to pre-pay point, which will save delay, and we will promptly return all over-payments to you.

Disclaimer Notice

We give no warranty, express or implied, as to description, quality, productiveness, or any other matter of any seeds, bulbs, nursery stock, roots or plants we sell, and will not be in any way responsible for the crop.

PORTLAND SEED COMPANY.

Our ROSE GROWING Division

Our sales of roses each year are enormous, due to the fact that we have the best rose growers under contract growing for us exclusively, and enabling us to sell at prices far below the market. From the "Rose City of the World" you are able to secure the finest roses grown at the very lowest prices.

Our Bulb and Nursery Division

In addition to this complete book we print each fall our Book of Bulbs, Roses, Shrubs, Perennial Plants, etc., and for such bulbs as Hyacinths, Tulips, Crocuses and all the Lilies. Please write for this book. Also special booklets on Roses, Shrubs, etc., are issued from time to time and we will be pleased to send any of these books on request.

The Importance of Fertilizers

We cannot too strongly emphasize the importance of fertilizers (plant foods) in the production of the best quality whether it be vegetables, flowers, lawns, shrubs or trees. Our fertilizer book gives you facts of great value and is free. Write for it.

Diamond Quality VEGETABLE SEEDS

SPECIAL Offers

Here are our special vegetable garden offers for 1927, made up to suit each purse and need and giving you very fine value. These collections are composed of our regular full size packets and complete descriptions of each variety are given on the vegetable seed pages.

Offer A—\$1.55 Value for \$1.00

The handiest small garden we could select for you—every item something you will enjoy. To get new friends to use DIAMOND QUALITY and to favor old friends, we offer this splendid collection for \$1.00 postpaid.

BEANS, Stringless Green Pod.....	15c
BEEFS, Detroit Dark Red.....	10c
CABBAGE, Early Jersey Wakefield.....	10c
CARROT, Danvers Half Long.....	10c
CORN, Golden Bantam.....	15c
CUCUMBER, Long Green.....	10c
LETTUCE, New York Head.....	10c
PARSLEY, Double Curled.....	10c
PEAS, Gradus.....	15c
RADISH, White Icicle.....	10c
RADISH, Scarlet Globe.....	10c
SPINACH, Thick Leaved.....	10c
SWISS CHARD, Lucullus.....	10c
TURNIP, Purple Top White Globe.....	10c

ALL FOR, POSTPAID.....\$1.00 VALUE.....\$1.55

Offer B—\$3.20 Value for \$2.00

Seed enough in this big complete collection to plant a large home garden, all carefully selected to provide choice table vegetables throughout the season. All our regular size packets, \$3.20 value for \$2.00 postpaid.

BEANS, Stringless Green Pod.....	15c
Kentucky Wonder Pole.....	15c
BEEF, Detroit Dark Red.....	10c
CABBAGE, Copen. Early Market.....	10c
Danish Ball Head.....	10c
CARROT, Chantenay.....	10c
Oxheart.....	10c
CORN, Golden West.....	15c
Oregon Evergreen.....	15c
CUCUMBER, Boston Pickling.....	10c
Davis Perfect.....	10c
LETTUCE, Early Curled Simpson.....	10c
New York Head.....	10c
MUSKMELON, Burrell Gem.....	10c
WATERMELON, Black Seeded Ice Cream.....	10c
ONION, Oregon Yellow Danver.....	10c
White Bunching.....	10c
PARSLEY, Double Curled.....	10c
PEAS, Little Marvel.....	15c
Tall Telephone.....	15c
RADISH, French Breakfast.....	10c
White Icicle.....	10c
SALSIFY, Mam. Sandwich Isl.....	10c
SPINACH, Imp. Thick Leaved.....	10c
SQUASH, Early White Bush.....	10c
Hubbard.....	10c
TOMATO, Chalk's Early Jewel.....	10c
TURNIP, Golden Ball.....	10c
Purple Top White Globe.....	10c

ALL FOR, POSTPAID.....\$2.00 VALUE.....\$3.20

Offer C—\$7.60 Value for \$5.00

For the dweller in the suburbs who has more ground than the person on an ordinary city lot, this is an ideal collection. It will give a continuous supply of the best and most productive fresh vegetables throughout the season, and leave a goodly supply to store away in the cellar for winter use. This collection contains:

BEANS—	ONION—
Stringless Greenpod.....1 lb. 35c	Ore. Yellow Danver.....Pkt. 10c
Golden Wax-podded.....½ lb. 20c	White Bunching.....Oz. 30c
Kent. Wonder Pole.....Pkt. 15c	PARSLEY—Dbl. Curled.....Pkt. 10c
Oregon Pole Lima.....Pkt. 15c	PARSNIP—
BEEF—	Hollow Crown.....Oz. 15c
Crosby's Egyptian.....Oz. 15c	PEAS—Laxtonian.....lb. 45c
Half Long Blood.....Oz. 15c	Telephone.....lb. 45c
Long Dark Blood.....Oz. 15c	PEPPER—Large Bell.....Pkt. 10c
CARROT—	PUMPKIN—Large Yel.....Oz. 15c
Early Scarlet Horn.....Pkt. 10c	RADISH—
Danvers Half Long.....Oz. 15c	Crimson Giant.....Oz. 15c
Oxheart.....Oz. 15c	White Icicle.....Oz. 15c
CABBAGE—	French Breakfast.....Oz. 15c
Ely, Jersey Wakefield.....Pkt. 10c	SALSIFY—
Copenhagen Market.....Pkt. 10c	Mam. Sandwich Isl.....Pkt. 10c
Danish Ballhead.....Pkt. 10c	SPINACH—
SWEET CORN—	Imp. Thick Leaved.....Oz. 15c
Golden West.....½ lb. 25c	SQUASH—
Country Gentleman.....Pkt. 15c	White Bush—Summer.....Pkt. 10c
Oregon Evergreen.....½ lb. 25c	Hubbard—Winter.....Oz. 20c
CAULIFLOWER—	SWISS CHARD—
Early Snowball.....Pkt. 15c	Lucullus.....Oz. 20c
CELERY—White Plume.....Pkt. 10c	TOMATO—
CUCUMBER—	Chalk's Early Jewel.....Pkt. 10c
Davis Perfect.....Pkt. 10c	TURNIP—
Boston Pickling.....Pkt. 10c	Purpletop Strapleaved.....Oz. 15c
LETTUCE—	Purpletop White Globe.....Oz. 15c
Black-Seeded Simpson.....Oz. 20c	RUTABAGA—
New York Head.....Oz. 35c	American Purpletop.....Oz. 15c
MUSKMELON—	
Burrell Gem.....Oz. 20c	VALUE.....\$7.60
WATERMELON—	ALL FOR.....\$5.00
King and Queen.....Oz. 20c	

Offer D—Free seeds with \$1 order

COUPON
This coupon when enclosed with an order and payment amounting to \$1.00 or more for merchandise in this catalog (excepting our offers A, B or C) entitles you to TWO ten-cent packets of vegetable or flower seed free.

This offer expires September 1, 1927.
PORTLAND SEED COMPANY.

NOTICE! These collections are put up in advance of the season ready to mail upon receipt of order and therefore the assortment cannot be changed. These offers expire September 1, 1927.

Planting Tables

Quantity of Seed to Produce a Given Number of Plants and Amount Required to Sow an Acre

	Per Acre
Artichoke, 1 oz. to 500 plants.....	6 oz.
Artichokes—White French.....	8 bu.
Asparagus, 1 oz. to 800 plants.....	1 lb.
Asparagus Roots.....	7500
Barley.....	2 to 2½ bu.
Beans, dwarf, 1 lb. to 100 ft. of drill.....	1 bu.
Pole, 1 lb. to 100 hills.....	½ bu.
Beets, 1 oz. to 100 ft. drill.....	6 to 7 lbs.
Broccoli, 1 oz. to 2000 plants.....	4 oz.
Brussels Sprouts, 1 oz. to 2000 plants.....	4 oz.
Buckwheat.....	½ to 1 bu.
Cabbage, 1 oz. to 2000 plants.....	4 oz.
Carrot, ½ oz. to 100 ft. drill.....	3 lbs.
Cauliflower, 1 oz. to 3000 plants.....	3 to 4 oz.
Celery, 1 oz. to 5000 plants.....	4 oz.
Cheat.....	2 bu.
Clover, Alsike and White.....	8 to 10 lbs.
Alfalfa.....	15 to 20 lbs.
Crimson Trefoil or Red.....	10 to 15 lbs.
Collards, 1 oz. to 2000 plants.....	4 oz.
Corn, Pop (shelled).....	8 to 10 lbs.
Sweet or Field, hills.....	12 to 15 lbs.
For soiling drills.....	3 bu.
Cress, ¾ oz. to 100 ft. drill.....	1 lb.
Cucumber, 1 oz. to 100 hills.....	2 to 3 lbs.
Egg Plant, 1 oz. to 2000 plants.....	4 oz.
Emmer.....	100 lbs.
Endive, ¼ oz. to 100 ft. drill.....	4 lbs.
Flax broadcast.....	¾ bu.
Grass, Kentucky Blue, pasture.....	1 to 2 bu.
Kentucky Blue, lawns.....	100 lbs.
Meadow Fescue or Wood Meadow.....	1 bu.
Mixed Lawn.....	5 to 6 bu.
Red Top, Chaff.....	1 to 2 bu.
Red Top, solid seed.....	10 to 15 lbs.
Timothy.....	10 to 15 lbs.
Orchard, Perennial Rye.....	1 to 2 bu.
Horseradish Roots.....	15,000 to 25,000
Kaffir Corn, in drills.....	6 to 10 lbs.
Kale, 1 oz. to 2000 plants.....	4 oz.
Kohl Rabi, 1 oz. to 2000 plants.....	4 oz.
Leek, 1 oz. to 100 ft. of drill.....	4 lbs.
Lettuce, 1 oz. to 150 ft. of drill.....	3 lbs.
Melon, Musk, 2 oz. to 100 hills.....	2 to 3 lbs.
Water, 4 oz. to 100 hills.....	3 to 4 lbs.
Millet—For Hay.....	30 lbs.
For Seed.....	20 lbs.
Oats.....	2 to 3 bu.
Okra, 1 oz. to 100 ft. of drill.....	8 lbs.
Onion Seed, for sets.....	60 to 85 lbs.
1 oz. to 150 ft. drill.....	3 to 4 lbs.
Onion Sets, 1 qt. to 40 ft. drill.....	8 bu.
Parsley, 1 oz. to 150 ft. drill.....	3 lbs.
Parsnips, 1 oz. to 150 ft. drill.....	3 lbs.
Peas, Field.....	2 bu.
Garden, 1 lb. to 100 ft. drill.....	1 to 2 bu.
Pepper, 1 oz. to 1000 plants.....	2 lbs.
Potatoes.....	10 bu.
Pumpkin, ½ lb. to 100 hills.....	3 to 5 lbs.
Radish, 1 oz. to 100 ft. drill.....	10 lbs.
Rape.....	3 to 5 lbs.
Rye.....	1½ to 2 bu.
Salsify, 1 oz. to 100 ft. drill.....	6 to 8 lbs.
Spinach, 1 oz. to 100 ft. drill.....	8 to 10 lbs.
Squash—Summer, 4 oz. to 100 hills.....	3 lbs.
Winter, 8 oz. to 100 hills.....	4 lbs.
Sugar Cane, in drills.....	10 lbs.
Tomato, 1 oz. to 2000 plants.....	4 oz.
Turnip, 1 oz. to 150 ft. drill.....	2 to 3 lbs.
Vetches, 1½ to 2 bu.; with grain.....	1 bu.
Wheat.....	1½ to 2 bu.

Number of Plants Per Acre at Various Distances

DISTANCE APART	Square Method	Triangular
1 foot apart each way.....	43,560	50,300
2 feet apart each way.....	10,800	12,575
4 feet apart each way.....	2,722	3,143
6 feet apart each way.....	1,210	1,397
9 feet apart each way.....	537	620
10 feet apart each way.....	435	502
15 feet apart each way.....	193	223
16 feet apart each way.....	170	196
20 feet apart each way.....	108	125
25 feet apart each way.....	70	81
30 feet apart each way.....	48	55
40 feet apart each way.....	27	31

An easy rule for determining number of plants or trees, per acre or plot: Multiply the distance in feet between rows by the distance between plants, and divide the square feet in the plot by this result. Illustration: Rhubarb, 4 ft. x 2 ft.—8 ft.; 8 into 43560 (acre)—5445 plants.

ASPARAGUS

One of the earliest Spring vegetables. It can be produced very easily and cheaply and is a profitable market crop. A bed 15x50 feet, requiring about 100 plants should give an abundant supply for the average family.

CULTURE—Soak seeds 24 hours in warm water, sow early in drills one foot apart. An ounce of seed will sow about 300 feet of drill. Keep soil mellow and free from weeds. After one year's growth transplant into permanent beds, carefully prepared by working to a depth of 24 inches, manuring deeply, using old manure and bone meal; 5 feet is a convenient width for a bed that will carry three rows, and can be reached without treading upon it. Set plants 18 inches apart in the rows and

spreads roots out, firming the soil down on them. At no time of its growth should the asparagus crop be allowed to lack for manuring. From one to two years' time can be saved by buying roots of us. See plant department, 7260 roots will plant an acre.

GIANT WASHINGTON

GIANT WASHINGTON—THE NEW RUST-RESISTING ASPARAGUS—Our grower of Giant Washington Asparagus seed under the supervision of the U. S. government has produced the superior asparagus we are listing under the name "Giant Washington." This was produced by breeding the female plants Martha and Mary to the male plant Washington, combining the best characteristics of the three. This seed is grown especially for us, and our plants are all grown from this seed by one of our best growers. Be sure to get the genuine. Pkt. 15c; oz. 25c; ¼ lb. 75c; lb. \$1.75; postpaid.

MARY WASHINGTON—PEDIGREED STOCK—There is no asparagus as good as the Washington and of the Washington strains the Mary is the best. It is earlier, produces more, has larger stalks, highest in rust resistance, nets more money per acre. Pkt. 25c; oz. 75c; ¼ lb. \$2.00; lb. \$5.00; postpaid.

ARGENTEUIL—A popular French asparagus of great merit; larger and lighter in color and said to be superior to Palmetto; of vigorous, even growth; very early and free from disease. Pkt. 10c; oz. 15c; ¼ lb. 35c; lb. \$1.00; postpaid.

PALMETTO—Extra early and uniformly large stalks remain tender, being in prime condition for some days after coming above the ground. A heavy, sure cropper. Pkt. 10c; oz. 15c; ¼ lb. 35c; lb. \$1.00; postpaid.

ARTICHOKES

LARGE GREEN GLOBE—The variety used as a table vegetable. The edible portion is the thick end of leaf of the flower head. Sow early in drills and when about ten inches high transplant into rows four feet apart each way. It will produce only a small crop the first year, but will continue in good bearing five years. Cut before the bud opens. The seedlings are variable and for market gardening they are generally propagated from cuttings. The buds when in blossom resemble huge thistles and the foliage being highly ornamental, this variety is much used for hedges and display in parkings. Pkt. 10c; oz. \$1.00; postpaid.

GLOBE
ARTI-
CHOKE

Artichoke Tubers

NEW FRENCH—Tubers planted and cultivated the same as potatoes. A superior quality and much higher yielding than the common varieties. Of great value for feeding stock, the best hog feed known; remarkable for fattening properties, great productiveness (over one thousand bushels having been raised on one acre) and ease with which they can be grown. They need not be dug. The hogs will help themselves by rooting. One acre will keep from twenty to thirty hogs in condition from October until April; highly recommended for milch cows, increasing yield of milk and at the same time improving their condition. Plant ten bu. per acre. 10 lbs. \$1.00, postpaid; 100 lbs. \$3.00, f. o. b. Portland.

JERUSALEM WHITE—Produces tubers like potatoes, grown in the same way. A fine vegetable for the table as well as a valuable hog feed. 10 lbs. \$1.00, postpaid; 100 lbs. \$2.50, f. o. b. Portland. Note—Tubers on hand from February. Write for prices.

TUBERS

BEETS

CULTURE—The beet is hardy and may be planted as soon as ground can be well prepared, doing best in rich, sandy soil, sown in rows sixteen inches apart, covered one and one-half inches deep. Seed will sprout better if soaked 24 hours in warm water before planting. Thin out by using the largest ones when they are of sufficient size, continuing until they are six or eight inches apart in the rows. For field crop, rows should be far enough apart to permit the use of a horse cultivator.

P. S. CO'S MARKET GARDENER—This extra early Beet is remarkable for its fine quality and rapid growth; deep red color, and handsome shape; as an early market sort it is unrivaled. It is superseding Egyptian, being earlier in development, more attractive and of superior quality for the table, holding its color and cooking quickly. Market gardeners prefer it as it matures evenly, stands a long time and does not split. Pkt. 10c; oz. 20c; ¼ lb. 45c; lb. \$1.25.

DETROIT DARK RED TURNIP—A fine beet for bunching for market; tops exceptionally small and uniformly upright. Roots are perfect turnip shape with small tap roots. One of the deepest red beets. Quality the finest. Pkt. 10c; oz. 15c; ¼ lb. 45c; lb. \$1.25.

EARLY MODEL—A splendid, handsome, extra early variety, well liked by the market gardener. Globular in shape, medium size, smooth, dark red color. Pkt. 10c; oz. 20c; ¼ lb. 45c; lb. \$1.25; postpaid.

EARLY ECLIPSE—One of the best early sorts; possesses all the qualities requisite in a first class beet, and is of a uniform, globular shape. The roots are a bright, glossy red, fine-grained and delicious. Pkt. 10c; oz. 15c; ¼ lb. 35c; lb. \$1.00.

EXTRA EARLY EGYPTIAN—The best variety for forcing, and for market gardeners; being very early with small tops. Roots very dark red, rounded on top, but flat beneath, with very small tap roots. Pkt. 10c; oz. 15c; ¼ lb. 35c; lb. \$1.00.

LONG SMOOTH DARK BLOOD—The leading late variety, keeping well all Winter. Should be planted in rich, warm soil to secure rapid growth, which makes them tender. Top small, root long and smooth. Flesh deep purple, fine and sweet. Pkt. 10c; oz. 15c; ¼ lb. 35c; lb. \$1.00.

HALF LONG BLOOD—A variety of excellent quality. One of the very best for Winter use; does not become woody and keeps as well as Long Dark Blood. Root is smooth and handsome, flesh brilliant color and as good in quality as the best Blood Turnip varieties. Pkt. 10c; oz. 15c; ¼ lb. 35c; lb. \$1.00.

EARLY BLOOD TURNIP—IMPROVED—An extra selected stock of Blood turnip having larger, coarser tops and roots than the Detroit Dark Red, and requiring a longer time to mature. Excellent for Summer and Autumn use. Pkt. 10c; oz. 15c; ¼ lb. 35c; lb. \$1.00.

P. S. CO'S MARKET GARDENER

SWISS CHARD—SEE PAGE 11

All Prices Above Are
Postpaid

MANGEL WURTZEL

These are grown extensively for stock feeding, and afford large quantities of fresh, nutritious and wholesome food during the Winter months, in connection with grain and dried forage. Sugar Beets are richer and sweeter than Mangels, but do not produce as heavily.

CULTURE OF MANGEL AND SUGAR BEETS—Thoroughly fine soil as good roots cannot be grown in lumpy, poorly prepared ground. The largest crops come from a soil ranging from light to a friable clay loam that has received from eight to fifteen loads of manure to the acre. This can be plowed in or half broadcast and half used in the furrows; plowing in of fresh manure in the Fall is best. It is also necessary to add some commercial fertilizer, but any good soil will grow a fair crop.

Use 6 to 10 lbs. of seed per acre, depending on whether machine or hand planting, sowing liberally so that in thinning an even stand can be secured. Rows 18 to 30 inches apart. Level culture is best. If planted in dry weather, be sure seed is in from one to one and one-half inches as it requires lots of moisture to burst the hard shell.

A poor stand and weak germination is often due to improper planting and lack of moisture. Transplanting can be successfully done to fill vacancies. Do this before a shower, and early, breaking off tops of larger leaves.

YELLOW GIANT SLUDSTRUP GOLDEN TANKARD ECKENDORF

P. S. CO'S HEAVIEST CROPPER—A wonderful improvement on existing stocks of Yellow Mangels, one of the heaviest croppers and easiest pulled, of very fine quality. The small foliage permits it to be left comparatively thick in the rows and weight per acre is therefore enormous. It is considered distinct over all other kinds and one of the largest and best Yellow Mangels. Pkt. 10c; ½ lb. 30c; 1 lb. 55c; 10 lbs., postpaid, \$5.00.

YELLOW GIANT, INTERMEDIATE or GATE POST—Roots very large, growing over half out of the ground; flesh white, sweet and tender; tops bright green, comparatively small; neck small, short, never becomes woody, easily harvested. Pkt. 10c; ½ lb. 30c; lb. 50c; 10 lbs. \$4.75; postpaid.

GIANT RED ECKENDORF—Straight, cylindrical form, very blunt, grows mostly above surface. A very heavy cropper. Pkt. 10c; ½ lb. 30c; lb. 50c; 10 lbs. \$4.75; ppd.

GOLDEN TANKARD—Dairy farmers state they are able to obtain a higher price for milk when feeding cows on "Golden Tankard." Sheep thrive on it. A rich, deep yellow throughout. Early, hardy and a heavy cropper. Pkt. 10c; ½ lb. 30c; lb. 50c; 10 lbs. \$4.75; postpaid.

MAMMOTH LONG RED—An improvement on the Long Red, with ordinary cultivation. Very uniform, smooth, of good shape. Grow in deep loose soil. Pkt. 10c; ½ lb. 30c; lb. 50c; 10 lbs. \$4.75; postpaid.

NEW MANGEL HALF SUGAR—Valuable for feeding purposes, yields as much per acre as the best Mangels, and twice as much per acre (bulk of roots) as the rich sugar beets. Roots large, very smooth, with few rootlets; creamy white, with medium sized tops. Pkt. 10c; ½ lb. 30c; lb. 50c; 10 lbs. \$4.75; postpaid.

DANISH SLUDSTRUP—Long, reddish-yellow, grows well above the ground, and is easy to pull. Has repeatedly been awarded a first class certificate by Danish Govt. Pkt. 10c; ½ lb. 30c; lb. 50c; 10 lbs. \$4.75; postpaid.

SUGAR BEET

KLEIN WANZLEBEN—This is the standard variety grown commercially for the production of sugar. Pkt. 10c; ½ lb. 45c; lb. 75c; 10 lbs. \$7.00; postpaid.

WHITE FRENCH or VILMORIN'S IMPROVED SUGAR—The best variety for growing for sugar-making. Pkt. 10c; ½ lb. 45c; lb. 75c; 10 lbs. \$7.00; postpaid.

DWARF OR BUSH BEANS

Owing to our mild Winters and cool Summers, locally grown acclimated seed from properly selected strains will be found to give best satisfaction in the Pacific Northwest. We are constantly testing and selecting the most dependable and profitable sorts and increasing our facilities and connections for local production, and when we offer a variety as being suited to your requirements and location you can accept it without fear of disappointment.

CULTURE—The soil best adapted for growing beans is a light, rich, well-drained loam, which was well manured for the previous crop. If the ground is too freshly manured the plants are apt to run to vines and set few blossoms. Plant in drills about two inches deep and from eighteen inches to two feet apart, as soon as the ground is dry enough and warm—about May 1st, or later, and for succession up to July 15th. Beans are very sensitive to cold and wet before they have sprouted, but are not so liable to be damaged after they are above ground.

Plant about one pound of Dwarf or Bush Beans to 100 feet of drill, one bushel per acre. Pole Beans—one pound to 100 hills, requiring about one-half bushel per acre. When planted in hills, 2½ to 3 feet apart, small varieties such as "Navy" and "Lady Washington" will require from 16 to 25 pounds per acre, larger sorts running from 25 to 30 pounds. Owing to their short season of growth, from 60 to 80 days, beans generally make a profitable crop for trucking. After harvesting the beans always plow the vines under to fertilize the soil.

WAX PODDED VARIETIES

Postpaid, Pkt. 15c; ½ lb. 20c; 1 lb. 30c; 10 lbs. \$2.75

PENCIL POD BLACK WAX—The most satisfactory of early dwarf Wax Beans, of bushy growth, about fifteen inches high, large, luxuriant foliage, beneath which in great clusters will be found an enormous crop of beautiful straight yellow pods six to seven inches long, well rounded, deeply "saddle backed," meaty and solid clear through; they are brittle, of rich mild flavor, and entirely stringless. An early sure cropper; of the finest quality.

GOLDEN WAX—One of the best dwarf sorts for the home market and private gardens. Plants are erect, compact, and very productive. Pods medium length, nearly straight, very fleshy, broad and flat, golden yellow color. The variety cooks quickly as a snap-bean, shells well when green, and is of superior quality used either way. Dry seeds are medium sized, oval, white, more or less covered with two shades of purplish red. The amount and shade of color may be affected somewhat by conditions of soil and ripening.

DAVIS WAX—Rustless and immensely productive, very hardy and one of the best for market gardeners. The dried bean is kidney-shaped, clear white and a favorite for baking and canning.

SURE CROP WAX—Black Seed. A sure cropper of fine quality. Superior to Prolific Black Wax. The pods are longer, rather flat, stringless and a better yielder. A good market variety.

IMPROVED KIDNEY WAX—A great improvement over the Davis Kidney Wax. Plants of erect habit, robust in growth and very prolific. Pods somewhat flattened but thick and fleshy, of rich creamy color, stringless and of excellent quality. A great bean for the market gardener.

Every Garden Needs "NITRAGIN"

Garden size is for Peas, Sweet Peas and Beans only, including Lima (3 in one). Price 20c. NITRAGIN is an old reliable inoculator. It is well known and used by agricultural colleges. Sold in tins—not glass—packed in a rich soil-like medium. Contents always fresh and the bacteria active and vigorous. NITRAGIN is easy to use. See index for all sizes.

"PENCIL POD"
BLACK WAX

GREEN PODDED VARIETIES

Pkt. 15c; ½ lb. 20c; 1 lb. 30c; 10 lbs. \$2.75 Ppd.

STRINGLESS GREEN POD—Extra early. The finely shaped, long green pods are absolutely stringless, and are ready to market two weeks earlier than any other green-podded bean. It is of immense value, not only to the market gardener, but also for those who seek early beans of rare quality for the table. A splendid dried brown bean.

STRINGLESS REFUGEE—A splendid improvement on the Refugee Thousand to One, with which it compares in season and earliness, but is absolutely stringless. Pods are round, more even in length, possibly a little lighter green in color, exceedingly tender and of a delicious flavor. A splendid bean both for snap and canning purposes.

TREE BEAN—Of sturdy branching habit bearing heavily and ripening early and evenly. The foliage is scant and usually falls before the pods fully mature. The distinctive pure white, rounded form and small size distinguishes this bean from other small white varieties and we consider it the most desirable for Northwestern growers.

DWARF HORTICULTURAL or "Cranberry Bean"—Grows erect, strong and shrubby, and is very prolific. The bean is highly prized, green shelled. It is rather large, plump and beautifully mottled yellow and red; one of the most delicious and desirable beans and a great favorite with market gardeners.

CANADIAN WONDER—This splendid bush bean is the largest, most prolific of the green-podded sorts, entirely stringless in its early development. A little later than the New Stringless Green Pod, but continues in bearing throughout the season, and is excellent shelled green.

BROAD WINDSOR—"Horse Beans." Stalk erect, strong and shrubby. The bean is large, broad and flat; should be planted early and is best green shelled. A European variety, very hardy and can be planted earlier than other sorts. Grown extensively for stock in some sections.

STRING-
LESS
GREEN
POD

CLIMBING OR POLE BEANS

CULTURE—Do not plant until the soil has become warm and the weather settled—and always remember beans should have rich, well drained soil. It is best to set the poles before planting; these should be six to eight feet high, rows about four feet each way. Plant four to six beans to the hill and thin to two or three, depending on the variety. A pound should plant 75 to 100 hills. A top dressing of commercial fertilizer or old manure should be worked in when cultivating.

Postpaid, Pkt. 15c; ½ lb. 20c; 1 lb. 30c; 10 lbs. \$2.75

EXCEPT AS NOTED BELOW

ASPARAGUS BEAN—The True Asparagus Bean is superior to Kentucky Wonder in quality and fully equal in productiveness. The long, slender pods are very fleshy, almost round, crisp, tender and delicious, of a beautiful pale green color, attractive form and absolutely stringless. They grow vigorously and bear heavily. (Stock limited.) Pkt. 15c; ½ lb. 30c; lb. 50c; postpaid.

SCARLET RUNNER—A favorite as a shell bean and for its flowers, which are bright scarlet; seeds broad and kidney shaped.

OREGON POLE LIMA—The only Bean of its kind that will thrive in our cool climate—It grows a strong thrifty vine and is very prolific, bearing continuously until frost, the blossoms bursting from the top shoots in long panicles, while the pods can be seen in every stage of development, to the matured beans at the bottom of the vine. Pods are well filled, having three to five large beans of the finest quality. It can be planted in any garden soil as early as April or late as July. Give the same care and culture as other beans, and they are ready to use when the pods are filled and first begin to ripen. They are at their best when the full green pods begin to turn yellow.

KENTUCKY WONDER—A vigorous climber; very prolific, bearing in clusters extremely long and very fleshy, succulent pods, flat, thick and remarkably tender. A first-class pole variety.

LAZY WIFE—Pods are from four to five inches in length, produced in large clusters in great abundance. Dark green, thick, fleshy and stringless of unusually rich flavor. Dry beans, pure white, excellent for winter use.

OREGON GIANT GREENPOD—The large fleshy pods 10 to 12 inches in length are free from all stringiness and are tender, crisp and delicious. The size, splendid quality and rich flavor make this one of the most desirable beans for home gardens and for canning. "Oregon Giant" is a strong grower and yields heavily, bearing its enormous pods in great clusters. The color is a light greenish yellow, splashed red. Pkt. 15c; ½ lb. 30c; lb. 50c; postpaid.

KENTUCKY WONDER WAX—The pride of the garden. It commences to bear when scarcely higher than the average bush variety, and keeps on producing until killed by frost. It is a rampant grower, one plant filling a pole with a mass of vines densely loaded with luscious beans. They are firm, entirely stringless, and when cooked, deliciously rich and buttery.

For BEANS use 350 pounds per acre of our **Diamond VEGETABLE FERTILIZER**. Ask for our Free Booklet, "Fertilizers"

NEW GUINEA BUTTER BEAN

AN EDIBLE GOURD

**Fruit grows 3 to 4 ft. long
THICK HEAVY VINE**

Although of recent introduction into this country, it has been a common table vegetable in China from time immemorial. Can be used as an ideal arbor covering and as a table vegetable as well. Fruits grow to be several feet in length but should be used while young, for the table, when they are even better than the most delicious marrow.

Pkt. 10c; oz. 30c; postpaid.

RECIPE—Take fresh from the vine a young gourd about sixteen inches long and three inches in diameter or smaller, while the fuzzy growth is yet on. Cut into cubes about ¾ inch, bring to a boil, pour off the water once or twice; season well with pepper and salt; add butter. You will be surprised how good it is. Or use the ones from 8 to 14 inches long. Wash them. Wipe dry. Cut the round way. Dip in batter, then in flour and in batter again. Fry until tender. They are delicious. To make the batter use one egg, one tablespoon flour, and one cup milk with salt and pepper.

Sweet Anise Seed, for flavoring, 20c lb., postpaid

We are overstocked on this flowering seed and this is your opportunity to stock up at half our regular price while it lasts.

Harness and Leather Soap

Closing out our stock of this harness soap at less than cost. Well aged and extra good value.

10 lbs. \$1

855

OREGON GIANT GREEN POD

**Buckeye
Incubator
No. 5 Standard
600 Egg
Regular Price \$116
Special at
\$90**

As long as our stock lasts
See page 85 for full description

DANISH
BALL HEAD

DANISH BALLHEAD—Our strain of short-stem is imported direct from Denmark, originating on the famous island of Amager, the vegetable garden of Copenhagen. The fine ribbed leaves are so densely packed together that no space is left for water or air to start decay and the firm solid heads are famed for their superior excellence and keeping qualities. Matures late and when cut shows a fine, hard, snowy white, solid head. The best in its class. Pkt. 10c; oz. 30c; ¼ lb. \$1.00; lb. \$2.35; postpaid.

DANISH ROUND HEAD (Select Short-Stem)—A round ball shaped cabbage of great solidity. Color, rich dark green, has few outer leaves, is very hardy and a profitable late market variety. Our stock of Round Head is Danish grown and of the same superior quality as the short-stem Ballhead, being one of the latest keepers and best varieties for early Spring market. Pkt. 10c; oz. 30c; ¼ lb. \$1.00; lb. \$2.35; postpaid.

COPENHAGEN MARKET—A Splendid Cabbage for Home Gardens—A splendid early globe-shaped Cabbage slightly flattened. The large solid heads are very uniform, with few outer leaves, keeps well and stands handling. Copenhagen Market is the favorite market variety, and we recommend it to our customers as the best early round head. Pkt. 10c; oz. 30c; ¼ lb. \$1.00; lb. \$2.35; postpaid.

EARLY JERSEY WAKEFIELD—The favorite early Cabbage with our market gardeners. A sure header. The thick, stout leaves and compact habit make it the best for Wintering over and very early setting. Grown more extensively for market than any other early cabbage. Is always of good size, very solid, and has but few outside leaves; a reliable header and always gives good satisfaction. Pkt. 10c; oz. 30c; ¼ lb. \$1.00; lb. \$2.35; postpaid.

PREMIUM LATE FLAT DUTCH—This improved strain possesses the good qualities of the old favorite, "Late Flat Dutch," one of the largest of the late varieties; a sure header. Pkt. 10c; oz. 30c; ¼ lb. \$1.00; lb. \$2.35; postpaid.

CABBAGE

CULTURE—The requisites for complete success are: First—Good seed. There is no other vegetable where the seed has so much influence on the quality of the product, and gardeners should always use the best procurable. Second—Rich, well prepared ground. Third—Frequent and thorough cultivation. A heavy, moist and rich loam is most suitable, which should be highly manured and worked deeply.

In general, the early sorts should be sown very early in hot beds, hardened off by gradually exposing to outside air, and as early as the ground is in good condition, transplanted, setting 18 to 36 inches apart, according to size of variety. The late Autumn and Winter varieties may be sown from the middle to the last of Spring and transplanted when 4 to 6 inches high. Shade and water the late sowings in dry weather to get them up.

Early
Jersey
Wakefield
The Favorite
with Market
Gardeners

RED CABBAGE—Odense Market—Used for pickling. The heads are very fine and remarkably sure heading. The best red cabbage. Pkt. 10c; oz. 30c; ¼ lb. \$1.00; lb. \$3.00; postpaid.

SAVOY CABBAGE—Vertus—Late Savoy—Large, compact heads, crisp and tender with a rich flavor. Desirable for cooking or salads. Pkt. 10c; oz. 30c; ¼ lb. \$1.00; lb. \$3.00; postpaid.

STEIN'S EARLY DWARF FLAT DUTCH—Grows low on the stem; a sure header; firm fine grained, tender. Pkt. 10c; oz. 30c; ¼ lb. \$1.00; lb. \$2.35; postpaid.

SUCCESSION—Heads large, slightly flattened; grows low on the stem. Pkt. 10c; oz. 30c; ¼ lb. \$1.00; lb. \$3.00; postpaid.

CHINESE IMPROVED OR PE-TSAI—The strain we offer resembles when well grown Cos Lettuce rather than Cabbage. It is often called Celery Cabbage on the market. The leaves when young are crimped, of light green color and appear like smooth leaved mustard but with much broader and heavier midribs. The plant as it matures becomes more upright and forms heads much like Cos Lettuce. The inner leaves blanch an attractive light yellow or creamy white with very white midribs. It is of distinct flavor, very mild and pleasant. It is served as a salad like lettuce or cooked like asparagus. Sow in this latitude after July 1st at the same time as turnips. Pkt. 10c; oz. 35c; ¼ lb. \$1.25; lb. \$3.75.

BRUSSELS SPROUTS

Grow two or three feet high, and produce, from the sides of 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. Should be treated like Winter Cabbage or Kale.

DWARF IMPROVED—A carefully grown strain, very hardy and giving compact, round sprouts of large size and good quality. Pkt. 10c; oz. 30c; ¼ lb. \$1.00; postpaid.

CHINESE
PE-TSAI

CAULIFLOWER

Don't buy cheap strains of Cauliflower seed. Only the best select strains can be depended upon to produce a big percentage of large, white, solid heads.

CULTURE—The Cauliflower succeeds well in any soil where cabbage will grow, but best results are obtained in rich loam with an abundance of water. By sowing early varieties in a hot bed in February or March, or later in a cold frame, fine heads can be obtained quite early. For a later supply, sow seed in a prepared bed in May, choosing a cool, moist place. When large enough transplant, making the rows about 2½ feet apart and 18 inches between plants. In dry seasons the crop must be watered.

MT. HOOD
EARLY SNOWBALL

PLANTS IN
SEASON ALL
VARIETIES

P. S. CO'S "MT. HOOD" SNOWBALL—The seed that produces those handsome large white solid heads that bring big profits to the gardener. We offer our "Mt. Hood" Cauliflower seed under our own label, it having been carefully selected and grown for us by one of the expert Cauliflower growers, and is the best strain of "Early Snowball" obtainable. We recommend "Mt. Hood" Snowball for either early or late planting. Pkt. 25c; ¼ oz. \$1.00; oz. \$3.00; ½ lb. \$10.00; postpaid.

DANISH GIANT—DRY WEATHER CAULIFLOWER—Early, large, solid white Cauliflower that can successfully withstand a drouth that would prove fatal to other varieties, but like all Cauliflower must have rich soil and cultivation to give best results. Also does well under moist conditions. Pkt. 20c; ¼ oz. 75c; oz. \$2.50; ½ lb. \$7.50; postpaid.

EARLY SNOWBALL—This is the regular grade of "Early Snowball" that is generally offered, and while it will not give as good results as "Mt. Hood," it can be depended upon to produce a good crop. Pkt. 10c; ¼ oz. 60c; oz. \$2.00; ½ lb. \$5.00; postpaid.

LARGE ALGIERS—A valuable late sort, sure to head, of the best quality and very popular with market gardeners. Plants large, upright growth, the leaves protecting heads so that they will endure, uninjured, a frost that would ruin other sorts. One of the very best of the late varieties. Pkt. 10c; ¼ oz. 35c; oz. \$1.25; ½ lb. \$4.00; postpaid.

AUTUMN GIANT—Heads white, large, compact and protected by foliage. Pkt. 10c; ¼ oz. 35c; oz. \$1.00; ½ lb. \$3.50; postpaid.

BROCCOLI or Winter Cauliflower

Broccoli is so nearly related to late Cauliflower that the varieties are often listed under both heads—the principal difference being in the hardness and time of maturity, Broccoli not heading until late Winter or early Spring. Culture is same as for late Cauliflower, and good, rich, well-drained bottom land is best, or well-tilled, well-fertilized upland.

ST. VALENTINE—The finest of all Broccoli—This grand new strain introduced by us is a sure header of immense size, finest quality, and is ready for market in February. The large, solid, handsome, white heads remain in good condition longer than other varieties. Pkt. 15c; oz. \$1.75; ½ lb. \$5.00; postpaid.

EARLY LARGE WHITE FRENCH—A valuable variety with large, white heads, firm and of good flavor. Pkt. 10c; oz. 90c; ½ lb. \$3.00; ppd.

CHICORY

The roots, dug in the Fall, dried, cut in thin slices, and ground, are used largely as a substitute for coffee. Sow quite thinly in shallow drills early in the Spring. When well started, thin out to stand 2 or 3 inches apart in the row. Pkt. 10c; oz. 40c; ¼ lb. \$1.35; lb. \$4.00; Postpaid.

CHIVES

Chives belong to the onion family and the tops are used green for flavoring and garnishing. They grow in little clumps and can be supplied as plants any time in the early Spring. See Plant Department.

COLLARDS

SOUTHERN GEORGIA—The old-time favorite. Stands all sorts of adverse conditions without injury. Very hardy. Pkt. 10c; oz. 20c; ¼ lb. 65c; lb. \$2.00; postpaid.

CORN SALAD

FETTICUS or LAMB'S LETTUCE—A refreshing salad, used extensively in Winter and Spring as a substitute for lettuce. It is often cooked like spinach. Sown in drills 1 foot apart, in the Spring or Fall. On the approach of cold weather cover over with straw or coarse litter. Pkt. 13c; oz. 30c; ½ lb. \$1.00.

CRESS

CURLED or PEPPER GRASS—This salad is much used with lettuce, to which its warm, pungent taste makes an agreeable addition. The seed should be sown in drills about 16 inches apart, on very rich ground, and the plants well cultivated. It may be planted very early. Pkt. 10c; oz. 20c; ½ lb. 50c; lb. \$1.50.

ST. VALENTINE BROCCOLI

CHERVIL

Plant any time in the early Spring. Leaves should be kept cut, and if not allowed to run to seed, will keep green for a long time. Makes an excellent plant for garnishing.

CURLED—Very finely curled, somewhat resembling parsley and used in same manner. Pkt. 10c; oz. 25c; ½ lb. 80c; lb. \$2.50; postpaid.

CARROTS

CULTURE—A sandy loam is the best soil for the carrot, but any good land, if thoroughly and deeply worked, will produce satisfactory crops. Sow as early in the Spring as the ground is fit to work, though good crops may be grown from sowing as late as June 15. For table use, sow the smaller kinds in rows 16 to 18 inches apart, and for field culture prepare the ground thoroughly and sow in drills 18 to 24 inches apart. Cover one-half to one inch deep and see to it that the soil is well firmed above the seed.

P. S. CO.'S NEW CORELESS

CHANTENAY

DANVER'S HALF LONG

P. S. CO.'S NEW CORELESS—A splendid new carrot. Larger than other early varieties. Crisp, solid, of fine flavor and almost coreless, grows smooth and uniform, a true stump rooted type. The very best for canning or drying as it is nearly coreless and has no tap root to trim off and waste. Holds its color and cooks quickly. The ideal carrot for home gardens. Pkt. 10c; oz. 20c; ¼ lb. 40c; lb. \$1.25.

IMPROVED LONG ORANGE—Popular for farm use on deep, mellow soil. Our stock is an improvement obtained by years of careful selections of the best formed and deepest colored roots, which grow to a large size, some specimens averaging 12 inches in length. Enormous crops can be grown under fair culture; one of the best varieties for feeding stock. Pkt. 10c; oz. 15c; ¼ lb. 30c; lb. 85c.

CHANTENAY—The Market Gardener's Favorite. Tops, medium sized; necks, small; roots, tapering slightly but uniformly stump-rooted and smooth; color, deep orange red; flesh, very crisp and tender. Although this is a medium early sort, it furnishes roots of usable size as early as any; is a heavy cropper and is undoubtedly one of the best for both the market and private garden, while its great productiveness makes it very desirable as a field sort. Pkt. 10c; oz. 15c; ¼ lb. 35c; lb. \$1.00.

OXHEART—A thick carrot, five or six inches long and very blunt at the lower extremity. It grows very rapidly and the root attains a weight of more than a pound. It is tender and of good flavor. Pkt. 10c; oz. 15c; ¼ lb. 30c; lb. 85c.

DANVER'S HALF LONG—Grown largely on account of its productiveness and adaptability to all classes of soil. Tops, medium sized, coarsely divided. The smooth, handsome roots are of medium length, tapering uniformly to a blunt point; flesh, sweet, crisp, tender; deep orange in color. Although the roots of this variety are short, they produce as large bulk as the longer field sorts, and are more easily harvested. Pkt. 10c; oz. 15c; ¼ lb. 30c; lb. 85c.

EARLY SCARLET HORN—The best early kind for general use. It is larger than the forcing variety, but fully as good in quality, and produces a much larger crop. Pkt. 10c; oz. 20c; ¼ lb. 40c; lb. \$1.00.

STOCK CARROTS

CARROTS, aside from being one of the most useful and easily grown garden vegetables, are invaluable for stock feeding. They are greatly relished, promote health and put a sleek coat on cattle and horses, giving a well-kept appearance. Dairy and stockmen should grow them extensively. For their special use we recommend our "Yellow Giant."

P. S. CO.'S YELLOW GIANT, Specially Adapted to Moist, Heavy Soils—This new Carrot was originated at the Sydney, Australia, Experimental Station, and has proved itself to be the earliest and most productive stock carrot offered to date. It is a half long variety, with an immense broad shoulder. The Carrot penetrates less than one-half the depth into the ground, which saves about one-half the expense of harvesting the crop. The color is of bright yellow, and is perfection itself for giving the proper color to butter. Every dairyman who wants a big crop of carrots of the right quality and easy of culture should plant our Yellow Giant. Pkt. 10c; oz. 15c; ¼ lb. 30c; lb. 85c.

LARGE WHITE BELGIAN—Extensively grown for stock feeding; very productive. Grows so much above the ground that the entire crop can be pulled by hand. Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. 75c.

IMPROVED SHORT WHITE—"MASTODON." Ranks as a field carrot, owing to its enormous productiveness and the ease with which it can be harvested. Roots half long, smooth, very heavy at the shoulder, but tapering regularly at the point; color, light green at the crown, white below; flesh, rich, white, solid, crisp and of excellent flavor. Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. 75c.

ALL PRICES ON THIS PAGE ARE POSTPAID

CELERY

GOLDEN PLUME—A most popular variety of quite recent origin. A week to ten days earlier than Golden Self-Blanching, to which it is preferred in many sections. It is self-blanching with the yellow color decided while the large heart blanches to a beautiful pearly white color. The individual stalks are always of finest flavor, brittle and without stringiness. The growth of the plant is stout and stocky, and is more resistant to disease than the other self-blanching types. **Pkt. 25c; oz. \$1.75; postpaid.**

GOLDEN YELLOW SELF-BLANCHING—This is no doubt the best celery for early Spring market use. Plants are of a yellowish green color when young, but as they mature the inner stems and leaves turn a beautiful golden yellow, which adds much to their attractiveness and makes the work of blanching much easier. **Pkt. 10c; oz. 30c; ¼ lb. \$2.25; lb. \$8.00; postpaid.**

WHITE PLUME—The Leading White Celery. A handsome crisp sort, of very easy cultivation. Naturally its stalks and portions of its inner leaves and heart are white. It is the earliest celery known. **Pkt. 10c; oz. 30c; ¼ lb. \$1.00; lb. \$3.00; postpaid.**

WINTER QUEEN—This is without doubt the most valuable variety of celery for Winter and Spring use ever introduced. Has double the amount of heart of any known celery. The plant has a fine appearance, of compact growth, and blanches to a beautiful cream-white. Ribs perfectly solid, crisp and a delicious nutty flavor. Stored for Winter or Spring use, it is an excellent keeper and when taken out the blanched stalks will be firm and crisp; entirely free from strings; brittle and of sweet flavor. **Pkt. 10c; oz. 30c; ¼ lb. \$1.00; lb. \$3.00; postpaid.**

GIANT PASCAL—Largest variety grown; of fine, nutty flavor; very easily blanched. **Pkt. 10c; oz. 30c; ¼ lb. \$1.00; lb. \$3.00; postpaid.**

WHITE PLUME
CELERY

CELERY PLANTS

We have the large healthy transplanted celery plants in the standard varieties for delivery in season. Any quantities. Write us for prices, or see Plant Department.

CELERICAC

TURNIP ROOTED CELERY—Large Smooth Prague. Improved form with very few side roots. The largest and best variety. **Pkt. 10c; oz. 25c; ¼ lb. 75c; postpaid.**

SPECIAL

SILVER PINE HEALING OIL, 25c bottle for **15c**, \$1.00 bottle for **60c**, F.O.B. Portland.

CELERY CULTURE

Sow the seeds early, about February, in a hot-bed or cold frame. When 3 inches high transplant, setting them 4 inches apart. When grown 6 inches, and fine, stocky plants, set in richly manured, deep soil, in rows 3¼ feet apart and about 9 inches from plant to plant. Water if dry weather follows transplanting. During the next two months all the attention that is required is to keep down the weeds. Blanch by placing boards along the rows, or earth up a little, and continue doing so at intervals until only the tops of the leaves are visible late in Autumn. Never hoe up the earth when plants are wet. One ounce of seed produces about 6000 plants.

To Succeed with Celery you must keep your plants growing constantly while young, if you allow them to "stand still" they will run up to seed later. Always cultivate as soon after watering as the ground is dry enough to work well. Fertilize heavily in the Spring—and use nitrate later if needed.

SWISS CHARD

NEW SAVOYED LEAF "LUCULLUS"

—An improved variety of "Swiss Chard," growing about two and a half feet high. The heavy stalks are over an inch thick and bare for more than a foot of their length. The leaves make the finest of "greens." By cutting back the leaves close to the ground tender shoots spring up quickly; these or the mid-rib are very delicious cooked as asparagus. Swiss Chard is hardy, easily grown and should be in every garden. It is one of the most delicious of all vegetables. **Pkt. 10c; oz. 15c; ¼ lb. 30c; lb. \$1.00; postpaid.**

BARGAIN CORNER

Lee's Egg Maker

These prices good as long as present stock lasts

	Regular Price	Special Prices
2-lb. pkg.....	\$0.50 each	\$0.30
5-lb. pkg.....	1.00 each	.60
25-lb. pail.....	4.25 each	2.50

Thousands of poultry raisers know LEE'S EGG MAKER. It is not a tonic but a meat food of great value. It will make hens lay, chicks grow and keep them all in a healthy vigorous condition. Take advantage of these special prices. Prices F.O.B. Portland.

Diamond Quality

SWEET CORN

"Golden West"

CULTURE—Sweet Corn should not be planted until the ground is warm, as the seed will rot in cold, damp soil, or if planted too deep. Late April is early enough for first plantings and for succession plant every two weeks through May and June. Cover the first planting very lightly, increasing the depth a little for the later plantings. For the Dwarf Early varieties, rows should be three feet apart; for later large varieties, four feet and the hills two or three feet in the rows.

Sweet or Sugar varieties are used both for table and stock feeding, some of the large later sorts being preferred for silos and fodder.

YELLOW VARIETIES

GOLDEN EVERGREEN SWEET CORN—A splendid yellow sweet corn noted for its excellent qualities. It is a cross between the Golden Bantam and Stowells Evergreen but is much larger than the Golden Bantam and more productive, yet retains the tender skin of the Evergreen. Comes in just right in season to follow the first early sorts. The color is a rich golden yellow with ears 8 to 9 inches long, well filled from butt to tip with good juicy kernels of most delicious flavor. The stock we have is **western grown** and we feel confident will prove a most popular variety for this section.

GOLDEN GIANT SWEET CORN—A large yellow sweet corn, much larger than the Golden Bantam which it resembles somewhat. It has real merit and has proven an excellent sort for successive planting. This variety grows to the height of about 5 feet and usually bears two good eating ears. They are from 9 to 10 inches in length and well filled from tip to butt.

GOLDEN WEST—A selection from the original strain of Golden Bantam. Produces a larger ear, has a more vigorous growth, and by continued careful selection, improves yearly. "Golden West" is extremely hardy, can be planted earlier than other varieties, and, being of dwarf habit, can be planted closer than other sorts. It is the very best corn for market or home gardens, where earliness and quality are considered. The color is a rich, creamy yellow, deepening to golden as it matures.

GOLDEN BANTAM—The original yellow sweet corn. Does not grow quite as large an ear as our "Golden West," but has most of its good qualities; early, productive, sweet and rich.

PRICES SWEET CORN ON THIS PAGE
Postpaid, Pkt. 15c; ½ lb. 20c; 1 lb. 30c; 10 lbs. \$2.75

WHITE VARIETIES

EARLY PORTLAND MARKET—One of the earliest large eared varieties. Large, sweet, plump grains of purest white on well filled ears; a good market variety. Ears large but stalk not considered a rank grower.

OREGON EVERGREEN—We offer "Oregon Evergreen" as the finest main crop Sweet Corn. The flavor and sweetness have not been excelled and the extreme whiteness of the large ears makes it very beautiful and valuable for canning. It is large and the stalks produce more ears than any other variety and have a very heavy husk over the grains, protecting them from insects and keeping the ear fresh a long time after cutting. "Oregon Evergreen" is a hardy, vigorous grower and is the ideal Corn for market gardeners.

STOWELL'S EVERGREEN—Remarkable for remaining a long time in a fresh condition suitable for the table. Hardy and productive and the best late variety for general use.

EARLY MINNESOTA—This old and deservedly popular variety is one of the best early sorts for the market and the private garden.

COUNTRY GENTLEMAN—The sugary sweetness and delicious flavor make this old-time favorite one of the most desirable varieties. The slender white irregular kernels are very long, the cob small making much more to the ear than other varieties.

BLACK MEXICAN—An old favorite still in good demand on account of its quality and sweetness. A good variety for home gardens.

Have Green Corn the Whole Season Through

Here is a splendid combination for succession of crop that will assure green corn all during the season. Plant in the following order:

1. EARLY PORTLAND MARKET	3. GOLDEN EVERGREEN
2. GOLDEN BANTAM	4. STOWELL'S EVERGREEN

The Acme Automatic One-Hand Corn Planter

Puts the right number of kernels just where you want them and at the proper depth. Works equally well with right or left hand. (See index.)

Golden Evergreen

Diamond Quality

FIELD CORN

Oregon Grown Yellow Dent in the Field

the heavy soils on the West side of the Cascades will give best results from Fall plowing, repeating in the Spring before seeding time. A liberal amount of stable manure and thorough tillage will help offset the cold nights. For best results when planted for grain, plant in hills 43 inches apart, allowing two stalks to the hill. For fodder or silo, three stalks, if the ground is rich.

SIXTY-THREE PER CENT of the feeding value of a matured corn plant is in the ear. Corn to mature properly must be adapted to the section where grown, requiring several seasons of intelligent care and selection.

Our Western Grown Corn being thoroughly acclimated will give splendid satisfaction under the conditions and for the purposes recommended—we have large stocks and can supply any amount at very reasonable prices.

CULTURE—Thorough preparation of the soil is necessary for best results, methods of culture being determined by the different conditions of soil, climate, moisture and previous crops. The ideal soil is a deep warm one with a little sand, well drained and with sufficient humus to hold the moisture.

Deep plowing is always necessary for best results, repeating in the Spring before seeding time. A liberal amount of stable manure and thorough tillage will help offset the cold nights. For best results when planted for grain, plant in hills 43 inches apart, allowing two stalks to the hill. For fodder or silo, three stalks, if the ground is rich.

Oregon Grown Yellow Dent—the Prize Winner

Prices Field Corn, Postpaid, Pkt. 10c; 1 lb. 20c; 10 lbs. \$1.50

Special Prices per 100 pounds F. O. B. Portland on request.

OREGON GROWN YELLOW DENT—Makes a quick growth with abundant foliage, maturing early, gives a good grain yield and will make silage of the highest food content. Especially adapted to the Willamette Valley and irrigated valleys of the Pacific Northwest.

PRIDE OF THE NORTH YELLOW DENT—Has long been the standard Corn recommended by the Agricultural Stations as the best Yellow Dent for Eastern Oregon, Washington and Idaho, and our seed has given splendid results whenever conditions have been at all favorable, maturing early and yielding heavily, the foliage being luxuriant and of medium height. Especially recommended for silo.

WISCONSIN WHITE DENT—Is a large handsome White Dent, extremely early and matures perfectly.

CHAMPION WHITE PEARL—A large, White Dent variety; very popular with our dairymen on account of the great amount of green feed it makes.

KING PHILIP—An early Red Flint Corn; well acclimated and well known.

WHITE RICE POP CORN—Best variety for popping corn.

For Seed.....per lb. 25c.
For Popping.....per lb. 15c.

MINNESOTA No. 13 YELLOW DENT—The earliest of the early Yellow Dent corns and reported to be the heaviest yielding, producing splendid large ears, closely filled from end to end with bright yellow kernels. Has rather a thick cob and the shelled grains have a tendency to irregularity. Will average 7 feet high and being a rapid, vigorous grower, with heavy foliage, makes a fine fodder corn, especially recommended for ensilage west of the Mountains. Will mature in ninety days under favorable conditions.

NORTHWESTERN DENT—A red corn with yellow dent or cap, and in high altitudes and the Northern sections where seasons are short will often mature a crop when other varieties fail. Owing to its frost and drought resistance, its extreme earliness and rapid growth make it valuable for late planting and for replanting. Ears are 7 to 10 inches, closely filled; grows 7 to 8 feet high. Splendid for silage.

WHITE FLINT—This valuable variety is specially adapted to Northwestern conditions. It is earlier than the well-known "Eight-Row Canada," and is to be preferred on account of its color, productiveness and very early ripening.

Western Grown
Minnesota No. 13

As an economic feed crop, Corn is without a peer. Twenty to thirty tons of silage per acre are within the reach of every corn grower who will plant good seed, fertilize wisely and cultivate diligently. Land that is producing three to four tons of hay will produce double this amount of feed planted to corn. Progressive farmers are realizing these facts and the corn acreage is increasing rapidly from year to year.

Always remember that corn increases in food value and digestibility as it reaches the ripe stage—while other forage crops become more difficult of digestion and lose much of their food value as they ripen.

Diamond Quality CUCUMBERS

DIAMOND LONG GREEN

For Cucumbers
DIAMOND FERTILIZER
will repay its cost many
times over. Let us send
you our Free Book
"FERTILIZERS"

CULTURE—Cucumbers need a warm, rich soil, and should not be planted in open ground until the weather is settled, as otherwise they will not thrive. Plant in hills 4 feet apart each way, thinning to three or four of the strongest plants, after danger from insects is passed. As fast as the cucumbers attain suitable size they should be taken from the vine, as their ripening soon destroys the vines' usefulness.

EARLY FORTUNE—Probably the best long distance shipping cucumber. Will hold its intense dark green color better and remain edible longer than most any other White Spine. Skin is smooth and fruit is uniform and symmetrical. It is earlier and more prolific than Davis Perfect and fruits are equally attractive. It will probably displace that variety to a great extent in the future as it has every advantage of the Davis Perfect and none of its disadvantages. Pkt. 10c; oz. 25c; ¼ lb. 75c.

"DIAMOND" LONG GREEN—The leading large variety. Fruit from 10 to 12 inches long, dark green, crisp and tender. A good variety for slicing, and when matured they are best for sweet pickles. We offer our "Diamond Strain"—they will grow long and uniform in shape. Pkt. 10c; oz. 20c; ¼ lb. 50c; lb. \$1.50; postpaid.

SHORT GREEN, OR EARLY FRAME—An excellent sort for both table use and pickling. Fruit straight, small at each end, bright green, with crisp, tender flesh. Comes into use a little later than the Early Cluster and keeps green a long time. Pkt. 10c; oz. 20c; ¼ lb. 50c; lb. \$1.50; postpaid.

LEMON CUCUMBER—This dainty little cucumber resembles a lemon both in form and color, having a distinctive flavor superior to and not found in any other cucumber. The Lemon Cucumber is so prolific that a single vine will be ample for the needs of the average family. It is also said that the

results that some experience from eating cucumbers. Pkt. 10c; oz. 25c; ¼ lb. 85c.

LEMON CUCUMBER

Lemon Cucumber can be eaten without fear of the harmful

IMPROVED WHITE SPINE—One of the best sorts for table use, fruiting early and abundantly. Fruit uniformly straight and handsome; light green, with a few white spines. Pkt. 10c; oz. 20c; ¼ lb. 40c; lb. \$1.35; postpaid.

"THE DAVIS PERFECT" CUCUMBER—The "Davis Perfect" is of perfect form, large size and of the finest color; is crisp, delicious and almost seedless. This fine variety comes from the originator of the Davis Wax Bean and is one of the most valuable varieties for home or market. The "Davis Perfect" is as handsome, grown outside, as any hothouse cucumber. Pkt. 10c; oz. 20c; ¼ lb. 50c; lb. \$1.50; postpaid.

TELEGRAPH—FORCING—A standard forcing variety, very popular with gardeners. Fruit 14 to 16 inches long, of very fine quality. A sure and heavy cropper. Pkt. 25c; postpaid.

JAPANESE CLIMBING—A useful variety for growing on a trellis or wire. The cucumbers are long, of a dark green color, white flesh, crisp, and of a good flavor. Pkt. 10c; oz. 20c; ¼ lb. 50c; postpaid.

PICKLING CUCUMBERS

CHICAGO PICKLING CUCUMBER—One of the most popular of the small early pickle varieties. It has square ends, smooth skin, is enormously productive and very disease resistant. The ideal type for very early uniform pickles. The fruits average 6x2¼ inches when fully developed. Pkt. 10c; oz. 20c; ¼ lb. 40c.

SNOW'S PERFECTION CUCUMBER—This variety is rather like the Chicago Pickle except that it is smaller. It is one of the most smooth, symmetrical pickle kinds grown and is highly recommended for its uniform early pickles. The fruits average 5x2½ inches in size. It is enormously productive and the square ended pickles are very attractive. Pkt. 10c; oz. 20c; ¼ lb. 40c.

BOSTON PICKLING OR GREEN PROLIFIC—Color, bright green, and a great producer. The fruits average 4 to 5 inches in length when large enough for slicing, and are of excellent quality, but it is for producing medium sized pickles that this variety is so highly esteemed. Pkt. 10c; oz. 20c; ¼ lb. 40c; lb. \$1.35.

EGG PLANT

Should be started in a hotbed and transplanted when the weather is settled and the ground thoroughly warm. They will thrive with the same treatment as that given the tomato.

BLACK BEAUTY—An extra early, quick-growing, vigorous variety; handsome and very uniform. Color, deep blackish purple. Splendid market sort. Pkt. 10c; oz. 70c; ¼ lb. \$2.00; postpaid.

NEW YORK IMPROVED, LARGE PURPLE—The leading market variety. Large, round, dark, most productive. Pkt. 10c; oz. 70c; ¼ lb. \$2.00; postpaid.

HORSERADISH ROOTS

For prices and descriptions, refer to Plant Department. (See Index.)

ENDIVE

This is a hardy vegetable, cultivated principally for a Winter salad. Sow from May until August for a succession of crops; tie the leaves closely together to blanch them.

BROAD LEAVED BATAVIAN (Escarolle)—Has broad, thick leaves, which form a large loose head. Pkt. 10c; oz. 15c; ¼ lb. 40c.

WHITE CURLED—A beautiful variety, with curled leaves for early use. Pkt. 10c; oz. 15c; ¼ lb. 40c.

GREEN CURLED—For Fall and Winter. Pkt. 10c; oz. 15c; ¼ lb. 40c; all postpaid.

GARLIC

A profitable crop if your soil is right. October is planting month in Western Oregon. Write for prices and cultural directions.

All Prices On This Page Postpaid

HERB SEEDS FOR FLAVORING

ANISE—For flavoring. ¼ lb. 15c; lb. 40c.

POPPY—For flavoring. ¼ lb. 10c; lb. 35c.

MUSTARD—For flavoring and pickling. Lb. 10c; postpaid 20c; 100 lbs. market price.

CELERY—For flavoring. Oz. 10c; ¼ lb. 15c; lb. 50c.

CARAWAY—Well preserved seed for the use of druggists and confectioners. Oz. 10c; ¼ lb. 20c; lb. 55c.

DILL—Seed and leaves used to flavor soup, stews and pickles. Leaves possess similar qualities to the seed, and can be used in the same manner. Oz. 15c; ¼ lb. 50c; lb. \$1.50.

GARDEN KALE

EMERALD ISLE—Finest in the World—This is really the handsomest Kale that has ever come under our notice; and is entirely distinct from other strains, very hardy, of medium height, very vigorous, throwing out new shoots as fast as the leaves are used, and will furnish excellent greens all winter. The closely curled, handsome leaves are the most attractive and of fine flavor. Fine exhibition plant. Pkt. 10c; oz. 20c; ¼ lb. 60c.

TALL GREEN CURLED SCOTCH—Grows about two feet high; leaves dark green, curled and wrinkled; very hardy and is improved by a slight frost. Pkt. 10c; oz. 20c; ¼ lb. 50c.

DWARF GREEN CURLED—Leaves beautifully curled and bright green. Pkt. 10c; oz. 20c; ¼ lb. 50c.

COW or THOUSAND HEADED KALE

The great demand for this wonderful forage plant proves it to be the most valuable green feed for Pacific Coast dairy and stockmen; endorsed by agriculture colleges and government stations. Cow Kale should be grown in the same manner as cabbage. Make the rows 4 feet, plants 3 feet apart in the row. Can be set as late as July. Write for full information on planting and feeding.

A quarter pound of seed will produce enough Kale plants for one acre. Postpaid, oz. 10c; ¼ lb. 25c; lb. 75c.

KALE PLANTS

For Kale plants in season, refer to Plant Department. (See Index.)

KOHL RABI

Hardy and of easy culture. Grown from plants the same as cabbage. The Kohl Rabi is a vegetable intermediate between the cabbage and turnip and combines the flavor of both. The edible part is a turnip-shaped bulb formed by the swelling of the stem. Kohl Rabi is far superior to cabbage or turnips in the delicacy of its flavor and is a splendid addition to every garden. It should be eaten before growth ceases.

EARLY WHITE VIENNA—Very early; bulb white; best table variety. Pkt. 10c; oz. 25c; ¼ lb. 85c.

EARLY PURPLE VIENNA—Same as above except in color, which is purple. Pkt. 10c; oz. 25c; ¼ lb. 85c.

LEEK

The Leek belongs to the Onion family. Prized for soups. Cultivate same as Onions, but should be hilled up about the neck to blanch it. **LARGE ROUEN** or American Flag—A large favorite American sort. Pkt. 10c; oz. 30c; ¼ lb. \$1.

Germâco

Hotkaps

Individual Hothouses for Every Plant

"HOTKAPS" FURNISH EACH YOUNG PLANT WITH COMPLETE PROTECTION FROM WIND, RAIN, FROST AND INSECTS. NOW HAVE HARDIER CROPS THAT MATURE EARLIER.

They are individual hothouses for each plant, economically priced, to insure against the crop hazards of frost, rain, wind and insects. They are made of strong, durable, properly ventilated wax paper, light in weight, easy to use.

"Hotkaps" bring crops to earlier maturity. Many write us that they have been first to market by from one to three weeks, and as a result, have been able to get higher prices.

Farmers quickly appreciate them. Once you've tried them, you'll always use them. They afford the best crop insurance, and bring you more profit.

We have them for sale at the following prices:

1 M.....	\$10.00	per M
5 M.....	9.75	per M
10 M.....	9.50	per M
25 M.....	9.25	per M
"Hotkap" Setter	2.50	Each
"Hotkap" Carrier	2.75	Each

Diamond Quality LETTUCE

P. S. CO'S "CRISPETTE"
A Splendid Lettuce for Home Gardens

HEADING VARIETIES

P. S. CO'S CRISPETTE—A beautiful Lettuce, perfect in quality. The large, curly leaves, which cover the outside of the solid heads, are of a bright, light green. The unusual solidity of the heads is insured by the large, white main ribs of the leaves, each of which curving strongly toward the center, makes it impossible for the leaves to open outward and expose the center, which will always be found crisp, tender, sweet and melting. It matters not whether grown to head in the early Spring or the hottest days of Summer, the leaves are always crisp and tender. Pkt. 10c; oz. 35c; ¼ lb. \$1.00; lb. \$3.00; postpaid.

NEW YORK OR WONDERFUL—The Best Head Lettuce for Market Growers—The mammoth head lettuce so largely grown for shipment to distant markets, arriving in splendid condition. Immense heads, solid, heavy, beautifully blanched to a creamy white with bright green outer leaves. The quality is unsurpassed, being tender, crisp and sweet. "New York" is a hardy, rapid grower, deep rooted and resistant to drought; a slow seeder and sure to head. Thin to 12 to 14 inches. Pkt. 10c; oz. 35c; ¼ lb. \$1.00; lb. \$3.00; postpaid.

HANSON—Improved Hard Heading Stock—One of the very best. Heads green outside and cream inside, grows and tender. It withstands the hot sun well. Pkt. 10c; oz. 20c; ¼ lb. 60c; lb. \$1.85; postpaid.

BROWN DUTCH—Forms a large, solid head; sweet, tender and of good flavor. Outer leaves are tinged with brown. It is very hardy. Pkt. 10c; oz. 20c; ¼ lb. 50c; lb. \$1.50; postpaid.

BIG BOSTON—Very large, smooth-leaved, solid-heading variety, grown more extensively throughout the East and South than any other. It is congenial to all climates, a good shipper. In flavor it probably excels other smooth-leaved varieties. An excellent all-year Lettuce. Pkt. 10c; oz. 20c; ¼ lb. 60c; lb. \$1.85; postpaid.

MAY KING—Large growing, smooth leaved, richly flavored. Plant, light green, with round leaves, which form into a very solid, compact, round head; stands a long time without running to seed. Inner leaves blanch to a rich golden yellow. Exceedingly rich, tender and buttery. Pkt. 10c; oz. 20c; ¼ lb. 60c; lb. \$1.75; postpaid.

PARIS WHITE COS—Grows to a very large size. A solid Lettuce of the highest quality. Light green long, narrow, spoon-shaped leaves. Pkt. 10c; oz. 20c; ¼ lb. 60c; lb. \$1.75; postpaid.

CHICKEN LETTUCE

Just the Thing for Poultry Men—This Lettuce yields an immense amount of chicken or rabbit feed. It does not form a head but sends up stalks three to four feet high and when cut it immediately starts to grow again. Loaded with leaves which can be pulled off the stem like kale. Pkt. 10c; oz. 15c; ¼ lb. 40c; lb. \$1.35; postpaid.

CULTURE—Lettuce is so extensively grown that cultural directions seem unnecessary, but we offer a few simple suggestions that may save a later disappointment, as any failure is generally blamed to the seed. This should not be, as Lettuce, like many other vegetables, requires very rich soil, plenty of water, a cool growing season and intense culture to produce the best results. If the earliest varieties are planted out in the Spring, and the weather turns dry or hot, they will run up to seed without heading. The same seed sown in the Fall or with cooler growing weather would develop perfectly. At a temperature of 40 degrees or lower Lettuce will not thrive. At 65 degrees and upward it has a tendency to run up and not head properly. For outside planting sow the seed in shallow drills from one to two ounces to the 100 yards. An ounce will produce 3000 plants. Four pounds should plant an acre. Lettuce matures in forty to sixty days from time of planting.

GRAND RAPIDS

LOOSE LEAF VARIETIES

GRAND RAPIDS—For Early Forcing—As a Lettuce, for greenhouse forcing, this variety undoubtedly stands at the head of the list. 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, light yellowish green leaves, slightly crimped and blistered, rather thin, good flavor, crisp and tender. It will stand shipping better than most curled sorts. Pkt. 10c; oz. 20c; ¼ lb. 60c; lb. \$1.85; postpaid.

SIMPSON'S EARLY CURLED—A leading market variety used for very early planting and forcing. Forms a dense mass of finely curled and wrinkled leaves that are excellent and tender, and do not wilt readily. Pkt. 10c; oz. 20c; ¼ lb. 50c; lb. \$1.50; postpaid.

BLACK SEEDED SIMPSON—Forms a close, compact mass, curly leaves of a yellowish green. Pkt. 10c; oz. 20c; ¼ lb. 50c; lb. \$1.50; postpaid.

CHICKEN LETTUCE

Diamond Quality

MELONS

WATERMELONS

CULTURE—Watermelons thrive best on light, well-drained soils, but give good results on any good rich garden soil properly drained and cultivated. Plant after weather is settled and ground warm. Hills 8 feet apart each way, well rotted manure worked into each hill. 1 oz. of seed will plant 30 hills, 2 to 3 lbs. per acre.

GOLDEN HONEY—The best of the yellow fleshed melons.

It is oblong in shape with an average weight of 20 lbs. The rind is dark green with irregular stripes of darker green. It is a standard variety and is one of the best melons grown for eating. Pkt. 15c; oz. 25c; ¼ lb. 75c; postpaid.

"KING AND QUEEN"—Winter Watermelon—Average weight 25 pounds. Spherical shape, ivory shell, pink center, seeds black. A luscious, valuable winter melon, hardy, a good drought-resister. Ripens every melon in less than 120 days. Keeps for ninety days if not bruised. Shell very hard and melon ripens to within ½ inch of it. Pkt. 10c; oz. 20c; ¼ lb. 50c; lb. \$1.50; postpaid.

KLECKLEY'S SWEET, or **MONTE CRISTO**—Splendid for home use or near markets. Vine vigorous and productive; fruit medium size; oblong; dark green in two shades, indistinct stripes. Flesh a rich red; sweet and tender. Pkt. 10c; oz. 15c; ¼ lb. 40c; lb. \$1.25; postpaid.

SWEET-HEART—Good shipper. Vine vigorous and productive, ripening its fruit early. Fruit large, oval, very heavy, uniformly mottled dark and light green; rind thin but firm; flesh bright red, firm, solid, but very tender and sweet. Fruit retains its good quality for a long time after ripening. Pkt. 10c; oz. 15c; ¼ lb. 35c; lb. \$1.00; postpaid.

TOM WATSON—18 to 24 in. long, 10 to 12 in. diameter, thin, dark green rind, deep red flesh, crisp and sugary, with a lusciousness and distinctive flavor that makes it one of the finest melons ever produced; hardy, early, stands handling and long shipment. Pkt. 10c; oz. 15c; ¼ lb. 40c; lb. \$1.25; postpaid.

BLACK-SEEDED ICE CREAM WATERMELON—Grown extensively in Wenatchee and Yakima sections of Washington. A splendid shipping melon, does exceptionally well in any soil which grows melons. Almost round, pink meat, black seeded, a fine keeper. Drought-resistant, ripens early. Pkt. 10c; oz. 20c; ¼ lb. 50c; lb. \$1.50; postpaid.

MUSKMELONS

CULTURE—Plant in hills 4 to 6 feet apart, after frost is past and ground is warm; enrich with well-rotted manure; plant seeds just under the surface, not too deep. One ounce to 50 hills, 2 or 3 lbs. per acre. Melons thrive best on warm, light soils, but good crops are obtained on heavy ground if rich and well drained.

BURRELL GEM—The Perfect Melon for Market or Home Gardens—Has a tough, thin rind, well arched ribs, covered with closely interlaced gray netting; about 4½ in. diameter by 6 in. long, flesh of reddish orange, very thick, fine grained and spicy, seed held firmly in triangular cavity. This is the secret of a good shipping melon. If the seeds shake loose easily a melon quickly decays. Pkt. 10c; oz. 20c; ¼ lb. 50c; lb. \$1.50; postpaid.

ROCKY FORD—POLLOCK 10-25—The latest improved popular Rocky Ford. It eliminates every defect of all other strains. Perfect in size, shape, netting, flavor, long keeping and good shipping qualities. Pkt. 10c; oz. 20c; ¼ lb. 50c; lb. \$1.50; postpaid.

ROCKY FORD—Oval, slightly ribbed, densely covered with coarse netting. Flesh thick, green, very sweet, highly flavored, wonderfully uniform in shape and quality. A favorite with market gardeners. Pkt. 10c; oz. 15c; ¼ lb. 40c; lb. \$1.25; postpaid.

HOOD00—Grows to a convenient size. Flesh thick and firm; deep salmon or orange color. Pkt. 10c; oz. 20c; ¼ lb. 50c; lb. \$1.50; postpaid.

OSAGE OR MILLER'S CREAM—One of the finest flavored melons in cultivation, and highly recommended. Flesh rich, salmon color, very sweet and melting in quality. Pkt. 10c; oz. 15c; ¼ lb. 40c; lb. \$1.25; postpaid.

LARGE YELLOW CANTALOUPE—Early and productive; flesh salmon color, rich, sweet. Pkt. 10c; oz. 20c; ¼ lb. 50c; lb. \$1.50; postpaid.

SMALL GREEN NUTMEG—Ripens early, flesh green, fine and sweet. Superior for early market, or family garden; a favorite for hotels and restaurants. Pkt. 10c; oz. 20c; ¼ lb. 40c; lb. \$1.25; postpaid.

KLONDIKE WATERMELON

KLONDIKE—For genuine merit the Klondike is surpassed by no other melon. It was first introduced in 1909 and has steadily gained in popularity each year. The seeds are quite small, the color brown mottled black, while the flesh is a distinctive shade of red. The rind is dark green and although thin, it is still a good shipper because it does not wilt. The shape is long and the average weight 20 pounds. The seed being so small one pound contains as many as two pounds of most other varieties. Our stock is procured from the introducer who has kept it pure to the original type. Pkt. 15c; oz. 25c; ¼ lb. 75c; lb. \$2.50; postpaid.

MUSTARD

Sow any time in the Spring, in rows, thin out as necessary.

SOUTHERN GIANT CURLED—Pkt. 10c; oz. 15c; ¼ lb. 35c; lb. 95c.

CHINESE MUSTARD—Less pungent than other varieties. Is most delicious, thriving at the same season and under conditions that are favorable to spinach. Pkt. 10c; oz. 15c; ¼ lb. 35c; lb. 95c.

FORDHOOK CURLED—Dark green, finely curled, leaves of distinctive flavor; fine for salads. Pkt. 10c; oz. 15c; ¼ lb. 40c; lb. \$1.00.

Mushroom Spawn

Our free pamphlet gives general instructions.

NEW AMERICAN SPORE CULTURES—Produced from original spores by new French process—the only method by which select varieties can be perpetuated and improved.

Bricks weigh about 20 ounces and will plant 10 square feet. Price per brick, postpaid, 40c; 5 bricks for \$1.75.

**This is the
Riverside
Sweet
Spanish
Onion**

ONIONS

VERS" we have the finest type of Danver Onion ever offered, and recommend it to all commercial growers.

We are growers of Onion Seeds and Sets, and for years have been specializing on varieties that attain their greatest perfection in the Northwest and believe in our "OREGON YELLOW DAN-

CULTURE—For the best results in Onion growing, soil should be deep and rich, bottom land of rather loose texture being preferred—(beaverdam soil is best). Sow $2\frac{1}{2}$ or 3 pounds of seed per acre, as early in season as ground can be put into proper condition, using good fertilizer such as our special Onion Fertilizer, or manure supplemented with Bone Meal, Muriate of Potash, and in some cases Nitrate of Soda, the latter often being used after the plants are up, while the other fertilizers are worked into the soil before the seed is sown. Hardwood ashes may take the place of the Muriate of Potash.

RIVERSIDE SWEET SPANISH ONION—This is the genuine Sweet Spanish and should not be confused with any other. It is a distinct type and of superior strain. The large globe shaped brown onions weigh from one to three pounds and are unusually mild, although retaining the genuine onion flavor. Planted at the proper time and thoroughly cured, Riverside Sweet Spanish is a good keeper and will ship as well as any other onion. The size of the onion can be regulated by the distance between onions. The closer they are the smaller will be the onion. To produce the larger size, they should be thinned to 6 or 8 inches between plants. It is important to keep a uniform moisture content in the soil, and to keep them growing continuously from the time they are up until harvest. Drying out from lack of moisture very often starts new buds and may result in "splits" or "goose-necks." Pkt. 15c; oz. 75c; $\frac{1}{4}$ lb. \$2.50; lb. \$7.50; postpaid.

AUSTRALIAN BROWN—Resembles the Oregon "Yellow Danvers" in general appearance, but has a clear amber-brown skin that attracts buyers. Early, ripens uniformly, will keep in good condition longer than any other onion. For late sowing Australian Brown heads the list. Pkt. 10c; oz. 20c; $\frac{1}{4}$ lb. 60c; lb. \$2.00; postpaid.

YELLOW GLOBE DANVERS—The type most widely known and used as a main crop variety. A handsome, round or globe-shaped variety of large size, with thin, yellowish skin, white flesh, fine grained, mild, firm, and the best of keepers. Ripens early. Pkt. 10c; oz. 25c; $\frac{1}{4}$ lb. 75c; lb. \$2.25; postpaid.

PRIZETAKER—The Genuine, the Handsomest Yellow Globe Onion—Fine flavor, enormous size, perfect globe shape, bright straw-colored skin, neck very small and always ripens up hard. Pkt. 10c; oz. 25c; $\frac{1}{4}$ lb. 75c; lb. \$2.50; postpaid.

LARGE RED WETHERSFIELD—A standard variety; one of the most productive kinds, even in poor soil. Its good keeping qualities render it one of the best for shipping. Pkt. 10c; oz. 25c; $\frac{1}{4}$ lb. 65c; lb. \$2.25; postpaid.

WHITE PORTUGAL—One of the standard American onions. The true type is of medium size, flat, pure white and the flesh fine-grained, firm and hard. It is late ripening and a good keeper. Used exclusively by large set growers in certain Eastern sections and by most pickle growers, for pickling onions. Used almost exclusively for White Silverskin as well. Pkt. 10c; oz. 25c; $\frac{1}{4}$ lb. 65c; lb. \$2.75; postpaid.

BOTTOM ONION SETS

Small onions grown from seed that has been sown too thickly to attain a large size. The small onions (about $\frac{1}{2}$ inch in diameter) planted out are ready in a short time to pull as green onions for the table or bunched for market. If left to stand they make ripe onions of the best quality, and come to maturity some six weeks earlier than a crop grown directly from the seed. Per lb. 20c, postpaid. Write for quantity prices.

OKRA (or GUMBO)

IMPROVED DWARF GREEN—Very early, with long, green slender pods. Pkt. 10c; oz. 15c; $\frac{1}{4}$ lb. 35c; postpaid.

WHITE VELVET—Large pods, smooth or very slightly ribbed, remain tender a long time. Pkt. 10c; oz. 15c; $\frac{1}{4}$ lb. 35c; postpaid.

PARSNIPS

CULTURE—As the seed germinates very slowly, sow as early in Spring as possible, in drills 15 inches apart on deeply cultivated rich, loamy soil. Keep clear of weeds and thin to 3 or 4 inches apart. The roots of the parsnip are improved by freezing.

HOLLOW CROWN OR LONG WHITE—Very long, white, smooth, tender, sugary, of most excellent flavor. Very hardy; will keep through the Winter without protection. Pkt. 10c; oz. 15c; $\frac{1}{4}$ lb. 35c; lb. 95c; postpaid.

WHITE BUNCHING

WHITE "BUNCHING" ON-

ION—Especially useful to market gardeners for producing an attractive "green onion." The young stalks are crisp and mild, attaining a good size before the bulb forms. Pkt. 10c; oz. 25c; $\frac{1}{4}$ lb. 85c; lb. \$2.75; postpaid.

P. S. CO'S OREGON YELLOW DANVERS
"The Perfect Onion"

PARSLEY

PLAIN—For flavoring and garnishing. The green leaves are used or they may be dried crisp, rubbed to a powder and kept in bottles until needed. Pkt. 10c; oz. 15c; $\frac{1}{4}$ lb. 40c; postpaid.

EXTRA DOUBLE CURLED—The plants bear a great number of leaves, so abundant and so finely curled they resemble a bunch of moss. Pkt. 10c; oz. 15c; $\frac{1}{4}$ lb. 40c; pld.

TURNIP-ROOTED OR HAMBURG—The root, resembling a small turnip, is the edible portion. Used for flavoring soups, etc. Pkt. 10c; oz. 15c; $\frac{1}{4}$ lb. 40c; postpaid.

Diamond Quality GARDEN PEAS

HAND PICKED at OUR WAREHOUSE

Tested for Germination in
OUR OWN LABORATORY

GARDEN PEAS are one of the most important crops, and we have spared no effort to select and improve the best strains of the most profitable and satisfactory varieties. These selected strains, grown under our direct supervision for many years, will give you the biggest yield and the handsomest, sweetest, best flavored Peas for early market or home garden. The varieties offered have proved by growing tests to be the best of their kind and class. Selected Hand Picked.

Prices on all Peas on this page postpaid
Pkt. 15c; ½ lb. 25c; 1 lb. 40c; 10 lbs. \$3.75

MAIN CROP VARIETIES

Great Favorites with our Market Gardeners

GRADUS or PROSPERITY—This early wrinkled pea bears pods of large size and combines quality with earliness. It is very hardy; can be planted fully as early as the smooth peas; growth vigorous and healthy; vines 2½ feet in height; very prolific. The quality and flavor are delicious and the peas remain tender and sweet for a long time.

TELEPHONE—TALL—Our Western grown selection of this popular favorite and standard market variety is immensely productive, the extra large pods being filled with peas of the finest quality, the luscious sugary flavor not being excelled by any other variety. A strong, rapid grower, averaging 4 to 5 feet.

THOMAS LAXTON—A very early variety of great merit. Vines are vigorous, of medium height—about three feet—similar to Gradus, but darker in color, hardier and more productive. Pods are large, about four inches, with square ends, uniformly well filled and of unexcelled quality. One of the very best sorts for market and home garden.

IMPROVED STRATAGEM—One of the best of the large podded peas; the pods are of immense size filled with large, dark green, wrinkled peas of the finest quality; vine of medium height, but very stocky, with very broad, light green leaves, and bearing an abundance of large handsome pods.

EARLY AND DWARF VARIETIES

EARLY DWARF GRADUS—Slightly earlier and more dwarf than the regular GRADUS. Vines moderately stout, pods medium green, rather large and well filled with dark green peas of exceptional quality.

DWARF TELEPHONE, or DAISY—Medium tall, vines exceptionally strong growing, producing freely large well filled pods. A favorite with shippers because it carries well and commands a high price because of its quality.

LAXTONIAN—An early, dwarf, robust, large podded pea of superior excellence; growth averaging 16 inches. The large pods are well filled, holding eight to ten peas. "Laxtonian" is so highly recommended that you should give it a trial. Crop is short this year.

LITTLE MARVEL—Splendid Dwarf Pea for Home or Market—The dwarf, bushy vines, averaging 15 inches, are loaded with firm square-ended pods 2½ to 3 inches long, tightly filled with plump, luscious, deep green peas. "Little Marvel" is as early as "American Wonder," fully equals the superb quality of "Nott's Excelsior," and far outyields these two popular sorts.

AMERICAN WONDER—One of the most popular and best of the early wrinkled sorts. A great favorite for family use. Has stout, branching vines, covered with well-filled pods containing seven or eight large, exceedingly sweet, tender and well-flavored peas. Height 10 to 12 inches.

PREMIUM GEM—Our select strain of this splendid variety is one of the earliest and best of the dwarf garden Peas. The vigorous, luxuriant vines average about 15 inches in height and are heavily loaded with well filled pods of rich, fine flavored sugary peas. Continues in bearing for a longer period than most varieties in this class. A splendid home garden pea for successive planting and for canning.

ALASKA, or EARLIEST OF ALL—A smooth, blue pea, of even, vigorous growth and extra early maturity. Vines 2 to 3 feet high, unbranched, bearing four to seven long pods, which are filled with medium-sized, bright green peas of excellent flavor. A great favorite with our market gardeners for Fall or early Spring planting.

PEPPERS

CULTURE—Sow early in hotbeds; or later, when the weather becomes warm, in open beds. When two or three inches high, transplant to a warm, mellow soil, in rows eighteen inches apart and a foot apart in the rows. Guano and hen manure are excellent fertilizers and will greatly increase the yield.

CHINESE GIANT—Fruits are a rich deep green when immature and bright scarlet red when ripe. Flesh is thick, mild and sweet, exceptionally desirable for use in salads and also one of the best varieties for stuffing. Plants vigorous and very productive, peppers often growing to be five inches in diameter, almost square in shape, and divided into four sections. Our seed of this variety grown from especially selected stock. Pkt. 15c; oz. 35c.

PERFECTION PIMIENTO PEPPER—Unequaled for quality, sweetness, large, smooth, flesh 3 times as thick as in other varieties. Skin can be slipped off by heating or boiling a little, or pare like an apple. Growth is vigorous. Yield is heavy and continuous, bearing until frost. Pkt. 10c; oz. 65c.

RUBY KING—Very large, sweet and mild; bright scarlet. Pkt. 10c; oz. 65c.

LARGE BELL, or BULL NOSE—Large, mild, thick, fleshed variety. Fine for stuffed pickles. Pkt. 10c; oz. 65c.

CAYENNE—Pods long; bright red; very pungent and used with pickles when green. Pkt. 10c; oz. 65c.

CHILI—Pods small and pointed; brilliant scarlet; very pungent when ripe. Pkt. 10c; oz. 65c.

THE PRICES ABOVE ARE POSTPAID

For FIELD PEAS
and TANGIER
PEAS
See Page 25

PUMPKIN "DIAMOND QUALITY"

LARGE YELLOW

WINTER LUXURY

LARGE YELLOW OR CONNECTICUT FIELD—Large, round; deep, glossy yellow. Vines vigorous and very productive; good keeper. Grown extensively for stock feeding. Pkt. 10c; oz. 15c; ¼ lb. 30c; lb. \$1.00; postpaid.

GIANT OF ALL—"King of Mammoths"—This colossal pumpkin is almost a globe in shape. Skin a rich golden yellow, flesh firm, fine grained and deep yellow, sweet flavored, very thick and of excellent quality. Pkt. 10c; oz. 20c; ¼ lb. 35c; lb. \$1.25; postpaid.

WINTER LUXURY—The best flavored pie pumpkin grown; enormously productive; excellent keeper; medium size; color, golden-russet, finely netted; flesh, deep golden, sweet, tender and very thick; none better. Pkt. 10c; oz. 20c; ¼ lb. 35c; lb. \$1.00; postpaid.

SWEET OR SUGAR—A handsome and productive small pumpkin; skin, orange; flesh, deep yellow, fine grained, very sweet, the famous "New England Pie Pumpkin." Pkt. 10c; oz. 15c; ¼ lb. 30c; lb. \$1.00; postpaid.

CULTURE — Pumpkins will grow on any good farm land, but their size and quality will depend on the culture and fertility of the soil. Plant early in May, in hills 6 to 8 feet apart. One pound of seed will plant about 300 hills. Care should be taken to keep the different varieties well apart, and away from other vining plants as they mix and deteriorate very rapidly.

SQUASH "DIAMOND QUALITY"

CULTURE—Plants are tender and sensitive to cold, and planting must be delayed until settled warm weather. The principles of culture are the same as for cucumbers and melons, but squash is less particular as to soil. Plant Summer varieties 4 to 6 feet apart each way and the Winter sorts 8 to 10 feet. Three plants sufficient to a hill.

SUMMER VARIETIES

WHITE BUSH—The best Summer sort for the home garden or market; very productive and of good size. Pkt. 10c; oz. 20c; ¼ lb. 45c; lb. \$1.25; postpaid.

EARLY SUMMER CROOKNECK—Early, prolific, solid curved neck; skin yellow, thin, hard and warty; flesh tender and of good quality. Earlier and larger than the ordinary Crookneck. Pkt. 10c; oz. 20c; ¼ lb. 45c; lb. \$1.25; postpaid.

WINTER VARIETIES

IMPROVED HUBBARD—The best seller and most popular variety on our list. Rind dark green, warty and very hard. Flesh light orange, very dry, sweet and rich flavored. Has no superior. Long keeper. Pkt. 10c; oz. 20c; ¼ lb. 45c; lb. \$1.25; postpaid.

MAMMOTH CHILI—The largest of all Squashes, growing to an enormous size, often weighing over 100 pounds, while its rich, fine flavored flesh insures its value for all purposes. Its size makes it valuable for stock feeding. Pkt. 10c; oz. 20c; ¼ lb. 45c; lb. \$1.25; postpaid.

GOLDEN HUBBARD—The same in size, shape and quality as the well known Hubbard Squash, except that it is bright red or golden color, and somewhat earlier. Good keeper. Pkt. 10c; oz. 20c; ¼ lb. 45c; lb. \$1.25; postpaid.

BOSTON MARROW—Skin yellowish, very thin; flesh dry and fine grained; of unsurpassed flavor. Pkt. 10c; oz. 15c; ¼ lb. 35c; lb. \$1.00; postpaid.

SIBLEY OR PIKE'S PEAK—Shell smooth, thin and of a pale green color; the flesh is thick, solid, deep orange color; very dry, fine grained, with a delicate flavor. Pkt. 10c; oz. 20c; ¼ lb. 45c; lb. \$1.25; postpaid.

TABLE QUEEN

For Pies
or
Baking

TABLE QUEEN—Small very dark green acorn-shaped squash of very finest quality. Makes excellent pies, can be cooked whole when young and bakes splendidly when matured. Grows 6 to 8 inches in length and 3 to 4 inches in diameter. The small size makes it ideal for individual service when baked. Matures early, is a good keeper and extremely prolific. Also known as Des Moines, Acorn, and Danish Squash. Pkt. 10c; oz. 20c; ¼ lb. 50c; postpaid

BANANA SQUASH

BANANA SQUASH—Grows from one to two feet in length. Flesh firm and solid, of beautiful orange-yellow, and excellent quality. Rind of shell smooth and grayish-green color. Resists heat of the sun better than the Hubbard and because of its excellent flavor and splendid keeping qualities, remaining in good condition from one season to another, is superseding that variety in many localities. Pkt. 10c; oz. 20c; ¼ lb. 65c; lb. \$1.50; postpaid.

RADISHES

CULTURE—To secure Radishes with crisp, tender flesh, grow them quickly in rich, loose soil, and gather before reaching full size. Our Radish Seed is strictly of the finest grade, being grown from carefully selected roots. Frequent plantings should be made for succession so that a supply of fresh, tender Radishes in the finest condition may be had at all times.

EARLY SCARLET TURNIP—White

Tipped—A beautiful variety; deep, scarlet with white tip. Very early. Has a small top, and may be planted closely. Flesh crisp, tender and sweet. Cannot fail to give satisfaction as a forcing Radish. Pkt. 10c; oz. 15c; ¼ lb. 30c; lb. \$1.00; postpd.

WHITE ICICLE—This Superb Radish is the finest and longest of the very early, pure white varieties. Planted in the Spring, ready for use in twenty to twenty-five days; the long, slender form and pure, paper-white skin most attractive when bunched for market. This Radish is not only crisp and tender when young but also retains these qualities until the roots attain large size; is excellently adapted for forcing purposes or successive sowing in open ground and gives a continuous supply of tender, crisp Radishes for the table or market throughout the season. Pkt. 10c; oz. 15c; ¼ lb. 30c; lb. \$1.00; postpd.

IMPROVED CHARTIER—Roots long, tapering and attaining a very large size. Of rapid growth; remains crisp and tender until fully grown. Color, scarlet above shading into white at the tip. Flesh white and mild flavored. Pkt. 10c; oz. 15c; ¼ lb. 30c; lb. \$1.00; postpaid.

CHINA ROSE WINTER—One of the best Fall and Winter varieties; a favorite with market gardeners, bright rose color; flesh white, firm and of superior quality. Pkt. 10c; oz. 15c; ¼ lb. 30c; lb. \$1.00; postpd.

RADISH MIXTURE

Just the thing for the family garden. Oz. 10c; ¼ lb. 25c; lb. 75c; ppd.

FRENCH BREAKFAST OR HALF LONG—

Medium size, quick growth, crisp and tender; lower end and taproot white. Pkt. 10c; oz. 15c; ¼ lb. 30c; lb. \$1.00; postpaid.

SPINACH

CULTURE—For Spring and Summer use, sow either broadcast or in drills one foot apart and one inch deep, as early as ground can be worked, and every two weeks for a succession.

IMPROVED THICK LEAVED—A variety which grows very rapidly, forming a cluster of large, very thick, slightly savoyed leaves of fine color, and quality when cooked. Best for market gardeners. Pkt. 10c; ¼ lb. 25c; lb. 75c; postpaid.

KING OF DENMARK—The most valuable of new introductions of early sorts, remaining in good condition from one to two weeks after other varieties have gone to seed. Plants are of rapid growth, leaves thick and stand well after cutting. Pkt. 10c; ¼ lb. 35c; lb. \$1.00; postpaid.

SAVOY LEAVED—Bloomsdale—Very early; of upright growth; leaves pointed. Plant in the Autumn for Spring use; grows quickly. Pkt. 10c; ¼ lb. 25c; lb. 75c; postpaid.

PRICKLY WINTER—Hardest variety; must be sown in the Fall; seed prickly; leaves long, pointed, thick and succulent. Pkt. 10c; ¼ lb. 25c; lb. 75c; postpaid.

LONG STANDING—An improved variety for general use; large, fleshy savoyed leaves remain in an edible condition over a long period; slow to go to seed. Pkt. 10c; ¼ lb. 25c; lb. 75c; postpaid.

SALSIFY, or VEGETABLE OYSTER

Salsify is a nutritious and wholesome vegetable with a flavor closely resembling oysters, for which it is a good substitute. Sow early in Spring, in drills a foot apart; when 2 or 3 inches high thin to 3 or 4 inches. Cultivate the same as carrots. Roots are hardy, may remain in ground during Winter or be stored in dry earth or sand.

MAMMOTH SANDWICH ISLAND—Produces a large crop of smooth roots. Pkt. 10c; oz. 25c; ¼ lb. 75c; lb. \$2.50; postpaid.

CRIMSON GIANT

EARLY CRIMSON GIANT—The Largest Early Scarlet Turnip-Shape Radish—An early Radish, double the size of any of the turnip-shaped type, but, notwithstanding its immense size, does not get hollow and pithy. The flesh is a sparkling white, solid, crisp, juicy and of the mildest flavor. The shape of bulb varies from round to almost oval, but the bright, deep crimson color of skin remains quite constant. Excellent for both forcing and open ground. Pkt. 10c; oz. 15c; ¼ lb. 30c; lb. \$1.00; postpaid.

EARLY SCARLET GLOBE—A small, scarlet globe-shaped Radish, with small top and of very quick growth, very early; rich color and crisp, tender flesh. Pkt. 10c; oz. 15c; ¼ lb. 30c; lb. \$1.00; postpaid.

Dupont
Semesan!
Something
New!
See Index

Use
Diamond
Vegetable
Fertilizer

White Icicle
Early, Sweet
and Crisp

Diamond Quality

TOMATOES

BURBANK

"BURBANK" TOMATO—The originator describes it as the earliest, smoothest, most productive and best early Tomato, color bright crimson, thick, smooth and firm with few seeds. Unusually heavy and of the finest quality. Keeps well; a good shipper; a prolific, continuous bearer, has the unusual and remarkable feature of being easily peeled, the skin slipping readily from the rich, firm flesh. Resistant to wilt and other diseases. Pkt. 10c; oz. 65c; ¼ lb. \$2.00.

CHALK'S EARLY JEWEL—Large, bright red, smooth, round fruits, colored evenly with the stem; solid, almost seedless, fine flavor. Vines are vigorous, not subject to blight, and yield fully equal to or better than Earliana. We recommend as an early Tomato for either market or home gardens; it has given us satisfaction under the varying conditions of soil and climate in the Northwest. Pkt. 10c; oz. 45c; ¼ lb. \$1.25.

STONE—Popular with canners, growers and market gardeners. Solidity and carrying qualities are remarkable. Color a desirable red. Shape perfect smooth and thicker from stem to blossom end than most varieties. Very handsome and salable. Pkt. 10c; oz. 35c; ¼ lb. \$1.00.

COMET—FORCING—The very best forcing variety and a general favorite with greenhouse growers. Color is a beautiful scarlet; fruits are of good size, very smooth and uniform. Pkt. 10c; oz. 50c; ¼ lb. \$1.50.

LIVINGSTON GLOBE—One of the best Early Tomatoes, Hardy and Blight Resistant—Fruits large, even size; very early; ripen through; always smooth, firm, round, solid meat, few seeds. Color beautiful glossy, rose-tinted purple; very productive. Is also an excellent forcing variety. Pkt. 10c; oz. 45c; ¼ lb. \$1.50.

DWARF CHAMPION—Dwarf, upright growth; smooth, purple fruit. Pkt. 10c; oz. 45c; ¼ lb. \$1.50.

TOMATO PLANTS

Standard varieties for seasonable delivery — Healthy transplanted and pot grown plants — Safely packed and shipped to any point in the Northwest. Refer to our Plant Department (see Index).

Ground Cherry or Husk Tomato

THE NEWER types of hardy, prolific Tomatoes are better adapted to the cool Coast climate than the older sorts; splendid crops are now being grown where heretofore it was thought Tomatoes would not thrive. A good plan is to try several varieties and find which is best suited to your special conditions.

CULTURE—Sow early in hotbeds, and as soon as they have four leaves transplant into shallow boxes. Harden off, and set out as soon as danger of frost is past. An ounce of seed will produce 3000 to 4000 plants.

If blight appears use "Bordeaux," but it is better to use as a preventative before blight strikes the plant, and as a control measure for flea beetles, spraying the under side of foliage.

JOHN BAER—Is the result of fifteen generations of breeding; it produces perfect, solid, high crown, brilliant red Tomatoes. They ripen ten days before Earliana, bearing 50 to 100 fruits per plant. The flavor is deliciously sweet. The plant will stand plenty of fertilizer without going to vine. Keeps well; a good shipper; a prolific, continuous bearer, and has the remarkable feature of being easily peeled, the skin slipping readily from the rich, firm flesh. Resistant to wilt and other diseases. Pkt. 10c; oz. 50c; ¼ lb. \$1.50.

BONNY BEST—Has given splendid results wherever tried and being early, hardy, very productive, recommended for outside planting wherever Tomatoes can be grown. A good forcing variety. Fruit smooth, round, slightly flattened, solid, a bright scarlet. Quality excellent. Pkt. 10c; oz. 45c; ¼ lb. \$1.25.

SPARK'S EARLIANA—One of the Earliest Tomatoes—Large, uniform size and beautiful red color. Ripens thoroughly all over, the stem end coloring up perfectly. Almost seedless and solid. A vigorous grower, heavy bearer, continuing until frost. Succeeds everywhere, and especially recommended for this Coast. Pkt. 10c; oz. 45c; ¼ lb. \$1.25.

GOLDEN QUEEN—A first-class, large, smooth, pure yellow Tomato. Pkt. 10c; oz. 50c; ¼ lb. \$1.65.

YELLOW PEAR—A small, pear-shaped Tomato, borne in great profusion, vine literally covered with clusters of fine, solid fruit; excellent for preserving. Very hardy. Pkt. 10c; oz. 65c; ¼ lb. \$2.00.

YELLOW PLUM—Small plum-shaped, deep yellow skin and flesh. For preserving. Pkt. 10c; oz. 65c; ¼ lb. \$2.00.

YELLOW CHERRY—Cherry-shaped fruit, deep yellow. Pkt. 10c; oz. 65c; ¼ lb. \$2.00.

GROUND CHERRY OR HUSK TOMATO—Grows to great perfection under ordinary culture, yielding abundantly; very much prized for preserving; the fruit grows encased in a husk. Should be in every garden. Pkt. 10c; oz. 65c; ¼ lb. \$2.00.

TOBACCO

CULTURE—Sow the seed thinly in beds, as early as they can be well prepared. Cultivate thoroughly, transplanting when 6 inches high to rows 4 feet apart each way.

CONNECTICUT SEED LEAF—Hardy, and the best adapted to cool localities. Pkt. 10c; oz. 75c.

HAVANA—Of fine texture and delicate flavor. Pkt. 10c; oz. 75c.

Bordeaux Mixture

To prevent root-blight, pour a cupful of Bordeaux around the stem at the surface of the ground.

EARLY GARDEN TURNIPS

EARLY PURPLE TOP MILAN—This variety is ready for the table sooner after planting than any other yet introduced. Top small, erect, strap-leaved; bulb a deep purple above, white underneath; flesh white, firm and delicate. Pkt. 10c; oz. 20c; ¼ lb. 40c; lb. \$1.25.

EARLY WHITE MILAN—Same as Purple Top Milan, but pure white, sweet and tender; best early market variety. Pkt. 10c; oz. 20c; ¼ lb. 40c; lb. \$1.25.

PURPLE TOP STRAP LEAF—A leading white-fleshed variety, and one of the best, 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. 15c; ¼ lb. 25c; lb. 75c.

EARLY WHITE FLAT DUTCH—One of the very best and most universally grown. Small, erect top, round, flat; flesh white, firm, but very tender and sweet. Of quick growth, it is soon ready for the table and keeps well. Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. 75c.

EARLY SNOWBALL—Early round turnip, maturing in seven weeks, is of perfect form, snowy whiteness, crisp, solid, fine flavor. Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. 75c.

GOLDEN BALL—Undoubtedly one of the most delicate and sweetest yellow-fleshed turnips yet introduced. Not of large size, but firm, hard and most excellent flavor. Keeps well and is superior as a table variety. It is extensively used by market gardeners. Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. 75c.

MAIN CROP TURNIPS

COWHORN—Sometimes called 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. Is delicate and well flavored. Has proved itself one of the best stock turnips ever introduced in Oregon. Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. 75c.

POMERANIAN WHITE GLOBE—One of the most productive kinds, and in good, rich soil, roots will frequently grow to 12 pounds in weight. It is of perfect globe shape; skin white and smooth; leaves dark green and of strong growth. Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. 75c.

PURPLE TOP WHITE GLOBE—A large, globe-shaped variety; purple above the ground. It is handsome and of excellent quality; recommended both for family garden and field crop. Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. 75c.

TURNIPS—Ruta Baga or Swede

IMPROVED AMERICAN PURPLE TOP—The leading variety; large, immense yielder. Superior in every way. Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. 75c.

LARGE WHITE NORFOLK—A white variety, usually attaining a very large size. Extensively grown for stock feeding. The leaves are also used for greens. It is hardy and may remain in the ground all Winter. Yields very large crop. Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. 75c.

WHITE EGG—Is perfectly smooth, of a pure, clear white, growing half out of the ground, and at times to the size of a Ruta Baga, being a very choice kind for table use; of excellent flavor; sweet and mild. Pulls clean from the ground, thin skin. Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. 75c.

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 dairy men. Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. 75c.

MONARCH OR TANKARD—Very solid, fine grained, of fine flavor; grows well out of the ground and yields large crops. Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. 75c.

WHITE SWEET RUSSIAN—Excellent for table or stock. Very large size; white, solid; sweet and rich; keeps well. Pkt. 10c; oz. 20c; ¼ lb. 40c; lb. \$1.00.

Pedigreed Seed Potatoes

We are Specialists

Our Seed Potato Improvement Work is done on those varieties which have proved standard with the buyers within as well as those out of the state, who purchase Oregon stock. We offer some of the finest seed potato stock available in the Northwest; seed stock with a performance history behind it. Few farm crops are more profitable than potatoes. Potatoes are of such great importance as food, giving quick cash returns and are so valuable in crop rotations, that we maintain a separate Potato Department, under the personal supervision of a trained Seed Potato Expert—whose sole duty is Seed Potato Improvement work.

How to tell Good Seed Potatoes

Many growers plant Potatoes which are diseased and not vigorous, because certain of our most serious potato diseases cannot be recognized in the tubers. For instance, a potato inspected may be smooth and shapely and show no interior discoloration, yet serious diseases may be present which cannot be detected even with a microscope. The field, itself, may look healthy up to blossom time and only an experienced judge of the various potato diseases, can tell the symptoms of certain diseases which greatly affect yields but do not materially change the appearance of the plants. Let us take several tubers which look as nearly alike as is possible to select and plant them side by side under similar conditions and you will probably see that each vine shows various degrees of health and vigor. It is the vine that tells the story of quality. Therefore, one of the principal means we use in building up our seed stock so that it is capable of the highest yields, is to eliminate from the fields, by hand work, during the growing season, all vines which are not healthy and vigorous, leaving only the healthy vines under which the Good Seed Potatoes, with which we supply our customers, are found. Don't plant cull-making and yield-cutting seed potatoes—plant Pedigreed Seed Potatoes, true to type, containing the minimum of disease and maximum of productiveness. Start right if you hope to finish right. Even if you increase your yield by a small percentage you will more than cover the cost of your seed, and good seed is capable of doubling the yield over inferior seed. Let us be instrumental in aiding you toward profitable potato growing through our Diamond Quality seed potato supply and service.

Our Potato Specialist, Lincoln Wheeler, supervises every operation from planting, through the growing season into harvest and storage.

RESULT OF BAD STORAGE

Same seed, same planting date, same growing conditions. Note the vigorous vines at right, showing the result of our ideal potato storage facilities. At left note effect of improper storage.

RESULT OF GOOD STORAGE

View in Our Seed Potato Experimental Greenhouses, Checking Over Our Foundation Stocks

Vine Tested in the Field

**Just 9 Weeks
between
planting
And eating**

**P. S. Co's. "Earliest
of All"**

Upland Dryland Yield 250 Sacks to the Acre

IF YOU GROW FOR EARLY MARKET this variety leads them all —We submit our "EARLIEST OF ALL" fields to the Oregon Agricultural College potato experts for inspection. The tubers are of a flattened, round shape with few and shallow eyes, white skin; are exceptionally smooth, seldom making a second growth, which always insures a high percentage of marketable tubers. The tubers form close together in the hills, making digging easy. Large white blossoms easily distinguish this from some of the later varieties, the tubers of which are somewhat similar in shape. A remarkably good keeper for an early variety. An ideal forcing potato for market gardeners who grow for the high-priced early markets. Its great superiority will readily manifest itself at harvest. This is our own introduction, and for years we have made "Earliest of All" our specialty and recognize no competition in this variety. **BE SURE** of getting the genuine "Earliest of All." 10 lbs. **\$1.10**; F. O. B. Portland. Add postage for parcel post shipment. Write for special low prices on quantities.

BURBANKS

This is the standard commercial variety. It is a very profitable potato to grow, meeting the popular demand of the Pacific Coast markets. We offer a select, true, heavy-yielding strain, rogued to our standard of type and freedom from disease. Our Burbank Seed cannot be surpassed in the West. When in doubt as to the variety to plant **Burbank** will prove your safest choice. **SHIPPED IN SEALED BAGS WITH CERTIFIED TAGS ATTACHED.** 10 lbs. **85c**, F. O. B. Portland. Add postage for parcel post shipment. Write for special prices on quantities.

Healthy Burbank Plants, Assuring Maximum Yield

Dryland Upland Seed Field, Running Over 225 Sacks Per Acre

NETTED GEM

(Russet Burbanks)—A splendid late potato that is grown extensively in irrigated sections. Tubers are elongated, russet netted skin, flesh white, shallow eyes, good keepers and produce a fine yield. Our seed stock of this variety is selected and rogued to our high standards of Seed Potato requirements, and bear official Certification Tags. 10 lbs. **85c**, F. O. B. Portland. Add postage for parcel post shipment. Write for special low prices on quantities.

PRIDE OF MULTNOMAH

Our own introduction, which has stood the test for 16 years commercial growing with the greatest success and profit to the growers. This variety produces a tuber with thin white skin, shallow eyes, flesh snow white, the finest table quality and of the elongated type so popular in the western markets. Yields better than many other varieties under dry conditions due to its large root system. **SHIPPED TO YOU UNDER CERTIFIED TAGS.** 10 lbs. **85c**, F. O. B. Portland. Add postage for parcel post shipments. Write for special low rates on quantities.

for the BEST field SEEDS

Many varieties of grasses and forage plants offered by Eastern seedsmen (often under new names) will not give profitable crops in our climate and, to avoid disappointment, we refer you to the following list, which has been carefully selected and contains the most desirable varieties. A careful reading of the following pages will give you much valuable information that has required years of observation and experimenting to obtain.

BARLEY

BARLEY is a shallow feeder, the roots growing near the surface, and requires a rich, mellow soil. Responds readily to good tillage, any extra work with disc and harrow will be amply repaid. Do not try to grow upon poor, sandy or wornout soils, or where ground is not in good condition or well drained. In rotation, Barley follows Corn, Peas, Potatoes, or any cultivated crop, and is the best nurse crop for starting clovers or mixed grasses. Should be planted late after ground is warm and Spring weather settled. Plant two bushels per acre. Crimson clover planted in the Fall and plowed under after blooming in the Spring, leaves soil in fine condition for barley.

SUCCESS BEARDLESS BARLEY—Brought out and featured by Pullman Agricultural College. Straw about height of common barley, stands up better than other varieties. Contains no beard. We believe this variety will remain true to type, but do not guarantee it to do so. Write for quantity prices. Price 10 lbs. 35c, postpaid.

NEW TREBI BARLEY—Many crops of Barley are ruined by early frost. The new Trebi ripens very early and there is much less danger of frost damage than with other varieties. Large, plump berry, very thin hull, beards come off easily when threshed, giving grain a very fine appearance. Highest quality, well cleaned, free from smut, etc. Write for quantity prices. Price 10 lbs. postpaid 35c.

COMMON BARLEY—We always aim to have a nice, clean stock of good Seed Barley on hand at all times. This is the common 6-row bearded type. Write for quantity prices. 10 lbs. postpaid 80c.

HANNCHEN BARLEY—Early and best of the two-rowed barleys, drought resistant and a heavy cropper. Grown from seed secured from Oregon Agricultural College. We call attention to the plumpness of seed, thinness of hull and ease with which beards break off. Although a Spring Barley the U. S. Dept. of Agr. has successfully grown Hannchen Barley from Fall seeding where Winters are mild. Write for quantity prices. Price 10 lbs. postpaid \$1.00.

WHITE HULLESS OR BALD BARLEY—Beardless—An early Spring variety, high feeding value, said to exceed corn as a pork producer. Can be fed to all live stock—especially valuable in a mixed ration. Grain plump, heavy and when threshed is hullless like wheat. A heavy cropper. When grown and cut for hay it produces a magnificent fodder, very rich and almost equal to a grain feed. Culture same as Common Barley. Write for quantity prices. Per lb. postpaid \$1.00.

SUCCESS BEARDLESS BARLEY

BUCKWHEAT

Can be easily grown wherever wheat will grow, producing a good yield even on light or poor soil and under favorable conditions is very profitable, being in big demand for milling—also the best "bee pasture." Sow 36 lbs. per acre in drills, 48 lbs. broadcast.

COMMON—Write for quantity prices. Postpaid, 10 lbs. \$1.15.

SILVER HULL—Light gray color, rounder than common; thin husk; matures earlier, yields heavily, excellent milling variety. Write for quantity prices. Postpaid, 10 lbs. \$1.15.

JAPANESE—Ripens early and yields the largest crops. Grains extra large, dark brown, very thin hulled, makes the highest grade flour. Write for quantity prices. Postpaid, 10 lbs. \$1.15.

FLAX SEED

Selected, re-cleaned, Western grown, new crop, large plump seed. Write for quantity prices. 1 lb. ppd. 25c.

COW or THOUSAND HEAD KALE

The demand for this wonderful forage plant proves it to be the most valuable green feed for Pacific Coast dairy and stockmen; endorsed by agricultural colleges and government stations. Should be grown in same manner as cabbage. Can be set as late as July. Write for full information on planting and feeding.

A quarter of a pound of seed will produce enough Kale plants for one acre. Postpaid, oz. 10c; ¼ lb. 25c; lb. 75c.

EVERGREEN CHEAT

Evergreen Cheat Seed

(*Bromus Secalinus*)—There are several varieties of Cheats. Evergreen makes hay with a green color, and its feeding value is greater than ordinary. Especially for low or moist soil, will stand considerable overflow without harm. Excellent hay for cows or horses, but should be cut before it gets too ripe. Sow in Fall, about 100 lbs. per acre.

10 lbs. postpaid 60c; 100 lbs. F. O. B. Portland, \$2.60.

MILLETS

Sow in April, May or June, 12 to 15 pounds for seed, or 20 to 30 pounds for hay per acre.

Prices 10 lbs. \$1.50, postpaid. Write for quantity prices.

GERMAN OR GOLDEN—An improved variety, yielding a larger crop of seed than Common Millet, also taller than the Common and yields a heavier crop of hay.

EARLY FORTUNE MILLET—Has given astonishing yields of both seed and fodder. Very early. Claimed to be rust-proof. The fodder can be fed to horses and other stock without injury, even after seed has formed which cannot be done with safety with most millets. Seed is large and of a beautiful red color.

NEW SIBERIAN—Wonderfully productive, extremely hardy, about two weeks earlier than German Millet. Grows four feet tall.

COMMON—A well-known variety, three to four feet high; broad blades and strong stalks.

BROOM CORN MILLET—Somewhat variable in character and divided into several varieties, one of which is sometimes called Hog Millet, as the seed is often used to feed hogs. All of this class are better adapted to produce seed than for pasture.

WHITE WONDER MILLET—Grows four feet tall, bearing large heads covered profusely with bristles which repel attacks by birds.

IMPORTANT—Read Carefully

Clover, Grass and Field Seeds are subject to market changes, therefore we cannot print

prices good for any length of time. When ready to buy, write us for special prices, stating quantity wanted; or send in your order.

We guarantee that we will give you full value for the money sent. Pound prices quoted are postpaid.

SEED OATS

THE production of fine seed oats has always been one of our specialties and we consider them to be the most profitable and satisfactory grain crop, being indispensable to stock and dairymen, and their use as a food is constantly increasing. Planted in season, oats rarely fail, are easily and cheaply grown, and the valuable new varieties which we offer will double the number of bushels per acre that you would get from common seed oats, which means half the cost of production, or twice the profit. They mature in July from Spring sowing, giving quick returns and leaving the soil in good condition for Fall planting.

ECLIPSE—White Side Oat

A reselection from our famous "Shadeland Challenge," being equally as vigorous and early and the massive heads are uniformly larger and filled with plump, heavy thin-hulled oats of finest milling quality. The yield on light dry soil where our seed crops are grown runs from 75 to 85 bushels per acre and moist bottom land 125 per acre is not uncommon. Can be planted Fall or Spring, west of the mountains (Fall plantings should be made on well-drained soil), but in severe climates early Spring planting is best. Matured in 90 to 100 days, and can always be harvested before the Fall rains. Their beautiful bright color and plumpness command the top price in the market. 10 lbs. postpaid, \$1.00. Write for price in quantities.

CLIMAX—Tree Oat

For early Spring planting where seasons are short, in high, dry altitudes, and where quick growth and early maturity are demanded, "CLIMAX" will give a bountiful harvest of the finest oats you ever saw. The white grains are uniformly large, plump and full with a very thin hull and are often borne 3 in a spikelet, which partly accounts for its wonderful yield. In our trials "CLIMAX" has not been injured by severe early freezing and later drought, but has stood up, green and vigorous, yielding one hundred bushels per acre on hill land when oat crops throughout the same section were stunted and dried up. West of the Cascade Mountains you can plant "CLIMAX" Fall or Spring, any time the ground is fit, but where the climate is severe, Spring plantings are best.

10 lbs. postpaid 75c. Write for quantity prices.

HULLESS OATS

Grow like ordinary oats with a branching head but thresh out clean, the kernel larger than common oats and ready for milling just as they come from the cleaner, retaining all their richness and flavor. You can make your own oatmeal and it will cook quicker and you will find it of superior excellence.

DIAMOND HULLESS OATS stool freely, stand up well, will thrive wherever oats can be grown. Drought resistant, ripen in about 100 days from seeding, weight about 54 lbs. measured bushel. Sow 40 to 50 lbs. per acre. 10 lbs. postpaid \$1.25. Write for prices in quantities.

STANDARD SEED OATS

WHITE SEED OATS—A selected reselected stock of No. 1 White Seed Oats which we can supply at market prices. Write for samples and prices on the quantity you require, or send in your order.

SWEDISH RED—A tree Oat from Sweden, having a soft hull and fine straw which is ideal for hay. Grown extensively in Northern California and along the Southern Oregon Coast. Sow in Fall or Winter.

GRAY WINTER—Planted extensively throughout the Northwest as a Fall or Winter Oat. Write for prices.

FIELD PEAS

A very profitable crop and grown here very extensively. They can be grown alone or with oats. When planted with grain and cut green they make a large amount of very rich feed; also very valuable for enriching the soil if plowed under. We can supply White Canadian or Blue Bell varieties. Write for prices.

TANGIER PEAS

This field pea is used for silage and soiling purposes. Grows from 3 to 6½ feet high, and produces 15 to 25 tons of green feed per acre. Should be planted in the early Spring, when seeded alone 80 to 100 lbs. per acre, planted with a nurse crop seed half and half on basis of 100 lbs. total per acre. Price 20c per lb. postpaid; \$1.75 per 10 lbs. postpaid. Write for quantity prices.

RAPE

DWARF ESSEX—One of the best forage plants, producing immense quantities of green feed when grass and other crops are dried up. Highly recommended by Professor Shaw and other eminent authorities. Has yielded ten tons of green forage per acre with a food value double that of green clover. Excellent pasture for all stock, and fine green feed for chickens. Thrives on all soils and is ready for use in six to eight weeks from time of sowing. Also valuable for plowing under. Sow same as turnips from May until September, or sow with grain. Use four pounds per acre in drills, eight pounds broadcast. Lb. 25c; postpaid. 10 lbs. \$1.55. Write for prices in quantities.

"CLIMAX"—Always a winner

SEED RYE

Spring Rye is a very important and profitable crop useful for replacing Winter grain that has failed, or planted as a soiling or grain crop is always dependable. Should be sown at the same time as other Spring grains, using 90 to 120 lbs. per acre.

Price 10 pounds, postpaid, 75c. For larger quantities, write for prices.

SPRING RYE—Bearded—We offer a fine stock of true Spring Rye that can be planted in this section any time after the ground can be worked.

BEARDESS SPRING RYE—This splendid variety is extremely hardy, yields heavily and is preferred for stock feeding, as the small beards (about an inch long) mostly drop off in handling. Plant Fall or Spring.

ROSEN RYE—A Fall or Winter rye brought from Russia in 1909. Each head has four complete rows of grain. The grains are much larger than of common rye and the yield double and some make it stronger and say three for one. You cannot make a mistake in trying it.

COMMON WINTER RYE—Choice reselected seed. \$2.25 per hundred, F. O. B. Portland.

SPELT or Emmer

EMMER—(Triticum Dicoecum)—A profitable crop yielding 50 to 100 bushels of grain, or 4 to 6 tons good hay per acre. Thrives well on poor soil. The straw makes good feed. Sow in Spring, 75 to 100 pounds per acre. Choice, reselected seed. 10 lbs. 85c, postpaid. Write for quantity prices.

ALL FIELD SEED PRICES ARE SUBJECT TO MARKET CHANGES. You will always get your money's worth or we will quote on request.

Diamond Quality SEED WHEAT

PRIOR to the adoption of the U. S. Grain Standards the Pacific Northwest did not use the grades established by the big eastern wheat centers, but since the U. S. standards have become effective it is impossible to market mixed varieties of wheat or other grains at the best prices, and growers will find it necessary and profitable to plant only clean, pure seeds of standard commercial varieties.

We have provided splendid stocks of the best sorts for this section and when ready to buy any variety of Seed Wheat, write us for quotations on quantity wanted or send in your order and we will give full value at lowest prices. The following are standard market varieties that are known as the most profitable and best yielding.

Price, 10 lbs. postpaid, 35c. Write for quantity prices. Prices subject to change without notice.

BLUE STEM—Spring—The best known and one of the most profitable Spring varieties for the Northwest. Heads are large and well-filled. Stools freely. Grain very hard. Although a Spring variety, can be planted as a Fall Wheat in sections where Winters are mild. The Blue Stem of the Pacific Coast has a white grain and smooth chaff, quite unlike the Velvet Chaff and Red grains of the states East of the Rockies. Better results are had with this Wheat East of the Cascade Mountains, as it has a tendency to lodge in the moist sections on the Coast.

HARD FEDERATION—Spring—This wheat has been tried out by the experimental station at Moro, Oregon. It is a hard flint wheat. The government test proves it to be high in gluten, and high in yield of flour, making it one of the best milling wheats. 'Beardless, and a heavy producer, and should be an excellent variety for the Northwest. We highly recommend it.

EARLY BAART—Bearded—Spring—A Spring wheat fully as early as Marquis, a better yielder and has a large white grain of finest milling quality. In the big wheat sections of Eastern Washington, Early Baart has matured three weeks ahead of Blue Stem, giving a bigger crop and its earliness insures protection against loss from extreme heat and drouth occurring later.

MARQUIS—Spring—Marquis Wheat was produced by a cross of Red Fife and Hard Calcutta. It differs from the parent stock, Red Fife, inasmuch as it has a heavier head, shorter straw, and more flinty, very heavy, weighing about 65 lbs. to the measured bushel. Heads are beardless, chaff smooth.

LITTLE CLUB—Spring—This well-known variety has stiff straw, typical club head and does not shatter easily. A good grower, yields well. Our stock is exceptionally good, being selected from a heavy yielding strain.

LITTLE CLUB

NON-SACCHARINE SORGHUMS

They are best drilled in—using 3 to 8 lbs. per acre, depending on variety and condition. Plant in the late Spring after the ground is warm. Cultivate often, throwing earth toward the plants.

SUDAN GRASS—The great drouth resisting forage crop—All stock relish it. Under favorable conditions, it grows 7 to 9 feet, luxuriant foliage and small stems. Where growing conditions are favorable the stubble makes excellent green pasturage. Price: postpaid, 10 lbs. \$1.75. Write for quantity prices.

BROOM CORN—Dwarf Evergreen—Grows from 4 to 5 feet high and makes straw of finest quality, being almost if not entirely, free from crooked brush. Per lb., postpaid, 25c; 10 lbs. \$1.50. Write for quantity prices.

MILO MAIZE—Similar to Kaffir Corn. Erect, thick, close-jointed stalk. Height 4 to 7 feet. Heads very large, giving a heavy grain yield, is drought resistant, and succeeds on alkali soil. Plant late when ground is warm, 3 to 6 lbs. per acre. Per lb., postpaid, 20c; 10 lbs. \$1.25. Write for quantity prices.

FETERITA—This is drouth resistant and 20 to 40 days earlier than Kaffir corn. Makes splendid fodder, as well as giving a good grain yield. Per lb., postpaid, 20c; 10 lbs. \$1.25. Write for quantity prices.

KAFFIR CORN—An excellent fodder plant, yielding a large crop of fodder during a season. Grows 4 to 5 feet high. Greatly relished by cattle and horses. The seed crop is also heavy. It does best sown in drills three feet apart. Per lb., postpaid, 20c; 10 lbs. \$1.25. Write for quantity prices.

SUNFLOWER

MAMMOTH RUSSIAN—The largest and most productive variety. Grown extensively for silage for cattle and is proving of immense value. The seed is a valuable poultry food, a great egg producer. Drill in 36-inch rows with hills 4 in. apart in row. Plant as soon as the soil is in good condition in the Spring. For silage it should be cut when 25 to 30 per cent of the plants are in bloom. In food value it is equal to corn silage and the yield 3 to 4 times as great. Lb. 25c; 10 lbs. \$1.65. Write for quantity prices.

VETCHES OR TARES

Prices Subject to Change Without Notice

HUNGARIAN VETCH—A very important annual leguminous farm crop for this state, especially the western part. Its aphid resistance is probably the largest single factor toward making it a generally grown crop in Western Oregon. During years when aphids practically destroyed many other farm crops this vetch was injured comparatively little and produced practically normal crops of forage and seeds. Seldom attacked by diseases or insect pests. Hungarian is a heavier yielder in both hay and seed than any other vetches grown here, under similar conditions. 10 lbs. postpaid, \$1.25. \$6.75 per 100 lbs. F. O. B. Portland. Write for quantity prices.

COMMON VETCH—(Vicia Sativa)—Often called Fall Vetches. It furnishes an abundance of excellent feed, either green or cut and cured for hay. Seed should be mixed with an equal amount of some variety of wheat, oats or rye having a stiff straw, and the mixture sown at the rate of two bushels per acre. Vetches weigh 70 lbs. per bushel. Sow in Fall or early Spring. 10 lbs., postpaid, \$1.00.

WHITE SPRING OR PEARL VETCH—Extensively used for Spring planting, as splendid results can be had from sowings made as late as April. Yield is fully equal to that from common vetch and fully as great feeding value. 10 lbs., postpaid, \$2.00.

SAND, OR WINTER VETCHES—(Vicia Villosa)—Thrives on poor, arid, sandy soils. Sown either in Fall or early Spring, generally mixed with rye, which serves to support plants. Grows to a height of 3-4 feet; can be cut twice, when bloom appears and afterwards for seed. 10 lbs., postpaid, \$1.75.

WOOLLY-PODDED VETCH—(Vicia Dasycarpa)—It differs from Hairy Vetch, having nearly smooth leaves, purple flowers and hairy pods. On account of its earliness has advantages over Hairy Vetch. Excellent crops are produced in Western Oregon. 10 lbs., postpaid, \$2.00.

PURPLE VETCH—(Vicia Atropurpurea)—Color of blossom is deep purple. Used by orchardists for plowing under. Can be grown as cheaply as Common Vetch. Plant in Fall on well drained fertile soil, 60 lbs. per acre. It may be used as a hay or silage crop. Free from attacks of the aphid. 10 lbs., postpaid, \$1.75.

CLOVER AND ALFALFA SEEDS

Write for prices on 100 lbs. or ton lots. They are subject to market changes. Pound prices postpaid to fourth zone.

ALFALFA OR LUCERNE CLOVER

ALFALFA should be cut for hay when the shoots of the next crop appear at the base of the plants. The hay is especially valuable for dairy cows. As soon as cut it immediately commences to grow and during the hottest and driest weather when other grasses are parched and withered, it remains fresh and green and grows as rapidly as ever. On the low lands it is not an unusual thing to harvest five or six crops of hay from the same field in one season without irrigation, and the same result is obtained on high, dry lands where irrigation is resorted to. It will not succeed on hard, clayey soils. Its roots, in seeking moisture, penetrate to incredible depths. The seed should be sown in the spring, after danger from freezing the young plants is over, or in the Fall, early enough to give it a good stand before frost. The domestic acclimated seed we offer can be depended upon to give splendid satisfaction.

GRIMM ALFALFA—(Certified)—The hardest Alfalfa known. In trials, at practically every Experiment Station in the West and Northwest, it has headed the list for vigor and hardiness. Being scarce and in big demand the price is high, but the value of Grimm has been demonstrated beyond question and we recommend its trial. Per lb. **60c**; postpaid.

10 lbs. \$5.30; postpaid. Write for quantity prices.
DRY LAND ALFALFA—Will produce large, profitable crops of hay and excellent pasture on the high dry lands, and is especially recommended for the hills and plateaus where irrigation is impossible. Per lb. **35c**; 10 lbs. **\$2.80**; postpaid. Write for quantity prices.

ALFALFA—Our domestic Alfalfa is acclimated and will thrive splendidly where growing conditions are normal, including irrigated lands. Where dry farming is practical special Dry Land Alfalfa is recommended. 1 lb. **35c**; 10 lbs. **\$2.80**; postpaid. Write for quantity prices.

CLOVERS

YELLOW SWEET CLOVER, BI-ANNUAL—(*Melilotus officinalis*)—In great demand on account of its earliness, being about two weeks earlier than the white. Does not grow as tall as white, but makes just as good pasturage as white. Produces high quality hay. Per lb. **30c**; 10 lbs. **\$2.10**; postpaid. Write for quantity prices.

YELLOW SWEET CLOVER, ANNUAL—(*Melilotus Indica*)—Now recognized as the legume best adapted for green manuring in orchards because it may be planted late in the fall after all crops have been harvested, and will grow all winter with only the season's rainfall. Per lb. **30c**; 10 lbs. **\$2.10**; postpaid. Write for quantity prices.

WHITE SWEET OR BOKHARA CLOVER, BI-ANNUAL—(*Melilotus Alba*)—Excellent for pasture, hay, and a soil improver. More drought resistant than alfalfa and will generally produce a large crop of seed and hay the second year. Thrives best on alkali soil, and is well recommended for bees. Per lb. **30c**; 10 lbs. **\$2.10**; postpaid. Write for quantity prices.

HUBAM SWEET CLOVER, ANNUAL—An annual white blossom sweet clover, very similar to *Melilotus Alba*. Rapid growing, ready for cutting four months after seeding. Makes an ideal crop for turning under or soiling in orchards. Bee men are finding ideal for bee pasture, it being available the first season. Good stock pasture. Seed 20 lbs. per acre. Per lb. **55c**; 10 lbs. **\$4.80**; postpaid. Write for prices on larger lots.

CRIMSON OR SCARLET CLOVER—(*Trifolium Incarnatum*)—Highly recommended for pasture and fertilizing purposes. A thrifty annual, growing 20 to 30 inches high. Germinates quickly, grows rapidly, stools abundantly. Cut for hay when in full bloom. Planted in the Fall can be plowed under after blooming in the Spring, followed with barley or potatoes. Per lb. **30c**; 10 lbs. **\$2.30**; postpaid. Write for quantity prices.

MAMMOTH RED CLOVER—Grows very large and is used almost exclusively for plowing under for manure. Per lb. **57c**; 10 lbs. **\$5.00**; postpaid. Write for quantity prices.

RED CLOVER—(*Trifolium Pratense*)—The standard Clover for all purposes. Hardy, succeeds well on any good soil. Makes superior hay—especially mixed with Timothy—either for dairy cows or for general use. Per lb. **55c**; 10 lbs. **\$4.80**; postpaid. Write for quantity prices.

ALSIKE OR SWEDISH CLOVER—(*Trifolium Hybridum*)—A perfectly hardy perennial. Excellent for hay and pasture. Valuable for bees. Resists both drought and excessive moisture. The hay is preferred to that of Red Clover, being finer, brighter and not so dusty. Per lb. **48c**; 10 lbs. **\$4.10**; postpaid. Write for quantity prices.

WHITE DUTCH CLOVER—(*Trifolium Repens*)—Superior for pasture and for the production of honey. Makes a beautiful lawn when mixed with Blue Grass.

Diamond Fancy, 1 lb. **65c**; 10 lbs. **\$5.80**; postpaid.
Fancy, 1 lb. **60c**; 10 lbs. **\$5.30**; postpaid.

Prices Subject to Change Without Notice

LADINO WHITE CLOVER Tall growing white clover which furnishes an excellent yield of good pasturage and makes sufficient growth to be cut for hay
Will carry twice as much stock per acre as blue grass. 1 lb. postpaid \$2.00

For Lawns, Golf Courses, Vegetable and Flower Gardens, SOILTEX provides a simple and economical means of testing the acidity of the soil and determining what treatment it requires.

SOILTEX

test for acid soil

Does Your Soil Need Lime?

How Much Does It Need? Will it Pay?

"Lime, Legumes and Inoculation"—this has come to be the slogan of the progressive farmer who wants to grow better crops and increase the fertility of his farm. Alfalfa, Red Clover, Sweet Clover, all require lime. Most other crops are benefited by it. Lime corrects acidity, sets free plant-food, improves the texture of the soil, and is necessary to the activity of nitrogen-gathering bacteria.

Save Money by Testing Your Soil

To apply less lime than is required, or to fail to apply it when needed, means loss of fertility and poorer crops. To apply more lime than your soil needs is wasting labor and money. Either way, you save money by testing your soil and knowing exactly what treatment it requires.

SOILTEX Tells What Your Soil Needs

With Soiltex, a new quick, easy and accurate soil testing method developed at the Michigan State Agricultural College, you can determine exactly in a few minutes whether your soil is acid, and how much lime it needs. Each outfit will make 75 to 100 tests. Full directions, color chart and lime table included. No special knowledge or equipment required. Costs less than 2 cents per sample tested. Soiltex will save you money.

SOILTEX Pocket-size Soil Testing Outfit, with color chart and lime table. postpaid **\$1.00**

DU PONT
SEMESAN
SEMESAN JR.
SEMESAN BEL

THE PREMIER SEED DISINFECTANTS

Semesan can be applied in either the dry or liquid form to prevent or control effectively a most diversified variety of diseases borne by seeds, seed pieces, plants and soils. Semesan Jr. provides an unusually effective but inexpensive dust treatment for the prevention and control of field and sweet corn seed diseases. Semesan Bel is an excellent dust or water mixture disinfectant for controlling diseases and increasing yields of seed potatoes and other tubers.

Prices for Du Pont Semesan

2 ozs.	\$.50	5 lbs.	\$ 13.00
8 ozs.	1.60	25 lbs.	62.50
1 lb.	2.75	50 lbs.	122.50

Semesan Jr. and Semesan Bel

1 lb.	\$ 1.75
5 lbs.	8.00
25 lbs.	37.50

Ask for Free Booklets Telling All the Facts

"DIAMOND QUALITY" GRASS SEEDS "DIAMOND QUALITY"

The choicest new crop seeds, RECLEANED IN OUR SPECIAL CLEANING MACHINES IN OUR OWN WAREHOUSE AND TESTED FOR PURITY AND GERMINATION IN OUR OWN LABORATORY, the only exclusive commercial seed laboratory in Oregon. No one, unless they have visited our laboratory, can realize the painstaking study and tests, given grass seeds especially, by our Seed Analyst, co-operating closely with our recleaning department in order to give the very finest, purest seed.

Our SPECIAL MIXTURES have been carefully worked out by the tests and observations of our practical experts familiar with the requirements and conditions to be met, and will give the best results possible to obtain for the uses to which they are recommended.

DIAMOND FANCY LAWN GRASS MIXED WITH CREEPING BENT

This mixture has sufficient creeping bent to eventually dominate the lawn and crowd out the weeds, at the same time giving a fine velvety turf. Sow one pound to 200 square feet. 1 lb. **85c**; 10 lbs. **\$7.80**; postpaid.

DIAMOND PUTTING GREEN MIXTURE

For those who want a lawn like a putting green. Sow 1 pound to 200 square ft. 1 lb. **\$1.10**; 10 lbs. **\$10.00**; postpaid.

DIAMOND FANCY LAWN GRASS MIXTURE

Prepared from the choicest recleaned grass seeds, carefully selected for their fineness, their deep rooting, close growing habits and seasonable qualities; producing an ideal, dense velvety turf of lasting quality that remains green throughout the year. Sow one pound to 200 square feet. 1 lb. **60c**; 10 lbs. **\$5.30**; postpaid.

DIAMOND SHADY LAWN MIXTURE

Especially selected for producing a fine velvety lawn under firs and shade trees where most grasses do not thrive. 1 lb. **\$1.00**; 10 lbs. **\$9.30**; postpaid.

DIAMOND TENNIS COURT MIXTURE—Close growing, heavily rooted grasses for making a dense, lasting turf. 1 lb. **75c**; 10 lbs. **\$6.80**; postpaid.

FINE MIXED LAWN GRASS—A good clean mixture for general use. Makes a quick lawn and if kept cut will be lasting and handsome. 1 lb. **50c**; 10 lbs. **\$4.30**.

To have a good lawn the soil must be fine and rich, and well leveled. Then the best seed obtainable should be used. Plant any time from September until late Spring, depending upon weather and soil conditions. Raking in the seed is advisable, and rolling greatly improves the turf. In watering your lawn soak it deeply and not too often, as light watering every day brings the roots close to the surface, where they quickly burn or dry out. You must not expect to make a fine lawn with cheap seed. The best lawn grass mixture costs more at first than the poorer substitute, but will be found much cheaper and more satisfactory in the end. Sow one pound to 200 square feet.

PACIFIC CREEPING BENT GRASS

(*Agrostis Maritima*)—This is the true creeping bent, grown on this coast, acclimated to this country and especially recommended for lawns and golf courses. It makes an exceptionally fine turf that smother out dandelions and other weeds. 1 lb. **\$2.10**; 10 lbs. **\$20.00**; postpaid.

CHEWING FESCUE (*Festuca Duriuscula*)—A low-growing grass, fine leaved, forms a close turf that prevents ingress of weeds, permanent in all kinds of soils, even the lightest and driest; unexcelled for lawns and golf courses when properly grown. 1 lb. **60c**; 10 lbs. **\$5.30**; postpaid.

FOR LARGER QUANTITIES WRITE FOR PRICES—SUBJECT TO MARKET CHANGE

Grass Seeds for Lawns and Pastures—Diamond Quality

KENTUCKY BLUE GRASS—Used extensively for lawns and found in all lawn mixtures; hardy grass. 1 lb. **45c**; 10 lbs. **\$3.80**.

RED OR CREEPING FESCUE (*Festuca rubra*)—Forms a close turf, valuable for lawn and golf mixtures; thrives in sandy soils and along the Coast. (14 lbs. to the bushel.) 1 lb. **50c**; 10 lbs. **\$4.30**; postpaid.

WHITE DUTCH CLOVER—Diamond Fancy, for lawns, the finest grade, 1 lb. **65c**; 10 lbs. **\$5.80**; postpaid.

ENGLISH RYE GRASS—Short Seeded Used by many gardeners. Sown thickly, it makes a fine lawn, and for large grounds and parks is very successful. 1 lb. **25c**; 10 lbs. **\$1.80**; postpaid.

ROUGH STALK MEADOW GRASS—For shady lawns or wood pastures. An excellent grass. 1 lb. **30c**; 10 lbs. **\$7.30**; postpaid.

RED TOP (*Agrostis Palustris*)—A good perennial grass for permanent lawns and pastures. Does best on moist marshy land. If not overflow land, it is advisable to mix it with Meadow Fescue, Orchard Grass or Alsike Clover. Sow hulled seed 14 lbs. to the acre. **Diamond Fancy Hulled**—Free from chaff and light seed, 1 lb. **60c**; 10 lbs. **\$5.30**; postpaid.

Mixtures for Golf Courses, Putting Greens and Fairways

We make a specialty of assembling combinations of seeds suited to any soil and to meet any specifications. All our seeds are of the highest quality, direct from the most reliable sources of supply, and are carefully tested in our own laboratory for purity and germination, and percentage tags are attached showing tests by our certified seed analyst. We invite correspondence and specification bids.

"DIAMOND QUALITY" GRASS SEEDS FOR PASTURES AND HAY**Tall Meadow Oat Grass****POINTS OF MERIT**

Seldom fails to get a stand of grass.

Earliest grass to start in the spring and last to die in the fall.

Withstands drouth, heat and cold much better than other grasses.

In favorable season it will produce two crops in a year, (however, second crop does not develop seed).

First crop grows from five to six feet tall, consequently it makes an abundance of forage or pasture.

With proper care will make large annual yields for a period of from three to six years and longer.

It is a long lived, deep rooted perennial.

Can be successfully grown with red or alsike clovers and will mature for hay with these legumes.

Will grow equally well on bottom lands or upland clay soils, and because of its deep root system it does not rob the surface soil of its fertility as does timothy or orchard grass.

10 lbs. **\$3.10**, postpaid. Write for large quantity prices.

TIMOTHY—(Phleum pratense)—This is the most valuable of all grasses for hay. Thrives best on moist, loamy soil. Sow early in the Spring or Fall. Sow 15 to 20 lbs. per acre. Fancy, lb. **25c**; 10 lbs. **\$1.80**; postpaid.

ITALIAN RYE GRASS (Lolium Italicum)—A quick-growing grass, attaining a height of 2½ to 4 feet; very desirable for temporary meadows or pastures. Thrives best on soils that are slightly moist, and will even stand considerable overflow. Grows easily and bears an abundance of foliage that makes the best and sweetest hay imaginable. Sow 40 lbs. per acre. 1 lb. **25c**; 10 lbs. **\$1.80** ppd.

ENGLISH RYE GRASS—(Lolium perenne)—A strong-growing, hardy perennial grass, noted for its nutritive qualities. It is equally valuable for both grazing and hay. 40 lbs. per acre. 1 lb. **25c**; 10 lbs. **\$1.80** postpaid.

MESQUITE—(Holcus lanatus)—It is usually sown on virgin soil without cultivation, after the ground has been burned over. Sow about 35 lbs. to the acre chaff seed, hulled, 15 lbs. per acre. Fancy hulled seed, 1 lb. **35c**; 10 lbs. **\$2.80**; postpaid.

ORCHARD GRASS—(Dactylis Glomerata)—One of the most valuable of all the cultivated grasses, blooming with Red Clover, and making with it admirable hay. As a pasture grass it is more productive than any other, and does best under close feeding. Sow 28 lbs. per acre. Fancy Eastern, 1 lb. **35c**; 10 lbs. **\$2.30**; postpaid

KENTUCKY BLUE GRASS—(Poa Pratensis)—One of the best grasses for permanent pastures furnishing a constant supply of the most nutritious feed during the greater part of the year. Sow 28 lbs. per acre. 1 lb. **45c**; 10 lbs. **\$3.80**; postpaid.

CANADIAN BLUE GRASS—(Poa compressa)—Recommended in all pasture mixtures on dry soil; thrives well on clay or hard trodden and poor soil. Sow 28 lbs. per acre 1 lb. **55c**; 10 lbs. **\$4.80**; postpaid.

MEADOW FESCUE—(Festuca pratensis)—Perennial; grows 3 to 4 feet high. Roots deep, thus resisting drouth. It succeeds on any ordinary soil; yields a heavy crop of superior hay; one of the best grasses for pastures, being valuable to mix with other kinds. Sown alone, use 40 lbs per acre. 1 lb. **40c**; 10 lbs. **\$3.30**; postpaid.

TALL FESCUE—(Festuca elatior)—Succeeds best in moist alluvial and strong clayey soils; is very productive and lasting; valuable for permanent pasture, is relished by stock and on rich land makes fine hay—height 3 to 4 feet; weight 22 lbs. per bushel. 1 lb. **35c**; 10 lbs. **\$2.80**.

BROMUS INERMIS—Russian Forage Grass—Awnless Brome Grass—This Bromus, on account of its strong perennial character, and its unusual drouth-resisting powers, is the best grass we have for the semi-arid regions of the Northwest. Grows luxuriantly, is freely eaten dry or green by cattle and yields from two to six tons to the acre. Sow 25 to 30 lbs. per acre. Spring or Fall. 1 lb. **35c**; 10 lbs. **\$2.80**; postpaid.

BERMUDA GRASS—(Cynodon dactylon)—Suitable only for climates where the Winters are not below the freezing point. It stands the hottest and driest season. Sow 6 lbs. per acre. 1 lb. **85c**; 10 lbs. **\$7.80**; postpaid.

CRESTED DOG'S TAIL—(Cynosurus cristatus)—A perennial grass with short, narrow leaves; valuable for lawns or pastures on dry, light land; makes excellent sheep pasture. Use 20 lbs. per acre if sown alone. 1 lb. **70c**; 10 lbs. **\$6.30**; postpaid.

SPECIAL PASTURE MIXTURES

No. 1. FOR GOOD LOAMY SOIL—A mixture of Grasses and Clovers, prepared especially for good, loamy soils, that will give satisfaction as a permanent pasture, or for mowing for mixed hay. For pasture, sow 20 lbs. per acre. 10 lbs. **\$3.50**; postpaid.

No. 2. FOR IRRIGATED LANDS—Use grass pastures and avoid bloat from green Alfalfa—Sow 28 lbs. per acre, preferably in early Spring. As soon as well established give water as needed. With proper attention a permanent pasture can be maintained. 10 lbs. **\$3.60**; postpaid.

No. 3. FOR LIGHT SANDY SOIL—An extra fine mixture for sandy or light soils. This will make a good, strong turf, that under ordinary circumstances should last for many years. Sow 20 lbs. per acre. 10 lbs. **\$4.00**; ppd.

No. 4. FOR DRY LAND—Mixed especially for the regions between the Cascades and Rocky Mountains, and on good, common wheat land. Try this mixture, as we believe that it will give you best possible results. Sow 20 lbs. per acre. 10 lbs. **\$3.80**; postpaid.

No. 8. FOR ARID OR ALKALI LAND—Particularly for arid alkali land. This mixture is composed of varieties that have proven to be the best for the soils mentioned. Sow 20 lbs. per acre. 10 lbs. **\$3.50**; postpaid.

MIXTURE FOR BURNED-OVER LAND—In grading and cleaning grasses and clovers, we frequently find combinations that are difficult of separation and while the seeds are often of excellent germination and quality, they cannot profitably be separated and cleaned, so we blend them to produce pasture mixtures suitable for sowing on burns and logged off and, which at the price are splendid values and very economical for such purposes. 10 lbs. **\$2.05** postpaid; 100 lbs. **\$15.00**, f. o. b. Portland.

No. 10. HAY AND PASTURE MIXTURE FOR DRY HILL LAND—Especially suited to the dry regions, such as parts of Southern Oregon, Eastern Oregon, Eastern Washington and Idaho. This mixture is made up of varieties that can endure a great change of temperature from heat to cold, and at the same time will make a splendid mixed hay. 10 lbs. **\$3.50**; postpaid.

No. 11. FOR GRAZING PURPOSES—This is a mixture of grasses only, being made up for the benefit of those who wish a mixture without Clover, and will make a fine permanent pasture, but is not intended for hay. 10 lbs. **\$3.60**; postpaid.

No. 12. FOR BURNED-OVER BOTTOM LAND, OR LAND INCLINED TO BE RATHER DAMP—This is a mixture that will do well either for hay or for permanent pasture on land that is too wet for many of the grasses and clovers. 10 lbs. **\$3.50**; postpaid.

No. 16. LOWLAND PASTURE MIXTURE—This mixture is prepared to give continuous pasture on low, moist ground. 10 lbs. **\$2.30** postpaid; 100 lbs. **\$17.50** f. o. b. Portland.

No. 17. UPLAND PASTURE MIXTURE—In selecting different varieties for this mixture we have taken those grasses which are well known for their drouth resisting, deep rooting qualities. 10 lbs. **\$2.30** postpaid; 100 lbs. **\$17.50** f. o. b. Portland.

WRITE FOR QUANTITY PRICES ON ALL ABOVE. ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE

Diamond Quality

FLOWER SEEDS

Important Note

In our catalog we have listed our flower seeds **alphabetically**, and to assist in your selection all those marked by (B) ARE BIENNIALS, and those marked with (P) ARE HARDY PERENNIALS. THOSE NOT MARKED ARE ANNUALS.

Annuals bloom and ripen the first year and then they perish. Many annuals in warm climates, or when taken in, or protected during Winter, become perennial, with short lives.

Perennials flower several years in succession.

Biennials do not generally flower the first year, and are in their perfection the second year.

HARDY Annuals, Biennials and Perennials can be sown in open ground early in the Spring if desired, and Hardy Biennials and Perennials require no protection in Winter.

HALF-HARDY Annuals, Biennials and Perennials should not be sown in open ground until settled warm weather, though they can be sown in the house if desired, early, and afterwards transplanted. The two latter need to be protected in Winter, or carried over until Spring in cold frames or greenhouses.

PLANTS IN SEASON—In season we have a great many of the perennials that will bloom the first season and annuals for transplanting. See plant department.

More Seeds In Each Packet
This Year

We have completely checked the quantities of seeds for packets and **ALL PACKETS ARE MORE GENEROUSLY FILLED THAN HERETOFORE. YOU WILL BE WELL PLEASED WITH YOUR PURCHASES OF OUR PACKET SEEDS. DIAMOND QUALITY.**

Try some of these surprise collections. Especially put up for purposes named

"Wild Garden"
Mixture
25c

In this we offer a splendid collection of hardy annuals consisting of experimental hybrids, and special selections from fifty-acre trial grounds; also a large collection of wild flowers and standard sorts, well calculated to make a display to meet the demand for odd corner mixtures or to beautify the vacant lot where cultivation is difficult and weeds predominate. Put up in ounce packets at **25c** each postpaid.

"Cut Flower" Garden
Mixture
50c

This consists of a mixture of hardy annuals blended to give a continuous succession of cut flowers from early summer until late fall. Put up in ounce packets at **50c** each.

Shakespearean
Floral Collection

After giving the matter careful study, we find the charm of the great poet's flower-scenery consists not in the abundance of varieties mentioned, but in the touches bestowed on a few, especially when those few belong to the ranks of the "common." One of the most trustworthy tests, perhaps the final test of the great poet is that he makes the old-fashioned seem new, and the unimportant rare and golden. Some few of the flowers mentioned in his works such as Crown Imperial, Lady-Smock, Long Purple, Mandrake, etc., have been difficult to identify or impracticable to procure. Nevertheless, we have worked out a collection of fifteen items which will make a splendid showing, and, we believe, be as complete as it is possible to obtain. These are the Aconitum or Monks Hood, Bachelor Button, Carnation, Columbine, Cowslip, Crow-flower, Daisy, Hare-Bell, Mallow, Marigold, Oxlip, Pansy, Pink, Poppy and Primrose. Purchased separately these would cost \$2.25. We offer the collection complete for

\$1.65

POSTPAID

The Violet also can be had in plants at **\$2.00** per dozen.

Everlasting or
Straw Flowers

Acroclium (Everlasting),
pkt. **10c**
Gysophila (Baby's Breath),
Pan. Fl. Pl., pkt. **15c**
Helichrysum (Straw Flower),
pkt. **10c**
Statice (Sea Lavender), pkt. **10c**
Collection 1 pkt. each of above
35c postpaid.

Acroclium—A favorite with florists. Very long, narrow petals, toward the center they cross and recross in splendid confusion, strong, branching habit.

Gysophila—A pretty, free-flowering plant bearing beautiful, small, star-shaped flowers in great profusion. Grows from 18 to 24 inches, sometimes reaching a height of 3 feet. Fine for bouquets.

Helichrysum—One of the best for Winter bouquets. Hardy annual. Colors, red, yellow and white. Effective for bedding.

Statice—Splendid for border or rockery, producing panicles of minute flowers, can be dried and used for Winter bouquets.

GARDEN GUIDE, the Amateur Gardener's Hand Book
380 pages of the best information available, with planting charts, profusely illustrated, 5x7 1/4 in., paper covers
Postpaid
\$1.00

ASTERS

Asters grow to perfection in our mild, cool climate and splendid strains of the best-known sorts have been developed by careful selection. As Fall bloomers for garden or cut flowers, asters are most satisfactory, and the varieties we offer can be depended on for best results, rivaling the chrysanthemum in size and beauty. A rich moist soil required

California Giants

The California Giants are today the most popular Asters in all flower shops and also in exhibition shows. Word has just been received that these Asters are in line for an "Award of Merit" because they are so much larger and finer than the Cregos. The petals are stronger and will stand out and will last longer than the Crego. The immense size and beauty, as well as the long sturdy stems, make them very attractive when arranged in floral work. They combine the vigorous and robust growth, which characterizes the Beauty type, with the Crego or Ostrich Feather type of flower, and are a true non-lateral type. We offer the following shades: Peach Blossom, Light Blue, Deep Rose, Dark Purple, White. Packets 15c; 1/4 oz. 75c: postpaid.

Beauty Type

The Beauty type, a very recent introduction, is really the Branching Aster over again, only on very long stems that are unlateral. The plants grow 2 to 3 feet high, are of branching habit, and the late type begins to blossom in early September, lasting until destroyed by frost. The flowers are large, borne on long stout stems from 18 to 24 inches, making them most desirable for cut flowers.

You can cut long stems from an Aster branch and still have your plant grow and develop more flowers. The Beauty type form a shrub more than a plant and do exceptionally well in this section.

EARLY BEAUTY TYPE—This is valuable for localities where the season is too short to flower the late type before frost, and also for early forcing. It must be remembered, however, that this is not an extra early Aster such as Early Express or Queen of the Market. Planted at the same time, this type flowers with the Crego and American Branching. We list the following shades: Azure Fairy, Carmine Rose, Crimson Beauty, Lavender Beauty, White Beauty, Peach Blossom, September Beauty, Purple Beauty, Rose Beauty. Packet 15c; 1/4 oz. 50c.

LATE BEAUTY TYPE—Large flowers borne on long stout stems beginning to flower early in September and lasting until destroyed by frost. We list the following shades: Crimson Beauty, Lavender Beauty, Peach Blossom, Rose Beauty, Purple Beauty, September Beauty. Packet 15c; 1/4 oz. 65c.

CREGO ASTERS—Distinct in every way, and its magnificent flowers have rare beauty of form and brilliant coloring, are very vigorous and free flowering. Shades: Pink, rose, crimson, white, lavender, purple, or mixed colors. Pkt. 10c; 1/4 oz. 50c.

ASTER-MUM—Resembling chrysanthemums in form, hence the name "Aster-Mum." Plants about 2 feet high with good stems. Earlier than "Crego." Mixed. Pkt. 10c; 1/4 oz. 50c.

GIANT COMET—Flowers large and beautiful; petals long and twisted. Mixed. Pkt. 10c; 1/4 oz. 50c.

LATE BRANCHING—Flowers large, beautiful, double and borne on long stems. Mixed. Pkt. 10c; 1/4 oz. 50c.

"MIKADO OR ROCHESTER"—Very long, narrow petals, toward the center they cross and recross in splendid confusion, strong branching habit. Mixed. Pkt. 10c; 1/4 oz. 50c.

QUEEN OF THE MARKET—Best early Easter, of graceful spreading habit. Mixed. Pkt. 10c; 1/4 oz. 50c.

PERENNIAL ASTERS—Hardy, handsome flowers of easy culture, appearing at a time when flowers are scarce. If seed is sown indoors very early and seedlings set in open as soon as large enough to handle, will bloom the first season. Large Flowering Mixed. Pkt 10c.

ACROCLINIUM — Everlasting—Grows about 15 inches high, white or rosy pink flowers, when cut in bud state, can be dried and used for winter bouquets. Sow early in sheltered location and transplant to permanent bed. Mixed. Pkt. 10c; oz. 75c.

AGERATUM — (Mexicanum) — For borders and bedding; covered with feathery blossoms all Summer; sow in early Spring in boxes to transplant or sow out of doors and thin to 4 to 6 inches. Shading dark blue to white. 1 to 1 1/2 ft. tall. Dark Blue, White or Mixed. Pkt. 10c; 1/4 oz. 25c.

AGROSTEMMA (P) — (Atro-Sanguinea) Foliage silvery white, blossoms crimson, resembling single pinks. Strikingly beautiful for beds, ribbons and borders. Should be sown where plants are to remain and thinned to prevent crowding. Height 2 feet. Perennial. Pkt. 10c; oz. 65c.

ALTHAEA—(See Hollyhocks).

ALYSSUM (P) — (Saxatile) — Showy, yellow flowers, blooms first season if sown early indoors. Fine for borders. Height 6 to 12 inches. Pkt. 10c; 1/4 oz. 40c.

ALYSSUM—A dainty white flower, for borders, edging and rockwork. In borders, sow thickly so as to form masses. Height 4 to 10 inches. Sow in Spring or late August. Maritimum—Sweet. Pkt. 10c; oz. 50c. Little Gem—Pkt. 10c; oz. \$1.00. Procumbens — Of trailing habit; profuse bloomer. Pkt. 10c; oz. \$1.00. **ANCHUSA (P)**—(Italica)—(Drop More)—A splendid, free blooming plant for hardy borders, height about 5 feet. Flowers a beautiful gentian blue color. Seeds should be sown in sheltered place outdoors and transplanted 2 to 3 feet apart. Pkt. 15c; 1/4 oz. 50c.

ALL PRICES ON THIS PAGE POSTPAID

BACHELOR'S BUTTON — (*Centaurea Cyanus*—or Corn Flower)—A hardy, annual, easily cultivated. Produces flowers of a great variety of rich colors on tall, branching stems, with but little foliage. Striking and handsome. Sow in open ground early and transplant. 1 to 2 feet tall.
 Fine Single Mxd. Pkt. 10c; oz. 40c.
 Fine Double. Mxd. Pkt. 10c; oz. 75c.
 Single Blue. Pkt. 10c; oz. 50c.
 Double Blue Florist Strain. Pkt. 10c; oz. 75c.
 Double Pink Florist Strain. Pkt. 10c; oz. 75c.

BALSAM — ("Lady Slipper")—Handsome plants, producing masses of various colored flowers, half hardy. Curious seed pods which, when ripe, will explode when touched. If sown in May should bloom from July until frost. 1 to 1½ feet tall.
 Double Comelia Flowered—Mixed Pkt. 10c; ¼ oz. 30c.

BLUE LACE FLOWERS—(*Didiscus*)—Plants grow about 18 inches in height, and are covered with clusters of tiny petaled flowers, giving the effect of dainty lace. The color is an exquisite light blue. Pkt. 15c; ¼ oz. 65c.

MARANTHUS—Handsome foliage and interesting flowers, making a striking effect in borders and beds. Thrives in hot, sunny situation with rather poor soil. 2 to 5 feet. Sow early and transplant. *Salicifolius*—Willow leaved. Pkt. 10c; ¼ oz. 50c. *Caudatus* (Love Lies Bleeding)—Graceful drooping flowers. Pkt. 10c; oz. 25c.

Tri-color, or Joseph's Coat—Foliage scarlet, yellow and green. Pkt. 10c; oz. 75c.

VIQUELEGIA—(See Columbine).

VRABIS (P)—(Rock Cress)—One of the earliest and prettiest Spring flowers for rockeries or edging, withstands drought; pure white flowers. Sow in permanent location and thin to 6 inches. Height 6 to 8 inches. *Alpina*. Pkt. 10c; ¼ oz. 30c.

CALENDULA—(Pot Marigold)—The well-known Pot Marigold, valued by Europeans for flavoring soups and stews. Flowers are dried in Fall and kept in paper bags for use. In mild climates this plant will bloom nearly all the year around. Colors range through yellow, orange and gold. 1 to 2 feet tall. Plant in early Spring in open ground.
 Orange King—Dble. Pkt. 10c; oz. 50c.
 Meteor—Double. Pkt. 10c; oz. 25c.
 Lemon Queen Dble. Pkt. 10c; oz. 35c.
 Double Mixed. Pkt. 10c; oz. 20c.

CALLIOPSIS—Very showy and attractive, always covered with a mass of bright flowers, yellow, crimson and maroon. Sow where plants are to remain. In sunny situation will bloom all Summer. Fine cut flowers. 1 to 2 feet tall.

Crimson King.	Pkt. 10c; oz. 50c
Golden Wave (Drummond).	Pkt. 10c; oz. 50c
Coronata Maxima.	Pkt. 10c; oz. 75c
Fall Single Mixed.	Pkt. 10c; oz. 35c
Fall Double Mixed.	Pkt. 10c; oz. 40c
Dwarf Mixed.	Pkt. 10c; oz. 50c

CANDYTUFT—(*Iberis*)—One of the most highly prized annuals for beds or masses, very useful for cutting. For early blooms sow indoors, transplanting to garden when 2 to 3 inches high. Sowings every two weeks in the open will flower from July until frost. Grow 1 to 1½ feet.
Umbellata Type—Carmine, Flesh Pink, Rose Cardinal, Crimson, Lavender, White, Mxd. Pkt. 10c; oz. 65c.
Coronaria—Giant White Hyacinth Flowered. Pkt. 10c; ¼ oz. 30c.

ARCTOTIS GRANDIS

ARCTOTIS GRANDIS — (*African Daisy*)—Plants form bushes about two feet across with deeply cut foliage, and daisy-like flowers often 2½ inches in diameter, color of a lilac tinge. Pkt. 10c; ½ oz. 50c.

BALLOON VINE—A rapid growing climber. Blossoms very small and white. Light, graceful foliage. Bears curiously inflated seed pods. Sow where it is to remain. Succeeds best in light warm soil. 10 to 12 feet tall. Pkt. 10c; oz. 35c.

CANTERBURY BELLS (B)—(*Campanula*)—Very ornamental garden plant growing 2½ feet high, producing large, nodding and charming bell-shaped flowers of many exquisite shades. Hardy biennial. Sow seeds in May. Keep seedlings well watered and transplant to permanent location in July or August. Give rich soil and plenty of room.
 Medium Single—Blue, rose, white or mixed. Pkt. 10c; ¼ oz. 25c.

Calycanthema—Cup and Saucer—White, pink, light blue or mixed. Pkt. 15c; ½ oz. 60c.

Persicifolia (P)—Very fine, blooms in June. Blue or White. Pkt. 15c.
Pyramidalis (P)—Stately, hardy plant for pot culture or garden. Blue or White. Pkt. 10c; ½ oz. 50c.

CARDINAL CLIMBER—Considered the most beautiful and brilliant annual climber. A strong and rapid grower, with fern-like foliage literally covered with a blaze of circular cardinal red flowers from midsummer until frost. Annual. Pkt. 15c; ¼ oz. 95c.

CARNATION (P)—(*Dianthus Caryophyllus*)—Carnations are Tender Perennials, being easily winter killed. Splendid for cut flowers, deliciously fragrant. Colors pink, white and red. Sow seeds indoors in March. Transplant seedlings to other boxes when 1 inch high. Keep them growing well until soil is warm, then transfer to open garden. Height 1 to 1½ feet. See Plant Dept. also.

Chabaud Everblooming—Extra Choice Double Mixed—Flowers in five to six months. Pkt. 15c.
 Double Grenadin—Comes in to bloom very early and the charming, double, scarlet flowers are very valuable for forming bouquets. Red White. Pkt. 15c.

Margaret—Finest Double Mixed—Bloom in four months from seed. Pkt. 10c; ¼ oz. 50c.
 Giant or Malmation—Mixed. Pkt. 15c.
 Double Dwarf Vienna—Mixed—Large flowered and comes into bloom early, producing flowers of many colors and beautiful markings; largely double. Pkt. 10c.

CASTOR BEAN—(*Ricinus*)—Tropical appearing foliage plant. Highly ornamental, of stately growth, large leaves of bronze or glossy green. Should not be planted until soil is warm. Grows 3 to 5 feet tall.
Sanguineus—Brilliant scarlet stems and fruit. Pkt. 10c; oz. 25c.
Zanzibariensis—Surpasses all in size and beauty of colors. Mixed. Pkt. 10c; oz. 25c.
 Best varieties mxd. Pkt. 10c; oz. 25c.

CATCHFLY—(*Silene*)—A hardy annual, yielding for a long time a profusion of umbels of bright colored flowers in various shades of pink. Fine for border or rockery. The plant is covered with glutinous moisture, to which flies adhere, hence its name. Sow in boxes and transplant as soon as large enough. Fine Mixed. Pkt. 10c; oz. 45c.

ALL PRICES ON THIS PAGE POSTPAID

CELOSIA CRISTATA — (Cockscomb)

Very attractive and showy, producing massive heads of deeply colored flowers. Colors, red, purple, and yellow. Sow very thinly in boxes indoors, transplanting to other boxes or thumbpots until little combs appear. Grows 9 to 12 inches tall.

Cockscomb Tall Mixed. Pkt. 10c; oz. \$1.00
Dwarf Empress. Pkt. 10c; ¼ oz. 75c
Dwarf Fine Mixed. Pkt. 10c; ¼ oz. 65c

CELOSIA PLUMOSA — (Feathered) —

Large plummy heads. For pots or open ground. Keeps well when cut. 1 to 2 feet tall. Finest Mixed. Pkt. 10c; oz. \$1.00.

Childsii — (Chinese Wool Flower) — A unique form of feathered celosia, growing 2 to 3 feet high, each branch terminated with a large head of rich crimson flowers that look as if made of silky wool. Effective in beds and borders. Valuable for cutting, as they can be dried, retaining their bright colors for weeks. Pkt. 15c; ¼ oz. 75c.

CENTAUREA — Sweet scented flowers

on long, strong stems. Will last several days when cut. Sow where plants are to remain, thinning to 12 inches apart. Grows 1 to 3 ft. tall.

Imperialis — (Giant) — White, purple, rose, deep lavender, and mixed. Pkt. 10c; ¼ oz. 35c.

Suaveolens — Yellow Sweet Sultan. Pkt. 10c; ¼ oz. 30c.

Moschata Mxd. — Pkt. 10c; ¼ oz. 30c.

Candidissima — (Dusty Miller). Pkt. 15c; ¼ oz. 75c.

CHRYSANTHEMUM — Very showy, effective and desirable as Summer flowering plants. Hardy annuals. Sow seeds in flats very early in Spring and transplant to garden when soil is warm. Grows 1 to 2 feet.

Carinatum Hybridum — Finest double mixed. Pkt. 15c; ¼ oz. 25c.

Carinatum and Segetum — Varieties fine mixed, contain a fine range of colors. Pkt. 10c; oz. 50c.

Coronarum — Double finest mixed. Pkt. 10c; oz. 40c.

CINERARIA (B) — Magnificent and indispensable flowering plants for the window gardens. White, blue, violet and crimson shades, covering the plant with a sheet of bloom. Should be sown under glass in very fine soil.

Hybrida Grandiflora — Choicest mixed (Pot Plant). Pkt. 50c.

Hybrida — Fine Mixed. Pkt. 25c.

Dusty Miller — (Maritima) — Beautiful silvery-leaved border plant; half hardy perennial. Pkt. 10c; ¼ oz. 35c.

CLARKIA — Hardy annual of easy growth, produces a fine effect massed in beds, bright and attractive. Fine for cutting. Does well in shade. Sow early in open ground. Grow 1 to 2 feet tall.

ELEGANS DOUBLE

Chamois — With touch of pink. Pkt. 10c; ¼ oz. 35c.

Scarlet Queen. Pkt. 10c; ¼ oz. 35c.

Salmon Queen. Pkt. 10c; ¼ oz. 35c.

Purple Prince. Pkt. 10c; ¼ oz. 35c.

White. Pkt. 10c; ¼ oz. 35c.

Fine Mixed. Pkt. 10c; ¼ oz. 30c.

CECILE — A splendid plant for large beds of shrubby border. Of branching habit, each branch producing a large head of attractive flowers. Sow in open ground as soon as weather is warm and settled. Height 3½ feet. Fine for bees. Mixed. Pkt. 10c; oz. 65c.

OBEDIA SCANDENS — (Plants in Season)

A handsome, rapid-growing, climbing plant, having large, bell-shaped flowers, beautiful foliage and peculiarly delicate and curious tendrils. Seeds should be planted on edge in shallow boxes of soft soil, covering with glass until seedlings appear. Transplant about May.

Purple. Pkt. 10c; ¼ oz. 25c.

White. Pkt. 10c; ¼ oz. 50c.

COIX LACHRYMAE — (Job's Tears) — A

broad-leaved ornamental grass, having large, tear-shaped, hard shining, pearl-gray seeds. Plant in prepared seed bed in open. Oz. 10c.

COLUMBINE (P) —

(Aquilegia) — Universal favorite for hardy borders and beds, for no other plant has so airy a grace or is more effectively adapted for cut flowers.

Single Mixed. Pkt. 15c; ¼ oz. 50c.

Double Mixed. Pkt. 15c; ¼ oz. 50c.

Long Spurred Hybrids — Mrs. Scott Elliott strain, extra large flower, sweet scented, long spurred and best range of colors. Pkt. 25c; 1-16 oz. 50c.

COREOPSIS (P) — (Lanceolata) —

Large, showy, bright yellow flowers produced in great abundance from June until frost; fine for cut flowers. Sow seeds indoors very early, transplanting to open when soil is warm. Height 1 to 2 feet.

Pkt. 10c; oz. 65c.

COSMOS — Beautiful autumn blooming

plants producing thousands of artistic flowers in pure white, pink and crimson shades, furnishing an abundance of cut blooms for Summer and Fall decorations. In this climate the late flowering types do not, as a rule, bloom much before early frosts, hence we list only early flowering types which by careful selection now have flowers as large as the late flowering kinds. Seed sown in the open ground in April should produce plants covered with blooms in July, or 6 weeks to 2 months earlier than late flowering. Plant not less than 18 inches apart in rows or in masses in beds. Pinching out tops when plants are a foot high makes them bushy and sturdy.

Cosmos — Extra Early Mammoth Flowering — Crimson. Pink. White. Pkt. 10c; oz. 65c.

Finest Mixed. Pkt. 10c; oz. 60c.

EXTRA EARLY DOUBLE CRESTED or **ANEMONE FLOWERED** — The newest thing in Cosmos.

Crimson. Pkt. 20c; ¼ oz. \$1.00.

Pink. Pkt. 20c; ¼ oz. \$1.00.

White. Pkt. 20c; ¼ oz. \$1.00.

Finest Mixed. Pkt. 20c; ¼ oz. 90c.

Klondike — Blooms very early and continuously 3 to 4 ft. high; flowers large, orange, borne on long stems. Pkt. 10c; ¼ oz. 75c.

YPRESS VINE — (Ipomoea Quamoclit)

— Climber with rapid growth. Has delicate fern-like foliage and great numbers of star-shaped blossoms with long tubes. Soak seeds over night in warm water, then sow where vine is to grow. Does best in warm sunny location. Grows 10 to 15 feet. White. Scarlet or Mixed. Pkt. 10c; oz. 75c.

HAHLIA (P) — A magnificent, Fall

blooming tuberous-rooted plant. Sow seed in boxes indoors very early, transplanting to open when danger from frost is past. Will bloom first season. Tubers of the best ones may be saved for following season.

Double Mixed. Pkt. 15c; ¼ oz. 50c.

Single Mixed. Pkt. 10c; ¼ oz. 40c.

Cactus — Flowers odd and fantastic in shape; all colors.

Finest Mixed. Pkt. 15c; 1-16 oz. 50c.

DAISY (P) — (Bellis Perennis) — Popular

low-growing plant bearing beautiful flowers. Hardy perennial. Sow in boxes about August and transplant to cold frame or some location where they may be protected the first Winter. Plant in permanent location early in Spring. Height 6 inches.

Extra Double Mixed. Pkt. 10c; ¼ oz. 50c.

Giant Double Monstrosa — Dark red, white rose-pink. Pkt. 25c; 1-16 oz. 60c.

Shasta Alaska — Very hardy; profuse bloomers; flowers very large and borne on long stems, single; petals pure glistening white dark center. Pkt. 15c; ¼ oz. 95c.

DATURA — Large, strong-growing

plants, trumpet-shaped flowers, white, sometimes tinted with blue. Roots can be preserved like Dahlias. Sow in sheltered bed in open and transplant when 2 to 3 inches high. Give plenty of room and rich soil. Height 2 to 3 feet.

Fastuosa — Double mixed. Pkt. 10c; oz. 65c.

Cornucopia — Pkt. 15c; oz. \$1.25.

DELPHINIUMS — See Next Page

DIAMORPHOTHECA AURANTIACA —

(Orange African Daisy) — Extremely showy annual with bushy plants 12 to 15 inches high. Flowers are 2½ inches across, of a unique rich glossy orange gold, with dark disc and halo. Presenting a magnificent sight in full bloom. Pkt. 10c; oz. 50c.

DIGITALIS (B) — (Fox Glove) — A tall

growing biennial with large leaves and spikes of vari-colored and spotted flowers. Fine for borders or background. Sow seeds in prepared seed bed in May. Keep seedlings well watered and transfer to permanent location in July or August. Give rich soil and plenty of room. Height 3 to 6 feet.

Gloxiniiflora — Mixed. Pkt. 10c; ¼ oz. 50c.

ALL PRICES ON THIS PAGE POSTPAID

Last year we introduced for the first time and put on the market, seed from the splendid collection of locally developed varieties. At that time we were only able to offer the seed in mixture, but now we are in a position to offer the following splendid collection of named varieties:

WING'S "WREXHAM" STRAIN DELPHINIUM HYBRIDS

FEATHERS—This is a perfect single flower of Hortense violet color shaded Smalt blue. The bee is small and dark with three small light feathers. It produces three feet of fine flowers gracefully arranged on the spike.

JOAN OF ARC—Very large semi-double delphinium of intense color. Inner petals of a Hyacinth violet and the outer ones a Lyons blue, tipped Hyacinth violet. It has an immense dark brown furry bee.

MILLCENT—This is a lovely semi-double iridescent flower of Forget-me-not blue faintly tinged with Mallow pink. Very attractive.

PAUL REVERE—A large semi-double Hortense violet with large brown bee. The three outer petals marked with Ultra-marine blue.

SALLY ANN—This is a large single Mazarine or sky-blue, with petals heavily tinted Mallow pink and has a small dark bee.

SPRINGTIDE—Is a large semi-double with an irregular white bee. The outer petals are sky-blue, banded lilac. Inner petals are lilac.

TOWN TALK—A very fine semi-double, with outer petals Salvia blue. The inner petals are light Hortense violet blended with Salvia blue. Curved over a half hidden bronze bee.

VANITY FAIR—This has a large semi-double flat flower with brown bee, feathered gold. The inner petals are a pale Ampero purple as are also the outer ones, but marked Forget-me-not blue at the tips.

Packets of 100 seed \$1.50 each, or the collection of 8 packets for \$10.00 ppd.

Delphiniums

"The New Popular Flower of the Day"

Within the past few years, the culture of Delphiniums has advanced tremendously, particularly here in the Pacific Northwest where climatic conditions are so favorable for their perfect development. These profuse blooming plants with tall spikes of many colored blooms offer great possibilities in adding color, character and charm to the floral garden. In fact Delphinium have lately come into their own and no garden is complete without them.

Locally, large sums of money were spent in purchasing prize-winning strains such as "Wrexham," from the north of Wales. Time and patience were spent in their cultivation, elimination of weak varieties and re-selection, in order to find not only the one rarest in size and color, but the varieties best suited to our climate and soil.

WING'S "WREXHAM" STRAIN HYBRIDS MIXED

Original stock came from the famous Watkins Samuels, Wrexham strain from the north of Wales. The range of colors in this mixture runs through the most delicate combination of Mauve and light blue, Crater Lake blue, heliotrope, pink-lavender, creamy-white, deep blue, purple, etc. With proper care and cultivation, flower-blooms will measure two to three inches in diameter and the plants sometimes reach the height of over seven feet.

Regular packet of 100 seed \$1, postpaid

N. B.—It has been stated that Watkins Samuels, the originator of the famous "Wrexham" strain, has now contracted his entire supply of seed to an Eastern dealer, who is offering it at a price many times higher than quoted above.

STANDARD VARIETIES

We also offer the following very excellent collection of the regular standard sorts of Delphiniums for those who desire some of the older and less expensive strains.

Belladonna—Light blue. Pkt. 25c; ¼ oz. \$1.25

Bellamosum—Dark blue. Pkt. 15c; ¼ oz. \$1.25

Cardinale—Scarlet. Pkt. 15c; ¼ oz. \$1.00

Chinese Azure Fairy—Blue. Pkt. 10c; ¼ oz. 50c

Chinese Blue Butterfly—Pkt. 10c; ¼ oz. 60c

Chinese Album White—Pkt. 10c; ¼ oz. 50c

One pkt. each above six varieties, 60c

Prices are postpaid

CULTURE—The growing of Delphiniums from seed is a most interesting game. The best time for sowing seed is immediately after it is ripe and the next best is in January or February in a hotbed or greenhouse. If you have a furnace heated house you may even do it there. Take a flat or box three or four inches deep and place pieces of broken crocks in the bottom to provide plenty of drainage and above this one inch of coarse leaf mold. Then use a combination of two parts broken up turf, one part sifted leaf mold and one part sand. Sow the seed in shallow drills and cover lightly with some of the top compost, under no circumstances deeper than an eighth of an inch. Water through a piece of cheesecloth or bagging so the seeds are not washed. Great care must be taken not to let the seeds dry out. Seeds should germinate in from two to three weeks, sometimes it takes much longer. When the plants have made their first true leaves, transplant to other flats and about April or early in May set them out in the open. Give plants fine open ground to grow in, cultivation and the proper fertilizer and they will reward a hundredfold.

EUPHORBIA—Branching, bushy plants with smooth, glossy leaves of various colors. Suitable for beds or borders. Sow in open ground, transplanting when few inches high. Give plenty of room. Good foliage plant. Height 2 to 3 feet.

Variegata, Snow on Mountain. Pkt. 10c; ¼ oz. 25c.

Heterophyllia—Painted leaf. Annual poinsettia. 3 feet. Pkt. 15c; ¼ oz. 35c.

EVENING SCENTED PRIMROSE (See Oenothera)

FORGET-ME-NOT (P)—(Myosotis) Beautiful Spring favorites of easy growth, bearing clusters of lovely, small blue flowers. Can be left in open ground except in very cold latitudes. Fine for borders and shady situations. Sow in box or prepared bed in the open. Height, one foot.

Alpestris—Of trailing habit, with pretty flowers. Blue or mixed. Pkt. 10c; ¼ oz. 65c.

Victoria—Flowers large, bright azure blue; fine for borders. Pkt. 10c; ¼ oz. 70c.

Semperflorens—Dwarf; continuous bloomer; blue. Pkt. 15c; ¼ oz. 70c.

FOUR O'CLOCK—(Mirabilis Jalapa)—Marvel of Peru—Easy culture, bearing a profusion of bright flowers of various shades. Flowers open at four o'clock, close in morning. Sow seeds early in the open and transplant. Grows 2 to 3 feet high. Choice Mixed. Pkt. 10c; oz. 25c.

AILLARDIA—(Blanket Flower)—Very showy garden plant, with brilliant flowers; free blooming from early Summer until Autumn; especially effective in masses. Sow early where plants are to bloom. Colors crimson and orange. Splendid cut flowers. Height 1 to 2 feet.

Picta Lorenziana—Double; finest mixed; annual. Pkt. 10c; ¼ oz. 25c.

Picta Single—Finest mixed. Pkt. 10c; ¼ oz. 20c.

(P) Grandiflora Maxima. Pkt. 10c; ¼ oz. 40c.

GERANIUM (P)—A half-hardy perennial, easily and quickly grown from seed. Sow thinly in boxes indoors, covering with glass until seedlings appear. When about one inch high transplant to small pots in rather poor soil firmly pressed down. Can later be re-potted in larger sizes or transferred to open garden.

Zonale—Extra choice, single mixed, the well-known bedding Geranium. Pkt. 15c; ½ oz. 95c.

Lady Washington—(Pelargonium)—Foliage green; flowers large, Finest mixed. Pkt. 25c; 100 Seed \$2.25.

GEUM (P)—(Chiloense)—Hardy, free-blooming plants. Fine for bouquets. Flowers crimson, double. Blooms all Summer. Height 8 to 12 inches.

Mrs. Bradshaw—Pkt. 25c; ½ oz. 75c

GODETIA—Profuse and constant bloomers, compact and bushy in growth. Colors rose, crimson, white and pink. Sow indoors in boxes and transplant. Succeeds in poor soil. Height 1 foot.

Dwarf—Fine Mixed. Pkt. 10c; ¼ oz. 35c.

Gloriosa—Dark Red. Pkt. 10c; ¼ oz. 35c.

Duchess of Albany—White. Pkt. 10c; ¼ oz. 35c.

GOURDS—Good climber. For covering verandas and trellis work; rapid growth, bearing fruits of curious shapes. Plant after soil is warm. Height 10 to 12 feet.

Calabash—Pkt. 10c; oz. 35c.

Mixed Varieties—Pkt. 10c; oz. 35c.

GYSOPHILA—Easily raised from seed. Grows from 18 to 24 inches, bearing beautiful star-shaped flowers in great profusion. First sowings in flats very early and transplanted. Make later sowings in open ground.

Grandiflora Elegans—White Paris market. Pkt. 10c; oz. 30c.

GYSOPHILA (P)—(Baby's Breath)—A pretty, free-flowering plant. Fine for bouquets. Seed very small. Sow in boxes indoors, covering lightly with sifted soil firmly pressed down. Transplant soon as large enough to handle. Height 2 to 3 feet.

Paniculata—Foliage fine; covered with tiny, pure white flowers. Hardy. Pkt. 10c; ¼ oz. 25c.

Paniculata Fl. Pl. New—About 50% double. Pkt. 15c; 1/16 oz. \$1.50.

HELICHRYSUM—(Straw Flower)—**Monstrosum**—Ever lasting. One of the best for Winter bouquets. Hardy annual. Colors, red, yellow and white. Effective for bedding. Sow in open and transplant or thin to 12 inches. Double Mixed. Pkt. 10c; ¼ oz. 25c.

HOLLYHOCKS—(New Annual)—**Hybrida Semperflorens**—This splendid variety will bloom in August, from Spring planting, continuing until frost. This is a great advantage, as other varieties do not bloom until the second year.

Finest Single Mixed. Pkt. 10c; ¼ oz. 30c.

HOLLYHOCK (B), or **Althaea**—A great improvement over the old type, the flowers being larger and richer colored. For backgrounds there can be nothing better. Hardy. Should be sown in open from Spring to mid-Summer, transplanting in late Fall. Give rich soil for best results. Five feet high. Chaters—Superb strains. Double varieties; of greatest perfection.

Scarlet, Rose, Newport Pink, Maroon, Yellow, White. Mixed. Pkt. 10c; ¼ oz. 85c.

HUNNEMANNIA—(Giant Yellow Tulip Poppy or Bush Eschscholtzia)—Best of the Poppy family for cutting. Seed sown early in May will, by the middle of July, produce plants covered with their large, buttercup yellow, poppy-like blossoms, and never out of flower until a hard frost. Height 2 to 3 feet.

Fumariaefolia—Pkt. 10c; oz. 75c.

HYACINTH BEAN—(Dolichos Lablab)—Rapid growing, ornamental, climbing annual, bearing clusters of beautiful purple and white flowers, followed by highly ornamental seed pods. Sow seeds early where vine is to remain. Mixed. Pkt. 10c; oz. 15c.

ICE PLANT—(Mesembrianthemum Crystallinum)—Pretty Summer trailing annual for vases and rock work; leaves covered with ice-like drops. Sow seeds early in boxes. Height ½ to 1 foot. Pkt. 10c; oz. 75c.

KOCHIA CHILDSII—(Summer Cypress) Forms symmetrical decorative bushes, foliage green, turning to fiery red in Autumn. Sow in open and thin to 15 inches. Valuable for Summer hedges. Height 1 to 2 feet. Pkt. 10c; oz. 35c.

KUDZU VINE (P)—(Pueraria Thunbergiana)—Beautiful Japan climber, hardy perennial with fragrant purplish-violet, wisteria-like flowers. Height 10 to 12 feet. Pkt. 10c; oz. 75c.

(Larkspur)

Larkspur

LARKSPUR—The annuals are quite hardy and bloom in late Summer months, furnishing flowers of striking beauty in form and color. Tall varieties are suitable for shrubberies and borders, while the dwarf sorts produce charming effects in beds. Height 1 to 2 ft. **Dwarf Rockets**—Finest colors. Double Mixed. Pkt. 10c; ¼ oz. 75c.

Tall Double Stock Flowered—Lustrous Carmine, Dark blue, Light Blue, Rose, White or Finest Mixed. Pkt. 10c; ¼ oz. 75c.

LEMON VERBENA (P)—Every garden should have a few plants of this fragrant favorite. Its pale green foliage goes well with any flower. Height 1 to 2 feet. (Usually propagated from cuttings.) Pkt. 15c; ¼ oz. 60c.

LINUM—(Grandiflorum Rubrum)—**Scarlet Flax**—One of the most showy bedding plants, fine foliage, with brilliant scarlet-crimson flowers. Pkt. 10c; oz. 45c.

Perenne (P)—Pearl blue flowers, graceful. Pkt. 10c; ½ oz. 35c.

Perenne Album (P)—Milk white flowers, decorative. Pkt. 10c; oz. 50c.

LOBELIA (P)—(Cardinalis)—Flowers rich red, dark green foliage. Especially valuable for border decoration. Sow in boxes indoors. Cover very lightly with sifted soil and press down firmly. Cover box with glass until seedlings appear. If sown in January or February, will usually bloom in May. Ht. 6 to 12 inches. Pkt. 150c.

LOBELIA—Delicate, low-growing, annual plants of the greatest value for borders, ribbons, edgings, rock work and hanging baskets. Sow very thinly in boxes, covering with glass until seedlings are through surface. Height 6 to 8 inches.

Crystal Palace Compacta—Dwarf flowers, very fine and rich, bright blue; finest for bedding and edging. Pkt. 10c; ¼ oz. 90c.

Gracilis—Blue, trailing; beautiful for baskets. Pkt. 10c; ¼ oz. 40c.

Royal Purple—Very dark-blue with white eye. Pkt. 10c; ¼ oz. 75c.

Sapphire—Deep blue with white eye, long, drooping flower stalks; grows rapidly; trailing. Pkt. 15c; ¼ oz. \$1.50.

Speciosa—Dark blue and dark leaved. Similar to Crystal palace but not so dwarf. Pkt. 10c; ¼ oz. 65c.

LUPINUS—Hartwegi. Dark Blue, Light Blue, Rose White, Mixed. Pkt. 10c; oz. 35c.

LUPINUS (P)—Shrubby plants, bearing long spikes of flowers. Colors white and pink, occasionally blue. Sow in open, early in Spring. Transplant Give plenty of room.

Perennial—Mixed. Pkt. 10c; oz. 50c.

LYCHNIS (P)—(Rose Campion)—Jerusalem Cross—Few plants produce more brilliantly colored blossoms. Flowers are borne in clusters and continue fresh and brilliant for a long time. Hardy, 1 to 2 feet high. Orange, scarlet and crimson. Seeds should be sown where plants are to remain, thin to prevent crowding.

Haageana Hybrida—Mixed. Pkt. 15c; ½ oz. 50c.

MARIGOLD — (*Tagetes*) — A hardy plant in dwarf and tall varieties; foliage bright green and deeply cut. Flowers are various shades of yellow and brown. Sow seeds early in flats and transplant to garden when 3 to 4 inches tall. For specimen plants soil should be light, rich and deeply spaded. Height 1 to 2½ feet.

African—Tall or Dwf., Dble. *Fistulosa* Type Mxd. Pkt. 10c; ¼ oz. 35c.

French — Dwarf or Tall Double Mixed. Pkt. 10c; oz. 65c.

Golden Ball—New Dwarf. French Double. Compact. Pkt. 10c; oz. 65c.

Little Brownies—(*Legion d' Honneur*) — Dwarf Double Brownies. Pkt. 10c; oz. 65c.

MIGNONETTE—(*Reseda*)—A quick-growing fragrant annual. Produces the largest and finest spikes of blossoms during cool, moist weather of early Spring and late Fall months, but will flower freely throughout the Summer from seed sown early in Spring. A second planting should be made about the first of August. Sow seeds where plants are to remain. Difficult to transplant. Height 1 foot.

Odorata Grandiflora—Large, well-formed, fragrant flowers. Pkt. 10c; oz. 25c.

Machet—White. White with reddish tinge. Best white Dwarf variety. Pkt. 10c; oz. 75c.

Golden Queen—Dense, dwarf growth; flower golden yellow; fragrant. Pkt. 10c; oz. 75c.

Dobbies Giant Red—Mammoth red spikes. Very fine. Pkt. 10c; ¼ oz. 35c.

MIMOSA — (*Sensitive Plant*) — *Pudica* — A good foliage plant. Very curious and interesting leaves, close if touched or shaken. Height 1 to 2½ ft. Pkt. 10c; oz. 75c.

MOON FLOWER — (*Ipomoea Mexicana Grandiflora*) — Rapid growing climber belonging to the "Morning Glory" family. At night and on cloudy days vine is covered with fragrant white flowers 4 to 5 inches in diameter. Seeds must be soaked, then planted where vine is to remain. Pkt. 10c; ¼ oz. 25c.

MORNING GLORY—The tall varieties are popular, well known, rapid growing climbers of the easiest cultivation, attaining a height of 10 to 12 feet. Very fine for covering arbors, trellises, etc. The Minor, or Dwarf varieties, flower very freely and do not require support. Plant seeds early where plant is to remain.

Convolvulus Major—Tall, choice single, mixed all colors. Pkt. 10c; oz. 15c.

Double Mixed—Tall. Pkt. 10c; ¼ oz. 35c.

Convolvulus Minor—Dwarf mixed. Pkt. 10c.

Imperial Japanese Fringed—These have very large fringed flowers in a great variety of the exquisite colorings; variegated foliage. Mixed—Pkt. 10c; ½ oz. 40c.

NEMESIA—A splendid border plant with the widest range in color. Is very early, a continuous bloomer and stands a lot of hardship. If topped, and watered when beginning to seed it will start blooming all over again. The Orchid-like flowers vary in color, blue, orange, rose, yellow, etc.

Blue Gem—Flowers almost like Forget-Me-Not. Pkt. 20c each.

Triumph Mixed. Pkt. 20c each.

NICOTIANA—A very showy plant, producing star-shaped flowers of delicious perfume. Taken up in the Fall, cut back and potted, will bloom freely all Winter. Half hardy annual; 3 feet high. Sow seeds in boxes indoors or in a sheltered situation in the open. For the best results give plenty of room, rich soil and sunlight.

Affinis—White. Sweet scented. Pkt. 10c.

Sylvestris—Pure white, fragrant, drooping flowers; deep green foliage. Pkt. 10c; oz. 75c.

Sanderac—Resembles the "Affinis," but does not close up in the daytime. The plants are covered with carmine-red, fragrant flowers. Pkt. 10c; oz. \$1.25.

GENOTHERA—(*Evening Primrose*)—Elegant for growing in an exposed position, in border or on rockery; constant bloomer all Summer. Shades of yellow. Sow seeds early in boxes, covering very lightly with fine soil firmly pressed down. Transplant seedlings.

Fine Mixed. Pkt. 10c; oz. 60c.

EVENING SCENTED PRIMROSE

(*Oenothera Lamarckiana*)

We have watched with awe the moving pictures of opening flowers—Hyacinths, Tulips, etc.—and appreciated that they required weeks to obtain. Yet we can enjoy such a thrill in our garden if we sit for 15 minutes at twilight and watch the Evening Primroses drop their calyx and unfold their petals, greeting us with a wealth of golden blooms. If this interesting feature were better known the Evening Primrose would be found in increasing numbers in our flower gardens. Pkt. 10c; oz. 75c.

PASSIFLORA (P)—(Passion Flower)

Most interesting and well known climber, bearing singularly beautiful blue flowers. Height 10 to 12 feet. Pkt. 10c; ¼ oz. 65c.

PEAS — Perennial (P) — (*Lathyrus latifolius*)

Similar to Sweet Peas but not so fragrant; they bloom through a long season, are perfectly hardy, and will live for years should be sown near a fence or other support, thinning to 2 to 3 feet apart. Height 4 to 6 feet. Mixed. Pkt. 15c; ½ oz. 95c.

PENTSTEMON (P)—(Beard Tongue)

Brilliant bell-shaped flowers borne on long spikes, and produced abundantly all Summer. Colors range through red, rose, cherry, carmine, pink and purple. Should be sown indoors. Cover lightly and press down firmly. Transplant to open. Mixed. Pkt. 10c; ½ oz. 50c. "Sensation"—As a bedding plant this takes rank with the Petunia. About 2 ft. Every branch a spike of flowers in a wide range of bright colors. Treated as Petunias. Pkt. 15c; ½ oz. 90c.

PETUNIA — (Hybrida) —

During the whole season it is covered with large, showy blossoms, which are always bright and fresh, in spite of heat and drought. The flowers are of an almost infinite variety of colors and markings, and quite as varied in form; large and small, fringed and plain, double and single Hardy Annual. Sow seeds very thinly indoors under glass. Care should be taken to save the weaker seedlings as they produce the finest flowers. Transplant to garden when soil is warm. Height 1 to 1½ feet.

Single Choicest Mixed. Pkt. 15c.

Double Choicest Mixed. Pkt. 35c.

Double Fringed Mixed. Pkt. 50c.

Giants of California—Choicest Ruffled Mixed (large throat). Pkt. 25c.

Elks Pride—Deep (Elks) Purple Large flowers, fine for window boxes, borders and bedding. Pkt. 35c.

City of Portland—One of the finest shades of pink. Flowers large and ruffled. Fine for border or bedding. Pkt. 35c.

Rosy Morn—Pink white throat, fine for bedding. Pkt. 20c; ¼ oz. 60c.

NASTURTIUMS

NASTURTIUMS are hardy annuals, of easy culture and flower best where the soil is not too rich. The new hybrids include various shades of rose, salmon, bright red, pale yellow, etc., either self-colored or spotted, mottled, striped and margined. For covering trellises, fences, arbors, piazzas, trailing from vases, over rockwork, for bedding, etc., nothing can equal the gorgeous effect produced by their marvelous wealth of bloom, borne in uninterrupted splendor from early Summer until cut down by frost. The seeds, picked green and pickled in vinegar have a piquant, appetizing flavor that is a valuable addition to relishes or pickles.

Tall Varieties

CHAMELEON—Variable flowers marked and blotched in many brilliant colors.

CRIMSON—Large, velvety crimson flowers, very attractive.

CLOTH OF GOLD—Fiery red, golden leaved.

DUNNETT'S ORANGE—(*Sunlight*)—Clear, rich golden yellow.

MOONLIGHT-PEARL—Soft primrose.

PRINCE HENRY—Fine lemon yellow, clear carmine blotches.

REGALIANUM—Purplish crimson.

SALMON QUEEN—Extra large light salmon, suffused rosy salmon.

VON MOLTKE—Bluish rose.

NAMED VARIETIES — Pkt. 10c; oz. 15c; ¼ lb. 50c.

MIXTURE—Standard tall varieties. Pkt. 10c; oz. 15c; ¼ lb. 40c. fl.

Dwarf Varieties

CHAMELEON—Variable colorings in bronze, crimson and yellow, rich markings.

CLOTH OF GOLD—Brilliant scarlet, golden yellow leaves.

EMPRESS OF INDIA—Intense scarlet, purplish green leaves.

PRINCE HENRY—Lemon yellow, with carmine blotches.

REGALIANUM—Purplish-garnet.

RUBY KING—Bluish rose.

VESUVIUS—A rich salmon orange, dark foliage.

NAMED VARIETIES — Pkt. 10c; oz. 20c; ¼ lb. 60c.

MIXTURE — Standard varieties. Pkt. 10c; oz. 20c; ¼ lb. 50c.

GIANT FLOWERING PANSIES

For years local experts have grown our Giant Pansies and co-operated in securing the finest strains from the world's most celebrated growers. These have been carefully re-selected and bred up to their present surpassing excellence, and for giant size, substance, form and coloring we have never seen Pansies to compare with them. Named varieties and special strains are grown separately and the seed collected by hand and carefully blended into what we believe to be the finest mixture ever offered.

GIANT STRIPED—A superior strain of truly giant pansies, with the most beautiful striped markings in richest dark shades. Pkt. 15c.

VIOLET BLUE—A new giant variety of a brilliant, dark indigo blue with violet luster, each petal having a large, dark brown, veined blotch. Edges slightly ruffled. Pkt. 15c.

KING OF THE BLACKS—(Giant)—Immense velvety black flowers of the finest quality, the largest and best black pansy. Pkt. 15c.

SNOW FLAKE—Pure white, of extra fine quality. Pkt. 15c.

MADAME PERRET—A beautiful and distinct type with edges of petals frilled—bordered white, colors are dark wine—pink and red, beautifully veined. The earliest of the Giants, and has the sweetest perfume. Pkt. 15c.

CORNFLOWER BLUE—A dainty blue, large, good substance. Pkt. 15c.

MASTERPIECE—Giant Ruffled—The mammoth size, richness and beauty of colorings and frilled or ruffled character of the petals make "Masterpiece" one of the most distinct and interesting Pansies. Pkt. 25c.

ADONIS—A distinct and beautiful shade of light blue with white center and dark blotch. Pkt. 15c.

GOLDEN QUEEN—A rich, pure yellow of the grandest form and size. Pkt. 15c.

GIANT DARK BLUE—A splendid blue black, very elegant. Pkt. 15c.

ONE PACKET EACH OF TEN VARIETIES NAMED ABOVE FOR \$1.25

FANCY STRAINS OF MIXED PANSIES

OREGON GIANT PANSIES—MIXED—Our Oregon Giants are a selection of the finest strains and named varieties from the foremost American and foreign growers. This seed has been gathered by hand for several seasons from selected plants grown here in Oregon and will produce plants and flowers of unsurpassed quality in the most pleasing colors and shades. Pkt. 25c; ¼ oz. \$1.25; oz. \$4.50.

FINE MIXED—Fine assorted colors. Pkt. 10c; ¼ oz. 50c.

TRIMARDEAU GIANTS—Remarkably large size, robust growth; very fine. Pkt. 10c; ¼ oz. 85c; oz. \$3.00.

OREGON GIANT PANSIES IN BLOOM—From March until June we offer our famous "Oregon Giant" Pansy plants in full bloom. Put up one dozen in a package. Mailing wt. 4 lbs. Price 75c and \$1.00 per package, not prepaid.

PHLOX

PHLOX DECUSSATA (P)—Large compact heads of bloom from mid-Summer until Fall. Height 2 to 4 feet. Wide range of colors. Sow seeds early in boxes and transplant seedlings once before placing in permanent location. Usually blooms the first season. Requires 5 to 6 months for seed to germinate. See Plant Department for finest named varieties.

Mixed. Pkt. 10c; ¼ oz. 60c.

PHLOX DRUMMONDI—Unrivalled for richness and beauty of color, ranging from white to the deepest scarlet and purple. For cutting, for bouquets or for bedding in masses they are unsurpassed. Hardy annual, one foot high. Sow as soon as soil is warm. Transplant about one foot apart.

Large Flowering—Crimson, white or mixed. Pkt. 15c; ¼ oz. 50c.

Chamois Rose. Pkt. 10c; ¼ oz. 75c.

Isabellina—Pale yellow. Pkt. 10c; ¼ oz. 75c.

Kermesina Splendens—Crimson with white edge. Pkt. 10c; ¼ oz. 75c.

Diamond Mixture. Pkt. 10c; ¼ oz. 75c.

Dwarf Mixed. Pkt. 10c; ¼ oz. 75c.

Star Phlox—(Cuspidata)—Flowers have a distinctive star-like appearance, with white margins, excellent for bouquets. Pkt. 10c; ¼ oz. 75c.

(Phlox)

PINKS—The dianthus family embrace some of the finest of all flowering plants. The blooms are of the richest and most pleasing colors, and nothing can surpass the exquisite fragrance of some varieties. They are hardy, and become perennial in warm climates. Sow seeds in boxes indoors and plant out in good soil when 1 to 2 inches high.

Chinensis Type—Single Mixed. Pkt. 10c.

¼ oz. 25c.

Double Mixed. Pkt. 10c; ¼ oz. 35c.

Heddewigii Type

Crimson Belle—Single deep crimson. Pkt. 10c; ¼ oz. 25c.

Eastern Queen—Single rose. Pkt. 10c; ¼ oz. 25c.

Vesuvius—Single orange-scarlet. Pkt. 10c; ¼ oz. 35c.

Finest Single Mixed. Pkt. 10c; oz. 75c.

Fireball—Double deep scarlet. Pkt. 15c; ¼ oz. 60c.

Salmon King—Double salmon. Pkt. 15c; ¼ oz. 65c.

Snowball—Dle. white. Pkt. 15c; ¼ oz. 65c.

Finest Double Mixed—Pkt. 10c; ¼ oz. 30c.

POPPIES—(See next page).

PORTULACA—(Rose Moss)—Brilliant dwarf annuals, only 6 inches high, luxuriating in warm situations, and blooming profusely in early Summer to Autumn. For low beds and masses of color from Spring until frost they are indispensable; colors range through innumerable shades of red, yellow, pink, white, striped, etc. Sow seeds indoors. Thrive best in hot and dry situation.

Single Mixed. Pkt. 10c ¼ oz. 45c.

Double Mixed. Pkt. 15c; ¼ oz. 75c.

(ORIENTAL POPPY)

POPPIES

POPPY — (Papaver) — Magnificent, showy flowers borne separately on tall stalks in many bright and charming colors. Some are hardy annuals, others are perennials. Sow seeds very early where they are to remain. Barely cover seed with fine soil and press down firmly. Thin to one foot. If cut before fully open blossoms will last several days. For perennial varieties seeds should be planted in small pots and thinned to one plant, as they are difficult to transplant. When pot is full of roots, plant in permanent location in good soil. Height 1 to 3 feet.

Bractestum (P)—Very showy, red. Pkt. 10c; ¼ oz. 40c.

Iceland, or Nudicaule (P)—Bright green, fernlike foliage, formed in tufts from which issue slender stalks about 12 inches high, bearing yellow, white or orange-scarlet flowers in endless profusion and most useful for cutting. Single. Mixed colors. Pkt. 10c; ¼ oz. 65c.

Oriental Poppy—Hybrida mixed. Pkt. 10c; ¼ oz. 65c.

Carnation Flowered Tall Double.

American Flag—White margined scarlet.

Blood Red—Violet Blotch.

Bright Rose.

Finest Mixed. Pkts. 10c; oz. 40c.

King Edward—Single—Large flowers produced with great freedom. Deep scarlet shaded crimson, with large black blotch. Height 2½ feet. Pkt. 10c; ¼ oz. 25c.

Glaucum—(Tulip Poppy)—Brilliant scarlet flowers 3 inches across. Pkt. 10c; oz. 75c.

California Poppy

California Poppy—(Eschscholtzia) —They commence to bloom within a few weeks' time from Spring-sown seed and continue to flower profusely until late in the Autumn, forming nice, bushy plants 1 to 1½ feet high. Colors yellow, red, orange and white. Fine delicate foliage. Sow seeds in Fall or Spring where plants are to remain. Seedlings are difficult to transplant. Thin to 12 in.

Aurantia—Rich orange, true California Poppy. Pkt. 10c; oz. 35c.

Carmine King—Deep carmine. Pkt. 10c; ¼ oz. 45c.

Golden West—Yellow with orange center. Pkt. 10c; oz. 30c.

Mikado—Orange. Pkt. 10c; ½ oz. 40c.

The Geisha—Inside petals brilliant gold, outside orange-crimson petals fluted. Pkt. 15c; ¼ oz. 40c.

Hybrida Mixture—New large flowering type containing large percentage of new colors, including soft pink, scarlet, chrome, copper-red, claret and royal purple. Pkt. 10c; ½ oz. 50c.

Shirley Poppies

Shirley Poppies—Very beautiful satiny flowers of various colors from white through delicate shades of rose, pink and carmine, to the deepest crimson. Fine for cutting and will keep fresh in water for several days if cut before the blooms are fully expanded.

American Legion—Brilliant orange scarlet, yellow anthers. Pkt. 10c; ¼ oz. 25c.

Eldorado—Double pink shades, exquisite. Pkt. 15c; ¼ oz. 40c.

Elorado Double Mixed. Pkt. 10c; ¼ oz. 25c.

Flesh Pink. Pkt. 10c; ¼ oz. 35c.

Picotee—White cup, scarlet edging. Pkt. 10c; ¼ oz. 35c.

Rose Pink—Wild rose pink. Pkt. 10c; ¼ oz. 35c.

Salmon Pink. Pkt. 10c; ¼ oz. 35c.

Finest Mixed. Pkt. 10c; oz. 40c.

LYRETHRUM—Very ornamental plants, for both foliage and flowers. Seeds should be sown very early in boxes. Cover very lightly with sifted soil and press down firmly. Transplant to permanent location as soon as large enough to handle. If flowers are allowed to form, foliage will change from yellow to green. Height 1 to 2 feet.

Parthenifolium Aureum, or Golden Feather—Gold leaved, flower white. Pkt. 10c; ¼ oz. 25c.

RUBBECKIA (P) —

(Golden Glow) —

Brilliant orange yellow petals around a large dark center. Useful for borders or as a single group. Sow seeds in a sheltered location and transplant when a few inches high. Flowers double. Hgt. 4 to 6 feet.

Height 4 to 6 feet.

Newmanni — Pkt. 15c; ¼ oz. 85c.

Fulgida — Orange yellow. Pkt. 15c; ¼ oz. 65c.

All prices on this page are prepaid.

SALVIA — (Flowering Sage) — Very ornamental, flowers borne in spikes of fiery red or crimson; and continue in bloom in open ground until after severe frosts. Start in heat and transplant into light soil, one to two feet apart. Excellent for bedding in masses or single planting. Hardy annuals. **Zurich**—(New Dwarf Early)—The finest of all Dwarf Salvias. Very floriferous. Pkt. 15c; ¼ oz. \$1.00.

Splendens—Brilliant scarlet. Pkt. 15c; ¼ oz. \$1.00.

Bonfire—(Clara Bedman)—One of the finest Salvias ever introduced; compact bush about two feet in height and diameter. Pkt. 15c; ¼ oz. \$1.25.

SAPONARIA OCYMOIDES (P)—Very showy hardy perennial rock plant, producing masses of small bright rose flowers during the Summer months. Pkt. 10c; ½ oz. 45c.

SCABIOSA — (Sweet Scabious, or Mourning Bride)—Free flowering annuals; white, carmine, lilac, maroon, etc.; effective for garden decoration and valuable for cutting. Sow seeds in open as soon as soil is warm, thinning to 8 to 10 inches. Blooms from early July until frost. Height 2 to 2½ feet.

Double—Mixed. Pkt. 10c; oz. 75c.

Azure Fairy. Pkt. 10c; oz. 75c.

Black Purple. Pkt. 10c; oz. 75c.

Fiery Scarlet. Pkt. 10c; oz. 75c.

Rose. Pkt. 10c; oz. 75c.

Pure White. Pkt. 10c; oz. 75c.

SALPIGLOSSIS — (Painted Tongue) — Showy, funnel-shaped flowers of large size. Fine for beds. Half-hardy annuals. Sow seeds in boxes indoors or in a hotbed.

Superbissima—Finest mixed. Pkt. 10c; ¼ oz. 50c.

SCHIZANTHUS — (Butterfly Flower) — Beautifully fringed and delicately colored flowers so numerous as to hide the foliage. Splendid bedding plant. Seeds sown in open come into bloom in a few weeks. Fine pot plant for house in Winter. Height 1 to 2 ft. **Rose and Amber Shades.** Pkt. 15c; ¼ oz. 95c.

Grandiflora Hybrids Mixed. Pkt. 10c; ¼ oz. 65c.

SNAPDRAGONS

Antirrhinum

One of the most useful and showy of border plants of almost every color. Also makes splendid cut flowers. They have recently been much improved and are now really magnificent. For best results plant seeds indoors very early, planting out when about 3 inches high. Height 2 to 3 feet.

TALL GIANT FLOWERED

Defiance—Scarlet.

Golden King—Giant yellow.

Queen Victoria—Pure white.

Pkt. 10c; ¼ oz. 25c.

Rose Queen—Pink. Pkt. 10c; ¼ oz. 30c.

Mixed Varieties—Pkt. 10c; ½ oz. 50c.

MEDIUM TALL VARIETIES

Queen of the North—White.

Pkt. 10c; ¼ oz. 30c.

Bonfire—Buff shaded scarlet.

Rose Dore—Rose suffused orange

Golden Queen—Giant yellow.

Pkt. 10c; ¼ oz. 35c.

Silver Pink—Pkt. 15c; ¼ oz. 50c.

Mixed Varieties Pkt. 10c; ¼ oz. 25c.

STATICE (P) — (Sea Lavender) — Splendid for border or rockery, producing panicles of minute flowers, can be dried and used for Winter bouquets.

Latifolia—Sow like other perennials in flats or cold frames and transplant when large enough into permanent positions, 12 to 18 inches apart.

Blue—Pkt. 10c; ¼ oz. 35c.

STOCKS—These popular flowers are easily grown, and are so highly fragrant and of such beauty they deserve a place in every garden. Should be sown under glass in a warm place, giving plenty of air after seedlings are up. Transplant when about 2 inches.

Imperial Large Flowering Ten Weeks.

Blood Red. Pkt. 15c; ¼ oz. 75c.

Canary Yellow. Pkt. 15c; ¼ oz. 75c.

Chamois—Ivory tinted old rose. Pkt. 15c; ¼ oz. 75c.

Dark Blue. Pkt. 15c; ¼ oz. 75c.

Flesh Pink. Pkt. 15c; ¼ oz. 75c.

Lavender. Pkt. 15c; ¼ oz. 75c.

Rose. Pkt. 15c; ¼ oz. 75c.

White. Pkt. 15c; ¼ oz. 75c.

Choice Mixed. Pkt. 10c; ½ oz. 65c.

Giant Perfection, Perpetual or Branching—These ever-blooming stocks are popularly called "Cut and Come Again." Sown in March they flower profusely from July until frost; their best period being late Autumn. Very fragrant.

Princess Alice—White.

La France—Blush pink.

Brilliant—Blood red.

Sapphire—Violet.

Creole—Canary yellow.

May Queen—Pale Blue.

Rose Pink.

Choice Mixed.

Virginian Stock—A fine, early flowering plant. Hardy annual. Mixed.

Pkt. 10c; ¼ oz. 15c.

Evening Scented Stock—(Matthiola Bicornis)—Old-fashioned annual which has no beauty to recommend it, but well worth growing for its entrancing fragrance each evening. Pkt. 10c; oz. 60c.

Each Pkt. 15c
¼ oz. 75c

SUNFLOWER—(Helianthus)—Stately growing annuals with immense golden yellow flowers; effective for garden decoration. Height 6 to 8 feet.

Dwarf Double—Bright golden yellow flowers three inches across. Pkt. 10c; oz. 65c.

Globosus Flstulosus—Saffron, very large, double and handsome. Pkt. 10c; oz. 45c.

Multiflora—Beautiful, double yellow flowers. Pkt. 10c; oz. 60c.

SWEET ROCKET (P)—(Hesperis)—

An old hardy garden favorite. Fragrant white flowers, 2 to 3 feet high, resembling Perennial Phlox. Sow early and transplant. Pkt. 10c; ¼ oz. 20c.

SWEET WILLIAM (B)—(Dianthus Bar-

batus)—Remarkable free flowering plant of brilliant colors, ranging from snow-white to darkest crimson and purple, and emitting a very delicate and refreshing fragrance. May be sown in open and thinned to 6 to 8 inches. Height 1 to 1½ feet.

Ceppery Red—Single.

Dunnetti—Dark crimson, single

Pink Beauty—Pink, single.

Scarlet Beauty—Single.

Pure White—Double.

Double Mixed—

Pkt. 10c; ¼ oz. 75c.

Single Mixed—Very beautiful—

Pkt. 10c; ½ oz. 60c.

THUNBERGIA—(Black Eyed Susan)

—rapid-growing annual climbers; splendid for trailing over trellises, fences, etc.; buff, white, orange, etc., four to six feet high. Grows readily from seed sown in the open.

Mixed Colors. Pkt. 10c; ¼ oz. 45c.

TRITOMA (P)—(Red Hot Poker)—

Bright, showy flowers produced in large spikes of brilliant rich colors. Although hardy, requires some protection through the Winter. Will bloom first season from seeds sown indoors very early and planted out as soon as soil is warm. Cut flowers keep a long time. Height 2 to 3 feet.

Uvaria—Dazzling orange red. Pkt. 15c; ¼ oz. 75c.

VALERIANA (P)—(Garden Heliotrope)

Sweet scented flowers having red or white blooms produced in large heads. Fine border plants. 2 to 3 feet high. Sow early in boxes and transplant to permanent location as soon as large enough to handle. Should have rich soil.

Red—Pkt. 10c; ¼ oz. 35c.

VINCA (P)—(Old Maid)—Tender perennial. Fine for pot culture. Flowers white and pink.

Mixed—Pkt. 10c; ¼ oz. 50c.

VERBENA—Start seed in the house or under glass early in Spring and transplant after 3 to 4 inches of growth. They flower in July and until frost. Height 8 to 12 inches.

Mammoth Mixed—Selected; extra

large, fine. Pkt. 10c; ¼ oz. 50c.

Fine Mixed—Pkt. 10c; ¼ oz. 40c.

Scarlet Defiance—Pkt. 10c; ¼ oz. 50c.

Pink Shades—Pkt. 10c; ¼ oz. 50c.

Blue Shades—Pkt. 10c; ¼ oz. 50c.

Candidissima—White. Pkt. 10c; ¼ oz. 50c.

WALL FLOWER (B)—(Cheiranthus

Cheri)—Spikes of beautiful, exceedingly fragrant flowers. Colors yellow, red, orange and brown. Half hardy perennials. Sow in open, transplant to permanent location late in Summer. Should bloom second season. Height 1 to 1½ feet.

Single, Mixed—Large flowering. Pkt. 10c; ¼ oz. 25c.

Finest Tall Double Mixed—Branching.

Pkt. 15c; ½ oz. 75c.

ZINNIAS

NEW DAHLIA FLOWERED ZINNIAS—The plants of this new race are very sturdy and produce many flowers with stout stems. The flowers in full bloom often measure four inches in depth and six inches in diameter. Easily grown from seed sown in the open.

EXQUISITE—Light rose with center a deep rose.

GOLDEN STATE—Rich orange yellow. Yellow in bud, turning to orange when in full bloom.

CRIMSON MONARCH—Largest and best of reds.

DREAM—A fine, deep lavender, turning to purple (mallow purple).

OLD ROSE—Real old rose, for charm and beauty ranks next to Exquisite.

SCARLET FLAME—A beautiful bright scarlet, with a blending of orange throughout the petal.

ORIOLE—Considered the most beautiful of its class. Immense orange and gold bicolor, changing slightly as it ages.

METEOR—A rich glowing deep red, the darkest of all the red shades, fine form. Very large and greater bloomer than other reds.

BUTTERCUP—An immense deep creamy yellow. Very desirable and should be included in every collection.

Separate Colors above named varieties—Pkt. 20c; ¼ oz. 95c.

Gold Medal Mixed—All colors. Dahlia flowered. Pkt. 15c;

½ oz. \$2.00.

GRANDIFLORA ROBUSTA ZINNIAS—Double giants. A

special strain, producing mostly double flowers of immense size. Plants

are of extremely robust growth, attaining a height of about 3 feet.

Apricot Yellow, Deep Flesh, Golden Yellow, Rose King, Salmon, Shrimp

Pink, White and mixed—Pkt. 10c; oz. \$1.85.

DWARF DOUBLE MIXED—Pkt. 10c; ¼ oz. 30c.

PICOTEE TYPE—All colors mixed—Pkt. 10c; ¼ oz. 25c.

VICTORY QUILLED—All colors mixed—Pkt. 10c; ¼ oz. 25c.

SUPERIOR PINK

Special Collection 8 Packets

One each of above including our new
lovely Superior Pink. \$1.30 Value, Postpaid

\$1.00

"Early Flowering" Spencer Sweet Peas

SIX WEEKS EARLIER THAN STANDARD SPENCERS.

these new Early Flowering varieties begin to bloom 106 days from planting in the open ground and flower through a long season—about four months. You will be surprised and delighted when you include Early Flowering Sweet Peas in your plantings. **VERY GENEROUSLY FILLED PACKETS.**

SUPERIOR PINK—A great advance over all other early pinks. Awarded silver medal at International Flower Show at New York City, and certificate of merit by the Chicago Florist Club. Blooms are of most attractive form, bold and with well waved wings and standards. Color a beautiful rose-pink, very slightly shaded salmon. It is of strong growth and under good growing conditions the strong sturdy stems will measure 16 to 18 inches and carry four flowers to a spray. Pkt. 25c; oz. \$2.50.

VULCAN—The brightest of all scarlets. Never burns or scalds. Produces freely on long stems. The color is the most vivid ever seen in sweet peas. The brighter and hotter the sun, the brighter and more intense is the color. None of the so-called scarlet varieties equal Vulcan in intensity of color. Pkt. 15c; oz. 75c.

ZVOLANEK'S ROSE—Deep rose-pink. Flowers large and produced on stems of good length. One of the best commercial varieties. Pkt. 15c; oz. 65c.

HARMONY LAVENDER—A splendid variety, rich true deep lavender throughout. Flowers of large size, beautifully waved. It is considered the best shade in the lavender class. Pkt. 15c; oz. 65c.

EARLY SNOWFLAKE—A pure white with large flowers usually borne in fours on very long stems. The best of its color. Pkt. 15c; oz. 65c.

BLUE BIRD—A magnificent violet-blue, profuse and continuous bloomer. Pkt. 15c; oz. 60c.

GLITTERS—The standard is a bright fiery orange, with wings of deep orange; strong vigorous grower, blooms profusely and continuously for long period. Pkt. 15c; oz. 60c.

VARRAWA—Large flowers, averaging 2½ in. in diameter, many being duplex or double. Color a bright rose-pink with a clear creamy base—really a bi-color. Pkt. 15c; oz. 60c.

All prices above are postpaid

Our New Varieties of "Superb" Spencer Sweet Peas

AUSTIN FREDERICK IMPROVED—A very strong-growing, large lavender, of good clear color. It is more of the rosy lavender than the blue. The flowers are very large and the stems extra stout. A most satisfactory variety to grow. Pkt. 10c; oz. 50c.

CHARMING—This might be described as a rosy-cerise. Some people describe it as a brilliant reddish-rose. A very pretty shade, flowers are large and form all that could be desired. Pkt. 15c; oz. 60c.

CONSTANCE HINTON—The finest black-seeded white variety; flowers of large size and come at times with a slight bluish tinge. Pkt. 10c; oz. 40c.

CRIMSON KING—A solid, deep clear crimson, becoming richer in the throat, extremely strong growth with long stemmed sprays, usually with four blooms. Free from sunburn and wind scald. Pkt. 10c; oz. 50c.

DAFFODIL—This is a very strong-growing black-seeded cream. It is very deep in color and for that reason is a favorite. Pkt. 15c; oz. 60c.

DOOREEN—This is a huge bright rose-carmine, the very best of this color class. Larger and brighter than all other carmine varieties and is a particularly robust grower, making an ideal variety for the garden. Popular with exhibitors on account of its large size. Pkt. 15c; oz. 60c.

GEORGE SHAWYER—A wonderful flower usually described as a large orange-pink. It requires slight shading to bring out the color to perfection. Unusually fine exhibition variety. Pkt. 10c; oz. 50c.

GLORIOSA—This is a very brilliant orange-scarlet. The color is very intense but this variety has to be shaded. Pkt. 15c; oz. 60c.

HEBE—This is the largest and best rose-pink variety. It is a variety with great vigor and the flowers are always produced on exceptionally long stems. Pkt. 10c; oz. 50c.

JACK CORNWELL—A deep navy-blue. No varieties of navy-blue are very large but Jack Cornwell is the most vigorous. Pkt. 10c; oz. 50c.

MARY PICKFORD—Almost as charming as "America's sweetheart" herself. A dainty cream-pink with the faintest suffusion of salmon, a combination difficult to equal. Sturdy grower with an abundance of four-flowered sprays on long stout stems. Flowers are perfectly formed with standards and wings decidedly waved. Pkt. 15c; oz. 75c.

MISS CALIFORNIA—A most beautiful and outstanding orange-salmon cream-pink flower, the blending of shades being wonderfully perfect. Large beautifully waved form in fours on long stout stems. Plant is a very vigorous grower. Pkt. 15c; oz. 60c.

PINK PERFECTION—A very rich shade of bright, warm rose-pink on cream ground. This is an improvement over Hawlmark Pink. Pkt. 15c; oz. 60c.

ROYAL SOVEREIGN—A most brilliantly colored orange variety, but requires shading. This variety is an unusually strong growing one for the color classification, and the flowers attain a very large size. Pkt. 15c; oz. 60c.

WEMBLEY—A clear, pale-blue lavender of merit. It grows very vigorously and produces large flowers, mostly 4 on strong stout stems. It is a very desirable color for combining with shades of pink, and is also outstanding on the exhibition table. Pkt. 15c; oz. 60c.

Our 1927 Superb Collection of Spencer Sweet Peas

15 Very Generously Filled Packets (One each of above varieties)

REGULAR VALUE \$1.95; POSTPAID FOR.....

\$1.50

Superb Spencer Varieties

"Diamond Quality"

THE NEW "SPENCER" type has lovely waved fluted flowers of giant size. In exquisite colorings, length of stem, and lasting qualities they are much superior to older types.

Our famous "Diamond Quality" Sweet Peas are selected with critical care and we offer the best productions of the foremost growers.

CULTURE—First and most important, plant as early in the Spring as the conditions will permit. Seeds should be sown at the rate of one ounce to 15 feet. Make a trench about 3 to 4 inches deep, planting the seeds in the bottom about 3 inches deep, pressing the soil down firmly. After the plants are well up, thin to 4 or 5 inches apart, and draw the soil around them until the trench is filled above the level. This gives a depth to the roots, preserving the moisture. Keep the ground well worked and water if needed, an occasional thorough soaking being better than a daily sprinkling. Keep the flowers cut close and a pruning of the tips of the vines will also aid in prolonging the season of bloom and insuring better flowers.

Pink and Cream

COUNTESS SPENCER—The first Sweet Pea of the Spencer type. Flowers extremely large, beautifully expanded, crumpled and waved. Color silvery, suffused and tinted with soft shell pink, deeper at outer edges. Pkt. 10c; oz. 40c.

DOBBIES CREAM—A good primrose, a strong grower and generally four flowers to a stem. Pkt. 10c; oz. 50c.

HAWLMARK PINK—A rich glowing deep rose pink flushed salmon; flowers invariably borne in fours. Large blooms beautifully waved and on long stems. Pkt. 10c; oz. 50c.

LA FRANCE—Charming shade of light shrimp pink; flowers large and well formed; a vigorous grower, usually carrying four flowers to a stem. Pkt. 15c; oz. 60c.

MRS. HUGH DICKSON—One of the most pleasing varieties. Flowers very large, usually four on a long, strong stem. Coloring is apricot on a cream ground, shading lighter toward center. Pkt. 10c; oz. 40c.

MARGARET ATLEE—The most perfect Duplex type yet produced. Color warm salmon pink suffused over a cream ground; deepens to a bright buff at base. Flowers very large, almost uniformly four on a stem. Pkt. 10c; oz. 50c.

PRIMROSE SPENCER—Color true primrose. Very vigorous, free flowering, excels in beauty, length of stem and keeping qualities. Pkt. 10c; oz. 40c.

Orange and Salmon

BARBARA—A beautiful shade of orange salmon, the brilliancy of the coloring being enhanced by planting in partial shade. Pkt. 10c; oz. 50c.

ILLUMINATOR—A brilliant orange-salmon ground illuminated with bright cerise pink; a rare combination of great beauty. Pkt. 10c; oz. 40c.

THOMAS STEVENSON—Brilliant orange scarlet, standard of deeper color than wings. Pkt. 10c; oz. 40c.

ROBERT SYDENHAM—A glowing orange salmon; strong grower, four flowers on a stem; the best and largest of this shade. Pkt. 10c; oz. 40c.

Red and Maroon

CAMPFIRE—The brightest scarlet sunproof Sweet Pea ever offered. The flowers will stand the hottest sunshine, the brighter the sun the better the color. Of fine size and borne in profusion on plants of great vigor; highly recommended for garden decoration and cut-flower use. Pkt. 20c; oz. 75c.

FIERY CROSS—The standard is a scorching fire-red or orange-scarlet, which scintillates and glitters in the bright sunlight with a glowing fire-like sheen that radiates over the entire flower. Pkt. 10c; oz. 50c.

KING EDWARD—Bright crimson scarlet, largest size, wavy standard; drooping wings, long stems; one of the finest reds. Pkt. 10c; oz. 40c.

KING MANOEL—Large full, wavy blossoms of dark brilliant maroon, bold and attractive. Pkt. 10c; oz. 40c.

ROYAL SCOTT—A magnificent red that does not burn. The color is glowing orange-scarlet. Pkt. 15c; oz. 60c.

THE PRESIDENT—The most brilliant in the orange-scarlet class; of immense size with good form, usually borne in fours on strong stems. Pkt. 10c; oz. 50c.

ERMILION BRILLIANT—An intense pure scarlet self-color of rare beauty and substance. Absolutely sunproof. A stocky, vigorous grower, profuse bloomer, the long stems carry four perfect flowers. Pkt. 10c; oz. 40c.

Superb Mixed

(True Spencers Only)—A splendid mixture, carefully proportioned to produce harmonious combinations of color. Not seedlings, but carefully selected named varieties that retain all the purity and brilliance of color.

Pkt. 10c; oz. 30c; ¼ lb. 95c; lb. \$2.75

Grandiflora

Old-time favorites
Our mixture is made
up of select named
varieties. Pkt. 10c;
oz. 15c; ¼ lb. 40c.

Diamond Mixture

The most perfect blend of the finest named varieties it is possible to produce. This mixture contains many famous novelties, the best of Grandifloras, also standard Spencer types, and will delight the most critical. Sold in 1 oz. sealed pkts. only at 15c each.

WEMBLEY

Lavender and Blue

ASTA OHN—Lavender, suffused with mauve; of perfect form, largest size, four blossoms on long, strong stems; very vigorous. Pkt. 10c; oz. 40c.

BLUE MONARCH—Splendid new dark blue, self-colored of large size and good substance. Pkt. 10c; oz. 40c.

FLORENCE NIGHTINGALE—Immense, bold erect flowers of soft, rich lavender with very delicate suffusion of rose—a self-colored flower, frilled and waved; four blossoms on extra long stems. Pkt. 10c; oz. 50c.

HAWLMARK LAVENDER—A blending of lavender shades. Exquisite form, beautifully waved and crimped, broadly expanded standard and large spreading wings. The plants make a strong, sturdy growth producing attractive four-flowered sprays on long stems. Pkt. 15c; oz. 60c.

MRS. TOM JONES—Very large and of great substance. Beautifully waved, usually borne four on a stem of great length. Color is best described as a bright "delphinium blue." Pkt. 15c; oz. 60c.

ORCHID—A pleasing and impressive shade of lavender with just sufficient pink to give it warmth and softness. An exceedingly fine bloomer. Pkt. 10c; oz. 50c.

ROYAL PURPLE—A rare new shade rich purple, almost true royal. Pkt. 10c; oz. 50c.

White

KING WHITE—The immense petals are gracefully frilled, and remarkable for the glistening purity of the whiteness and perfect finish of flower. Pkt. 10c; oz. 50c.

WHITE SPENCER—A pure white flower of enormous size, beautifully crinkled and fluted. Pkt. 10c; oz. 40c.

YOUTH—An exceptionally large, fragrant Sweet Pea. Color white, edged with a delicate, soft rose-pink. The plant is robust in growth, and bears four blossomed sprays in great profusion. Pkt. 15c; oz. 60c.

FLOWER SEEDS—GREENHOUSE CULTURE

ASPARAGUS SPRENGERI—(Emerald Feather)—One of the best of the new so-called ferns. Feathered foliage; useful for bouquets, wreaths or sprays, remaining perfect for weeks after cutting. Seeds should be sown under glass with night temperature of about 65 degrees. Will germinate in 4 to 6 weeks. Height 2 to 4 feet. (For plants see plant department.) Pkt. 10c; $\frac{1}{4}$ oz. 75c.

ASPARAGUS PLUMOSUS—(Asparagus Fern)—One of the prettiest house plants. The leaves are bright green, gracefully arched, surpassing Maidenhair Ferns in grace, delicacy of texture and richness of color. Culture same as Sprengeri. Height 6 to 12 feet. (For plants see plant department.) Pkt. 25c; $\frac{1}{8}$ oz. 95c.

BEGONIA—Begonias are among the most beautiful of flowering plants, especially adapted to pot culture. They are, however, difficult to grow from seeds even in a greenhouse. Generally propagated by cuttings. (For plants see plant department.)
Gracilis, Fine Mixed. Pkt. 25c.

CALCEOLARIA—Beautiful flowers of unique form and colors, ranging from red, yellow, brown and orange. Fine for pot culture. Should be sown in flats very thinly, covered lightly with sifted soil firmly pressed down. As soon as large enough to handle, transplant to thumb pots, shifting from size to size as they become potbound. Of little value outdoors, as the hot sun ruins the blooms.
Hybrida—Finest mixed. Pkt. 50c.

CANNA—(Indian Shot)—Large, ornamental, tropical-looking plants of easy culture. Soak seeds in warm water for several hours, or until they commence to swell, then plant under glass. When second leaf appears transplant into pots and keep under glass until soil outside is warm. Colors red and yellow. Height 2 to 6 feet. (For Canna bulbs see plant department.) Crozy's Best Mixed. Pkt. 10c; oz. 50c.

COLEUS—Probably the best known and most popular of ornamental foliage plants. Leaves of all shades and colors. Tender perennial. Sow seeds in flats indoors. Transplant seedlings to other flats until settled warm weather, then transplant to open garden. Pot for house culture before frost. Height 1 to 2 feet.
Extra Choice Mixed. Pkt. 25c.

CYCLAMEN—Florists' pot plant. Beautiful winter and spring flowering plants for window and greenhouse.
Giantum Hybridum—White with carmine eye, dark red, salmon-pink, rose. Pkt. 25c.
Papilio Hybridum, or Butterfly Cyclamen. Pkt. 25c.

DRACAENA—Ornamental greenhouse plant. Very desirable. Narrow, dark foliage.
Indivisa Lineata. Pkt. 10c; $\frac{1}{4}$ oz. 30c.

GREVILLEA ROBUSTA—(Silk Oak)—Very beautiful and graceful plant with fern-like foliage—a splendid pot plant. Sow in boxes in late Winter or early Spring, potting the seedlings when 2 to 3 inches tall. Repot frequently to maintain rapid growth. Height 2 to 4 feet. Pkt. 15c; $\frac{1}{2}$ oz. 95c.

HELIOTROPE—Flowers in large clusters of lovely shades of blue. Delightfully fragrant and free-blooming. Splendid for bedding, pot culture or bouquets. Start under glass very early in spring, transplanting to pots or open garden. Will bloom in 2 to 3 months.
Fine Mixed—All colors. Pkt. 10c; $\frac{1}{4}$ oz. 50c.
Choicest Mixed, from new varieties. Pkt. 15c; $\frac{1}{8}$ oz. 75c.

LANTANA—A free-flowering shrubby plant, suitable for outdoor or pot culture. The flowers emit an agreeable odor and are of many shades of purple, orange and white. Half-hardy perennial. Sow seeds thinly in boxes indoors, covering very lightly. Transplant to garden when 2 to 3 inches high. Height 1 to 2 feet.
Hybrida Fine Mixed. Pkt. 10c; $\frac{1}{4}$ oz. 20c.

PRIMULA—(Primrose)—Of the varieties named below some are hardy, early blooming garden plants, others beautiful Winter-blooming house plants. Soak seeds in warm water for 24 hours, then sow thinly in shallow boxes of soft sandy soil, covering lightly with sand. Press down firmly and cover with glass until through the surface. When large enough to handle transfer into boxes of fine soil. Remove to permanent location when about 3 inches high.

Polyanthus—Early blooming, dwarf growing plants. Valuable for outdoor bedding. Mixed colors. Pkt. 25c; $\frac{1}{16}$ oz. 75c.

Vulgaris—Yellow, common, English Primrose. Pkt. 25c; $\frac{1}{32}$ oz. 75c.

PRIMULA—(Obconica Grandiflora)—Beautiful single flowers. This is really an ever-blooming plant, producing elegant clusters of flowers continuously throughout the year. Fine mixed. Pkt. 25c; $\frac{1}{64}$ oz. \$2.25.

SMILAX—(Medeola Asparagoides)—Charming, tender, perennial climber for greenhouse or window gardens. The foliage and stems are of pleasing light green; excellent for decoration. If grown from seeds, should be treated same as Asparagus Sprengeri. (For plants see plant department.) Pkt. 10c; $\frac{1}{4}$ oz. 20c.

MISCELLANEOUS FLORISTS' SUPPLIES

We carry a complete stock of florists' supplies, including wire designs, cords, ribbons, chiffons, foil, wire, clips, pine flower boxes, earthen and paper flower pots, twine, clips, wax and crepe paper, and a big line of baskets. Florists and nurserymen are invited to write for wholesale price list. We also have a complete stock of general items used in the garden, as described below.

Round Plant Stakes

PAINTED GREEN

Length 3 ft. 3 $\frac{1}{2}$ ft. 4 ft. 4 $\frac{1}{2}$ ft.
Dozen 65c 75c \$1.00 \$1.35

F. O. B. Portland

Wooden Pot Labels

PAINTED WHITE

Size 4 in. 5 in. 6 in. 8 in.
Hundred for 30c 35c 45c 90c
F. O. B. Portland, postage extra

Raffia

Natural color; for basket weaving and other purposes. Per lb. 30c, postage extra.

Bamboo Plant Stakes

Just the Thing for Greenhouse Use

Size, in... $\frac{1}{4}$ x24 $\frac{1}{4}$ x30 $\frac{3}{8}$ x36 $\frac{1}{2}$ x48
Per 100... \$1.00 \$1.15 \$1.25 \$2.00

F. O. B. Portland

Tree Labels

Painted, wired with copper wire. Per 100 40c.

Weatherproof Pencils

For marking pot and tree labels. 15c.

Vitaplastic

Glazing Compound—The best, most dependable glazing material. Never hardens or cracks. Gal. \$2.00; 5 gal. \$9.25; 20 gal. \$35.00; f. o. b. Portland.

Glazing Points—(Peerless)—1000 in box weight 2 lbs. 75c, postage extra.

Porch Boxes, Japanese Tubs, Hanging Baskets, Lawn Vases, Trellises

Specimen Ferns, Palms and Ornamental Plants furnished to order. We can assist you in securing special decorative effects for House or Garden. Tell Us Your Desires—WE CAN SAVE YOU MONEY.

Perennial Border and Bedding Plants

WE offer well-rooted specimens that can be safely packed and promptly delivered in perfect condition. If you contemplate large plantings or special effects, let us know your plans and requirements. We can supply in any quantity for every requirement at lowest prices.

In our list you will find many NEW and RARE perennials; the original plants having been secured from Europe; and all plants propagated from cuttings or root divisions are guaranteed true to name and color. We offer them to you at very moderate prices.

All Priced at 20c Each \$2 Doz., except as noted

(Dozen price applies to a dozen of ONB VARIETY only, not on mixed lots)

F. O. B. Portland, postage extra

ACONITUM-WILSONI (Monkshood) — Form bushy clumps and are invaluable for planting under trees and in shady places. Large dark blue flowers on stems 4 to 6 ft. Sept.

DENOPHORA-LILIIFOLIA — A very pretty Genus, closely resembling Campanula, with dainty light blue bell-shaped flowers on stems 3 ft. high. May-July. Ea. 25c, Doz. \$2.50.

POTANINI — Interesting semi-dwarf species, with large drooping flowers, of a light blue. 18 to 24 inches. July to October. Each 30c, Doz. \$3.00.

ALSTROEMERIA-AURANTIACA (Peruvian Lily) — Handsome plants, especially when grown in groups. Require a well drained, partly shaded position and at all times during their growth, the roots must have an abundance of water. Yellow flowers, streaked with red, in umbels on stems 2 to 4 feet high, from July to September. Each 30c, Doz. \$3.00.

ANCHUSA-ITALICA — Stout well-balanced bushes of dark green foliage, smothered with flowers of a brilliant shade of light gentian-blue. 2 to 4 feet. April to July.

ANEMONE JAPONICA (Japanese Windflower) — Among the most important Fall-flowering Hardy Perennials. Require partial shade. August to November.

RUBRUM — Semi-double rosy-red. 2 feet.

QUEEN CHARLOTTE — Very large semi-double of La France pink. 3 to 4 feet.

WHIRLWIND — Double white. 2 to 3 feet. We are listing 3 new introductions from Europe this season, as follows:

LOUISE UHINK — The finest of the double whites. Strong grower with healthy foliage. Large, double, pure white flowers on stems 1 to 4 feet high. Each 40c, Doz. \$4.00.

MAX VOGEL — Large semi-double pink flowers. 2 to 3 feet. Each 40c, Doz. \$4.00.

RICHARD AHRENS — Large white flowers with pinkish-lavender tinge. Each 50c.

ARTEMISIA LACTIFLORA — Chinese species of exceptional merit. Dark green, finely cut foliage, large terminal spikes of creamy-white flowers. Each 30c, Doz. \$3.00.

ASCLEPIAS-TUBEROSA — Very showy native plant, thriving in full sun and not particular as to soil. Flower, when opening, is of a salmon-pink color, changing to light orange-scarlet and then to a brilliant orange-scarlet, thereby putting three colors on each flower stem. 2 feet. June to Aug.

ASPHODELUS-LUTES (King's Spear) — Tall spikes of bright yellow Lily-like flowers, which are very fragrant. Sword-like foliage. 3 to 4 feet. Each 30c, Doz. \$3.00.

ASTERS (Michaelmas Daisies) — Among the very best of our Hardy plants, having the merit of making soft masses of any desired height from 2 to 7 feet. The foliage is of a soft, pleasing shade of green and makes an excellent filler and foil for other groups. Will do well in any garden soil with moderate watering, either in full sun or very light shade.

ABENDROTHER (Evening Glow) — Rosy red. 3 feet. Each 30c, Doz. \$3.00.

CLIMAX — Beautiful light blue or lavender with bright golden-yellow disc. 4 to 5 feet.

FELTHAM BLUE — Aniline blue. 3 to 4 feet.

LOUVAIN — A free-flowering soft pink variety. 3 to 4 feet. Each 30c, Doz. \$3.00.

MAGGIE PERRY — Very large flowers, loosely arranged in large trusses, lovely shade of mauve. The best of the older varieties. 3 to 5 feet.

MME. MICHAUD — A new semi-dwarf French Aster. One of the most distinct and interesting of the new introductions. Soft lavender pink. 1 ft. Ea. 40c, Doz. \$4.00.

PERRY'S WHITE — Flowers pure white, golden center, which turns to crimson when fully developed. The best of the white varieties. 4 feet.

RYECROFT'S PINK — Of free branching habit. Bright rosy pink flowers. 5 feet.

RYECROFT'S PURPLE — Large, rich purple flowering form of preceding. 5 feet.

ST. EGWIN — Very free-blooming, with soft rosy-pink flowers. 3 feet.

TATARICUS — One of the tallest and latest flowering. Bluish-violet. 7 feet.

ASTER (Mesa Grande Speciosa Grandiflora) — A very late flowering species, growing about 30 inches high, and in late October covered with large flowers of a dark purplish color. Each 40c, Doz. \$4.00.

ASTER AMELLUS (King George) — Large flowering, with large trusses of bluish-violet flowers. 2 ft. June, Aug. Ea. 50c.

RUDOLPH VON GOETHE — The best of the Amellus varieties. Very free-flowering, with large lavender-blue flowers, about 2½ inches in diameter. Resembles King George, but a much stronger grower and about two weeks later. Each 40c, Doz. \$4.00.

BLEEDING HEART — See Delityrao.

BLACK-EYED SUSAN — See Rudbeckia.

BOCCONIA-CORDATA (Plume Poppy) — Should be planted for its beautiful foliage as well as for its flowers. Leaves are glaucous, heart-shaped and deeply veined. Flowers are borne in great feathery or plummy masses, in terminal panicles, raised high above the heavy foliage.

BOLTONIA-ASTEROIDES — Pure white Aster-like flowers in great profusion from early September to October.

LATISQUAMA — More dwarf growing than preceding, with lavender flowers, slightly tinged pink. Each 30c, Doz. \$3.00.

SUPHTHALMUM-SALICIFOLIUM — Makes a neat compact bush, 12 to 18 inches high, with large bright yellow flowers from May to July.

Calycanthema (Cup and Saucer)

CAMPANULA-MEDIA (Canterbury Bells) — Single in white, blue and pink.

CALYCANTHEMA (Cup and Saucer) — white, blue and rose.

GRANDIS (Latiloba) — Stout spikes, well furnished with large lavender-blue, saucer-shaped flowers, somewhat like C. Persicifolia. Quickly forms a dense carpet. 3 feet. Each 25c, Doz. \$2.50.

LACTIFLORA — A very graceful plant, bearing large trusses of open bell-shaped flowers, of blue or lavender, on stiff stems, being excellent for cutting. 3 feet. May to July. Each 25c, Doz. \$2.50.

LATIFOLIA MACRANTHA — Large purplish-blue flowers on strong stems about 30 in. high. May to July. Each 25c, Doz. \$2.50.

PERSICIFOLIA (Peach Bells) — The Peach-leaved Campanula in blue or white. Forms dense carpets and flowers are excellent for cutting. 2 feet. May to July.

PERSICIFOLIA FL. PL. — The double flowering Peach-Bell. We guarantee this to be the true double flowering Peach-Bell. In blue only. Each 30c, Doz. \$3.00.

PYRAMIDALIS (Chimney Bellflower) — The most conspicuous of all Campanulas, forming a perfect pyramid, crowded with large porcelain-blue flowers. 4 to 5 feet. June to September. Each 30c, Doz. \$3.00.

PYRAMIDALIS ALBUS — A white flowering form of preceding. Each 30c, Doz. \$3.00.

PYRAVERSII — A new hybrid, with open bell-shaped flowers of lavender-blue with indigo center, borne freely on pyramidal stems 3 to 5 feet high. July to September. Each 40c, Doz. \$4.00.

CARDINAL FLOWER — See Lobelia.

CATANANCHE-COERULEA (Cupid's Dart) — Called Cupid's Dart because the ancient Greeks used it as one of the principal ingredients in their love potions. Lovely, blue, Daisy-like flower. 2 feet. June to August. Each 30c, Doz. \$3.00.

COERULEA BI-COLOR — White flowers, with slight suffusion of purple in center. Each 30c, Doz. \$3.00.

CARYOPTERIS MASTACANTHUS NANA (Blue Spirea) — A handsome Hardy Perennial, growing about 3 feet high and producing rich lavender-blue flowers the whole length of the branches. A valuable plant for either pot culture or bedding, blooming continuously from early September until frost cuts them down. Each 75c.

(Columbines—Double and Spurred Single)

AQUILEGIA (Columbine) — Combine as many good points as any Hardy garden plants grown. Handsome foliage at all seasons and beautiful flowers borne gracefully on long stems. While a light shade and loose, loamy soil are the best, they will do well in the full sun, and in any soil from light loam to adobe. May and June.

HYBRIDS — Blue, white, pink, yellow and lavender combinations. Can supply in mixture of colors only.

COLORADO NATIVE — Low-growing bushes with flowers of blue and lavender shades. Each 25c, Doz. \$2.50.

LONG-SPURRED DELICATISSIMA — Rose and yellow.

MRS. SCOTT ELLIOTT'S HYBRIDS — Wonderful colors with very long spurs. Each 25c, Doz. \$2.50.

ROSE QUEEN — Rose, white and yellow.

SNOW QUEEN — Dwarf white.

WHITE LADY — An English introduction. Long-spurred, snowy-white flowers, beautiful foliage. 2-yr. plants. Ea. 40c, Doz. \$4.00.

Perennial Border and Bedding Plants—Continued All Varieties 20c Ea., \$2.00 Doz., Except as Noted

F. O. B. PORTLAND, OREGON; IF MAILED ADD POSTAGE

Dozen Price Applies to a Dozen of ONE VARIETY Only, Not Assorted

‘ENTAURA-DEALBATA—The best of the Genus. Large and striking rose-pink flowers borne above the finely cut and handsome foliage. May to Sept. Each 50c.

MACROCEPHALA—Large thistle-like golden-yellow flowers. 3 to 5 ft. July, Sept.

MONTANA—Large violet-blue flowers. 18 inches. May to September.

MONTANA ALBA—White flowering form of the preceding.

‘EPHALARIA ALPINA—Flat heads of sulphur-yellow flowers. 5 to 7 ft. June, Aug.

‘HELONE-BARBATA HYBRIDS (Shellflower)—Slender, tubular flowers on tall erect stems, 3 to 4 feet high. Various shades of red and pink. June to August.

HYBRIDA PRAECOX—A very early spring-flowering species. Many new colors. May to August. Each 30c. Doz. \$3.00.

CHINESE LANTERN PLANT—See *Physalis*.

CHRISTMAS ROSE—See *Helleborus*.

COLUMBINE—See *Aquilegia*.

(*Coreopsis*)

COREOPSIS (Golden Star)—Dazzling orange color, borne from early June to late Fall.

FLORE PLENA—About 50% of blooms are double. The extra petalage adds a further charm to this already popular flower.

CYNOGLOSSUM - AMABILE—(Hound's Tooth)—The Perennial Hound's Tooth. About 2 feet high, with dark green foliage and deep blue forget-me-not like flowers, being of a clear blue, without the white eye of the *Myosotis*. Each 40c.

CUP AND SAUCER—See *Calycanthema*.

CUPID'S DART—See *Catananche-Coerulea*.

DAY LILY—See *Hemerocallis*.

DEILYTRA (Bleeding Heart)—Flowers heart-shaped. In long, drooping racemes of rose-crimson. One of the prettiest border plants and useful for forcing. Each 75c.

DELPHINIUM (Hardy Larkspur)—Are our best blue cut flowers, perfectly hardy, and established plants produce a number of spikes that will give 2 to 3 crops during the season.

BELLADONNA—The freest and most continuous bloomer of all Delphinium. Also makes the best cut flower. A clear azure blue with white bee.

BELLAMOSUM—Habit and growth same as Belladonna, but of a deep blue, white bee.

CLIVEDEN BEAUTY—An improved Belladonna, larger flowers on taller stems. Cambridge blue. Stock limited. Ea. 30c. Doz. \$3.

FORMOSUM—A dark blue with white bee.

GOLD MEDAL HYBRIDS—Seeds selected from named varieties. Many fine colors.

EXCELSIOR STRAIN HYBRIDS—From the best named varieties in the largest Pl. Gardens in England. Ea. 30c. Doz. \$3.00.

DELPHINIUMS IN SEPARATE COLORS—We have a few choice Delphiniums in the Hybrid class which we marked as to form and color, running from light blue and pinkish-lavender to dark blue with purplish cast, with bees (eyes) of many different colors. Single, double and semi-double. Each 50c.

DIANTHUS BARBATUS—See Sweet William.

DIANTHUS (Pinks) **ALLWOODI**—Perpetual-flowering Hardy Pinks. Wonderful improvement of the old type of Hardy Pinks. Are equally hardy and are perpetual flowering, blooming continually from early summer until late fall. Flowers are larger, borne on longer, stronger stems and are fragrant. PRICE OF ALLWOODI PINKS—Each 30c. Doz. \$3.00.

HAROLD—Large double pure white.

JEAN—White with violet-crimson center.

ROBERT—Delicate shade of old rose.

CARYOPHYLLUS FL. PL. (Double Clove-Scented Pinks)—A new strain, containing many fine rich colors. Each 25c. Doz. \$2.50.

HARDY GARDEN PINKS—

ELSIE—Double bright rose, maroon center.

GERTRUDE—Double deep rose.

SNOW—Early white.

WHITE RESERVE—Late white.

LATIFOLIUS ATROCOCINEUS (Ever-blooming Sweet William)—Beautiful summer bedding variety, producing masses of brilliant colored, double flowers all season.

DICTAMNUS FRAXINELLA (Gas Plant or Burning Bush)—The Dictamnus is one of the most satisfactory hardy plants in cultivation, both on account of its splendid flowers and its rich durable foliage. Grows about 3 feet high, and during the early summer produces its attractive flowers of pink or white. From the flower heads and seed capsules exudes a volatile inflammable oil in hot weather; if a light be applied early on a warm summer evening, the whole flower heads will be enveloped in a bluish flame and a very pungent odor emitted. They resent being moved when once they have become established.

2-year-old plants.....Each 50c
3-year-old plants.....Each 75c

(*Digitalis*)

DIGITALIS (Foxgloves)—Valuable Gloxinia-colored plants for the garden or shrubbery. 3 to 5 feet high, and bloom from May to July.

LILACINA—Lavender shades.

SHIRLEY GIANTS—Extra large-flowering in mixture of colors only. Colors run to bright pinks.

BUXBAUMII—Buxbaum's golden yellow foxglove. Foliage is less woolly than in other varieties. Each 25c. Doz. \$2.50.

DORONICUM—One of the most effective of early spring-flowering plants. Large yellow Daisy-like flowers on stems 2 to 3 feet high.

ECHINOPS-RITRO (Globe Thistle)—Produces large globular heads of rich blue flowers on stems 3 to 4 feet high, which when dried, remain attractive for a long time.

ERIGERON SPECIOSUS—Large, handsome blue flowers, violet, tinted with yellow centers, not unlike a large Michaelmas Daisy. 18 to 24 inches. June and July.

ERYNGIUM BOURGATI—Very distinct species. Spiny stems and bracts, which are often of a bright steel-blue color. Flower heads blue, or, rarely green. 12 to 18 inches. June to August. Each, 35c.

PLANUM (Sea Holly)—Holly-like leaves and thistle-like heads of flowers of a deep blue. Very decorative in the border and useful for dry bouquets in winter. 3 ft. June, July

EVENING GLOW—See *Abendroethe*.

FOXGLOVES—See *Digitalis*.

FUNKIAS—Very handsome and distinctive. While they prefer a partially shaded position and rather marshy soil, they will do fairly well in almost any position.

UNDULATA VARIEGATA—Leaves widely edged and striped white. Light blue flowers on stems. 16 to 20 inches high. June to August. Each 30c. Doz. \$3.00.

GAILLARDIA—One of the showiest hardy plants. Grow from 18 to 24 inches high and bloom from May to late Autumn.

GRANDIFLORA—Many fine color combinations of red, yellow and orange. Mixture of colors only.

KERMESINA SPLENDENS—Colors run to rich crimson.

THE KING—The best Gaillardia introduced to date. Flowers measure as high as 6 to 7 inches in diameter, on stout stems, 18 to 24 inches long. Flowers have a vivid crimson center with a wide yellow margin. Plants from root divisions (from plants imported from Holland). Each 50c. Doz. \$5.00.

PORTOLA (New)—Plant is of strong, vigorous, upright habit of growth, 2 to 3 feet high, with heavy, glaucous foliage. The long flower stems, straight and strong, hold the massive flowers erect. Flowers are 3 to 4 inches and over in diameter; petals are very broad, overlapping, of great substance and spread out flat, forming a very symmetrical flower. In color, a brilliant, rich coppery-scarlet, each petal tipped or margined with golden-yellow. Each 40c. Doz. \$4.00.

GALEGA-HARTLANDII—Strong growing bushy plants, 2 to 4 feet high, with pale pinkish-lavender flowers and graceful foliage. Each 25c. Doz. \$2.50.

GAURA-LINDENHEIMERI—One of the finest hardy plants, with 18-in. length branches of white and pink Orchid-like flowers. A continuous bloomer and fine for massing.

GEUM—Invaluable group for the rockery or border, neat habit, flowering for a long period during the spring and summer.

MRS. BRADSHAW—The old favorite, large double flowers of a fiery red.

LADY STRATHEDEN—Rich golden-yellow flowers. Very double. Each 25c. Doz. \$2.50.

GLORY (*Atrosanguineum* Fl. Pl.)—Habit same as Mrs. Bradshaw, but color is a rich orange-scarlet, much livelier than Mrs. Bradshaw. Each 25c. Doz. \$2.50.

ORANGE QUEEN (New)—The color of this new Geum is of a shade intermediate between that of Mrs. Bradshaw and Lady Stratheden. Plants are of similar habit to both of these popular varieties, being quite as large and as free flowering. Limited stock. Each, 40c.

GLOBE THISTLE—See *Echinops-Ritro*.

GOLDEN ROD—See *Solidago Canadensis*.

GYPSOPHILIA - PANICULATA (Perennial Baby's Breath)—Myriads of small white flowers on hair-like stems, forming a fairy mass, which for cutting is unsurpassed. Will thrive in any kind of soil in a sunny position. 2 to 3 feet. May to July.

FLORE PLENA—Double flowering form of the preceding. Charming double rosette-like flowers. Limited stock. Two-year-old plants, guaranteed to be double-flowering. Each 50c.

ROKEJEKA—Rose-colored Baby's Breath. Tall, graceful grower, with large pink flowers. Fine border plant and makes a wonderful cut-flower. Each 30c. Doz. \$3.00.

HELENIUM—Tall growing plants, closely allied to the Sunflower, bearing in late summer and early fall, great masses of large Daisy-like flowers in shades of yellow and orange.

AUTUMNALE RUBRUM—Ox-blood red, changing to terra-cotta.

AUTUMNALE SUPERBUM—Golden-yellow.

RIVERTON BEAUTY—Pure lemon yellow with large disc of purplish-black.

RIVERTON GEM—Old gold, suffused with terra-cotta, changing to wall-flower red.

Perennial Border and Bedding Plants—Continued All Varieties 20c Ea., \$2.00 Doz., Except as Noted

Dozen Price Applies to a Dozen of ONE VARIETY Only, Not Assorted

F. O. B. PORTLAND, OREGON; IF MAILED ADD POSTAGE

HELIANTHUS (Sunflower) — Most effective perennials for planting among shrubbery or in clumps in the lawn.
MAXIMILLIANA—Latest of all, blooming profusely in October. 5 to 7 feet.
MULTIFLORUS FL. PL.—Double golden-yellow, 3 to 4 feet.
RIGIDUS JAPONICA—Golden-yellow with dark center. 5 to 6 feet. July to Sept.
SPARSIFOLIUS—The best of the summer-blooming varieties. 5 to 6 feet.
HELIOPSIS-PITCHERIANA—Similar in habit to Helianthus, but commencing to bloom earlier in the season. Deep golden-yellow flowers, 2 to 3 inches in diameter, on stems 24 to 30 inches long. Are replacing Coreopsis as the yellow cut flower, as they last longer after being cut. Produce two crops each season.
SCABRA GRATISSIMA (New) — Large orange semi-double flowers, 3 to 4 inches in diameter. More dwarf and compact growing than preceding. Ea. 40c, Doz. \$1.00.
HELIOTROPE—See Valeriana.
HELEBORUS (Christmas Rose) **HYBRIDS**—Hardy herbaceous perennials, admired for their very early flowers and also for their very attractive leaves. Erect growing, 12 to 18 inches high, with large palmately divided leaves. Large pink flowers, 4 to 6 inches across. A few mild days in December will bring out the buds and flowers. A moist, well-drained, partially-shaded situation is preferable, and should not be disturbed after they have become established. 2-year-old plants, each 50c; 3-year-old plants, each \$1.00.
HEMEROCALLIS (Day Lily) **DUMORTIERII**—A dwarf Day Lily, 12 to 18 inches high. Orange colored flowers, 2 to 2½ inches long. One of the first to bloom. Each 30c.
FLAVA (Lemon Lily)—Sweet-scented, clear full yellow. 24 to 30 inches. June. Each 30c, Doz. \$3.00.
FULVA (Tawny Day Lily)—Coppery-orange, shaded crimson. 3 feet. July. Each 30c, Doz. \$3.00.
LUTEOLA MAJOR—Flowers golden yellow, 6 inches across, on stout branching stems, 4 feet high. One of the best and hardiest. July. Each 40c.
HESPERIS (Sweet Rocket) **MATRONALIS**—Sweet-scented purple. Sometimes white flowers. 3 to 4 feet. May to July.
HIBISCUS-MOSCHEOTUS HYBRIDS (Giant-Flowered Mallows)—The mammoth Hollyhock-shaped flowers range in color from white to intense crimson, but there is a softness and delicacy to all the shades that make them harmonize with almost any color scheme. 6 to 8 inches in diameter. 5 to 7 feet high. August and September. 2-year-old plants, Each 30c.

(Hollyhocks)

HOLLYHOCKS—A native of China, being one of the very oldest of cultivated flowers. Prefers a position where it receives the full sun. Double and single flowering sorts in separate colors.
HONESTY PLANT—See Lunaria.
ICELAND POPPY—See Papaver.

INCARVILLEA-DELAVALYI (Hardy Gloxinia)—Large, rich rose, Gloxinia-like flowers with deep yellow throats, on spikes 2 to 3 feet high. May and June. Each 30c, Doz. \$3.00.
JAPANESE SPURGE—See Pachysandra Terminalis.
JAPANESE WINDFLOWER—See Anemone.
JERUSALEM CROSS—See Lychnis.
KING'S SPEAR—See Asphodelus.
LOBELIA CARDINALIS (Cardinal Flower)—Rich, cardinal red flowers, opening from below upward along the tall spike, thus bearing flowers for several weeks. Prefer a moist deep loam in a partially shaded, or if given more water, a sunny position. 2 to 3 feet. July and August. Each 25c, Doz. \$2.50.
QUEEN VICTORIA—This variety has crimson foliage, which with the bright scarlet flowers is very effective. Each 40c.
LUNARIA BIENNIS (Honesty or Money Plant)—A hardy Biennial evergreen, recommended for cut flowers in spring, or as dried everlasting flowers, their silvery moon-shaped seed pods presenting a beautiful and rather curious appearance. 3 to 4 feet. Each 25c, Doz. \$2.50.
LUPINUS ARBOREUS (Yellow Boy)—Dense bushes 4 to 6 feet high, completely clothed with elegant racemes of rich yellow flowers, as many as 75 having been cut from bush during the season. Plant in fall or early spring. Each 30c, Doz. \$3.00.
SNOW QUEEN—Same habit as Yellow Boy, but with snow white flowers. Each 30c.
LUPINUS POLYPHYLLUS—Differ from Lupinus Arboreus in having larger flower stalks of racemes, but not as numerous. 3 to 4 feet.
CARMINE—What its name implies, a real carmine color. Each 30c.
LAVENDER QUEEN—Pretty lavender, tinted with rose. Each 30c, Doz. \$3.00.
MOERHELMIT—Rose and white. Each 30c, Doz. \$3.00.
ELLIOTT'S SWEET - SCENTED—New strain, sweet-scented; great range of colors, including pinks, fawn, purple and rose. Can supply in mixture of colors only. Each 30c, Doz. \$3.00.
HARKNESS' HYBRIDS—Wonderful mixture, containing many beautiful air shades. Mixture of colors only. Ea. 30c, Doz. \$3.00.
LUPINUS - HARKNESS' REGAL LUPINS (Hybrids)—This new race of Herbaceous Lupins is quite distinct from any other race of Lupins, and embraces colors, the likes of which have never been seen, or even dreamt of. These plants, being seedlings of Hybrids, are not guaranteed to be 100% true to color, about 50% being the average. Those that did bloom this season showed some wonderful color combinations. It is impossible by description to convey an adequate idea of the beauty of these colors, some so startling bright, others more subdued, yet not less charming.
PRICE OF THE FOLLOWING LUPINUS
Each 50c, Doz. \$5.00.
DAZZLER—Apricot and yellow.
MARJORIE—Bronze, shaded yellow.
WINSOME—Fawn, shaded yellow.
BRONZE and COPPER SHADES.
CREAM and PINK SHADES.
RED and MAHOGANY SHADES.
YELLOW SHADES.
LUPINUS-KELWAY'S SWEET LAVENDER (New Hybrid)—Fine spikes of lavender colored flowers, sweet-scented. Hardy and floriferous. Each 50c, Doz. \$5.00.
LYCHNIS - CHALCEDONICA (Jerusalem Cross)—Heads of brilliant orange-scarlet on stems 2 to 3 feet high. Will thrive in any kind of soil.
VISCARIA SPLENDENS—Neat tufts of dark green foliage, with reddish flowers on stems 12 to 18 inches high. Excellent for hot sunny position.
LYTHRUM SALICARIA—A strong growing plant, thriving in any soil or position, producing large spikes of rose-colored flowers from July to September.
MICHAELMAS DAISIES—See Asters.
MICHAUXIA CAMPANULOIDES—Grows 4 to 5 feet high; has irregularly toothed, bristly-hairy foliage and large curious drooping flowers, white, tinged slightly with purple, wheel-shaped at first, later the petals reflexed. The flower is parted nearly to the base into 8 to 10 segments, 1½ inches long. A very striking plant for the background. Likes a well-enriched soil of light character. Each 30c, Doz. \$3.00.

MONARDA-CAMBRIDGE SCARLET—The best of the various forms of this aromatic plant. Stout leafy stems, crowded heads of brilliant scarlet flowers. 2 feet. June to August.

MONKSHOOD—See Aconitum.

PACHYSANDRA TERMINALIS (Japanese Spurge)—A trailing plant, 6 to 8 inches high, forming broad mats of bright glossy green foliage and small spikes of greenish-white flowers during May and June. A ground cover that thrives in all shady places and the only plant that will thrive under Pine trees. Each 30c, Doz. \$3.00.

(Iceland Poppy) Nudicaule

PAPAVER-ALPINUM—A diminutive species neat tufts of foliage and dainty flowers in shades white, pink, yellow and buff. Each 25c, Doz. \$2.50.
NUDICAULE—IMPROVED SUNBEAM (Iceland Poppy)—This strain includes many new tints, such as maize, creams and various tones of rose. The flowers, which are much larger than the old strain, are borne on long, thick stems. 18 inches. Early spring to late summer.
ORIENTALIS-LACHS KOENIGIN—Large deep salmon-pink flowers.
MRS. BAKER—A rich wine-red.
PRINCESS VICTORIA LOUISE—A delicate shade of salmon pink.
MAHONY—Maroon-shaded crimson. The darkest Papaver yet introduced. Guaranteed true to name and color. Ea. 30c, Doz. \$3.
PERRY'S WHITE—Flowers are fine satiny white, with crimson maroon blotch at the base of each petal. Guaranteed to be true to name. Each 30c, Doz. \$3.00.
REMBRANDT—Magnificent orange-scarlet, the most gorgeous of all the Papaver. Each 30c, Doz. \$3.00.
MRS. FISHER (New)—Large dark crimson flowers borne on stout stems, 2 to 3 feet high. The finest dark Papaver in our Gardens. Each 30c, Doz. \$3.00.
PENTSTEMON - BARBATUS TORREYI—Spikes of bright scarlet flowers on stems 2 to 3 feet high. June to September.
SHIRLEY GIANT—Gloxinea-like flowers in varieties of color, including rose, cherry crimson and purple. Can supply in mixture of color only. Each 25c, Doz. \$2.50.
HETEROPHYLLUS—Make compact bushes 12 to 18 inches high. Flowers about 1 inch long; pink or rose-purple; slender at base, but full or inflated above, the lips well marked. May to July, second cutting in September. Each 30c; Doz. \$3.00.
PERENNIAL BABY'S BREATH—See Gypsophila-Paniculata.
PERUVIAN LILY—See Alstroemeria.
PERSIAN DAISY—See Pyrethrum.
PHYSALIS-FRANCHETTI (Chinese Lantern Plant)—An ornamental variety of the Winter Cherry. Forms dense bushes, about 2 feet high, producing freely its bright orange-scarlet lantern-like fruits, which, when cut, will last all winter. Very attractive plant. Each 30c.
PHYSOSTEGIA—A beautiful mid-summer flowering plant, not unlike a gigantic Heather. Will thrive in any soil and under any conditions.
ALBA—White flowering.
VIRGINICA—Bright, but soft pink.
POLEMONIUM-COERULEUM (St. Jacob's Ladder)—Useful border plants, succeeding best in partial shade. Deep green, finely cut foliage, spikes of showy blue flowers in May and June. 2 feet.

Perennial Border and Bedding Plants—Continued

All Varieties 20c Ea., \$2.00 Doz., Except as Noted

Dozen Price Applies to a Dozen of ONE VARIETY, Not to Mixed Lots
F. O. B. PORTLAND, OREGON; IF MAILED ADD POSTAGE

Phlox

PHLOX DECUSSATA—Perennial Phlox succeed in almost any kind of soil enriched with manure in spring, and allowed an occasional soaking of water during the hot weather. If the spikes of bloom are removed as soon as over, they will produce a second supply continuing till late autumn.
ALBION—White, faint analine-red eye.
DIADUM—Pure white.
ECLAIREUR—Rosy-magenta, lighter halo.
EUROPA—White, distinct crimson eye.
LAVENDER QUEEN—Large spikes of purplish-lavender flowers. Will not sunburn.
MRS. JENKINS—Best late white.
R.P. STRUTHERS—Rosy-carmine, claret eye.
SELMA—Pale rose-mauve, claret eye.
WM. ROBINSON—Rosy-salmon, purplish eye.

PRICE OF THE FOLLOWING PHLOX

EACH 25c. DOZ. \$2.50

BARON VON DEDEM—Scarlet, suffused orange.
BEACON—Brilliant cherry-red.
ELIZABETH CAMPBELL—Bright salmon pink with lighter shadings. One of the most attractive of all Phloxes.
GOLIATH—Bright cerise, deeper eye.
PROF. SCHLIEMANN—Bright lilac-rose. One of the best for late-flowering.
PROF. VIRCHOW—Bright carmine, overlaid with orange and scarlet.
RHEINLANDER—Salmon pink, deep red eye.
RYNSTROEM—Lively rose-pink.
THOR—Lively shade of deep salmon pink, suffused with scarlet glow. Light halo surrounds analine-red eye. One of the best.
MISS LINGARD (Suffruticosa)—Earliest of all Phlox. Large white flowers, pink eye.
FRAU ANTON BUCHNER—A beautiful pure white, taller than Mia Ruys. Early.

PRICE OF THE FOLLOWING PHLOX

EACH 40c

BARON VON HECKERN—One of the finest salmon-pink.
EVELYN—Large soft pink flowers.
EUGENE-DANZANVILLIERS—The best of its color, a rosy-lilac with a large white eye.
DEUTSCHLAND (Homeland)—Large trusses of brilliant oriental-red flowers with orange suffusion and crimson red eye.
MIA RUYS—Enormous, much-branched trusses of large pure white flowers. Dwarf.
MRS. MILLY VON HOBOKEN—Rich salmon-rose. Extra large and of perfect form.
VALD JENSEN—Beautiful shade of salmon-pink, with very small white eye. One of the latest and best.
PHLOX-FEUERBRANDT—In this European introduction, we have a color that has been unknown in Phlox. A bright vermilion scarlet with a deeper center, puts it at the head of all Phlox. Each 50c.
PYRETHRUM HYBRIDUM (Painted or Persian Daisy)—Perfectly hardy, and invaluable as a cut flower, lasting longer in water than most any other flower. Nothing can surpass the Pyrethrum profusion of flowers throughout the entire summer, from May to July. While we sow only from the best double-flowering varieties, only a small percentage will bloom double the first year, but will average 70% to 80% the second season. Each 25c. Doz. \$2.50.

RED HOT POKER—See Tritoma.

RUDBECKIA—BLACK-EYED SUSAN—The perennial form of this favorite flower. Deep orange-yellow flowers with dark purple cone on long wiry stems. June to Aug.
GOLDEN GLOW—One of the most popular hardy plants, growing 6 to 7 feet high, producing masses of large double yellow flowers, shaped like a Cactus-Dahlia.
GRANDIFLORA HYBRIDS—Dark orange-yellow flowers with purplish-black cones.
PURPUREA (Purple Cone Flower)—Peculiar reddish-purple flowers, with a very large brown cone-shaped center. July to October. 2 to 3 feet. Each 25c. Doz. \$2.50.
FULGIDIA VARIABILIS—Somewhat like a Black-Eyed Susan. Taller and stiffer stems. Flowers remain in good condition for from 4 to 6 weeks on plants. August to October. 13 to 24 inches. Each 30c. Doz. \$3.00.

SALVIA—AZUREA GRANDIFLORA (Rocky Mt. Sage)—Grows 3 to 4 feet high, producing masses of sky-blue flowers from August to October. Thrives in any soil in sunny position.

GLOBOSA—A new introduction from Europe. Leaves, in a flattened rosette, are 12 to 16 inches long and 6 to 8 inches broad, deeply cut, clothed with a silvery white tomentum. Flower stems 3 feet or more high, much branched, with large white flowers. Biennial. Each 30c.

GREGGII—A native of Texas and Mexico. Makes a shapely and bushy plant about 2 feet high, and from July to September bears masses of rich and luminous brilliant carmine flowers. Stock limited. Each 50c.

NUTANS—Hardy perennial, 2 to 3 feet high, the violet flowers being borne in whorls at top of flower stem, 6 to 8 whorls being the average. Each 30c.

OFFICINALIS (Giant Sage)—The well-known Herb.

PATENS—A beautiful plant for the border. Flowers of the darkest blue known. Should not be planted in position which is flooded during wet season. Each 25c.

SCLEARIA (Clary)—Large woolly leaves, often 8 to 10 inches long and 4 to 6 inches broad. The bluish-white flowers come in whorls on spikes 24 to 30 in. high. Ea. 30c.

TURKESTANICA—Has quadrangular stems, tinged with pink. Large white flowers, tinged with pink, on stems 2 to 3 feet high. Each 40c.

VIRGATA NEMOROSA—A most effective plant for the border, growing from 2 to 3 feet high, and producing its dark purplish-blue flowers. May to Sept. Each 30c.

SCABIOSA-CAUCASICA—A soft and charming shade of lavender, commencing to bloom in June, throwing stems 18 to 24 inches long, until frost cuts them down. Each 30c.

ALBA—White flowering form of the preceding. Each 35c.

JAPONICA—Clear blue flowers, about 2 inches across, on stems 2 feet high. August to October. Each 25c. Doz. \$2.50.

SEA HOLLY—See Eryngium-Bourgati.

SEA LAVENDER—See Statice.

SHASTA DAISY—ALASKA—Immense fluffy white flowers with yellow centers.

SIEGER—A European introduction, and the largest flowering Daisy yet introduced. Flowers measure from 4 to 6 inches across. Each 30c; Doz. \$3.00.

SHELLFLOWER—See Chelone-Barbata.

SIDALCEA—ROSE QUEEN—Erect growing, more or less branching plants, producing their rose-pink flowers during July and August, succeeding in any ordinary garden soil. Each 30c. Doz. \$3.00.

SOLIDAGO CANADENSIS (Golden Rod)—Well-known hardy perennial, succeeding in any soil, in sunny position. Spikes of golden-yellow flowers all summer.

STACHYS LANATA (Lamb's Ears)—Fine old-fashioned cottage garden plant. Silvery foliage.

STATICE LATIFOLIA (Sea Lavender)—A valuable plant either for the border or rockery, with tufts of leathery leaves and immense candelabra-like heads of purplish-blue flowers. These, if cut and dried, will last for months.

STOKESIA-CYANEA—A beautiful native plant, bearing freely from early in June to late Fall, its handsome, bright lavender-blue or white flowers, on stems 12 to 18 inches high.

LILACINA—A recent introduction from Europe. Flowers 3 to 4 inches across, on stems 15 to 18 inches long, 4 to 8 flowers on one stem. A pleasing lavender. June to September. Each 30c.

SUNFLOWER—See Helianthus.
SWEET ROCKET—See Hesperis.
SWEET WILLIAM (Dianthus Barbatus)—
JOHNSON'S GIANT—The finest of the Sweet William Mixtures. Giant flowers in marvelous colors. Can supply in mixture only.

OCULATUS—Large flowers in various shades of red.

NEWPORT PINK—A fine watermelon pink.

PUNCEUS—A new European introduction. Rich salmon scarlet. One of the best. Ea. 25c.

SCARLET BEAUTY—Rich deep scarlet.

THALICTRUM-AQUILEGIFOLIUM—Graceful foliage like Columbine, and rosy purple or white flowers from May to July.

Can supply in mixture only. Each 30c.

ADIANTIFOLIUM—A beautiful variety with foliage like a Maiden-Hair Fern and minute yellow flowers. May to July. Ea. 30c.

DIPTEROCARPUM—New Chinese species of great merit, growing from 4 to 7 feet high, elegant fern-like foliage, loose panicles of flowers of a charming shade of lilac-mauve, brightened by lemon-yellow stamens. July to September. Each 30c.

THYMUS—VARIEGATED—The well-known Herb. Small pale green and yellow leaves. Lavender flower.

GOLDEN LEMON THYME—Leaves golden-yellow and green, lemon-scented.

TRITOMA (Red Hot Poker) BORCH'S HYBRIDS—Early, perpetual flowering Hybrids, colors ranging from pale yellow to scarlet. Supply in mixture only. Each 30c.

MIRABILIS—Ever-blooming Hybrids that bloom from early May until cut down by frost. Orange-scarlet to canary yellow. Each, 25c.

PFITZERI—The ever-blooming Flame Flower. The free and ever-blooming qualities of this variety have made it one of the greatest bedding perennials. In bloom from June to October, with spikes 3 to 4 feet high, and heads of bloom of a rich orange-scarlet, producing a grand effect either planted singly or in masses. Ea. 30c.

TUBEROSA—See Asclepias.

VALERIANA-OFFICINALIS (Garden Heliotrope)—Produces showy heads of rosetinted white flowers during June and July, with a delicious strong Heliotrope odor.

COCINEUM—Showy heads old rose or pink.

ALBA—The white form of preceding.

VERBASCUM-GIGANTEUM—Foliage silvery white; flowers yellow. 5 to 7 feet.

PHOENICEUM—Quite distinct, neat tufts of dark green foliage, slender spikes of rose or purple colored flowers. 2 to 3 feet.

VERONICA—A family containing some of the most beautiful subjects for the Hardy Garden.

LONGIFOLIA SUBSESSILIS—One of the handsomest blue-flowering plants. Hardy and increases in strength and beauty each year. Spikes, 2 to 3 feet high, completely studded with beautiful blue flowers from July to September.

SPICATA—Dense tufts, from which arise erect spikes of clear blue flowers. 18 in.

SPICATA ALBA—White flowering form of preceding.

VIOLETS—No flower is a greater favorite than the Violet. All the Violets we offer are hardy, and while they will do in almost any position, they will do best in partial shade.

GOV. HERRICK—Rich deep purple.

PRINCESS OF WALES—Rich violet.

WALLFLOWERS—The old favorite Sweet-Scented Wallflowers in the following separate colors:

EARLY GIANT—Brown and yellow. Early flowering.

BLOOD RED—Of exceeding floriferousness. Flowers are of an attractive dark red and very fragrant.

CRANFORD BEAUTY—Clear golden yellow.

CRIMSON KING—Deep purplish crimson.

GOLDEN KING—Golden yellow variety.

FIRE KING—A vivid orange, very striking.

GOLDEN MONARCH—Golden yellow flowers. Dwarf habit.

PURPLE QUEEN—A most pleasing contrast to other varieties, being of a purplish hue.

VULCAN—Enormous flowers of ruby crimson. Dwarf.

YUCCA-FILAMENTOSA (Adam's Needle)—Among hardy plants, there is nothing more effective and striking for isolated positions on the lawn or on dry banks where few other plants thrive. It is also indispensable for the rockery. Its broad sword-like evergreen foliage and immense branching spikes of drooping, creamy-white flowers, rising to a height of 6 feet, render it a bold and handsome subject wherever placed. 3-year-old plants, each 35c.

PERENNIAL ROCK or ALPINE PLANTS

Important—The popularity of rock gardens has increased so greatly that we have at considerable time and effort prepared an exceptionally complete and fine list of the perennials especially suited for this purpose. In fact, the list is so complete it is impossible to show pictures of them; however, we have tried to make the descriptions short and clear, and we are sure you will enjoy reading through the entire list as much as we have enjoyed preparing it and that the selections you make for your "rockery" will be most pleasing to you.

With the exception of a few of the newest and most rare varieties, our plants are field grown, are given constant care and cultivation and when sent out are strong and well developed; much larger and worth a great deal more money than pot-grown plants.

While we endeavor to secure the best possible seeds from the most reliable sources, we cannot guarantee, as to form and color, any plants propagated from seed, especially hybrids. Please do not specify straight colors on hybrids that are listed "in mixture of colors only."

If you contemplate large plantings or special effects, let us know your plans or requirements. We can supply in any quantity for every requirement at lowest prices.

All Prices 20c Each, \$2.00 Doz., Except as Noted

F. O. B. PORTLAND, OREGON; IF MAILED, POSTAGE EXTRA

(Dozen Price Applies to a Dozen of One Variety Only, Not Mixed Lots)

ACHILLEA

AETHIONEMA

ARABIS

ARMERIA

ASTER

ASTILBE

ACAENA (Glaucous)—Dwarf trailing plants, evergreen foliage of bluish hue. 2 ins. Each 25c, doz. \$2.50.

ACHILLEA (Argentea)—Dwarf, tufted, hoary Alpine plants. Silvery foliage, white flowers. 4 to 6 ins. June and July. Each 25c, doz. \$2.50.

Millefolium Roseum—Dense heads of rosy-pink flowers. 18 ins. May to July.

Parmica, the Pearl—Pure white flowers, all summer. 18 ins.

Tomentosa—Beautiful Alpine species, close tufts of finely divided foliage and compact heads of golden-yellow flowers. June and July. 12 to 18 ins. All of the Achilleas are drought resisting and will thrive in any kind of soil.

AETHIONEMA (Grandiflorum)—Strong twiggy bushes, resembling an Iberis in growth, with clusters of rosy-pink flowers in May and June. 12 ins. Each 30c.

Coridifolium—Branches numerous, 4 to 6 in. high. Rosy lilac flowers in dense, short racemes. June and July. Each 50c.

ALYSSUM (Argenteum)—Dwarf and dense grower, foliage silvery beneath, large panicles of bright yellow flowers, beginning later than Alyssum Saxatile and blooming all summer. 10 ins. Each 25c, doz. \$2.50.

Moellendorffianum—Makes a dense cushion about one ft. across. Fine for carpeting, growing about 4 ins. high. Yellow flowers in June and July. The best Alyssum for the rockery. Each 30c, doz. \$3.00.

Saxatile Compactum—Neat bushes, hoary foliage, large heads of golden-yellow flowers. 8 to 10 ins. May and June.

Saxatile Citrinum—Dwarf compact habit, especially good for edging and rockery work. Masses of pale yellow flowers May and June. 10 ins. Each 30c, doz. \$3.00.

Saxatile Luteum—Good compact habit, sulphur-yellow flowers. Each 25c.

ANDROSACE (Lanuginosa Leichtlini)—A free-growing trailing plant with gray silky foliage and umbels of white flowers with small crimson eye. The most alpine of Alpine plants. Protect from extreme moisture during winter months. May to October. Each 35c, doz. \$3.50.

ANEMONE (Hupensis)—A pretty species from central China, closely resembling Anemone Japonica in a miniature way, with pale mauve colored flowers from Aug. till late fall. 12 to 18 ins. Each 25c, doz. \$2.50.

Pulsatilla (Pasque Flower)—Grows from 8 to 12 ins. high and produces large flowers, varying from lilac to purple. April and May. Each 40c, doz. \$4.00.

St. Brigid (Irish Anemone)—Their fine cut foliage and pretty shades of blue, pink and white flowers make them one of the popular spring flowers. 12 to 18 ins. Each 25c, doz. \$2.50.

ANTHEMIS—Handsome finely cut foliage and large lemon-yellow flowers. Blooms all summer and thrives in the poorest soil. 2 ft.

AQUILEGIA (Alpina)—A beautiful short-spurred form, blue and white flowers, about 10 ins. high. July and Aug. Ea. 30c, doz. \$3. Atrata (European Columbine)—Stems 18 to 20 ins., many-flowered. The violet flowers are furnished with a claw, about 1 in. long. Rare. All summer. Each 30c, doz. \$3.00.

ARABIS (Rock Cross) Alpina—Gray-green foliage, pure white flowers. 4 to 6 ins. April. Flore Pleno (Double)—Flowers have a pinkish tinge and as they do not go to seed as readily as the single flowering, they do not have the unsightly seed pods. 6 to 8 ins. April and May. Each 25c, doz. \$2.50.

Rosea—Neat tufts of hoary foliage covered with dainty sprays of rose-colored flowers. April and May. Each 30c, doz. \$3.00.

ARENARIA (Balearica)—Close turf-like habit. A real gem for carpeting a shady moist spot. Small white flowers from May to Sept. Each 25c, doz. \$2.50.

Caespitosa—A compact, leafy form making dense moss-like masses. White flowers all summer. Each 30c, doz. \$3.00.

Montana—Charming trailing species, with large white flowers, first rate rock or edging plant in dry soils. June to Sept. Each 30c, doz. \$3.00.

ARMERIA (Caespitosa)—Diminutive tufts of dark green foliage, studded with tiny pink flowers. Rare and beautiful. 2 ins. Ea. 50c. Formosa—Light pink flowers. 12 to 15 ins. May to July.

Maritima—Neat tufts of dark green foliage with an abundance of rose-pink flowers. 8 to 12 ins. May to July.

Vulgaris—Native of the Coos Bay country. About 6 ins. high with numerous rose-pink flowers. 6 ins. May, July. Ea. 25c, doz. \$2.50.

Maritima Alba—A white-flowering form. Each 25c, doz. \$2.50.

ASPERULA (Woodruff)—A spreading, trailing plant with beautiful rosy-pink flowers. 6 to 8 ins. May to July. Each 25c, doz. \$2.50. Tinctora—An excellent plant for dry places. Native of the dry hills and rocks of Europe. May be used in place of Gypsophila Paniculata, as filler for bouquets. Trailing unless supported. Flowers white, sometimes reddish on outside. Each 25c.

ASTER—(Alpinus)—Large purplish-blue flowers with golden-yellow center. 10 ins. May and June.

Alpinus Goliath—Flowers are larger than those of preceding variety and of a beautiful lilac shade, with a yellow center. 12 to 15 ins. May and June. Each 25c, doz. \$2.50.

Amellus King George—Extra large-flowering, with large trusses of bluish-violet flowers. 2 ft. May to Aug. Each 50c.

Amellus Rudolph Goethe—Very free-flowering with large trusses of large lavender-blue flowers, about 2 ins. across. The finest Amellus variety yet introduced. 2 ft. June to Aug. Each 50c.

Aster Farreri Big Bear—A new species; following is an extract from Mr. Farrer's report R. H. S. Journal: "The most glorious Aster of the year, a towering, tazzled person of a thousand narrow rays of richest violet, flopping from a flat center disc of vermilion orange, a species new to cultivation and the finest yet introduced." 1 ft. May to July. Each 50c.

Mauve Cushion—New hardy Japanese Aster. An entirely distinct species, forming a round cushion-like plant 2 to 3 ft. in diameter and 6 to 8 ins. high, covered with mauve-colored flowers from Sept. to Nov.

ASTILBE (Spiraea)—Has been off the market for several years. One of the most beautiful perennial plants with their long plume shaped spikes of pink and white flowers. Each 50c, doz. \$5.00.

AUBRETIA (Hybrids)—Neat tufts of foliage, smothered during spring and early summer with gorgeous colored flowers. 4 to 6 ins. Moerheimii (New)—With large soft-pink flowers. Each 35c.

AURICULA (Alpine Primrose)—Handsome smooth-leaf foliage, often covered with a whitish powder. Flowers in clusters, fragrant at times, and in many fine color combinations. 6 to 8 ins. April and May. Each 25c, doz. \$2.50.

BELLIS PERENNIS (Double English Daisy) Fire King—Very striking shining flowers with quilled petals and yellow center.

Longfellow Rosea—Large double pink.

Giants of Arnstadt—Giant white flowers, resembling an annual Aster in size and form.

AUBRETIA

BELLIS

CAMPANULA

CERASTIUM

CRUCIANELLA

DELPHINIUM

PERENNIAL ROCK or ALPINE PLANTS, Continued

All Prices 20c Each, \$2.00 Doz., Except as Noted

F. O. B. PORTLAND, OREGON, IF MAILED POSTAGE EXTRA

(Dozen Price Applies to a Dozen of One Variety Only, Not Mixed Lots)

DIANTHUS

CALAMINTHA (Alpina)—A very graceful little rock plant, spreading tufts of pretty foliage, spangled with lavender-blue flowers. 6 to 8 ins. June to Aug.

CAMPANULA—One of the most popular families of hardy rock plants.

Carpatica (Carpathian Harebells)—A pretty species growing not over 8 ins. high, in compact tufts; flowers clear blue, held erect on wiry stems. As an edging for hardy border or for the rockery it is unsurpassed. June to October.

Carpatica Alba—A pure white form of the preceding.

Isophylla Alba—A trailing plant with pure white flowers, 1 in. or more wide. A desirable basket or rock plant in either sun or half shade. July, Sept. Each 40c, doz. \$4.00.

CAMPANULA GARGANTICA—The jewel of the rock garden. The plants form rosettes of small leaves covered from June to Sept. with light blue star-shaped flowers, which have a medium sized white eye. Trailing, 3 to 4 in. high. Each 35c.

Laurii—A new species from the Greek islands. Habit reminds one of *Rotundifolia*, but more spreading and the flowers produce more freely. Flowers are of a beautiful shade of lavender, very large, about 1 inch across and very attractive. Instead of drooping as in *C. Rotundifolia*, the flowers turn upward. When in bloom, the plants represent a mass of color with scarcely a leaf visible. Each 50c, doz. \$5.00.

Muralis (*Portenschlagiana*)—Dense tufts of dark green foliage, smothered for months with large light blue flowers. 3 to 5 ins. June to Sept. Each 30c.

Pusilla—Makes a very dense spreading clump of fine foliage with many flowers, carried on slender stems, 4 to 6 ins. high. Flowers blue, nodding. June to Oct. Ea. 30c, doz. \$3.

Pusilla Alba—A white flowering form of the preceding. Each 30c.

Rotundifolia (Blue Bells of Scotland)—Slender branching stems, 10 to 15 ins., covered with dainty pale blue flowers from May to September.

Turbinata—Resembles *C. Carpatica*, both plants and flowers being larger. Each 25c, doz. \$2.50.

CERASTIUM (*Tomentosum*)—Neat tufts of silvery foliage, slender sprays of pure white flowers.

CHEIRANTHUS ALLIONII (*Liniofolius*)—Beautiful new species, with lilac-mauve flowers, very free-flowering and good for dry rockeries and borders. Each 30c, doz. \$3.00.

CORYDALIS (*Thalictrifolia*)—Beautiful new species from China, handsome foliage resembling *Thalictrum*, yellow flowers all summer. Requires slight protection during very severe weather. One ft. Ea. 40c, doz. \$4.00.

CRUCIANELLA (*Stylosa*)—Tangled masses of elegant foliage, crowded heads of bright rose flowers. 12 ins. May to Aug.

DAPHNE (*Cneorum*)—With long trailing branches, leaves small, dark green, glabrous above, evergreen. Flowers in many-flowered heads. Pink and fragrant. 6 to 10 ins. May to July. Each 50c.

DELPHINIUM (*Chinensis*)—A very pretty species with fine feathery foliage and intense gentian blue flowers. 18 ins. May to July.

Chinensis Album—A pure white form of the preceding.

Nudicaule—Grows 18 to 20 ins. high, free-flowering, bearing a profusion of brilliant scarlet flowers. May until cut down by frost. Each 25c, doz. \$2.50.

DIANTHUS—This genus contains some of the most charming of our Alpine plants, most easily cultivated in gritty well-drained soil.

Alpinus—Very dwarf, flower stems rarely reaching more than ¾ in. high. Dark shining foliage. Flowers deep rose, or purplish and crimson spotted, 1 in. across, with a darker ring around the eye. May to June. Each 35c.

Caucasicus—Compact tufts, covered with deep rose-colored flowers. 6 ins. May to July. Each 25c, doz. \$2.50.

Caesius (Cheddar Pink)—Pretty tufted species, excellent for dry banks, rocks and old walls. Bright pink flowers on stems 6 to 8 ins. high. June to Aug. Each 25c, doz. \$2.50.

Deltoides (Maiden Pink)—A beautiful little plant with narrow leaves, bearing a profusion of small flowers, deep rose in color, from May to July. 4 to 6 ins. Each 25c, doz. \$2.50.

Graniticus—Of neat branching habit, 6 to 8 ins. high. Flowers bright red, although sometimes purple or vivid rose will be amongst them. July-Sept. Ea. 25c, doz. \$2.50.

DIANTHUS (*Neglectus*)—Perhaps the most beautiful of all Alpine Pinks. Neat tufts, flowers salmon-rose, reverse of petals tawny yellow. 3 to 4 ins. high. June to Aug. Each 35c, doz. \$3.50.

Plumaris (Pheasant Eye Pink)—Large flat masses of blue-green foliage, bearing many fine long-stemmed flowers through a long flowering season. Colors diverse. May, July.

Semperflorens Perfection—A splendid strain which produces an infinite variety of shades of red, such as crimson, carmine, pink, rose, salmon and cinnabar, mostly with an eye of deeper hue. Can supply in mixture of colors only. 10 to 12 ins. May to July. Each 30c, doz. \$3.00.

Sternbergii—Very neat plant, bearing white fringed flowers. Most excellent for rockery. 4 to 8 ins. May to July. Each 35c, doz. \$3.50.

Superbus—Grassy foliage, quantities of palest lilac, or sometimes white flowers, which are much cut and very fragrant. 12 ins. July to Sept. Each 25c, doz. \$2.50.

Sylvestris—Tufted plant, about 1 ft. Beautiful salmon-pink flowers. Ea. 30c, doz. \$3.

DRABA (*Cuspidata*)—An *Alyssum*-like plant. Tufted, about 4 ins. high with light yellow flowers during Feb. and Mar. Prefer the full sun. Each 30c, doz. \$3.00.

DRACOCEPHALUM (*Nutans*)—A very pretty rock plant, closely allied to *Nepeta*. 10 to 12 ins. high, with dense spikes of purplish-blue flowers. Prefers a moist, partially shaded situation. May to July. Each 25c, doz. \$2.50.

ECHEVERIA GLAUCA (Hen and Chickens)—The glaucous leaves are in small but dense rosettes. Flowers, 15 to 20 on stem 8 to 10 ins. high. Reddish.

ERIGERON (*Aurantiacum*)—Close tufts of dark green foliage with bright golden-orange flowers. Very showy. 6 to 8 ins. May to June. Each 25c, doz. \$2.50.

Mucronatus—Neat tufts of dark green foliage, small pink and white Daisy-like flowers. Trailing habit. May, Oct. Ea. 30c, doz. \$3.

Multiradiatus—Very dwarf, pink Daisy-like flower. 4 ins. Each 30c, doz. \$3.00.

ERINUS (*Alpinus*)—Diminutive evergreen rock plants. From close tufts of dark green foliage emanate numbers of short spikes, well set with purplish flowers. 3 to 4 ins. May to July. Each 25c, doz. \$2.50.

Alpinus Album—A white flowering form of the preceding.

LEONTOPODIUM

LYCHNIS

MYOSOTIS

PRUNELLA

VERONICA

ERIOPHYLLUM CAESPITOSUM (Oregon Sunshine)—Tufted herbaceous perennials with finely cut foliage. Prefers a rather poor soil. Flowers yellow. 12 to 18 ins.

ERPETION RENIFORME GLOBOSUM (Australian Violet)—Neat tufts of kidney-shaped foliage. Small flowers, lavender with a small white fringe. 4 ins. May to July. Each 10c, doz. \$3.00.

ERYNGIUM (*Bourgati*)—Very distinct species, spiny stems and bracts, which are often of a bright steely blue color. Flower heads blue or rarely green. 12 to 18 ins. June to August. Each 35c, doz. \$3.50.

ERYSIMUM RUPESTRE AURANTIACUM (Fairly Wallflower)—Dense tufts of bright green foliage and lemon-yellow or bright orange colored flowers. April to June. 6 to 8 ins. Each 25c, doz. \$2.50.

EPILOBIUM (*Hectori*)—A neat creeper. As leaves grow older they have the appearance as if they were of hammered copper. Small white flowers. All summer. Each 25c.

EUONYMUS (*Radicans*)—This trailing *Euonymus*, with beautiful, small green and white variegated leaves, is particularly desirable for its dense, evergreen foliage and extreme hardiness, taking the place of the English Ivy for wall covering. Makes a splendid ground cover and one of the best creepers for the rockery. Each 75c.

EUPHORBIA (*Cyparissias*)—Many short plume-like branches from the crown and adventitious root-buds, covered with spreading dark green leaves. Bright yellow flower-like bracts. May and June. 8 to 10 ins.

FELICIA—PETIOLATA ROSEA—A most desirable trailing plant with pink Daisy-like flowers. Planted on a wall, it will hang down from 2 to 4 ft. and it flowers almost continuously. A very strong grower. Each 25c; doz. \$2.50.

FRAGARIA INDICA (Creeping Strawberry)—Grows rapidly, with runners as much as 5 ft. long. Has a small red fruit. Excellent for hanging baskets, walls, rocks and banks.

GENTIANA ANDREWSII (Bottle Gentian)—One of the most fascinating native plants. The flowers, which are tightly closed, are borne at the top of stems 8 to 12 ins. high and are an intense blue. July and August. Each 25c, doz. \$2.50.

PERENNIAL ROCK or ALPINE PLANTS, *Continued*

All Prices 20c Each, \$2.00 Doz., Except as Noted

F. O. B. PORTLAND, OREGON, IF MAILED POSTAGE EXTRA

(Dozen Price Applies to a Dozen of One Variety Only, Not Mixed Lots)

GERARDIA (Hybridia)—Resembles a Pentstemon. Gloxinoides in growth and flowers, stems being more slender and flowers smaller. Colors range from pinkish-lavender to light purple. 2 ft. May to Aug. Each 25c, doz. \$2.50.

GEUM—An invaluable group for the rockery, neat habit, flowering for a long period during the spring and summer, easy cultivation. **Borisii**—The finest of this showy family. Neat tufts of evergreen foliage, producing an abundance of neat branching stems, covered with large well-formed flowers of a vivid tangerine or orange scarlet. 8 to 10 ins. May to Oct. Each 50c.

Glory (Atrosanguineum Fl. Pl.)—Fine orange scarlet. Habit same as Mrs. Bradshaw. Each 25c, doz. \$2.50.

Heldreichii—Resembles **Borisii** in habit, but with orange colored flowers and lighter green foliage. 8 ins. May to Sept. Ea. 40c.

GYPHOPHILIS (Ceratoides)—A dense growing creeper with small clusters of large flowers, often 2 1/2 in. across, of a silvery white or lilac color with pink veins. June and July. Each 25c, doz. \$2.50.

Repens—A trailing plant with stems ascending at end. Not over 4 ins. high. Rather large bluish white flowers from mid-summer to autumn. Each 35c, doz. \$3.50.

HELENIA (Hoopesii)—These low-growing early-flowering Heleniums are excellent plants for the rockery where they receive a little sunshine. Hoopesii is the earliest of all Heleniums and the only one with pure orange colored flowers, which are 3 to 4 ins. long. May to June. Each 25c, doz. \$2.50. **Biglowii**—Follows Hoopesii in blossom with large yellow flowers with black centers. Prefers a rather poor heavy soil. Each 25c, doz. \$2.50.

HELIANTHEMUM (San Rose or Rock Rose) **Mutabile**—Low-growing evergreen shrubs which, during their flowering season, May to July, are covered with a mass of brilliant colored flowers. 10 to 12 ins. **Boyle de Feu**—Double red flowering form of the preceding. Each 30c.

HELIXINE (Soleirolia)—Is one of the tiniest of plants and is not over 1/2 in. high, but spreads to make a solid delicate carpet. Fine for rock work in shade and moist spots. Each 30c.

HEPATICA—A charming group of early spring-flowering plants, remarkable for the way in which they flower. Prefer a north or east slope, where they receive partial shade, although will do fairly well in an open position in moist rich soil.

Triloba Alba—White. Each 25c, doz. \$2.50. **Triloba Coerulea**—Blue. Each 30c, doz. \$3.00.

HERNARIJA (Glabra)—Makes a dense mat of moss-like foliage, which turns a deep bronzed in winter. Small greenish flower during summer. Thrives in the poorest soils, makes a solid covering and is regarded as one of the hardest trailers. Each 30c.

HEUCHERA SANGUINEA (Coral Bells)—They have beautiful heart-shaped leaves which form a low evergreen clump, 6 to 8 ins. high. Coral red flowers on stems 12 to 18 ins. June to August.

HYPERICUM CALYCYNUM (Rose of Sharon)—Low-growing evergreen, 10 to 12 ins. high, with large yellow flowers which are brightened by the red anthers. A good ground cover. Each 25c, doz. \$2.50.

Moserianum—A beautiful summer-flowering variety. Dwarf, marvelously free-flowering, flowers being from 2 to 3 ins. in diameter, of a golden yellow, with crimson tipped anthers. 12 to 18 ins. Each 30c, doz. \$3.00. **Olympicum**—Neat growing evergreen, about 1 ft. high with large yellow flowers in abundance, June to Sept. One of the best for the rockery. Each 30c, doz. \$3.00.

Repens—Prostrate masses of evergreen foliage with large golden yellow flowers from June to Sept. Each 30c, doz. \$3.00.

IBERIS GIBALTARICA (Hardy Candytuft)—Neat bushes of dark evergreen foliage, smothered with close heads of flowers, ranging in color to lavender. 10 ins. May to July. **Tenorena**—Somewhat shrub-like, about 6 in. high, with white flowers, changing to purple. May to July. Each 25c, doz. \$2.50.

IBERADELLA (Retundifolia)—Neat compact tufts of dark green foliage, covered with small white flowers from May to July. Each 25c, doz. \$2.50.

INCARVILLEA (Brevipes Grandiflora) (Hardy Gloxinia)—Umbels of large crimson-purple flowers, with conspicuous white markings. Glossy green foliage. Flowers appear while stem is only 3 to 4 in. above ground and advance with growth of plant. 12 to 15 ins. May and June. Each 30c, doz. \$3.00.

INULA (Ensifolia)—Compact bushes, smothered with golden-yellow flowers. Prefers full sun. 18 to 24 ins. June to Sept. Each 25c, doz. \$2.50.

Koyleana—New Himalayan species, with rich orange colored flowers, 4 to 6 ins. in diam. The black buds are very conspicuous. 12 to 15 ins. July to Sept. Each 40c, doz. \$4.00.

ISATIS (Glauca)—Stems about 2 ft. high, bearing a large panicle of yellow flowers, resembling **Gypsophilla** in a way, and used in its place, as it is in blossom a month sooner. Seed pods are not unattractive. May to July. Each 25c, doz. \$2.50.

JASIONE (Perennis)—Close tufts of pretty foliage, compact heads of bright blue flowers not unlike those of the **Scabiosa**. 6 to 8 ins. June to Aug. Each 25c, doz. \$2.50.

LAVENDER NANA ATROPURPUREA (French Lavender)—Very dwarf, 8 to 10 ins. Compact bushes of silvery gray foliage, with an abundance of tiny spikes of rich purplish-blue flowers. July to Sept. Each 35c, doz. \$3.50.

LEONTOPODIUM (Swiss Edelweiss)—The plant which in its mountain home is responsible for so many accidents. Prefer an elevated position in the rockery, in rather light soil, with full exposure to the sun.

Alpinum—Pretty white leaves and small yellow flowers, which are surrounded by star-like heads of leaves, clothed with a dense white woolly substance. 4 to 6 ins. May to Aug. Each 35c, doz. \$3.50.

Sibericum—Resembles the above with larger flower heads. Each 40c, doz. \$4.00.

LINARIA (Aequitriloba)—Close growing, creeping evergreen, with long trailing branches. Flowers pale mauve with reddish-purple palate. Prefer partial shade. May to Sept. Each 30c, doz. \$3.00.

Alpina—Compact tufted plants with spreading flower stems. Flowering in short racemes or heads, violet or blue with orange colored palate. 4 to 6 ins. June to Aug. Each 30c, doz. \$3.00.

Anticaria—A pretty subject for dry spots in the rockery. Dwarf, with large flowers varying from white to purple, with yellow predominating. 6 ins. June to August. Each 30c, doz. \$3.00.

Cymbalaria (Kenilworth Ivy)—Pretty trailing variety for rock or wall work or hanging baskets or brackets. Small lilac-blue flower with yellowish throat. Mar. to Aug. **Macedonica** (Nympha)—Flowers cream colored with deeper color on the palate in long wand-like terminal racemes. 2 ft. May to August. Each 25c, doz. \$2.50.

LINUM (Perenne)—Perennial. Elegant foliage, graceful arching stems, bearing many large circular flowers of an intense sky blue. 2 ft. May to August.

LYCHNIE (Alpina)—Close tufts of olive-green foliage. Long spikes of deep rose colored flowers. One of the best for the rockery. 4 to 6 ins. June to Sept. Ea. 25c, doz. \$2.50. **Arkwrightii**—Magnificent novelty in lovely shades of color. Extraordinary hybrid of **L. Chalcedonica** and **Haageana**. 15 ins. June to August. Each 30c, doz. \$3.00.

Flow Cuculi (Ragged Robin)—The red or pink flowers are in loose paniculate cluster. 12 to 18 ins. June-Aug. Ea. 25c, doz. \$2.50. **Naageana** (Hybrid)—Very effective when planted in clumps. Neat bushes with large flowers of a brilliant crimson. 10 to 12 ins. June to August. Each 25c.

LYSIMACHIA (Nummularia)—Very useful for rustic baskets and vases; also for carpeting shady places. Small yellow flowers.

MERTENSIA VIRGINICA (Virginian Cowslip)—Bluish-grey foliage. Long arching racemes of rich sky blue flowers. Demand a moist shady spot. Apr.-June. Ea. 30c, doz. \$3. **MYOSOTIS** (Forget-me-nots)—Hardy biennials and perennials, which prefer moist half-shady places. Should be renewed often. Early spring to mid-summer.

Alpestris (Indigo Blue)—Intense rich dark blue with long stems. 4 to 8 ins. **Disitiflora** (Grandiflora Perfection)—Taller growing than preceding, with large sky-blue flowers. 8 to 10 ins. Each 30c.

Palustris (Grandiflora)—The best of the water Forget-me-nots. New. Large flowered, bright blue "Pixies" eyes. 4-6 in. 25c.

NEPETA GLECHOMA (Ground Ivy)—A most useful and dainty mint. The leaves are crested and pretty; the stems run on the ground and root, making solid carpets. No better cover for shaded beds or banks.

Mussini—One of the most desirable perennials. Neat bushes of lavender-like foliage, covered with terminal spikes of lavender-blue flowers, both flower and foliage being aromatic. 12 to 15 ins. June to Sept.

OENOTHERA (Evening Primrose) (Fraticosa)—Makes a bush-like growth 1 to 3 ft. high and bearing for a long time in summer a profusion of large lemon-yellow flowers. **Speciosa Rosea**—Forming prostrate masses of large bright rose-colored flowers. 1 to 2 ft. Each 25c, doz. \$2.50.

PACHYSANDRA TERMINALIS (Japanese Spurge)—A trailing plant, 6 to 8 ins. high, forming broad mats of glossy green foliage and small spikes of white flowers during May and June. Will grow in all shady situations and the only plant which will thrive under pine trees. Each 25c, doz. \$2.50.

PAPAVER (Alpina)—A diminutive species for the rock garden. Neat tufts of foliage and dainty flowers in shades of white, rose, yellow, buff, etc. Can supply in mixture of color only. 8 ins. One year old plants 25c each, two year old plants 35c each.

Nudicaule (Iceland Poppy) (Improved Sunbeam)—This strain includes many new tints such as maize, creams and various tones of rose. The flowers, which are much larger than the old strain, are borne on long thick stems. 18 ins. Early spring to late summer. **Nudicaule** (Excelsior Re-selected)—In this new and re-selected strain, the proportion of new and beautiful colors, including many art shades, with delicate rose blush and apricot tints, is much greater than the strain hitherto offered. Free-flowering. Can supply in mixture of colors only. Ea. 30c, doz. \$3.

PENTSTEMON (Glaber)—Of prostrate habit. Flowers, which are of a bright blue, seldom pink, on stems about 1 ft. high. May to June. Each 25c, doz. \$2.50.

Heterophyllum—Flowers about 1 inch long, pink or rose-purple, slender at the base but full or inflated above, the lips well marked. May, July, 15 to 18 ins. Ea. 30c, doz. \$3.

Pubescens (Pygmaeus)—Very dwarf habit. Flowers clear blue, with white lower lip. June and July. 6 ins. Each 30c, doz. \$3.00. **Menziesii** (Davidsonii)—An Alpine dwarf having its tough and almost herbaceous stems underground except the very short and erect flowering branches, which are 2 to 3 ins. high, the flowers usually exceeding in size all the remainder of the plants above ground. Flowers 1 in. long, lilac-purple in color. June to August. Each 50c.

PENTSTEMON (Newberry)—Shrubby plant 4 to 8 ins. high, with pink or rose-purple flowers. June to September. Each 50c.

PHLOXA (Amoena)—This is one of the best varieties for the rockery or for carpeting the ground. Grows but 4 ins. high and in the spring is a sheet of rich bright pink flowers. Each 25c, doz. \$2.50.

Canadensis Divaricata—One of the prettiest hardy plants in cultivation. Neat tufted habit, slender stems, terminating with curly, boss heads of lovely, fragrant lavender-blue flowers. 10 to 12 ins. May and June.

Subulata (Moss or Mountain Pink)—It is impossible to accurately describe the singular beauty of this charming group. Close tufts of moss-like foliage, covered during spring and early summer with brilliant colored flowers. Separate colors; white, lavender or rose-pink. 4 to 6 ins.

PHYTEUMA (Scheuchzeri)—Belongs to the Campanula family. Is a rock-loving species and requires full sun, without damp, little soil and that only of leaf mold and sand. Stems slender and flexible, 6 to 8 ins. high. Bracts about 18 ins. long. Deep violet-blue flowers in rounded heads. May and June. Each 30c, doz. \$3.00.

PLATYCODON (Grandiflora) (Japanese balloon flower)—Large deep blue or white flowers, stems 18 to 24 ins. long. June to Aug. **Japonicum Flore Plena**—Is of stronger and bushier growth and freer flowering. The flowers average 2 1/2 ins. across; the inner and outer lobes alternate with one another, giving the flower the appearance of a ten-pointed star. Habits same as preceding. Two year old (guaranteed as to form) 40c. Seedlings (about 90% true to form) 25c.

PERENNIAL ROCK or ALPINE PLANTS, *Continued*

All Prices 20c Each, \$2.00 Doz., Except as Noted

F. O. B. PORTLAND, OREGON, IF MAILED POSTAGE EXTRA

(Dozen Price Applies to a Dozen of One Variety Only, Not Mixed Lots)

CUMEBAGO (Larpetae)—Is of dwarf, spreading habit, 6 to 8 ins. high, and covered with deep cobalt-blue flowers, late summer, fall.

OTENTILLA (Double Flowering Hybrids)—Neat low-growing tufts of strawberry-like foliage, with brilliant colored flowers on stems 12 to 18 ins. high. June to August.

PRIMULA—One of the most interesting and pleasing of hardy plants we have and as varied as they are beautiful. Succeed best in partial shady positions.

Auricula—(See Auricula)
Bessiana—A distinct Chinese species, bearing several whorls of rich velvety purple flowers on stems 18 to 24 ins. long. April to June. Each 50c.

Baileiana—Another striking Chinese species, bearing several whorls of rich orange-colored flowers. Fond of a damp spot. 18 to 24 ins. Each 50c.

Casmeriana—A beautiful variety of recent introduction. Large globular heads of purplish-blue flowers. Prefers a moist, shaded situation. 12 ins. March to May. Each 50c.

Polyanthus (Miss Wilmott's Hybrids)—Undoubtedly the finest strain in cultivation containing all the old and many new colors March to May. 6 to 8 ins. Ea. 30c, doz. \$3.

Veris—The well known hardy Primrose. Contains many fine color combinations. Can supply mixture only, except when in flower Veris (Triumph)—The finest strain of P. Veris in cultivation. Many new colors and flowers are extra large, on long stems. Can supply in mixture only, except when in bloom. Each 30c, doz. \$3.00.

PRUNELLA (Incisa Rubra)—Close tufts of dark green foliage with stout well furnished spikes of brilliant crimson flowers. 4 to 10 ins. All summer. Each 25c.

SAGINA (Subulata)—Mossy green cushions studded with tiny white flowers during May and June. Excellent for stepping stones.

APONARIA OCEYMOIDES—Brilliant masses of bright rose flowers in spring. 6 ins. Oceymoides Splendens—A high-colored form of the preceding. Trailing and larger flowers. Each 25c, doz. \$2.50.

SAXIFRAGA—It is impossible to over-value this extensive genus of rock plants. They can be successfully grown in any sunny position and sandy soil with the exception of the following varieties: Umbrosa (London Pride) requires shade and considerable more moisture than any of other Saxifraga. The Mossy Saxifraga, such as Decipiens Bathoniensis, Guildford's Seedling, Schoeno Von Ronsdorf, the different Aizoon varieties and the Cordifolia require partial shade.

Aizoon—A very variable Alpine plant, much tufted and forming dense small rosettes. White flowers on stems 6 to 10 ins. high. May and June. Each 30c, doz. \$3.00.

Aizoon Flavescens—A free-growing and decorative Saxifraga with clear lemon-yellow flowers produced in good spikes. 6 to 8 ins. May and June. Each 30c, doz. \$3.00.

Aizoon Rosea—A bright pink flowering form of the preceding. Each 30c, doz. \$3.00.

Bathoniensis—A rapid grower, 10 to 12 ins. high, with stout branching stems, bearing large pink-white flowers. April and May. Each 30c, doz. \$3.00.

Burseriana—Fresh grey-green, turning to light brown as they grow older. Flowers white, veins often colored. 2 to 4 ins. Feb. to March. Each 50c, doz. \$5.00.

Decipiens (Grandiflora)—Charming hybrids, countless flowers in many shades from white to rose and crimson. Can supply in mixture of color only, excepting when in bloom. 10 to 12 ins. April, May. Ea. 40c, doz. \$4.

Decipiens Rosea—Neat tufts with bright pink flowers. A recent introduction. 4 to 6 ins. Each 30c, doz. \$3.00.

Elizabethae—Very free-growing, forming cushion-like tufts. Leaves deep green in small rosettes. Yellow flowers on red tinged flower stems about 2 ins. high. April and May. Each 50c, doz. \$5.00.

Guildford's Seedling—A mossy Saxifraga with bright crimson flowers. Very beautiful. 10 to 12 ins. April and May. Each 40c, doz. \$4.00.

Lagaveana—A miniature plant with tiny silvery rosettes and ruddy stems, 6 to 8 ins. high, bearing 4 to 6 creamy-white flowers to each stem. May. Each 40c, doz. \$4.00.

Lantoscana—One of the best and most distinct. Leaves short and blunt. White flowers on stems 10 to 12 ins. high. Prefer a little lime and good drainage. June. Each 40c, doz. \$4.00.

SAXIFRAGA—Continued—

Macnabiana—Seldom more than a foot high, more or less branched above. Flowers white, numerous, heavily speckled with pink to purple dots, the dots being large. June and July. Each 30c, doz. \$3.00.

Megasea Cordifolia—Handsome, broad deep green foliage which alone renders them useful, while the pretty rose-pink flowers, which appear early in the spring, make them doubly effective. 10 to 15 ins. March and April. Each 25c, doz. \$2.50.

Pyramidalis—Very robust, 2 to 4 ft. high when in flower. The rosettes are large and glaucous and the flowers very numerous in a large panicle, white speckled with crimson. June and July. Each 25c, doz. \$2.50.

Umbrosa (London Pride)—Leaves form a dense rosette, 8 to 12 ins. across. Flowers white, speckled carmine, on stems 12 to 18 ins. high. Requires a shady, moist position. May and June. Each 25c, doz. \$2.50.

SCUTELLARIA (Alpina)—A hardy spreading plant, about 10 ins. high, with blue flowers in dense terminal racemes. May to Sept.

SCUTELLARIA (Orientalis)—A low-growing species, never more than a foot high, with clear yellow flowers. Each 25c; doz. \$2.50.

SEDUMS—A very interesting group of plants, easily grown, the larger proportion forming tufts, clasping the ground and for carpeting there is nothing to equal them.

Acre—Stems creeping, branched, flower stems 2 to 3 ins. high. Flowers yellow. Thrives best in poor soil. June and July.

Albium—White flowering form of preceding. **Kamtschaticum Grandiflorum**—Branches 6 to 10 ins. long. Yellow flowers on stems 6 to 8 ins. high. June and July.

Kamtschaticum Roseum—A pink flowering form of the preceding. Each 30c.

Muralis—Very dark green leaves, turning red as they grow older. Flowers are white with pink center or a clear red. One of the best. 4 to 6 ins. June to August. Each 30c, doz. \$3.00.

Spurium Coccineum—Creeping branches. Crimson flowers on reddish flower stems 6 ins. high. July to September.

Spurium Roseum—A pink flowering form of the preceding.

Telephium—Erect growing, 12 to 18 ins. Flowers pink, reddish spotted, or sometimes pure white. July and Aug. Each 30c, doz. \$3.00.

Spectabilis—One of the prettiest erect growing Sedums, 12 to 18 ins. high, with broad light green foliage and immense flat heads of showy rose colored flowers. Aug. to Sept. Each 30c, doz. \$3.00.

SEMPERVIVUM (House Leek)—Curious and interesting plants, forming rosettes of succulent leaves of varying colors.

Arachnoideum (Coh-wieb House Leek)—Called so on account of nearly all of the tips of leaves being connected with long soft white hairs. Salmon-pink colored flowers on stems 4 to 6 ins. high. June to Sept.

Glaucum—Rose colored flowers, about 1 in. in diameter on stems 6 to 8 ins. high, in a short compact panicle 2 to 3 ins. across.

Laggerii—Leaves grey-green. Flowers rose. One of the best. June to Sept.

Montanum—Flowers mauve-red on stems 4 to 8 ins. high in a very dense panicle about 2 ins. in diameter. June to Sept.

SILENE (Acaulis)—Dense tufts of spiny foliage, covered with tiny pink flowers. 1 to 2 ins. May to July. Each 40c.

Alpestris—An elegant dwarf species. White flowers. 6 ins. May, July. Ea. 30c, doz. \$3.

Maritima—Has glaucous blue foliage of a very pleasing tint and makes a very compact mass, covered with white flowers from June to Aug. 3 ins. Each 30c.

Saxifraga—Somewhat shrubby, bright green foliage, small white flowers. 4 to 8 ins. May to July. Each 25c, doz. \$2.50.

Schafta—A beautiful Alpine species with large bright rose-pink flowers. Trailing, 3 to 6 ins. July to Sept. Each 30c, doz. \$3.00.

STACHYS LANTA (Woolly Woundwort or Lamb's Ears)—White woolly leaves. Flowers small, purple, in dense 30 or more flowered whorls. Very white herbage. 12 to 15 ins.

STATICE INCANA-NANA—Very dwarf. Tufts of leathery leaves, not unlike Statice Latifolia, but the flower stems are more prostrate and only 6 to 8 ins. long. Grayish-white flowers.

STATICE-LATIFOLIA (Sea Lavender)—Tufts of leathery leaves and candelabra heads of purplish-blue, minute flowers, which if cut and dried, last for months. Flower heads 2 to 3 ft. across. 12 to 18 ins. Jun. to Aug.

STOKESIA (Cyanea)—A most charming and beautiful native plant. Large blue Aster-like flowers on stems 10 to 12 ins. long. Aug. and Sept.

Lilacina—A recent introduction from Europe. Flowers 3 to 4 ins. across on stems 15 to 18 ins. long, 4 to 8 flowers on one stem. A pleasing lavender. June to Sept. Each 30c, doz. \$3.00.

TEUCRIUM CHAMAEDRYD—Although not recognized as a rockery plant or shrub, its beautiful glossy green foliage alone makes it valuable. Its flowers, red-purple or bright rose with red and white spots, produced during July and August when flowers are scarce in the rockery, makes it doubly effective 12 to 18 ins. Each 30c, doz. \$3.00.

THYMUS—The Thymes are useful rock plants, forming sheets of attractive foliage, useful for carpeting and very pretty for edging.

Citriodorus Aurea—A golden-yellow form of the well known Lemon-Scented Thyme. 6 in. Serpyllum (Creeping Thyme)—Forms dense mats of dark green foliage and clouds of lilac flowers. Trailing. June and July.

Serpyllum Coccineum—A bright red flowering form of the preceding but has a longer season. June to Sept. Each 25c, doz. \$2.50.

Serpyllum Lanuginosa—Foliage woolly, gray. Flowers pink. The best Thyme for the rockery, one plant often covering a rock 2 to 3 ft. in diameter. Each 25c, doz. \$2.50.

TROLLIUS (Glohe Flowers)—Are grown for the beauty of their globular flowers and show of dark green leaves. They are suited to wet sunken gardens, wild borders and edges of water gardens, although doing well in a good garden soil, not lacking moisture.

Asiaticus—Small bronze-green leaves, flowers a rich orange yellow. 18 to 24 ins. Will do best if partially exposed to sun. May to July. Each 50c, doz. \$5.00.

Gold Quella—Golden yellow. Very showy 2 ft. May to July. Each 50c, doz. \$5.00.

VERBENA (Venosa)—A showy species from S. Brazil and Argentina. Tuberous roots. Flowers lavender-blue to sky-blue. 8 to 19 ins. Each 25c, doz. \$2.50.

VERONICA AMETHYSTINA—A slender species with short stems of amethyst-blue flowers. 6 to 10 in. May-June. Ea. 25c, doz. \$2.50.

Corymbosa—A dwarf plant, 6 ins. high, with a dense plume of azure-blue flowers. July and Aug. Each 30c, doz. \$3.00.

Prostrata—Carpets of olive-green foliage, smothered with dainty spikes of rich blue flowers. 4 to 5 ins. May and June.

VIOLA (Apricot)—A real gem for the rockery where it gets partial shade. It flowers for a long period with flowers like pansies of the richest apricot color. A compact grower. Spring to late summer. Each 25c, doz. \$2.50.

Bosniaca—A fine, new European introduction. Makes neat clumps that are covered with reddish-violet flowers throughout the summer. A distinct Alpine species. Each 30c, doz. \$3.00.

G. Wernig—A Cornuta. Small dark violet flowers on long stems, a veritable sheet of bloom the whole season.

Jersey Gem—Possesses the dwarf habit and continuity of blooming of the Horned violet (Viola Cornuta) and the vigorous, bushy growth and roundish foliage of the finest English bedding varieties. Color is a pure violet and flowers are slightly perfumed. 8 to 10 ins. Each 25c, doz. \$2.50.

Lutea Splendens—Bright yellow flowers on long stems. Flowers all summer. Each 25c, doz. \$2.50.

WAHLENBERGIA (Dalmatica)—Belongs to the Campanula family. A beautiful dwarf Alpine. Blue flowers in a terminal, 6 to 10 flowered. 3 to 5 ins. high. May to July. Each 30c, doz. \$3.00.

ZAUSCHNERIA (Californica) (California Fuchsia)—A low-growing plant with scarlet or vermilion, trumpet-shaped flowers, about 2 ins. long. A flaming sheet during the months of Aug. and Sept. It is remarkably resistant to drought. Each 40c.

VIOLA RIVINIANA—An excellent plant for the rockery, standing the sun and drought better than any other Viola. Blooms the entire summer if given a little water. Flowers a light blue, on stems 3 to 4 ins. high. Each 25c, doz. \$2.50.

Ivy Leaved or Trailing Geraniums

Unexcelled as basket or window box plants, as well as being useful in bedding, covering the ground quickly with their deep green, ivy-shaped leaves and brilliantly colored flowers. **20c Ea.**; set of 6 sorts **\$1**; postage extra
BALLADE—Large double, of a tender lilac color, feathered with crimson.
COLONEL BADEN POWELL—The nearest approach to a pure white variety in this class. Fine large trusses.
CHARLES TURNER—Brilliant pink, approaching scarlet. Upper petals nicely feathered maroon. Large trusses.
GARDEN GLORY—Brilliant scarlet, upper petals veined crimson; rich and attractive.
INCOMPARABLE—Exquisite shade of rosy-carmine, sturdy growing and free blooming.
MADAME THIBAUT—Beautiful shade of soft rose pink, upper petals delicately feathered with crimson maroon; undulated petals, immense trusses, luxuriant foliage.

Pelargoniums

LADY WASHINGTON GERANIUMS **25c Ea.**; set of 5 sorts **\$1**; postage extra
AGATHEA—White flushed with apple-blossom. Upper petals blotched maroon.
OUCHESS OF PORTLAND—Large round flowers vinous cerise shaded to vermillion. Upper petals darkly blotched and veined.
EASTER GREETING—Remarkable for its free blooming proclivities, equally as fine bedder or as a pot plant. Fiery amaranth red, blotched maroon.
FAIR MAID—Lower petals white flushed light pink; upper petals blackish maroon surrounded with crimson and bordered white.
MARGARET DAWSON—Deep rose pink, feathered crimson. Maroon blotches on upper petals.

Geraniums

and have good drainage in the pots. No other flower can take their place as bed or border plant, and inside they grow beautifully throughout the year, making cheery house plants.

12 Rare Novelties Single Geraniums

Price **25c** Each; Set of 10 Sorts **\$2.00**
 Add Postage on Parcel Post Orders

FIAT—Bright salmon, peach shaded; large trusses freely produced; splendid bedder.
GABRIEL MONTOYA—Bright reddish purple; large round full trusses; very striking.
HALL CAINE—Immense circular flowers of a rich bright scarlet; large, heavy trusses.
MAXINE KAVOLENSKI—Orange scarlet flowers in large trusses freely produced. Fine bedding variety.
PAMELA—Vinous rose color upper petals shaded to white at base. Splendid free blooming sort.
QUEEN OF WHITES—Free flowering white, pure as snow. Always in bloom.
ROMILDA VICINI—White ground overlaid with light rosy-salmon with a reticulated effect. Upper petals feathered with crimson.
UNIVERSE—Very large circular florets in umbels of fine size. Color bright scarlet with white eye.
VITTO MUSSI—Rich velvety crimson flowers of fine size. One of the finest dark colored sorts.
VICTOR GROSSET—Rich apricot salmon shaded to vermillion. Very brilliant and beautiful. Immense trusses.

Twelve Fine Single Geraniums

Price **25c** Each; Set of 12 Sorts **\$2.00**
 Add Postage on Parcel Post Orders

ALICE LEMON—Pure white shaded with peach pink in center.
ALBION—Beautiful free flowering snow white variety. Always in bloom.
EMANUEL ARENE—Rich velvety crimson, maculated orange red. Immense trusses. Fine bedder.
EUGENE SUE—Odd shade of russet orange, very distinct.
JAQUERIE—Rich, vivid crimson, immense trusses.
MRS. A. BLANC—Silvery salmon shaded to peach; one of the richest colored sorts.
MADAME MOSNAY—Peculiar shade of carmine-lake, shaded to violet and white. Very distinct.
METEOR—Brilliant crimson maroon. A magnificent bedding variety.
MILDRED RIVAL—Pure rose pink, with conspicuous white blotch on two upper petals.
MRS. E. G. HILL—Very large trusses of single florets; color clear salmon, with a white center.
ROSAMINE—Delicate rose pink, maculated with white, large truss. Free blooming.
TIFFIN—Brilliant scarlet in large trusses, produces freely all season.

12 Rare Novelties Double Geraniums

Price **25c** Each; Set of 10 Sorts **\$2.00**
 Add Postage on Parcel Post Orders

BLANCAFLUER—Fine new double white with flowers of wonderful purity of color. Sturdy growing.
DR. PHILLIP TISSIE—Light crimson, shaded with magenta to pure white. Strikingly beautiful and distinct. Robust grower.
ERNEST CHEBROUX—Very large trusses of rich bright cerise colored flowers, each floret with large distinct white eye.
FLEURE BLANC—Very large double florets in great trusses, white tinted with pearly rose.
FRANCES PERKINS—Bright rose pink flowers in large massive trusses. Always in bloom. Strong growing.
JEAN OBERLE—Apple blossom pink flowers of fine size freely produced. A grand bedding type.
LOUIS MAZIEUX—A gorgeous flower of a brilliant vermillion scarlet with prominent white markings in center of the florets.
MADAME TURIN—Plant vigorous, free blooming with very large trusses of wide florets; ground color pure white, rosy salmon center.
PIERRE COURTOIS—Velvety purple spotted with light violet, a rare color.
SATIN ROSE—Light pink, upper petals shaded to white at base.

Twelve Fine Double Geraniums

Price **20c** Each; Set of 12 Sorts **\$2.00**
 Add Postage on Parcel Post Orders

ABBIE SCHAEFFER—Rich deep crimson maroon in fine large trusses.
ALPHONSE RICARD—Immense trusses of the most vivid scarlet.
C. W. WARD—Rich salmon shaded to orange. Large trusses on strong stalks. Magnificent foliage.
EDMOND BLANC—Large trusses of rich purplish violet flowers borne in greatest freedom.
FLEUR DES JARDINES—Deep scarlet dashed with white at base of petals. Heavy grower, free blooming.
JEAN VIAUD—Soft rose shaded to white. Immense florets in large trusses. Magnificent variety.
MADAME LANDRY—Distinct salmon pink. Lightly shaded scarlet.
MME. RECAMIER—Snow white; strong vigorous grower; flowers abundantly in large trusses.
MRS. LAWRENCE—Beautiful satiny pink shaded to white.
S. A. NUTT—Rich dark crimson varieties in trusses.
SCARLET BEDDER—Bright scarlet, large trusses holding color well in hottest weather. Never out of bloom. Nice dwarf grower with handsome foliage.
THOMAS MEEHAN—Bright vinous-rose color, upper petals marked with orange. Free in bloom.

Bedding Lantanas

A fine class of Summer blooming bedding plants also known as shrubby Verbenas. They vie with Geraniums and Cannas in their brilliancy of color in the Summer.
 Price **15c** each; set of 6 sorts, **75c**; postage extra

AMEIL—Covered all Summer with umbels of little florets red on the outer edge and orange-yellow in the center.
CRAIGI—Velvety cardinal red center studded with golden yellow. Free blooming and good grower.
COUNTESS DE BIENCOURT—Rich rose centered primrose yellow. Each floret with golden yellow throat.
IOLANDE—Beautiful umbels of showy flowers in shades of crimson, orange and yellow.
JAUN D'OR—Large umbels of light sulphur yellow flowers changing to a beautiful shade of pink.
RADIATION—Bronzy red with golden yellow center. One of the brightest and best bedding sorts.

New Heliotropes

Price **20c** each; set of 4, **65c**; postpaid

ALBATROSS—Elegant dwarf, bushy growing; large panicles of pure white flowers in great confusion.
HEAVENLY BLUE—Large, close panicles of exquisite light blue flowers, with a white eye.
LAVENDER QUEEN—A beautiful shade of lavender, suffused with rosy mauve. A dwarf robust grower, free continuous bloomer.
ROYAL PURPLE—Color, deep violet purple, with white eye; very floriferous; highly recommended for bedding.
 Special price on Royal Purple, **\$1.00** dozen

Pansies in Bloom

MASTODON PANSIES IN BLOOM—From March until June we offer our famous "Mastodon" Pansy plants in full bloom. Put up one dozen in a package. Mailing weight 4 lbs. Price **60c** to **\$1.00** per dozen, not prepaid.

FINEST JAPANESE CHRYSANTHEMUMS

Price 20c each; set of 12 sorts, \$2.00, postpaid

BETSY ROSS—Very large globe shaped flowers with finely incurved petals. Pure white, splendid.

BRONZE QUEEN—Bright golden bronze flowers of reflexed form. Early and free blooming.

CHIEFTAIN—Very large, perfectly incurved flowers, beautiful silvery pink.

CHRYSOLORA—In our field trials this variety stood out as the finest yellow in the collections. Large incurved flowers of elegant form.

CITRONELLE—Large incurved lemon yellow flowers of grandest form and texture; a most promising new sort.

EARLY FROST—Pure snowy white flowers, the inner petals incurving and outer ones reflexing into a fine shape.

GOLDEN GLORY—Rich deep yellow flowers of incurved form. Early and free blooming.

NETTIE PARKER—Deep vinous pink flowers of perfect incurved form and fine size. Splendid free bloomer.

WHITE CHIEFTAIN—Compact incurved flowers of elegant form and nice size; pure white tinged with pearl. A popular cut flower sort with florists.

W. H. WAITE—Immense full flowers of finest incurved form on stout stems. Color rich golden bronze, shaded with terra-cotta. A wonderful piece of coloring.

OCONTO—Large pure white flowers of fine size and form. Early blooming and strong growing.

OCTOBER ROSE—Rose pink with silvery suffusions. Large incurved blooms. Rather dwarf. Early.

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.

Price 20c each; set of 12 sorts, \$2.00
Postage extra

AMILLE BERNADINE—Large fluffy flowers of violet and carmine color shaded with white.

HALDRON—Bronzy red tipped with chamois. Dwarf growing and very free.

HAMPAGNE—Bright red with golden-yellow reverse. Very brilliant and striking.

RANFORD WHITE—Snow white flowers in great profusion. Dwarf growing.

LORY OF SEVEN OAKS—Deep golden yellow, very free-flowering. Excellent dwarf habit.

GOACHERS CRIMSON—Large handsome flowers of a rich shade of crimson. Blooms very early.

HENRY VINCENT—Rose-pink flushed with silver. Strong healthy-growing and free blooming.

LE PACTOLE—Bright lemon-yellow flowers produced with great freedom. One of the best.

MIGNON—Rosy pink, shaded silvery. Strong vigorous grower and very free.

QUEEN OF WHITES—Snowy white flowers cover the plant early in the Fall. A gem in the garden.

SOURCE DE OR—Tawny red flushed with bronze and chamois. Narrow tubular petals almost like a cactus dahlia.

WOLVERINE—Golden yellow of splendid form and texture. Dwarf growing and very free.

TEN CHOICE CARNATIONS

Carnations will thrive in any good fresh garden soil. After danger of frost is over, set 10 to 12 inches apart each way, cultivate and water as needed until they begin blooming, then mulch with light manure that has straw in it; plants should be staked or strung to support them. Carnations are easily grown in the house for winter flowers.

Price 20c each; set of 10 sorts, \$1.75, postage extra

ALICE—Large nicely fringed, well formed flowers on stout stems. Colors light pink with silvery shadings. One of the best.

AVIATOR—Flowers very large and massive with finely fringed petals and strong calyx. Stems long and stout; color bright rich scarlet. A true everbloomer.

BELLE WASHBURN—A bright, deep scarlet; soft yet brilliant; the flower is of the largest size and perfectly double.

BONORA—A beauty; fancy variety of fine size and form, borne on long, stout stems. Color white, splashed with red.

ENCHANTRESS—Flowers very large, borne on long stems; a superb shade of flesh pink; early and continuous bloomer.

MATCHLESS—Very large flowers, pure white maculated with apple-blossom. Fine strong growing habit.

MRS. C. W. WARD—Simply superb, both in form and color; brilliant dark pink, of immense size.

POCAHONTAS—Rich crimson-maroon flowers of fine size and build. Rarely beautiful variety.

WHITE WONDER—Snow white flowers, produced on strong wiry stems. Nicely fluted and very fragrant.

WHITE ENCHANTRESS—A pure white from the famous variety Enchantress; same general habit and characteristics.

Field Grown Carnations for Forcing—for Delivery in Season

FREE BLOOMING FUCHSIAS

Price 20c each; set of 6 sorts, \$1.00; postage extra

ANNIE EARLE—Tube and sepals waxy white; corolla single, clear carmine; splendid free blooming.

GENERAL ROBERTS—Flowers very large, corolla plum color; tube and sepals crimson; one of the finest. Double.

MOLESWORTH—Fine, large and elegant form, sepals long and reflexed, pure red; corolla double white.

MINNESOTA—Single corolla of rich purple color; pure white sepals. Very free.

STORM KING—Superb double white variety well known to all plant lovers.

TRAILING QUEEN—Tube and sepals rosy-scarlet, corolla violet purple, trailing habit, for baskets and boxes.

SWEET VIOLETS

Price 20c each; set of 6 sorts, \$1.00; postpaid
SINGLE

BARONESS ROTHSCHILD—Similar to Princess of Wales but blooms more freely.

CALIFORNIA—Very showy flowers of enormous size, deep violet blue, deliciously fragrant.

PRINCESS OF WALES—Gigantic flowers of a very rich shade of blue, extremely fragrant.

DOUBLE

LADY HUME CAMPBELL—Beautiful light blue, very free blooming, exquisitely fragrant.

MARIE LOUISE—A constant bloomer, producing large flowers, lovely deep violet purple.

SWANLEY WHITE—The finest and best double white violet in cultivation.

BEAUTIFUL ORNAMENTAL FERNS

N. ROOSEVELT FERN—Resembles a Boston Fern, produces more fronds a wonderfully decorative plant.

TEDDY JUNIOR FERN—A new dwarf Fern, sport from the Roosevelt; compact in form, a rapid grower.

Small plants **25c** postpaid. Large plants from 4-in. pots **75c**; 5-in. pots **\$1.50**; postpaid. Specimen plants **\$1.50** to **\$3.00**; f. o. b. Portland.

BOSTON FERN—The original and well known type of sword fern. Splendid plants.

Small plants **25c** postpaid. Large plants from 4-in. pots **75c**; 5-in. pots **\$1.50**; postpaid. Specimen plants **\$1.50** to **\$3.00**; f. o. b. Portland.

OSTRICH PLUME FERN (*Nephrolepis Whitmani*)—A sport from the Boston Fern, very beautiful.

Small plants **25c** postpaid. Larger plants from 4-in. pots **75c**; 5-in. pots **\$1.50**; postpaid. Specimen plants **\$1.50** to **\$3.00**; f. o. b. Portland.

6 Fine Table Ferns for \$1.25

F. O. B. Portland

Adiantum Cunatum (Maiden Hair Fern)—Very beautiful.

Aspidium Tenssimense—Valuable for fern dishes; of graceful habit.

Pteris Argyrea (Silver Fern).

Cyrtomium Falcatum (Holly Leaved Fern)—Hardy, dark green foliage.

Pteris Cretica Alba-Lineata—A pretty variegated type.

Pteris Wilsoni—A very beautiful sort.

Rex Begonias

Grown for the beauty of the foliage. The leaves are large, variegated and margined with a peculiar silver-metallic gloss. The most ornamental of window plants.

Choice plants, each **25c**.

Larger plants **40c** to **60c** each, postpaid.

ASPARAGUS FERNS

20c ea. postpaid; larger plants, **35c** and **50c** ea., by express

SPRENGERI (Emerald Feather)—This is undoubtedly one of the handsomest and most valuable evergreen trailing plants for the house and conservatory ever introduced. Beautiful sprays of lovely green feathery foliage. It makes a charming ornamental plant for the window or conservatory in winter.

PLUMOSA (Japanese Lace Fern)—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 finest silk or lace. No finer house plant than this.

FLOWERING BEGONIAS

20c each; set of 6 sorts, **\$1.00**, postpaid

BERTHA CHATEROCHER—Glossy green foliage, clusters of bright scarlet flowers, nearly all year.

COMPTA—Pointed purplish-green leaves with silvery shadings. Pure white flowers.

ARGENTEA GUTTATA—Pointed wine-colored leaves, silvery white spots; clusters of white flowers on tips of stems.

FOLIOSA—The freest-flowering Begonia we have. Makes a handsome window plant, with its glossy green leaves and bright pink flowers.

MARJORIE DAW—A strong variety of slender habit, glossy green foliage, large racemes of salmon-pink flowers, drooping gracefully.

METALICA—Large dark green leaves of plush-like texture. Panicles bright red, covered with downy hair, open flowers are pure white.

FAVORITE FLOWERING PLANTS

Beautiful annual plants for Baskets, Porch Boxes, Bedding and House Plants

Add postage on parcel post shipments

ABUTILON ECLIPSE—Handsome variegated foliage; bright pendant flowers of scarlet and gold colors. Fine for vases and baskets. Each **20c**.

AGERATUM (Blue Star)—Bedding and border plant growing one foot high. Feathery blue flowers all Summer. Each **15c**; doz. **\$1.25**.

CALCEOLARIA (Shower of Gold)—Pretty clusters of golden yellow flowers all through the season. Each **20c**.

COLEUS (Fancy Leaved)—Coleus are the most important of all the fancy leaved bedding plants. They also make very fine pot plants, especially if you have a warm room to winter them in. Each **15c**; 6 fine sorts **75c**.

GENISTA RACEMOSA (Shower of Gold)—Its pendant shaped flowers literally smother the plant during the Spring months, while at other times its graceful dark green foliage makes a very ornamental plant. Easily grown. Each **25c**; add **10c** if postpaid.

COMMON IVY—Waxy green leaves, strong growing vine for window and porch boxes or for hanging baskets. Each **15c**.

MESEMBRYANTHEMUM SPECTABILIS—Quilled-shaped, succulent leaves with large single thistle-like oerise pink flowers. Fine for baskets, vases or porch boxes. Each **15c**.

PETUNIA (Irvington Beauty)—Single-flowered. Covered with beautiful light pink flowers veined green and shaded to white in the throat. Ea. **20c**; 3 for **60c**.

SMILAX—For using as a green with cut flowers. Fine as a window plant. Ea. **15c**.

VINCA VARIEGATA—Leaves are a glossy green, broadly margined a creamy white. The best of trailing plants for window boxes. Each **20c**; 2 for **35c**.

VERBENA (New Mammoth)—The Verbena is, next to the Geranium, the most popular of all bedding plants. Assorted colors. Each **15c**; doz. **\$1.25**.

WANDERING JEW (*Tradescantia*)—White and Red Variegated. Each **15c**.

Popular Annual Bedding Plants

Annual bedding plants are so inexpensive and satisfactory that they should be planted extensively for cut flowers in the home as well as for garden effects. They also make splendid displays in tubs and porch boxes. We have for early delivery fine large plants that can be set as soon as weather permits and with little care will bloom freely throughout the season. Prices are per dozen, f. o. b. Portland.

	Doz.		Doz.
Alyssum	50c	Marigold	50c
Asters	50c	Petunia	75c
Carnations	\$1.00	Phlox	50c
Clarkia	50c	Salpiglossis	50c
Cosmos	50c	Salvia	50c
Geraniums	\$1 to \$3	Stocks	50c
Larkspur	50c	Verbena	50c
Lobelia	50c	Zinnias	50c

Some Types of
Cactus Dahlias

FINEST CACTUS DAHLIAS

From comparative tests in the field we have selected the following as being the best of their types and color. This list contains many of the newest Dahlias as well as the best of the older ones.

Prices F. O. B. Portland; if mailed, postage extra

BORDER KING—Large, incurved flower of deep, rich glowing scarlet. A beautiful exhibition variety. Each 50c.

CAPTAIN SCOTT (English Cactus)—A free flowering white with long petals, good stems, constant bloomer throughout season. Ea. 50c.

CHAS. SHERBROOKE—A rich scarlet, reverse of petals old gold. Each 35c.

CONQUEST—Rich crimson of large size with narrow, incurved, slightly twisted petals; erect habit; long, upright stems. Ea. 35c.

EDITH CARTER—Yellow, heavily tipped with carmine; erect habit and stems. Each 35c.

ESTHER—Soft silvery lilac rose. One of the best. Each 35c.

ETERDNAND DE LYON (H. C.)—Rich carmine rose, almost magenta; large, full flowers, wavy petals. Each 50c.

FRANCES GRAHAM—Giant salmon-rose colored flower, on the hybrid-cactus type. 50c.

F. W. FELLOWS—One of the largest Cactus Dahlias, blooms freely, long stems, orange narrow straight petals. Each 50c.

GEO. WALTERS—One of the largest and best varieties. Salmon pink with gold suffusion in center, wonderful bloomer, long, stout stems, always in great demand. Each 50c.

GOLDEN WEST—Of great beauty. Free blooming, on long stems. Golden yellow. Ea. 35c.

GUARDIAN—Giant glowing crimson flowers, on long stems; best for cutting or exhibition. Each 75c.

HELEN DURNBAUGH (H. C.)—A wonderful new variety. Delicate blush, deepening toward the center to an intense, glowing tint of soft rosy pink. Extra large. Each 50c.

HOFFNUNG—A beautiful chamois-rose with light yellow at the base of the long, incurved petals; free flowering giant hybrid cactus of great merit. Each 25c.

INDOMITABLE—Long, narrow petals, incurved; color rosy mauve. Each 50c.

KALIF—A giant flower, brilliant pure scarlet. The immense blooms are freely borne on long, strong stems; a wonderful display. 50c.

LA FAVORITA (Hybrid Cactus)—This splendid new variety is a brilliant salmon, shading from dark in center to pink at points. Each 50c.

MAGNIFICENT—Of immense size, flowers of ten 8 in. across; beautiful oriental buff, overlaid rose-salmon; fine stems; free bloomer. Each 50c.

MARGUERITE BOUCHON—Exquisite shade of brilliant yet soft rose pink, large white center; long, straight needle-like petals. 50c.

MELODY—Clear yellow, heavily tipped white, large incurved flower with good stems. A free bloomer. Each 50c.

MILTON EDWARDS (New H. C.)—Huge flowers; an odd shade of orange red or henna; long stems. Each 50c.

MRS. DOUG. FLEMING—Without doubt one of the best whites. Very narrow, incurved florets, so numerous as to make monster flowers. Extra free and constant; erect stem. Each 50c.

MRS. EDNA SPENCER (Hybrid Cactus)—A delicate shade of orchid pink. Beautiful form and stout stems, free bloomer, vigorous grower. Each 50c.

NORMAN—Bright orange red; very large flowers; fine for exhibition; dwarf grower. Each 50c.

RAPIER (H. C.)—Pure gold shade, tinted salmon; very large attractive flowers. Ea. 30c.

RECORD—Rich oriental red, shading to yellow center; very free bloomer. Each 25c.

RUTH GLEADELL—A beautiful shade of yellow suffused with pink on outer petals. 35c.

SALMON ROSE—Petals broad and curled, light salmon rose, gold center. Each 35c.

TUSTU—Velvety maroon, free flowering. 25c.

U. S. A. (Hybrid Cactus)—A mammoth flower of exquisite deep orange, very unusual in a Dahlia. Attracts attention everywhere. \$1.00.

WASHINGTON CITY (H. C.)—Giant star-like flowers of purest white; long, strong stems. Each 50c.

DAHLIA CULTURE

NOTE.—In this locality we recommend planting about the middle of April and shipment of bulbs will be made the latter part of March, that we may be better able to ship only bulbs with good eyes. Do not delay your order for some of those listed are in short supply.

Dahlias will grow to perfection in any good garden soil, preferably one that contains a little sand. Plant as soon as frost is gone and ground warm, cutting tuber to a single strong eye, placing it on its side at a depth of about 6 inches, in ground that has been well cultivated. An excellent way to start Dahlias is to sprout tubers in green house and set out the rooted plants. Rows should be 4 feet apart, plants 18 inches to 3 feet apart in the row, depending on whether for a hedge or specimen plants. Cultivate thoroughly until ready to bloom, then deep tillage must cease and only the surface be lightly stirred, as deep cultivation at this time is fatal to blooming. Tall varieties should be staked. If you use commercial fertilizer, do not apply until plant starts growth, then work into top soil, 5 or 6 inches from plant. Bone meal is an excellent fertilizer for Dahlias but must be applied early, as it is slow in action. When the plant is well up, say 6 to 10 inches, pinch off top, leaving 2 or 3 joints. This will cause it to branch out into a more sturdy, bushy growth. Water freely.

POM PON DAHLIAS

Same as Show type, except they are of diminutive size, but have longer stems and are great bloomers. Ideal for cut flowers, as they are very long keepers.

ADRIENNE—Scarlet slightly tipped yellow. Ea. 25c.

ALEX—Light cerise, faintly tipped silver. Each 25c.

AMBER QUEEN—Rich clear amber, shaded apricot; free flowering. Each 25c.

CATHERINE—Bright yellow. Each 15c.

DARKEST OF ALL—Dark maroon, almost black. 15c.

GEO. BRINKMAN—Pure white. Each 25c.

GEO. IRELAND—A dainty mauve color. Each 25c.

GIRLIE—Rosy mauve; on long stems. Each 25c.

KLEIN GRETCHEN—White, heavily flushed with carmine. Each 25c.

LITTLE BELLE—Clear mauve pink. Each 20c.

ORANGE—Deep orange; extra fine stems. Ea. 25c.

PRIDE—Dark crimson-scarlet; very free flowering; extra fine. Each 25c.

PRINCE CHARMING—Lavender, touched with violet and deep rose. Each 25c.

SPY—Bright light scarlet, very showy. Each 25c.

Dreer's White

SHOW DAHLIAS

The show or quilled type is the popular old fashioned Dahlia so improved that many of our most magnificent flowers belong to this class.

ANNA REHORST—Rich deep shade of purple. 50c.

DREER'S WHITE—A magnificent white of largest size, great purity, long stems. Each 35c.

DREER'S YELLOW—Very large blooms; resembles Dreer's White, except color. Each 50c.

ROBERT MANTELL—New. Deep crimson-maroon. Each 50c.

W. W. RAWSON—Pure white overlaid with amethyst blue; often 7 inches in diameter; stiff erect stems. Each 25c.

DECORATIVE DAHLIAS

Prices F. O. B. Portland; if mailed, add postage

Rare and New Decorative Varieties of Special Merit

- AL KORAN**—New Dahlia of immense size and perfect formation. The giant flowers are held on long strong stems, color, yellow suffused goldenrod amber. Very attractive and highly recommended. Each \$1.50.
- CHARM**—New. A pleasing shade of burnt orange shading to yellow; large, attractive blooms on good stem. One of the late Judge Marean's wonderful Dahlias. Each \$1.00.
- EARLE WILLIAMS**—A brilliant crimson scarlet, each petal tipped white. Immense giant blooms of perfect formation. A prize winner. Each \$1.25.
- EMILY D. RENWICK**—New. A fascinating iridescent rose, wonderful color. Each 50c.
- GLORIEUX**—Rich, golden yellow, tinted bronze and usually tipped white. A free bloomer and worthy of a place in the most up-to-date collection. Each 75c.
- LADY BETTY**—Extra large. Blooms freely all season. Color a lovely creamy white suffused with pink. There are none like it. Decorative. Each \$1.50.
- MARY BURNS**—(California Decorative)—A combination of red and old gold, outside of petals old gold, reverse a dull red. A wonderful exhibition variety. Each 50c.
- MILLIONAIRE**—One of the largest decorative Dahlias. Light lavender shading to white in center. Each 75c.
- MRS. CARL SALBACK**—New. Immense lavender, pink blooms on exceptionally long, strong stems. Each 50c.
- MRS. I. DE VER WARNER**—One of the finest decorative Dahlias. Deep mauve pink or orchid. Extra strong grower, producing gigantic blossoms on long stems. Each \$1.00.
- OSAM SHUDOW**—Famous Dahlia of recent introduction. Beautiful old rose, suffused with lilac, yellow at base of petals. Blooms 9 to 11 inches across. Each \$1.00.
- PATRICK O'MARA**—The flowers are 8 inches in diameter and borne on long, strong, erect stems. The color is an unusually soft and pleasing shade of orange-buff, slightly tinged with rose. One of the most lasting cut-flower Dahlias. Each 75c.
- ROSA NELL**—New. A beautiful clear bright rose color; immense flowers on excellent stems. A novelty of great merit. Each \$1.00.
- SAMUEL L. POLLOCK**—New art duplex Dahlia. Flowers of the largest size, often 9 inches across, with big wide petals, 2½ to 3 inches in width; color a rich glowing cardinal red, with a large, bright golden yellow center; long stout stems; very showy and attractive in the garden, and an ideal cut flower. Each 75c.
- THE GRIZZLY**—A rare novelty of deep, rich crimson-maroon, on perfect stem. Of immense size and a prolific bloomer. Each 75c.

A MAGNIFICENT COLLECTION OF DECORATIVE DAHLIAS

- BALLON**—A very odd shade of bronze apricot, suffused with gold; quite distinct. Each 35c.
- BERTHA STORY**—New giant, decorative. A deep rose pink; free flowering. Each 35c.
- GILLIE BURKE**—Free flowering, soft yellow of extra large size. Flat petals narrow and very numerous. Very attractive. Each 35c.
- CARMENSYLVA**—An exquisite shade of salmon pink. Fine for cut flowers. Each 35c.
- CHOWCHILLA**—A bright, warm yellow; petals long, partly rolled; immense flowers. Ea. 35c.
- DELICE**—Lovely shade of pink, broad petaled flowers. Each 25c.
- DOROTHY ROBBINS**—New. Giant blooms of a distinct Autumn shade, deep buff, suffused orange red, grand stems. Each 75c.
- GEN. CUSTER**—Flowers often over eight inches across; color an interesting combination of yellow, white and coral red; no two blooms come alike; very free. Each 35c.
- MORTULANUS WITTE**—Very long stemmed. Pure glistening white. Each 35c.

- JONKHEER BOREEL**—An elegant large flower of brownish buff-yellow color. Most beautiful shade. Each 35c.
- KING ALBERT**—New Holland variety. Pure violet purple; extra large, full flowers; strong stems; early, free flowering. Ea. 50c.
- LATONA**—Fine large flower of pretty pale yellow tinged buff and lavender. Freely produced on the stoutest, erect stems. This Holland creation is in great demand. Ea. 25c.
- LE GRAND MANITOU**—Extra large variegated flowers; white striped and spotted violet-purple. Each 25c.
- MADONNA**—Flowers of hybrid cactus type. One of the most charming white Dahlias. The blooms are often 8 inches across, ivory white. Last for days when cut. Each 50c.
- MINNIE BIRGLE**—Bright rich red. Each 25c.
- MARCELLA**—A delightful, clear, soft pink. Bound to become a great favorite. Each 25c.

- POLAR STAR**—The purest white Dahlia of remarkable beauty. Flower is large and full and carried on 18-inch stems. Each 50c.
- PORTHOS**—New Holland Dahlia. Large blooms of deep lavender-mauve. Each 50c.
- PURPLE MANITOU**—A clear deep purple. The best of its color. Each 25c.
- ROSEMAROR**—Giant blooms 9 to 12 inches color a beautiful rich rosy pink. Each 75c.
- SEQUOIA GIGANTEA**—A very large, deep, buttercup yellow; stout stems. One of the largest and best. Each 50c.
- SOUVENIR DE GUSTAVE DOAZON**—Magnificent rich scarlet, often growing 9 inches in diameter; constant bloomer. Each 25c.
- SULPHURIA**—An extra large, clear sulphur yellow, without shading. Early and a most constant bloomer. Each 50c.

PAEONY FLOWERED DAHLIAS

Prices F. O. B. Portland; if mailed, add postage

NEW PAEONY TYPE VARIETIES

- CITY OF PORTLAND**—Truly a wonderful dahlia. Color a clear, rich, deep yellow. Immense flowers that are graceful and artistic, held upright on long stems. Paedony type. Each, 75c.
- EDITH CAVELL**—Enormous flowers on very long, stout stems. Without doubt one of the greatest novelties ever offered. Full petaled Paedony flowered type. Reddish bronze, shaded with old gold. Each 50c.
- ELIZABETH BOSTON**—New. Giant blooms of deep crimson, shading to old gold at tips. Extra long stout stem. Decidedly one of the largest and best Dahlias of recent introductions. Each \$1.00.
- NAIAD**—An exquisitely tinted cream pink, extra long stems and large flowers; very beautiful cut flower for the home. Each, 35c.
- OREGON SUNSET**—A new Paedony Dahlia of wonderful beauty. Rich golden yellow, heavily suffused reddish brown. Free flowering, long stout stems. Ea. 50c.
- ORIENT**—A beautiful combination of orange scarlet, and bright yellow. Very showy, and fine for cutting. Each, 25c.
- OSAKA GIESHA**—Huge flowers, often 10 inches across, held on extra long stiff stem; very odd color; face of petals sulphur yellow, back a dull red. Ea. \$1.00.
- PACIFIC GLOW**—Giant blooms of a beautiful salmon pink shade. Each, \$1.00.
- PEARL DELGAR**—Very large and beautifully formed flowers, a new color, best described as a dull plum color. Each 50c.
- Pvt. BYRON STREETER**—New. A fascinating shade of lilac-purple, suffused dark lilac on outer petals; enormous very double flowers; strong stems. Ea. 60c.

POPULAR VARIETIES OF PAEONY TYPE DAHLIAS

- BILLIONAIRE**—One of the largest Paedony Dahlias. Bright golden orange. Each 50c.
- BLACK BEAUTY**—Dark velvety maroon, often shaded violet. Each 25c.
- FANTASTIQUE**—Distinct and decidedly different; large semi-double flowers, irregularly curled and twisted petals, color deep wine crimson, tipped and edged pure white. 35c.
- FORDHOOK CERISE**—New. A brilliant shade of cerise, profuse bloomer. Each 50c.

- GEISHA**—Golden yellow, changing to red and again to yellow tips. A sure bloomer and most popular. 8 to 10 inches across. Ea. 50c.
- HELEN LADD CORBETT**—Beautiful, soft pinkish lavender of large size and perfect form. Long stems, constant bloomer. Ea. 25c.
- HI GILL**—Golden yellow, reverse bronze; very large on long, strong stems. Each 35c.
- HOPE**—English variety. Beautiful mauve color; very large blooms; long stems. Each 50c.
- LIEUT. ORVILLE A. STEVENS**—Light orange-scarlet; blooms large, good stems. 25c.
- MADAM VON BYSTEIN**—A magnificent lilac lavender, changing to light blue. Each 25c.
- MAPLE LEAF**—A rich golden yellow, heavily marked with red. Very unusual. Each 40c.

- MRS. JACK GREEN**—Very large full flower a beautiful shade of rich scarlet. Each 35c.
- MEYERBEER**—Holland variety of largest size, crimson, suffused and lined purple; extra long, strong stems. Each 50c.
- OREGON BEAUTY**—Bright fiery scarlet with golden sheen. Free blooming. Each 25c.
- PRIDE OF CALIFORNIA**—Large red flower, very attractive and an exceptionally good keeper. Fine for exhibition. Each 50c.
- PRIDE OF PORTLAND**—An immense flower, the color of Geisha but the yellow is brighter and also the red. Each 75c.
- STEPHEN LOMA**—Pleasing dark magenta color, with fine stems. Each 35c.
- WHITE FLAG**—Pure snow white. Each 35c.

PLANT
PLENTY
OF
GLADIOLUS
THIS
YEAR

Primulinus Hybrids

A beautiful new race of Gladioli, lanky and graceful flowers in various brilliant shades. Each 5c; doz. 50c.

Gladioli, Fine Mixed

A large variety of fine flowers unequalled for the price. Each 5c; doz. 50c; 100, \$3.00.

GLADIOLUS

Exquisite coloring, vigor, ease of cultivation and freedom from insect pests and diseases are making Gladioli universal favorites that should have a place in every garden. They come into bloom at a season when there are few other flowers.

CULTURE—Gladioli may be planted as early as the ground can be worked or as late as June. A sunny situation is preferred. Plant to a depth of 3 to 6 inches, depending on the size of the bulb. Largest bulbs are not always best, as some varieties do not produce large bulbs. Any garden soil will give satisfactory results, but if well enriched, cultivated and freely watered when bulbs first show, Gladioli will amply repay you for this additional care. If cut when the first bud opens and put in water, the flowers will open perfectly, keep for many days, and colorings are richer and more delicate than if left to open on plant.

CHOICE VARIETIES

Prices are f. o. b. Portland; add postage for parcel post shipments

ALICE TIPLADY—A large flowered primulinus type. Short and stocky of growth with a most beautiful orange saffron bloom; a vigorous grower. Each 10c; doz. \$1.00.

AMERICA—Exquisite shade of pink-tinted lavender. Each 5c; doz. 50c; 100, \$3.50.

BARON HULOT—A brilliant indigo blue, free flowering and very attractive. Each 10c; doz. \$1.00.

BYRON L. SMITH—Very choice. Lavender with sulphur blotch in throat. Closely resembles color of a beautiful cattleya orchid. Ea. 15c; doz. \$1.50.

CRIMSON GLOW—Deep, rich red; gives touch to the garden that is hard to equal. A good stalk and stands well, holding its flowers a long time. Each 15c; doz. \$1.50.

DOROTHY McKIBBIN—A wonderful pink, earliest of all to bloom, should be in every garden. Each 15c; doz. \$1.50.

E. J. SHAYLOR—Truly beautiful. It remains long in bloom, its several side shoots prolonging the season, sometimes for weeks. Each bulb will usually make two very tall erect flower stalks, sometimes three. In color a beautiful deep rose pink. Many wide open flowers at a time. Each 10c; doz. \$1.00.

GRETCHEN ZANG—Large bright flesh pink with large deep rosy pink blotch in throat. Late bloomer. Each 10c; doz. \$1.00.

HALLEY—Salmon pink with creamy white blotch. Large flower and early bloomer. Each 5c; doz. 50c.

HERADA—To all who love a pure mauve this will prove a joy. Has on a graceful stem several wide open blooms of this rare and charming color. Each 10c; doz. \$1.00.

IRISWHITE—Nicely formed flower of medium size well arranged on a tall graceful stalk. Nearly pure white with delicate lavender in throat. One of the earliest gladioli. Very vigorous grower. Each 10c; doz. \$1.00.

MARY PICKFORD—Of good size and style, charming creamy tone, with throat markings of soft lemon yellow. Buds are cream colored and very striking. Each 10c; doz. \$1.00.

MRS. FRANK PENDLETON—On a ground of purest white, clear, rose pink covers all its wide open petals. Lower petals have a dash of crimson blended in perfect harmony with the delicate pink color scheme. Each 10c; doz. \$1.00.

ORANGE GLORY—A wonderful orange color with throat shading lighter. Each 15c; doz. \$1.50.

PANAMA—A seedling of America, of much deeper pink; spike long with large flowers well arranged. Each 10c; doz. \$1.00.

PRIMUMELLA—A blend of Ophelia rose and delicate creamy yellow, very beautiful. Each 35c; doz. \$3.50.

PRINCE OF WALES—Clear light salmon, very early variety and valuable for house decoration. Each 10c; doz. \$1.00.

ROSE GLORY—A strong, vigorous magnificent garden variety, with pure rose pink, deeper pink in throat; petals have good texture and stand wind and heat well. Edges of all petals are delicately ruffled or fluted, which adds to its charm. Each 15c; doz. \$1.50.

SALMON BEAUTY—Large flowered primulinus deep salmon, rich salmon yellow throat. Ea. 10c; doz. \$1.00.

SCARLANO—Bright scarlet with deep dark red blotch in throat. Nicely ruffled. Each 15c; doz. \$1.50.

SCHWABEN—Large flowers of clear canary yellow with magenta line in throat. Vigorous grower. Each 5c; doz. 50c.

VIRGINIA—Large flame red, solid color, vigorous grower. Many blooms well arranged on spike at one time. Each 15c; doz. \$1.50.

WILBRINK—Wonderfully delicate. A large flower of light lavender pink with deeper lines in the throat. Each 5c; doz. 50c.

MONTBRETIAS

Of the same family as gladiolus, Montbretias are hardier and increase more abundantly. There are a number of old varieties which have been popular for years; the flowers on the old varieties are, however, small and in no way comparable to such greatly improved varieties as the Lord Nelson, etc. In good soil these will easily grow three feet in height, and their spikes are producers for months and are always well branched. They are splendid for cutting, being especially effective with Autumn foliage.

CALIFORNIA—Clear yellow. Ea. 7c; doz. 75c.

FIRE KING—Scarlet red. Each 7c; doz. 75c.

IMPROVED AURENTICA—Orange yellow. Ea. 10c; doz. \$1.00.

LORD NELSON—Orange yellow. Each 10c; doz. \$1.00.

MESSIDOR—Cream white. Ea. 15c; doz. \$1.50.

TALISMAN—Dark scarlet. Ea. 10c; doz. \$1.00.

MIXED—12 different colors. Doz. 60c.

(Montbretia)

GLADIOLUS SPECIAL

We offer this wonderful special for mixed gladiolus for large plantings and mixed bouquets. No. 2 size bulbs.

50 for \$1.00

100 for 1.75

POSTAGE EXTRA

Write for special price
on large quantities

HARDY JAPANESE LILIES

IMPORTED

Lilies planted outdoors during the Fall or early Spring flower each year from June to October. After bulbs are set out they should remain undisturbed for five or six years. They will increase in size and number of flowers, with practically no attention, our Coast climate being perfectly suited to their requirements and once established, they rival the famous product of Japan.

Prices on Lily bulbs are postpaid to 4th zone; beyond that add for extra postage

AURATUM (Golden Banded Lily)—The handsomest and best known of the Japanese Lilies. Immense ivory-white flowers with yellow and crimson dots; in the center of each petal is a gold band fading into white; very fragrant; bloom June to October. Large bulbs, each 25c; doz. \$2.75.

AURATUM PLATYPHYLLUM—Similar in color to Auratum, heavily spotted but much larger. Mammoth bulbs, each 30c; doz. \$3.25.

HENRYI—Beautiful orange-yellow flowers with green band, very effective. Hardy. Each 35c; doz. \$3.50.

SPECIOSUM ALBUM—Pure white, flowers free. Large bulbs, ea. 30c; doz. \$3.00.

SPECIOSUM MAGNIFICUM—Similar to Melpomene but more vigorous and blooms earlier. Each 25c; doz. \$2.75.

SPECIOSUM MELPOMENE—Has deep carmine flowers spotted blood red. Each 25c; doz. \$2.75.

SPECIOSUM RUBRUM—White with dark rose spots. Most popular of speciosum varieties. Hardy, vigorous, and free bloomer. Large bulbs, ea. 25c; doz. \$2.75.

TIGRINUM SPLENDENS (Improved Single Tiger Lily)—Very large flowers of excellent form, color orange-salmon, with dark spots; hardy and a free bloomer. Large bulbs, each 20c; doz. \$2.00.

WATER LILIES

Prices vary greatly according to size, etc. Write for prices when interested.

AMARYLLIS VITTATA HYBRIDS

Wonderfully beautiful lilies; can be grown easily, either as a pot plant or out-of-doors. Flower stalks about 12 in. high, have two to six giant flowers of the most perfect form. They flourish in the sun but even do better in partial shade. Out-doors plant in sandy soil about a foot apart, covering about 4 in. Indoors plant in small pots as they seem to flower better when root-bound. As a house plant it is unsurpassed.

Named Varieties, Mixed Colors only. Each 75c; doz. \$7.50. Postpaid to 4th zone.

LILIUM CANDIDUM

(Also known as Madonna Lily, or St. Joseph's Lily.) Ever popular, fragrant snow white, hardy garden Lily; grows 4 to 5 ft. high; blooms in the open ground in June. Our stock is imported from the Azores, the finest obtainable; should be planted early.

Mammoth bulbs, Ea. 30c; doz. \$3.00

Select bulbs, Each 20c; doz. \$2.00; postpaid to 4th zone

MT. HOOD LILIES

An especially beautiful Lily, a native of Oregon and interesting to have in the garden. Flower is large, open form, white tinted with lilac, and is very fragrant. Grows 3 to 4 feet high.

Choice bulbs, Each 25c; doz. \$2.50

Extra blooming size, Ea. 35c; doz. \$3.50; postpaid to 4th zone

Lilium Regale or Myriophyllum

"The Regale Lily." The most vigorous and satisfactory Lily that has ever come under our observation. Perfectly hardy, of medium height, often bearing five to eight large handsome blooms. Color white, outer petals shaded in varying amount with pink, the throat suffused primrose-yellow. Delightfully perfumed, reminding one of the jasmine and lacking the heavy oppressive odor of other Lilies.

One year size, Each 50c; doz. \$5.00

Extra large two year size, Ea. 75c; postpaid to 4th zone

Lily of the Valley

One of the most satisfactory and charming Spring flowering plants, producing in profusion its delicate bell-shaped, fragrant white flowers; thrive in any common soil, are perfectly hardy, and will succeed in shady situations. If left undisturbed in the open ground they will increase from year to year, and are charming in beds or borders around the lawn. PIPS, doz. 75c; 100 \$5. postage extra.

CANNAS

Require a rich, moist soil and should not be planted until all danger of frost is past. They are quick growers and the new flowering sorts bloom continuously until frost. Inexpensive, these charming ornamental plants produce rich tropical effects that cannot be excelled, and the varieties offered are equally valuable for the beauty of their bloom.

Prices, except where noted: Bulbs or plants in season, each 25c; doz. \$2.50; not postpaid.

Set of 10 sorts \$2.00.

CITY OF PORTLAND—A magnificent pink with salmon suffusion. Luxuriant green foliage, very hardy. Each 35c; doz. \$3.50.

FIREBIRD—Green-leaved; flowers fiery, bright red, in immense trusses. Height 4 feet.

KING HUMBERT—Mammoth flowers of brilliant orange-scarlet, with bright red markings, broad foliage of rich coppery bronze with brownish green markings; 5 to 6 feet.

LOUISIANA—Grand Orchid-Flowered variety carrying large spikes of orange red flowers throughout the Summer. Best bedding sort.

METEOR—Large spikes of deep crimson flowers on tall stalks, green foliage.

NOKOMIS—Vivid crimson flowers with silky sheen, bronze colored foliage.

PANAMA—Massive orange scarlet with narrow golden yellow edge.

ROSEA GIGANTEA—Deep rich dark pink shaded to coral; immense spikes of bloom in great freedom. Height 4 feet.

THE PRESIDENT—The best red-flowered green-leaved Canna. Flowers glistening scarlet. Height 4 feet. Each 35c; doz. \$3.50

WYOMING—Immense spikes of orange colored flowers of great beauty. A giant in growth and bloom.

HARDY IRIS

("Iris" means "The Rainbow")
ALSO KNOWN AS GERMAN IRIS.
LIBERTY IRIS, BEARDED IRIS.
FLEUR-DE-LIS or FLAG LILIES

The growing of the Iris is greatly increasing each year on account of their rare beauty as well as ease of growing. They are hardy, drouth resisting; they come at a time when the garden needs their color, they bloom the first season after planting and soon form wonderful big clumps which are easily divided and transplanted.

Cultivation is easy; sunny situation needed; soil dry and well drained (Iris cannot stand water around the roots). Plant with bulb just below the surface, spread the roots out and pack the soil. No fertilizer should touch rhizomes. Fall planting is preferable. Water about once in two weeks until well established. Bone meal and finely ground limestone are good fertilizers.

(In list below, S indicates standard or part of flower remaining upright, and F indicates falls or drooping part of flower.)

Named varieties, strong roots, Ea. 25c; Doz. \$2.50

MIXED VARIETIES, EACH 20c; DOZ. \$2.00

Prices are F. O. B. Portland, Postage Extra

Caprice. S. soft rosy red; F. deep rosy red.
Ser Majesty. S. rose pink; F. bright crimson tinged darker shade.
Liberty. Bright azure blue; of the finest.
Lohengrin. S. and F. uniform shade of Cattleeye rose. Large.
Loreley. S. light yellow; F. ultra marine blue, bordered cream.
Lady Jane. S. coppery; F. red and white.
Mad. Chereau. S. white; F. clear blue.
Midnight. Rich deep purple; fine cut flower.
Monsieur. S. crimson dotted lavender, inner petal ivory; F. rich crimson, edged lavender.

Montezuma. S. deep golden yellow minutely dotted brown; F. yellow and white, veined purple and brown.
Nibelungen. S. olive green; F. yellow purple and white.
Pearl. S. very light lavender; F. deep lavender.
Perfection. S. light blue; F. darker velvety violet and black, orange beard.
Queen-of-May. Soft lilac, almost pink.
Sherwin-Wright. S. and F. golden yellow; blooms freely.
Walhall. S. lavender; F. wine red.
Zephyr. S. and F. clear blue lilac; beautiful and fragrant.

JAPANESE IRIS (Kaempferi)

Japanese Iris are almost too beautiful to attempt a description; all the colors of the rainbow are gathered into their wonderful, vivid, yet harmonious shadings and silky texture. The flowers average about four feet in height and 5 to 7 inches across, although in the hands of experts they reach the great size of 12 inches. They are surely worth a choice place in every garden. Each year the clumps increase in size and the flowers become more beautiful.

CULTURE—They are very unlike Hardy Iris in culture. Japanese Iris require plenty of water and good soil to get the best blooms; they do especially well on the borders of streams or ponds. A good dressing of bone meal and nitrate of soda is a big help when planting. Plant about 8 inches deep and 4 inches apart, divide the clumps every other year. They bloom after the Hardy Iris. Doubles have six petals; singles have three petals.

Named Varieties, Ea. 35c; Doz. \$3.50 (F.O.B. PORTLAND POSTAGE EXTRA)

LIST OF VARIETIES OF JAPANESE IRIS

The finest varieties to be had in the Northwest, very popular, and priced exceptionally low for this high quality.

Oste-fogu. Single, rich claret red with range blotches; very charming.
Sasa-Aoi. Double; gray, veined with navy blue, soft and beautiful. Six petals.
Koki-No-Iro. Double; deep red-purple, suffused with blue, a patrician of color. Six petals.
Sumo-No-Obi. Double, dark lavender blue, especially fine. Six petals.
Syodaisan. Double; purple, overlaid cerulean blue, a royal flower. Six petals.
Pyramid. Double; violet-purple, veined white in the center of each of its six beautiful petals.

CULTURE JAPANESE IRIS. Double and single, no named varieties; all colors and shades. Special prices, each 20c; dozen \$2.00; hundred \$15.00. (F.O.B. Portland;

Mount Hood. Double; light blue, shaded slightly darker, with a bright orange center (just the colors reflected on the grand old mountain as the sun rises over its snow-clad slopes of a winter morning).

Sano Watashi. Double; a pure brilliant white with a yellow halo. Six petals.
Suso No Koi. Blotched and speckled blue with a yellow throat.

Taiheraku (Peace). Double; rich purple with yellow blotches, tipped blue, purple veins radiating out; petaloid stigmas gray and lavender; a truly gorgeous flower. Six petals.

Single Flowering. Each
25c; doz. \$2.50
F. O. B. Portland

Tuberous Rooted Begonias

From early Spring until late Fall they display a mass of gorgeous and brilliant coloring in shades of yellow, bronze, white, red and pink. No flower will do as well as these when planted in a shady place. For pots or window boxes they are unexcelled. **Culture.** Mix a little bone meal and sand in the soil. Quickest results are obtained by starting indoors and transplanting when frost danger is over. Should be lifted in Fall by frost time and stored in sand in a cool place. Two types, single and double

Double Flowering. Each
30c; doz. \$3.00
F. O. B. Portland

TULIPS

Tulip bulbs can be planted satisfactorily as late as March. As long as we have stock we offer these

Special Prices

GIANT DARWIN TULIPS
Fine quality mixed, assorted varieties and colors
Dozen 35c; 100 \$2.50

DUTCH BREEDER TULIPS
Mixed varieties, very fine
Dozen 75c; 100 \$5.00
Prices f. o. b. Portland

PEONIES

The ranks of Peony lovers are increasing rapidly, and for those who have only limited time for the care of flowers, nothing will give so much joy and satisfaction and endure so long as these wonderful flowers—the Peonies. Color schemes are not necessary for beautiful effects, any combination is delightful. Peonies make a gorgeous display whether in landscape, flower bed, border or garden. By selecting a comprehensive assortment to include colors, types, fragrance and seasons the greatest enjoyment is possible. Peonies are nearly always free from disease, insects do not bother them and they succeed in any soil or climate. The first year bloom is as a rule poor, no matter how well they are planted, but they improve quickly season after season and each year flower and plant become increasingly beautiful.

Our list of Peonies includes some of the most beautiful varieties in existence; some are very rare and will well repay their cost in their extraordinary blooms. Prices f. o. b. Portland.

New and Rare Varieties

Alsace-Lorraine. (Lemoine 1906.) Cream white deepening to pale yellow; late; pointed petals; water lily center; flowers in clusters, free bloomer, tall and strong, very beautiful. Each \$3.00.

Kelway's Queen. Deep flesh pink, center flecked with crimson, very profuse bloomer, late mid-season; one of Kelway's very best. Each \$10.00.

Marie Grousse. Pale lilac rose; mid-season; very large and striking, stems stiff and upright. Each \$2.50.

Mons. Martin Cahuzac. Dark purple garnet with black reflex; mid-season; the darkest peony; very large. Ea. \$3.50.

Sarah Bernhardt. Flat compact semi-rose type; uniform mauve color, silver tipped; penetrating fragrance. Ea. \$3.50.

Therese. Very soft pink, lilac white center; with reflex; mid-season; strong plant and stems, enormous flowers. Dessert's best. Each \$7.00.

Red Varieties

Adolph Rousseau. Semi-double type; purple garnet; tall plant; free bloomer; dark foliage veined red; one of the best for landscape effect. Early. \$1.00.

Delachei. Rose type; dazzling rosy magenta, vigorous grower; blooms in clusters; very fine, late mid-season. 60c

Felix Grousse. Bomb type; a brilliant red, good odor, vigorous grower with spreading habit, blooms freely in clusters. One of the most enjoyable peonies and one of the best reds. Ea. 75c.

Karl Rosenfield. Semi-rose type; brilliant velvety crimson, mid-season, no odor; strong and healthy, free bloomer in clusters; large and fine for cut flowers as well as landscapes. Ea. \$1.50

L'Eclatante. Bomb type; deep velvety crimson; mid-season; flowers very double and full, each flower standing up straight and erect, well above the foliage, especially attractive. Each 90c.

Officinalis Rubra. Earliest of all good reds, a large round bloom of vivid crimson, generally in bloom on Memorial Day. Sold only on orders including other varieties at this special price. 75c.

Rubra Superba. Rose type; a rich, brilliant dark crimson; large full double; without stamens; fragrant. Each 75c.

White Varieties

Albatre. Large, compact, crown type; milk-white, shaded ivory; center petals tinged with lilac and edged with minute carmine line. Each 50c.

Duchess de Nemours. Crown type, pure white, with sulphur white collar. Early to medium season. Each 60c.

Festiva Maxima. Large rose type, white with crimson markings in the center, one of the best. Fragrant. Each 60c.

Officinalis Alba. Opens a pink, soon changing to white. Earliest of all. 75c.

Queen Victoria. Bomb type, white, with delicate flesh tint. We consider this our best early white Decoration Day Peony. Of charming fragrance. Ea. 50c.

Pink Varieties

Charlemagne. Salmon pink, very double and full. Each 60c.

Dorchester. Large, full type, very light pink. Each 60c.

Duchess d'Orleans. A deep pink, salmon center. Early cut flower. Each 50c.

Edulis Superba. Crown type, bright clear pink, very fragrant, extra large, early Decoration Day peony. Each 50c.

Elegantissima. Light cherry pink; mid-season; an excellent cut flower. 60c.

Eugene Verdier. Semi-rose type, delicate blush shading to hydrangea pink, enormous flowers, one of the finest. 75c.

General Dodds. Uniform dark Tyrian rose, center touched with a few white dots; very desirable; late. Each 75c.

Livingstone. Rose type, a soft pretty pink, center petals flecked with silver mine; blooms in clusters; late. Ea. 90c.

NEW SINGLE FLOWERING PEONIES

Two very choice new varieties that we recommend highly for this country. Try both of these for a rich repayment in pleasure.

Defiance. Bright crimson petals in striking contrast with the cushions of pure golden stamens, wonderfully beautiful and "dashing" in its effect. Each \$1.50.

Duchess of Portland. A rich lively pink shading to soft flesh, a free bloomer, medium early. Each \$2.00.

Culture. Fall is the best time to plant because blooms will usually follow the next spring, although planting may be done in early spring. Peonies need a deep soil, not too much gravel, a good clay loam is best, and work soil to a good depth. Give a good dressing of lime at planting time and repeat every second year. Bone meal is also good to work in the bed. Cover the crown not over 3 inches deep and plant, if possible, in partial shade. When cutting Peonies allow at least two leaves to remain on each stem; the roots need these lungs for full growth. Do not remove foliage until it is thoroughly dead.

"A Field of Peonies"

The fields where our Peonies grow are a wonderfully beautiful sight

Diamond Quality Two-Year-Old Field Grown Budded Bushes

Our roses are all large sturdy two-year-old bushes, field grown, budded on disbudded Manetta stock and will give you splendid flowers the first season. They are true to name and our list includes the best of the well-known popular varieties, the most meritorious of recent novelties and the Gold Medal roses of famous European growers.

THE TIME TO PLANT. Roses may be planted either in the Fall or Spring. It should be done early, and we earnestly request our friends to place their Spring orders early so shipment can be made at the most favorable time.

PLANTING. Deep preparation of soil is urged. Be sure to stir ground thoroughly to a depth of 18 inches and at least two feet if soil is inclined to be wet or soggy, filling in extra 6 inches with stones to insure drainage. Bone meal worked into ground at time of planting is a big help, using a large trowelful to a plant. Sheep manure in a little larger proportion is also good. If planting in the Fall prune tops but slightly but be sure to trim all root ends back unless this has been done at the nursery. In the Spring trim back all branches to not more than 4 eyes. Plant at least 2 inches deeper than the crown from which sprouts arise.

CULTIVATION AND PROTECTION. Keep soil well stirred but do not cultivate deeper than 2 inches. Soak ground when you do water and then do not water again until the surface is quite dry. Be sure to protect roses from insects and disease by spraying.

SHIPPING. We always send all our two-year-old rose bushes charges collect by express or freight, packing so they will carry safely even though they should be on the road for two weeks or more. If necessary, we can send small two-year-old bushes by mail, but in such cases we always prune the tops and roots ready for planting. Add 5c postage for each bush.

It is impossible to list the hundreds of varieties of roses that are now on the market, but we have selected what we consider the choicest and best to list in our catalog. Please state if we may replace sold out varieties with others equally as good. This will save possible delays.

Our Hardy Collection 12 Fine Roses for \$4.50

(For shipment by parcel post add 50c postage)

Consisting of one each Kaiserin Aug. Victoria, Mad. Caroline Testout, Ulrich Brunner, Grus An Teplitz, Lady Ashtown, Etoile de France, General Jacqueminot, La France, George Dickson, Frau Karl Druschki, Duchess of Wellington, Maman Cochet.

"Rose City" Collection \$5.25

(For shipment by parcel post add 50c for postage and packing)

Consisting of one each Hoosier Beauty, White La France, Ophelia, Hadley, Lady Hillington, Mad. Edouard Herriot, Mad. Butterfly, Kitchener of Khartoum, Columbia, Sunburst.

LIST OF ROSES BY COLORS

For the convenience of those who prefer to select certain colors or roses we give the list below. For full description refer to the alphabetical list on pages 64 to 67 inclusive. (On parcel post shipments add 5c per rose for postage.)

WHITE VARIETIES

British Queen50c
Frau Karl Druschki.....50c
Kais. Aug. Victoria.....40c
White La France60c
White Maman Cochet.....50c

YELLOW AND ORANGE VARIETIES

Amelia Gude\$1.00
Betty60c
Chameleon\$1.00
Christine90c
Cleveland50c
Constance65c
Duch. of Wellington.....60c
Franz Deegan65c
Golden Emblem90c
Independence Day\$1.50
Irish Elegance60c

Lady Hillington75c
Louise Baldwin\$1.50
Mad. Melaine Soupert.....65c
Marquis de Sinety65c
Miss Lolita Armour.....75c
Miss Wilmott65c
Mrs. Aaron Ward75c
Mrs. S. K. Rindge75c
Rayon D'Or75c
Souv. De Claud. Pernet..\$1
Sunburst65c
T. F. Crozier75c

BLUSH VARIETIES

Baroness Rothschild45c
Margt. Dickson Hamili.....60c
Pres. W. R. Smith.....75c

PINK VARIETIES

Cecil Brunner50c
Columbia60c

Conrad F. Meyer40c
Countess Clanwilliam.....65c
Dorothy Page Roberts.....60c
Duchess of Sutherland.....50c
Eileen Poulson75c
Evelyn75c
Lady Alice Stanley60c
Lady Ashtown60c
Lady Ursula50c
La France50c
Los Angeles65c
Lyon65c
Madame Butterfly60c
Mad. Caroline Testout.....50c
Maman Cochet50c
Ophelia65c
Pilgrim65c
Queen of Fragrance75c
Viscountess Folkstone.....60c
William F. Dreer75c

RED VARIETIES

American Beauty50c
Col. Leclerc90c
Dinsmore40c
Evening Star\$1.00
Fred J. Harrison\$2.00
General Jacqueminot40c
General McArthur50c
George C. Waud65c
Glow Worm\$1.00
La Somme\$1.50
Louise Cath. Breslau.....75c
Mad. Edouard Herriot.....75c
Mrs. Alfred Tate75c
Mrs. Chas. Russell65c
Mrs. F. W. Vanderbilt.....50c
Padre\$1.50
Premier75c
Richmond50c

Ulrich Brunner40c
W. C. Gaunt75c

CRIMSON

Admiral Ward50c
Avoca65c
Chateau de Clos Vougeat60c
Edward Mawley50c
Etoile de France50c
George Dickson50c
Grus An Teplitz50c
Hadley60c
Hoosier Beauty65c
H. V. Machin50c
Irish Fireflame60c
Isobel75c
J. B. Clarke50c
K of K60c
Red Letter Day65c

See Complete Alphabetical Description List of Roses on Following Pages

ALPHABETICAL LIST OF ROSE BUSHES

(Los Angeles)

(Evening Star)

(Frau Karl Druschki)

(Madame Edouard Herriot)

(Margaret Dickson Hamill)

(Mad. Melanie Soupert)

(Madame Butterfly)

(Lady Alice Stanley)

(Mrs. Aaron Ward)

(Ulrich Brunner)

(La France)

(Irish Elegance)

(For List By Colors See Page 63;
For Climbers See Page 67)

ADMIRAL WARD—(H. T.)—A fine bedding variety of vigorous growth and erect branching habit. Spherical blackish red bud opening to large, full, globular flowers of crimson red with shading of fiery red and velvety purple. Each 50c.

AMERICAN BEAUTY (H. P.)—One of the largest, sweetest and best; rich glossy crimson, shaded and veined in a most charming manner. Very fragrant. Each 50c.

AMELIA GUDE (H. T.)—Color, golden orange, with touches of orange on reverse of petal. Ideal for table decoration, bouquets, etc. Prolific variety throughout the year. Each \$1.00.

AVOCA (H. T.)—Crimson scarlet, large well-formed flowers; a very fine rose. Each 65c.

BARONESS ROTHSCHILD (H. P.)—Flowers of immense size; color, bright rosy pink, tinted white; beautifully formed. Without fragrance. Ea. 45c

BETTY (H. T.)—Beautiful coppery rose color, overspread with golden yellow fragrant. Buds long and pointed; moderately double, petals unusually large and veined, long stems. Each 60c

BRITISH QUEEN (H. T.)—Pure white, large, full flowers, opening freely. One of the best white roses for bedding and cutting; stiff slender stems, free and fragrant. Each 50c.

CECILE BRUNNER (D. P.)—Bright rose, yellowish in center; very sweet. Each 50c.

CHAMELEON (H. T.)—Pure flame edged cerise. Beautiful cedar green foliage. Each \$1.00.

CHATEAU DE CLOS VOUGEOT (H. T.)—Deep, velvety crimson shaded with blackish maroon. The nearest approach to a black rose. As if cut from so much velvet, the most beautiful rose in color and texture. A true ever-blooming variety. Each 60c.

CHRISTINE (H. T.)—A good deep persistent yellow. Has shapely buds and handsome flowers. Each 30c.

CLEVELAND (H. T.)—Deep coppery yellow at base of petals, flushed red dish copper. Very large, beautifully formed and a fine variety. Each 50c.

COLONEL LECLERE (H. T.)—Beautiful cherry red, washed with carmine lake. Fine Autumn bloomer. Ea. 30c.

COLUMBIA (H. T.)—Peach blow pink deepening as it opens to a glowing pink. A striking peculiarity of this rose is that the shades all deepen as the rose opens. Single buds, long stems, splendid for cutting. Nearly thornless; free from mildew. Ea. 60c

CONRAD F. MEYER (H. R.)—A most valuable addition to the list of hardy free-blooming roses. The color is a beautiful silvery pink. Fragrant, will not mildew or black spot; handsome foliage; ornamental as a shrub. Ea. 40c

CONSTANCE (H. T.)—Rich orange yellow, distinctly streaked and splashed with crimson, long pointed buds; free bloomer. Each 65c.

COUNTESS CLANWILLIAM (H. T.)—Produces flowers in great abundance. Color, delicate peach pink, petals flamed and edged with deep cherry red. Long pointed buds opening to large full flowers. Each 65c.

DINSMORE (H. P.)—One of the best hardy early, cherry-red roses. Prolific bloomer and very fragrant. Perfectly double. Each 40c.

(Continued on Next Page)

ALPHABETICAL LIST OF ROSE BUSHES

(For List By Colors See Page 63;
For Climbers See Page 67)

(Kaiserin Aug. Victoria)

(Independence Day)

(Christine)

(Mad. Caroline Testout)

(Miss Lolita Armour)

(Fred J. Harrison)

(Queen of Fragrance)

(Premier)

(Pres. W. R. Smith)

(Golden Emblem)

(Columbia)

(Yellow Sunburst)

DOROTHY PAGE ROBERTS (H. T.)—Coppery pink, suffused with apricot yellow, free and perpetual, delightful garden rose. Each **60c.**

DUCHESS OF SUTHERLAND (H. T.)—Gorgeous pink buds with fairy-like texture shading to pale lemon yellow at base. Each **50c.**

DUCHESS OF WELLINGTON (H. T.)—Intense saffron yellow stained with rich crimson which as the flower develops, becomes deep coppery saffron yellow. Delightfully fragrant. Ea. **60c.**

ELLEN POULSEN—Dark brilliant pink, large, full and sweet scented. Each **75c.**

EDWARD MAWLEY (H. T.)—Long pointed buds of deep, rich, velvety crimson. Growth is upright and branching with handsome foliage. One of the finest red roses. Each **50c.**

ETOILE DE FRANCE (H. T.)—Well formed buds that develop into full open flowers of red and soft velvety crimson shading to vivid crimson. Each **50c.**

EVELYN—One of the finest roses grown. Color salmon, white shaded and bordered rose. Fragrant. Ea. **75c.**

EVENING STAR (Pern.)—A sport of Mad. Edouard Herriott. Color much more brilliant. Deep coral, shaded yellow and red. Ever blooming tendencies. Each **\$1.00.**

FRANZ DEEGAN (H. T.)—Center golden yellow, outer petals soft yellow. Very fragrant. Each **65c.**

FRAU KARL DRUSCHKI (H. P.)—The white American Beauty. Makes splendid buds and immense flowers; perfectly double. Each **50c.**

FRED J. HARRISON—Cardinal red with black blotches on edges. Flowers large, double, fragrant and lasting, growth vigorous. Continuous bloomer. Each **\$2.00.**

GENERAL JACQUEMINOT (H. P.)—Bright shining crimson; very rich and velvety, large and full. Rich fragrance. Each **40c.**

GENERAL McARTHUR (H. T.)—Dazzling crimson scarlet; delicious perfume and magnificent foliage. Blooms in great profusion. Not subject to mildew. Each **50c.**

GEORGE DICKSON (H.P.)—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 **50c.**

GEORGE C. WAUD (H. T.)—A beautiful variety possessing a distinct color. Glowing vermillion with orange red suffusion; large, full flowers of perfect form, highly tea-scented; free flowering. Each **65c.**

GLOW WORM (Pern.)—A most beautiful new single rose, similar to Fire-flame but by far more brilliant. Rich scarlet suffused coppery orange. Each **\$1.00.**

GOLDEN EMBLEM (H. T.)—A grand new Irish rose of ideal habit of growth with holly-like glossy green foliage, each stem bearing a glorious golden yellow flower of the finest form. The peer of all yellow roses. Each **90c.**

GRUS AN TEPLITZ OR VIRGINIA R. COXE (H. T.)—Color fiery crimson, with a dark velvety sheen, very fragrant. Free blooming, producing a mass of gorgeous blooms on long stems. Each **50c.**

(Continued on Next Page)

ALPHABETICAL LIST OF ROSE BUSHES

(For List By Colors See Page 63;
For Climbers See Page 67)

HADLEY (H. T.)—A fine American pedigree rose producing flowers of elegant form and substance. Color rich crimson scarlet shaded maroon. Prolific during all seasons, with a wonderful fragrance. Each **60c.**

HILLS AMERICA — Beautiful pink, long pointed buds, flowers of great size; in thornless class; "June rose" fragrance. Each **75c.**

HOOSIER BEAUTY (H. T.)—Crimson scarlet with darker shadings, velvety texture. Bud long and pointed, deliciously fragrant. Each **65c.**

INDEPENDENCE DAY (Pern.)—Sunflowers gold, flamed and stained coppery old gold and orange. One of the best. Each **\$1.50.**

H. V. MACHIN (H. T.)—Similar to Hadley both in color and texture. A good rose in any garden. Each **50c.**

IRISH ELEGANCE (S.)—Large, single golden bronze flowers of great beauty, free and constant bloomer, with deep bronze foliage. Each **60c.**

IRISH FIREFLAME (S.)—Deep orange-splashed crimson, changing to fiery orange crimson; buds hold shape long time. Tea scented. Each **60c.**

ISOBEL (H. T.)—Single rose. Rich crimson, flushed orange scarlet with pure yellow center. Fragrant. Each **75c.**

J. B. CLARKE (H. T.)—Irish variety of great merit either for garden decoration or cut flowers. The color is bright crimson shaded maroon; petals large, flowers very full and perfectly formed. Flowering from early summer until late autumn. Each **50c.**

KAISERIN AUG. VICTORIA (H. T.)—Elegant, large pointed buds; full double flowers; color delicate creamy white; fragrant. Each **40c.**

K OF K (H. T.)—Intensest scarlet known. Semi-single, huge petals. Free bloomer, sweet scented. Each **60c.**

LADY ALICE STANLEY (H. T.)—Deep coral rose outside of petals, pale flesh color on inside. Long pointed buds. Fragrant. Each **60c.**

LADY ASHTOWN (H. T.)—One of the finest pinks of a rich, deep, silvery tone; flowers large. Each **60c.**

LADY HILLINGDON (T.)—Deep apricot yellow, long and pointed bud. Flowers are of good substance and very lasting. Foliage luxuriant. A fine forcing or garden rose. Ea. **75c.**

LADY URSULA (H. T.)—A clean flesh pink with little shading, plant a good grower and notable bloom. Ea. **50c.**

LA FRANCE (H. T.)—A silvery rose, changing to pink. Sweetest fragrance of all roses. A great favorite. **50c.**

LA SOMME (Pern.)—Bud round orange red and deep copper. Flowers large formed like Testout; deep coral red shaded copper and bright salmon. Each **\$1.50.**

LOS ANGELES (H. T.)—Flame pink toned with coral and shaded gold at base of petals; fragrant, vigorous, and very free blooming, buds long and pointed, mammoth flowers. Ea. **65c.**

LOUISE BALDWIN (H. T.)—This new English rose has the form of Lady Hillington. Well shaped flowers of rich orange with soft apricot shading. Each **\$1.50.**

LOUISE CATHERINE BRESLAU (H. T.)—Coral red, shaded chrome yellow, opening to a shrimp pink, shaded coppery orange. Each **75c.**

LYON (Pern.)—Beautiful shrimp pink with salmon and chrome yellow shadings. Large coral red buds, beautifully formed. A continuous and free bloomer. Charming fragrance. **65c.**

MAD. BUTTERFLY (H. T.)—Sport of Ophelia, brilliant pink suffused apricot and gold; buds are lovely for corsages, wonderfully fragrant. Ea. **60c.**

MAD. CAROLINE TESTOUT (H. T.)—A grand rose of the La France type, but with flowers larger and finer. Color, bright satiny pink; very fragrant and free in bloom. One of the handsomest roses and should be planted extensively. Each **50c.**

MAD. EDOUARD HERRIOTT (H. T.)—Coral red, shaded yellow at base, passing to shrimp red, bronze and geranium red; hardy, vigorous. Ea. **75c.**

MAD. MELANIE SOUPERT (H. T.)—Splendid new orange yellow, shaded pink; beautiful long-pointed buds. Best of its color. Each **65c.**

MAMAN COCHET (T.)—Color is a deep rosy pink, the inner side of the petals silvery pink; buds extremely large, beautifully formed, very full; outer petals reflexed. Each **50c.**

MARGARET DICKSON HAMILL — Delicate straw color, its shell-like petals flushed at the edges on the reverse side with delicate carmine-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 **60c.**

MARQUIS DE SINETY (H. T.)—Deep saffron yellow, flushed reddish copper. Flower large, capped with high center petals large and crisp, fragrance rich. Stems curiously carved. Foliage dark and handsome. Ea. **75c.**

MISS LOLITA ARMOUR (H. T.)—A magnificent rose; color chrome yellow at base of petals, shaded to coppery orange. Flowers very large, of finest form, on stout canes. Each **75c.**

MISS WILMOTT (H. T.)—One of the most refined and charming roses ever raised, a uniform soft sulphur-cream slightly flushed toward the edges. A distinct variety that will appeal to all rose lovers. In shape and form a model of perfection. Each **65c.**

MRS. AARON WARD (T.) — A deep golden orange color shading out to lemon or creamy yellow at the edge of the petals. One of the most beautiful roses in existence. Each **75c.**

MRS. ALFRED TATE (H. T.)—Coppery red shaded fawn. Buds are about the longest we have ever seen on an outdoor rose. Will easily rank with the very best. Each **75c.**

MRS. CHARLES RUSSELL (H. T.) — "American Beauty" cannot compete with it when it comes to counting points. Stems three feet long, stiff and surmounted by grand rose-pink blooms. Each **65c.**

MRS. F. W. VANDERBILT (H. T.)—Deep orange red, shaded bronze apricot red. A very attractive variety, perfect in shape, fragrant, free producer. Each **65c.**

MRS. S. K. RINDGE (Pern.)—A sister variety of Lolita Armour. Buds very long and pointed, rich golden yellow outside of petals stained at base with Indian red. Each **75c.**

OPHELIA (H. T.)—Orange salmon buds, opening to flowers of dainty pink. The foliage is clean, dark and leathery—growth vigorous and free, producing long canes. Blooms early and continuously. Each **65c.**

PADRE (Pern.) — Coppery scarlet, flushed yellow at base, flowers semi-double with 15 to 20 petals, often curiously notched, exceptionally free bloomer. Color commands attention. Each **\$1.50.**

PILGRIM (H. T.)—A lovely silver pink. Vigorous and free blooming. Ea. **65c.**

PREMIER (H. P.)—A clear pleasing red; does not fade. Good form and habit, excellent for cutting and inside forcing; fragrant, thornless, free blooming. Each **75c.**

PRES. W. R. SMITH—Creamy white with shading of pink, seedling from Maman Cochet and K. A. Victoria. Each **75c.**

QUEEN OF FRAGRANCE (H. T.)—Large double elegantly shaped shell pink blooms, tipped with silver. Noted for its powerful perfume. Ea. **75c.**

RAYON D'OR (Pern.) — A gorgeous yellow rose with wonderful foliage. Needs a little protection in severe winters; immune to mildew, free flowering. Each **75c.**

RED LETTER DAY (H. T.)—Brilliant glowing crimson scarlet, opening into medium sized cactus-like flowers of curious formation. One of the freest blooming roses. Each **65c.**

RICHMOND (H. T.)—Vivid red buds and pure rich scarlet flowers of most perfect, desirable forms; free continuous flowering and a splendid forcer. Each **50c.**

SOUV. DE CLAUDIUS PERNET (Pern.)—On the order of Constance or Golden Emblem but with large, elongated and beautifully formed buds. Clear brilliant yellow, shaded warmer in the center. Wonderful foliage. Each **\$1.00.**

SUNBURST (H. T.)—The finest of all yellow roses with long pointed buds; a giant rose, long stems. Color a superb cadmium yellow with orange yellow center. The foliage is a handsome bronze green; vigorous, free and healthy. Each **65c.**

T. F. CROZIER—Clear canary yellow, large buds. Each **75c.**

ULRICH BRUNNER (H. P.)—Extra large, bold flowers, full and globular; color, rich glowing crimson, elegantly flamed with scarlet, strong and disease resisting. Each **40c.**

VISCOUNTESS FOLKESTONE—Large flowers of creamy white and salmon pink, darker in center, fragrant; free flower and vigorous growth. Ea. **60c.**

W. C. GAUNT (H. T.)—Bright vermillion tipped scarlet. Fine bud and foliage. Each **75c.**

WHITE LA FRANCE (H. T.)—Broad petals of silvery white with delicate pink shadings, large finely formed buds; fragrant; a free and continuous bloomer. Each **60c.**

WHITE MAMAN COCHET (T.)—White with outer petals blushed; immense size, exquisitely fragrant; long, pointed buds. Each **50c.**

WILLIAM F. DREER (H. T.)—Soft shell pink, base of petals rich golden yellow. For delicacy of coloring has few if any equals. Each **75c.**

THE POPULAR RAMBLER ROSES

Our Rambler Roses are strong, vigorous climbers, growing 10 to 12 feet high in one season. Two-year, field grown, budded on disbudded Manetta stock: the best

35c Each

(For shipment by parcel post add 5c each for postage)

DOROTHY PERKINS, RAMBLER (H. W.)—A beautiful bright shell-pink; large double flowers. Very sweet scented, hardy, superior foliage. Each **35c**.

HIAWATHA, RAMBLER (T.)—Ruby crimson, with a clean white eye; large single flowers in clusters; excellent for climbing, trailing and forcing. Each **35c**.

PHILADELPHIA CRIMSON RAMBLER (P.)—A light crimson, improved form of Crimson Rambler, flowers brighter, larger, more double, much less susceptible to mildew. Each **35c**.

RED DOROTHY PERKINS, RAMBLER (H. W.)—Fine crimson rambler; glossy green foliage; never troubled with mildew. Flowers very double, in brilliant colors; the handsomest of all red climbers. Each **35c**.

TAUSENDSCHON RAMBLER—A lovely shade of soft pink, bright clusters of blossoms, almost covering foliage, few thorns, free and vigorous; splendid foliage. Each **35c**.

WHITE DOROTHY, RAMBLER—A sport from Dorothy Perkins, possessing all the fine qualities of that grand variety, but having pure, white flowers. Each **35c**.

(Crimson Rambler)

(Tree Druschki)

(Dorothy Perkins)

Baby Ramblers

FOR WALLS AND ROCKERIES

35c Each

This is a class of ramblers especially developed for low rock work, embankments, walls, etc., where heavy vines are not desired. Dainty, exceedingly attractive and interesting. Colors pink, yellow and crimson. Each **35c**.

(For shipment by parcel post add 5c each for Postage)

Tree Roses

Standard or tree Roses are budded or grafted on hardy rose stalks about 4 feet high. They soon make good sized heads, forming a small tree; desirable for planting as single specimens, in backgrounds or in rows along walks or driveways.

We have a fine selection of colors State preference. Each **\$2.50**, f. o. b. Portland. Shipped by express only

CLIMBING AND PILLAR ROSES

TWO-YEAR-OLD, FIELD GROWN, BUDDED ON DISBUDED MANETTA STOCK

Prices are f. o. b. Portland. On parcel post shipments add 5c each for postage.

AMERICAN BEAUTY (CLIMBER)—Rich crimson color, delightfully fragrant; very free bloomer. Each **75c**.

AMERICAN PILLAR (H. W.)—Brilliant crimson pink single flowers of medium size with large white centers and golden stamens. Profuse bloomer, tremendous clusters, vigorous plant, rather late. Each **75c**.

CECIL BRUNNER, CLIMBER (C. P.)—Clusters of pretty pink flowers, especially beautiful in bud. Each **75c**.

DR. W. VAN FLEET (W.)—Flowers large with high-built center and petals beautifully undulated and cupped. Color the most beautiful shade of pink ever seen in a rose. A rank climber, immune from mildew. Each **75c**.

GLORIE DE DIJON, CLIMBER (C. T.)—An old favorite, noted for its free flowering, its delicate tea scent, and its shades of color, being a blending of amber, tinted salmon and rose. Each **75c**.

HOOSIER BEAUTY CLIMBER—Identical with bush variety as to flower; it is a rampant climber; crimson flowers, shaded to black. Each **75c**.

KAISERIN A. VICTORIA, CLIMBER (C. H. T.)—Strong rapid growing climbing form of the popular rose. Fine large ivory white flowers. Each **75c**.

(Hiawatha Rambler)

(Tausendschon Rambler)

(American Pillar)

LA FRANCE, CLIMBER (C. H. T.)—Identical with the well known La France; vigorous climber, early and late flowering. Each **75c**.

MARECHAL NEIL, CLIMBER—A magnificent deep golden yellow variety; so famous as to need no description; finest of its color. Each **\$1.00**.

PAUL'S SCARLET CLIMBER (H. W.)—By all means the most brilliant rose known in any class because of its clear, vivid, shining scarlet in large semi-double flowers. These flowers retain their intense coloring until petals fall. Cannot be too heartily commended as essential to any garden. Each **75c**.

PINK CHEROKEE, CLIMBER—Lovely single blossoms, 3 to 5 inches in diameter, saucer shaped and of a beautiful shade of light pink. **75c**.

SILVER MOON, CLIMBER (H. W.)—Similar in habit of growth to Dr. Van Fleet, but with large saucer-like single flowers of silvery white color. Flowers of wonderful substance on long stems. Each **75c**.

SUNBURST, CLIMBER—A splendid climber of the same beauty and freedom of bloom as the bush form of this popular rose. Each **\$1.00**.

WILLIAM A. RICHARDSON (N.)—Very deep orange yellow. Flowers medium in size, but freely produced. A very fine rose. Each **75c**.

CLEMATIS JACKMANII

AMPELOPSIS (Ivy)

ENGELMANNI—Similar to Quincefolia, but leaves slightly smaller, and will cling to walls without any support. Very hardy and attractive. Strong two-year roots, **40c.** Postage extra.

QUINQUEFOLIA "Virginia Creeper"—Common American Ivy. Strong two-year roots **40c.** Postage extra.

VEITCHII "Boston Ivy"—Leaves glossy, coloring bronze in Fall; flowers small; berries deep blue; clings firmly to smooth walls. Strong two-year roots **40c.** Postage extra.

CLEMATIS

One of the most beautiful and useful climbers. Their magnificent flowers, borne in great profusion in beautiful shades of lavenders, purples, reds and white, make them especially attractive. Clematis requires a rich loamy soil, but manure should not touch the roots. Cut out the weak and surplus branches in the Spring, and tie the vine up well to its support.

PANICULATA—A rapid and vigorous grower; it produces sheets of medium sized, pure white flowers of the most pleasing fragrance; well adapted for covering trellises or fences. Choice plants, each **30c.** Postage extra.

HENRYI—Fine, large, creamy white flowers; a strong grower and very hardy. Each **30c.** Postage extra.

JACKMANII—Intense violet purple with a rich velvety appearance; distinctly veined. The above large plants, each **20c.** Postage extra.

RAMONA—Beautiful lavender, best of its color. Each **20c.** Postage extra.

DUTCHMAN'S PIPE

ARISTOLOCHIA SIPHO—A handsome, bright green luxuriant vine, having large foliage and brownish, pipe-shaped flowers. A strong rapid grower. Strong plants, each **75c.** Postage extra.

ORNAMENTAL Climbing Vines

CINNAMON

The most desirable, easiest grown climbers in the world; from China—the land of wonders. Their abundant blossoms perfume the air for a long distance with a delicate fragrance. Perfectly hardy—thriving in all soils, in sun or shade, wet or dry. No insects, blight or disease of any kind ever troubles them, no Winter harms. Once planted, they will grow a lifetime. Each **25c;** five for **\$1.00,** postpaid.

CINNAMON VINE

ENGLISH IVY

Large, thick, shining, leathery leaves; evergreen. Plant in sheltered position. Each **20c.** Postage extra.

EUONYMUS

RADICANS—A most beautiful evergreen vine of vigorous growth and perfect hardiness. Clings to stone or brick. Most valuable and takes the place of ivy. Each **60c.** Postage extra.

HONEYSUCKLE

HALL'S JAPANESE—Almost evergreen, very popular; white turning to yellow. Each **40c.** Postage extra.

JASMINE

NUDIFLORUM—Drooping branches, enveloped with bright yellow flowers before leaves appear. Each **\$1.00.** Postage extra.

KUDZU

KUDZU

PUERERIA THUNBERGIANA—Large foliage and dense shade, growing 50 feet in one season. Flowers plentiful in August, rosy-purple, pea-shaped; racemes. Each **50c.** Postage extra.

TRUMPET VINE

BIGNONIA RADICANS—Strong climber; deciduous; flowers orange scarlet. Blooms mid-summer. Each **50c.** Postage extra.

WISTARIA

W. SINENSIS (Chinese Wistaria)—Grows 15 to 20 feet in a season; has long, pendulous clusters of pale blue flowers in May and June and Autumn. Choice one-year plants, **\$1.50 to 75c.** Postage extra.

MULTIJUGA—Two-year grafted.
Blue flowers, each.....**\$2.50**
Pink flowers, each.....**\$3.00**
White flowers, each.....**\$1.50**
Postage Extra

CLEMATIS PANICULATA

DEUTZIA

FORSYTHIA

HONEYSUCKLE

LILAC

SNOWBALL

SPIRAEA

SYRINGA

WEIGELIA

DECIDUOUS SHRUBS

Deliveries are made from November until May, orders are accepted at any time for delivery in season.

We use every precaution to deliver healthy, vigorous stock, but the measure of your success will depend upon the planting and care given, as careless or uninformed handling kills thousands of fine trees and plants every season. Avoid unnecessary exposure of roots to the air. In the case of evergreens that are "balled," do not remove the burlap. Plant as received, only cut the string around the top, then loosen burlap after tree is set. If you cannot plant immediately on receipt, always "heel" in so roots may be in contact with good soil.

If the soil is good and properly prepared, only a hole large enough to easily take the roots need be dug, but better results can always be obtained by digging out a large space and filling in with good top soil. In setting the trees, do not put deeper than they stood in the nursery, excepting some dwarfs, which go a little deeper. Be sure to Pack Earth Solidly Around Roots. Neglect of this is responsible for many failures.

ALL PRICES ON SHRUBS F. O. B. PORTLAND

ALMOND (PRUNUS)

PINK FLOWERING (P. Japonica)—Well known early dwarf shrub. Double clear pink little roses festoon the gracefully bending branches. Height at maturity 3 feet.

Each **\$1.50**

ALTHAEA (ROSE OF SHARON)

Late Summer blooming, continues into the Fall when color is scarce, bearing flowers that closely resemble Hollyhocks in color and size. Colors pink, white or red. Maturity ht. 10 ft.

Each **75c**

AZALEA

A. MOLLIS—Low growing, in early Spring is covered with gorgeous flowers before the leaves appear. Excellent planted under trees or in groups. Cannot guarantee colors, mostly orange, yellow and salmon-pink. Maturity height 6 feet.

Each **\$2.00**

BERBERRY

B. THUNBERG—(Japanese)—Low growing with clusters of white flowers in May. Foliage changes to a red in Autumn. Maturity height 4 feet.

Each **60c**

BOX LEAF ELDER

VARIEGATED—The finest variegated tree of the hardy kinds, leaves almost pure white. Nothing finer for specimen planting 4 to 6 ft. Also in silver and gold coloring. Maturity height 10 feet.

Each **\$3.00**

BUDDLEYA (MAGNIFICA LILAC)

Produces long straight slender branches that terminate in long spikes of lilac-like flowers of a beautiful shade of lavender blue. Commences to bloom in June and continues until frost. Fine subject for lawn or tall hedge. Maturity height 6 feet.

Two-year-old plants, each **75c**

BROOM (GENISTA)

ALBA—(White)—A fine hardy variety, attaining good size. Blooms in Spring. Maturity height 10 feet.

Each **75c**

JUNCEA—(Spanish Broom)—The most beautiful of all, stems almost leafless, of a vivid green. Blooms all Summer when color is most desirable. Maturity height 10 feet.

Each **75c**

SCARAPIUS—(Scotch)—Rapid growing, bearing clusters of bright yellow flowers in Spring. Maturity height 10 ft. Each **75c**

CALYCANTHUS

FLORIDUS—(Sweet Scented Shrub)—Double, dark flowers, very fragrant and blooms all season. Maturity height 5 ft. Each **75c**

CHERRY (CERASUS)

JAPANESE WEEPING—Maturity height 6 ft. Single pink flowers. Each **\$5.00**

Double pink flowers, each **\$6.00**

CRAB

BECHTEL'S FLOWERING—Bears masses of double rose-like flowers of delicate pink color, and delightful fragrance, tree shape. Maturity height 10 ft. Each **\$1.50**

DEUTZIA

DEUTZIA GRACILIS—One of our daintiest and most graceful flowering shrubs; low growing, slender branches, covered with a profusion of flowers, white with a blush of pink in the bud. Each **75c**

LEMOINE'S—(D. Lemoinei)—One of the hardiest and most popular varieties, flowers in large clusters of pure white. Grows to 6 feet high. Each **75c**

PRIDE OF ROCHESTER—(Deutzia Crenata)—Pure white, tinged with blush. Flowers very double, blooming May and June. Maturity height 6 ft. Each **75c**

WATERI—(D. Crenata Flora Rosa Plena)—Beautiful dainty double pink flowers. A fine lawn subject. Very showy. Grows to 6 ft. Each **75c**

BECHTEL'S FLOWERING CRAB

DEUTZIA—PRIDE OF ROCHESTER

JAPANESE FLOWERING QUINCE

HYDRANGEA

TREE HYDRANGEA—PANICULATA GRANDIFLORA

DECIDUOUS SHRUBS (Continued)—Prices f. o. b. Portland

ELAEGNUS (JAPAN, CHINA)

Ornamental shrub of spreading habit. Branchlet ruddy brown, leaves silvery. Flowers small but numerous. Yellowish white and fragrant, followed by scarlet fruit in large clusters. Maturity height 4 ft. Note—this fruit is edible and makes delicious jelly or juice.

1½ to 2 ft., each **\$1.50**
2½ to 3 ft., each **\$3.00**

FORSYTHIA (GOLDEN BELL)

F. FORTUNEI—Blooms in dense masses of golden yellow flowers in early Spring. Beautiful as lawn tree. Each **75c**

INTERMEDIA—One of the finest shrubs for early Spring blooming. Yellow flowers appear before leaves. Height at maturity 4 ft. Each **75c**

HONEYSUCKLE (BUSH)

WHITE TARTARIAN—Bushy upright growth, flowers freely. Red and orange berries stay on until Fall. Maturity height 8 ft. **75c**

HYDRANGEA

JAPANESE OTAKSA—One of the most popular lawn plants. The flowers run in shades of pink, blue and white, mineral in soil often changing them to two or three shades in one. For shady places. Maturity height 4 ft. Each **75c to \$1.50**

PANICULATA GRANDIFLORA—(Tree Hydrangea)—Grows to six feet high. Flowers are in cone shape on ends of branches, pure white, afterwards changing to pink, remaining on tree until frost. Each **\$1.00**

HYPERICUM

PATULUM HENRYI—One of the finest shrubs we have to offer, attaining a height of 4 ft. and covered during the Fall months with masses of large yellow flowers. Each **75c**

KERRIA

A very graceful shrub that bears bright yellow rose-colored flowers in early Spring, vivid green branches, showy in Winter. Maturity height 4 feet. Each **75c**

LILAC (SYRINGA VULGARIS)

Maturity height about 15 feet
COMMON—White or purple. Each **75c**
CHAS. SARGENT—Violet-mauve blended with sky-blue enormous flowers. Grafted. **\$1.25**

HIPPOLYTE MARINGER—Purplish-mauve,

compact flowers, very free. Grafted. **\$1.25**
JEAN BART—Rosy-violet, buds carmine. Grafted. Each **\$1.25**

MAXIMOWICZ—Violet-heliotope, reverse silvery, enormous flowers. Grafted. **\$1.25**

MISS ELLEN WILLMOTT—Snow-white, elegant spikes, large flowers. Grafted. **\$1.25**

CHRISTOPHE COLOME—Light lilac, buds purple, very fine and large. Grafted. **\$1.25**

DR. BREITCHNEIDER—Purple in bud opening white late. Grafted. Each **\$1.25**

NIGRICANS—Lilac. Grafted. Each **\$1.25**

PERLE VON STUTTGART—Pure white, grafted. Each **\$1.25**

MOCK ORANGES (SYRINGA)

Large hardy shrub with a profusion of white creamy flowers, very fragrant. Maturity height 12 feet. Grafted. Each **75c**

PRUNUS (FLOWERING PRUNE)

P. BLIVANS—Same as Pissardi in growth but flowers double pink. Most beautiful of all and very rare. Mat. ht. 20 feet. **\$2.00**

P. PISSARDI—Foliage and fruit red, covered in Spring with clouds of white flowers. Maturity height 20 feet. Each **\$1.00**

P. VESUVIUS—Foliage comes out light green gradually getting darker until Fall, when it is blood red. Very showy fruit. Maturity height 20 feet. Each **\$1.50**

PUNICA (POMEGRANATE)

The flowering pomegranates are of very rare value. They are most attractive, brilliant in color, bloom throughout most of the Summer; foliage glossy and handsome. Growth dwarf-tree-like, height 3 to 4 ft. Each **\$1.50**

QUINCE

JAPANESE FLOWERING—Covered with bright scarlet flowers very early in Spring before leaves appear. Maturity height 4 ft. Each **\$1.00**

RUSSIAN OLIVE

Large shrub with long narrow silvery foliage. Flowers yellow, appearing in May, followed by yellow berries. Maturity height 10 ft. Each **\$1.00**

SPIRAEA

BILLARDI'S—(S. Billardi)—Flowers red in dense spikes, blooms most of Summer. Maturity height 4 feet. Each **60c**

BLUE SPIRAEA—Beautiful Autumn blooming shrub. Flowers bright blue the entire length of stems. Maturity height 4 ft. Each **75c**

CRIMSON—Anthony Waterer—(S. Bumalda)—A desirable variety, deep red flowers, blooming all Summer; fine for foreground planting. Maturity ht. 4 feet. Each **60c**

JAPANESE—(S. Callosa)—Purplish foliage while young, flowers rosy pink in July. Maturity height 4 feet. Each **60c**

THUNBERGH—Charming spiraea with graceful form and abundant blooms. Maturity height 4 ft. Each **60c**

VAN HOUETTI'S BRIDAL WREATH—(S. Vanhouetti)—Very graceful; flowers white in clusters. May. Maturity ht. 6 feet. **60c**

SNOWBALL

COMMON—Flowers globular, pure white, in May. Maturity height 12 feet.

2 to 3 ft., each **60c**; 10, **\$5.00**

SYMPHORICARPOS (SNOWBERRY)

S. OCCIDENTALIS—Western snowberry. A native shrub of spreading habit, bearing small pink flowers in Summer and clusters of large clear white berries in Winter. Maturity height 5 ft. Each **50c**

S. VULGARIS—Indian Currant—Red fruited snowberry, habits similar to white, but loaded with dark red berries Fall and Winter. Grows to 4 ft. Each **50c**

TAMARIX

JUNIPERANA—(Africana)—Ornamental tree with soft, juniper-like leaves, pink flowers. Maturity height 14 ft. Each **\$1.50**

WEIGELIA

A most desirable free flowering shrub covered in the late Spring with a mass of trumpet-shaped flowers, showing a profusion of bloom that is unequaled. Maturity height 12 feet. Each **75c**

CANDIDA—Flowers white, bush tall.

ROSEA—Flowers light pink, shrub compact.

EVA RATHKE—Flowers red, one of the best.

VARIEGATED—Leaves become silver white.

WEIGELIA

SPIRAEA—VAN HOUETTI

EVERGREEN SHRUBS

Read instructions for handling shrubs at top of page 68.

AZALEA (ASAHI)

CRIMSON—Evergreen variety from Japan, bright minute, waxy foliage that turns garnet in Winter. Loaded in early Spring with masses of scarlet flowers which almost cover the plant. Thrive best in cool, moist situation, do not plant in full sunlight. Excellent for massing or in front of other shrubs. Height 12 to 15 in. Maturity height 3 ft. Choice plants, each **\$2.00**

ABELIA

GRANDIFORA—Graceful evergreen shrub with small glossy leaves and tubular shaped flowers of a bluish pink color. One of the few late Summer, early Fall blooming shrubs. The large ruddy sepals remain long after the flowers fall, having the appearance of hoods themselves. Does well in any location but does not like to be crowded as it is of a drooping nature and effect is spoiled if planted too close to buildings or other shrubs. Maturity height 4 to 5 ft.

12-18 in., ea. **\$1.00**; 18-30 in. ea. **\$1.50**.

AUCUBA (Japanese Laurel)

Known as Japanese Laurel or Gold Dust Laurel. Japanese shrubs of moderate size, very beautiful and are covered with wonderful large red berries. It is necessary to have at least one green foliage plant to every three variegated if berries are desired as there are both male and female plants of this variety and planted alone they will often be barren. Do not expose to extreme hot sun as leaves are apt to burn. Maturity height 5 feet.

VARIEGATED—Yellow spotted leaves.

GREEN—Dark glossy green leaves.

15-18 in., ea. **\$1.50**; 18-24 in., ea. **\$2.00**

BARBERRY

B. DARWINI (Chile)—Shrub with slender branches, drooping toward tips. Leaves shaped like holly, flowers golden yellow, berries blue; foliage turns red in winter; slow growth; maturity height 4 feet.

6-8 in., ea. **75c**; 12-18 in., ea. **\$1.25**

B. VERICULOSIS—Resembles Darwin, but is low growing; fine for rockeries and terrace work; brilliant foliage; maturity height 2 ft.

12 to 15 in., each **\$1.00**

B. WILSONI (China)—One of the most attractive winter shrubs, being covered with clusters of cone-shaped red berries that remain on all winter; foliage does not remain on all winter, but berries completely cover it. Do not plant too close to other shrubs, as it becomes bushy. Maturity height 4-5 ft.

12-15 in., ea. **\$1.00**; 18-24 in., ea. **\$1.50**.

BOXWOOD (Buxus)

One of the longest lived shrubs known, small leaved, of dense compact growth; can be used in tubs or for low hedge work and trimmed into any form.

Pyramid form, trimmed 2-2½ ft., ea. **\$4**. Globe form, 12 to 15 in. spread, 15 to 18 in. high, each **\$2.00 to \$4.00**.

For hedges (not trimmed) any size from 6 to 12 inch height, write for prices, mentioning quantity desired.

CAMELLIA (China and Japan)

Small trees with shining waxy leaves and beautiful waxy flowers, very much resembling a small rose. Thrive best in partial shade and should never be allowed to get too dry. Grow very slowly, but begin blooming when extremely young. Should have protection in cold regions, as buds set in late Fall and blooms come very early in Spring. Maturity height 10 feet. In assorted colors only, mostly red and pink. 1½ ft. high, ea. **\$2.00**

DAPHNE (China and Japan)

D. ODORA MARGINATA (Pink Daphne)—A grand shrub, greatly admired everywhere; the flowers are intensely fragrant, massed in dense clusters of pink at ends of branches; leaves are edged white; blooms very early in the Spring. Of slow substantial growth. Maturity height 4 feet.

12-15 in., ea. **\$2.00**; 18-24 in., ea. **\$3.50**

COTONEASTER

A very desirable class of shrubs, becoming more known and rapidly attaining deserved popularity. Some are of upright growth; others are trailing.

C. FRANCHETTI (China)—Growth upright, distinguished by its very arching branches, which give it a most graceful habit. Pink flowers followed by red berries in the Fall. Maturity height 6 to 8 feet.

1-1½ ft., ea. **75c**; 2-3 ft., ea. **\$1.50**

C. HORIZONTALIS (China)—Nearly deciduous; leaves very small and turn red during Winter; berries of the brightest red that stay on all Winter. Low growing with horizontal branches, excellent for terrace or embankment work. Very hardy. Maturity height 2 ft.

Ea. **75c to \$1.50**

C. MICROPHYLLA (Himalayas)—Very much like C. Horizontalis, but differs in that it is entirely evergreen; berries are larger and of purplish red, almost prostrate growth. Maturity height 2 ft. Ea. **75c to \$1.50**.

C. MICROPHYLLA THYMIFOLIA—Like above, but foliage is very dense; tiny leaves and berries; very dainty; maturity ht. 1 ft. Each **75c to \$1.50**.

C. SIMONS II—Growth very straight and upright; excellent to fill in background between shrubs when height is desired. Leaves do not remain all winter, but branches are covered with bright red berries the size of a cranberry. Of quick growth. Maturity height 10 to 12 feet.

18-24 in., ea. **75c**; 3-4 ft., ea. **\$1.50**

EUONYMUS (Japan)

A fine specimen evergreen plant with leathery glossy green leaves, one of the hardiest broad leaved evergreens. Very fine for foundation planting. Maturity height 8 feet.

12-18 in., ea. **\$1.00**; 18-30 in., ea. **\$1.50**

E. VARIEGATED (Japan)—Similar to above, but leaves are of a gorgeous golden yellow edged with green; very greatly admired; maturity height 4 ft. 15-18 in. Ea. **\$2.00**

ESCALLONIA (South America)

Dwarf growing evergreen with dark green foliage; spreading branches cover throughout summer, with tubular shaped pink flowers of much beauty. Very handsome species; not very hardy in cold climate; maturity ht. 3 ft.

1½ ft. each **\$1.50**

HOLLY (Ilex)

ENGLISH (Aquifolia)—Prickly dark green foliage; grows moderately fast; covered during the winter months with bright red berries. We endeavor to furnish nothing but assured Berry bearing stock which has produced berries before being sent out. However, very often in transplanting they drop these berries and do not reset them until roots become established again. Holly trees, while they never should be allowed to remain dry too long, are often ruined by too much spraying with hose during summer months, causing flowers to drop and no berries. Maturity height 40 feet.

Price **\$1.50** per foot of height.

LAURUSTINUS (Mediterranean region)

A well known evergreen shrub with dark green foliage. Bears a profusion of small white flowers in the open and pink in the bud, very early in the Spring. Attains considerable size and used a great deal in specimen planting or to fill a large corner or space. Fine for massing or hedge work. Very hardy. Maturity height 10 feet.

10-15 in., ea. **75c**; 18-24 in., ea. **\$1.25**.

LONICERA (Nittida)

EVERGREEN BUSH HONEYSUCKLE (China)—A fine variety for base or foundation planting, as well as for massing in large beds. Can be trimmed much the same as boxwoods for tub or porch decoration. Maturity height 5 feet.

1 ft. **50c**; 1½ ft. **75c**; 2½ ft. **\$1.25**

Write for prices on hedge size.

LAUREL

ENGLISH LAUREL (Cerasus)—One of the best known laurels; growth shrub-like with broad dark green leaves of leathery texture, greatly used in landscape work. Attains a height of 12 feet if not topped. Being used a great deal now for evergreen hedge planting at a distance of 2 feet apart for dense hedge. Specimen plants, 18-24 in. \$1.25. Larger plants up to 5 feet priced on request. Hedge plants unball from \$15 to \$40 per 100, height 8 to 15 inches.

PORTUGAL LAUREL—A very beautiful slow growing laurel, dark green glossy leaves, small but very compact; can be trimmed to globe or pyramid shapes. Maturity height 8 feet.

12-15 in., ea. **\$1.50**; 2 ft., ea. **\$2.25**; 2½ ft., ea. **\$3.00**.

OREGON GRAPE

(MAHONIA AQUIFOLIA)—The holly-leaved berry of Oregon, a native of this state, but our plants are nursery grown and especially fine. Dark evergreen foliage in summer, changing to purplish and variegated reds in the Fall. The official flower for the state of Oregon.

14 in. **\$1.00**; 18 in. **\$1.25**; 24 in. **\$1.75**.

PERNETTYA

A new evergreen novelty, of dense compact habit; does well in any location, but prefers a rich soil. The leaves are small, dark, glossy green, with white flowers in the Spring and a profusion of attractive berries in the Fall and Winter. Can be trimmed.

P. ALBA—White berries.

P. NIGRA—Dark red berries.

P. ROSEA—Pink berries.

1½ ft., ea. **\$2.50**; 2½ ft., ea. **\$3.50**.

PRIVET (Ligustrum)

CALIFORNIA PRIVET (L. Ovalifolium)—Our best plant for hedges. Plant in double row 2 feet apart, 6 inches between plants. Maturity height 10 feet.

18-24 in., 10 plants **\$1.00**; 100, **\$7.50**

24-30 in., 10 plants **\$1.25**; 100, **\$10.00**

ENGLISH PRIVET (L. Vulgare)—A little harder, for colder climate, leaves smaller. Maturity height 10 feet.

18-24 in., 10 plants **\$1.00**; 100 **\$7.50**

24-30 in., 10 plants **\$1.25**; 100, **\$10.00**

GOLDEN PRIVET (L. Lucidum Variegatum)—A beautiful variegated shrub used to plant in among evergreens, giving a wonderful effect. Maturity height 10 to 12 feet.

2 ft., each **\$1.00**; 3 ft., each **\$1.50**

PYRACANTHA (Crataegus)

A tall-growing shrub with long narrow green leaves, small white flowers, followed by berries that stay on all winter; especially fine for background. Maturity height 15 feet.

P. LALANDI (From Europe)—Orange berries.

12-18 in., ea. **\$1.25**; 18-24 in., ea. **\$1.50**

P. CRENULATA (China)—Red berries.

18 to 24 in., each **\$1.50**

RHODODENDRON

Grafted varieties are still very scarce. We have a few of the original Holland stock left for sale. These plants are from 3 to 4 feet high and are extra fine specimens. No color guarantee. Each **\$10.00**

Seedling stock, not grafted, 1½ ft. Ea. **\$3.00**

VERONICA

Shrubs of compact growth, forming well rounded specimens for use singly or in groups. Fine to use as borders or to place in front of taller species. Thrive in shade or sun.

V. BUXIFOLIA (Box Leaved Veronica)—

Small, upright growth, very compact; small foliage, white flowers. Ea. **75c to \$1.25**

V. CYPRESSOIDES—Globular shaped with numerous slender branches clothed with scale-like leaves of appearance of cypress.

1 ft., each **50c**; 2 ft., each **\$1.25**

V. TRAVERSI—Upright variety; one of hardiest, white flowers during early Summer.

1½ ft., each **75c**; 2 ft., each **\$1.25**

V. THYMIFOLIA (A distinct Dwarf Variety)

Bright green foliage always fresh looking.

Thrives anywhere. Each **75c**

CATALPA BUNGEI

ASH

AMERICAN WHITE—Broad, round head and dense foliage. Very fine. Each \$1.50.

BIRCH (Betula)

CUT LEAF (B. Alba)—Silvery white bark, slender drooping branches. 5-6 ft. Ea. \$2.50.

CATALPA

Splendid trees, white flowers, bright foliage. **CATALPA WESTERN (Speciosa)**—Very rapid grower; a quick shade. 5-6 ft. Ea. \$1.50.

CATALPA BUNGEI—Dwarf dense rounded headed variety, much in outline like the Popular Bay Trees, but is hardy and better

DOGWOOD (Cornus Florida)

WHITE FLOWERING—Flowers white, 3 in. in diameter, blooming before leaves come in spring. Price, 4-5 ft., each \$1.50; 10, \$12.00.

DECIDUOUS TREES

When you are planning to purchase deciduous shade and ornamental trees we strongly recommend that you write us, telling us the location of tree and height desired, as we can advise as to the best to plant and give you a better description of the trees as to habit, etc. All of the trees listed below can be furnished in much larger sizes than listed and we will be pleased to tell you what we can furnish and quote prices. In the list that follows the sizes given are the approximate heights when sold.

ELM

AMERICAN WHITE—A magnificent tree adapted for garden. 6 to 8 feet. Each \$3.00, with drooping branches. 7-8 ft., \$1.50; 10, \$15.00.

ENGLISH ELM—A rapid grower, standing erect and compact, dark green. 6-8 ft. \$1.50.

HAWTHORNE

PAUL'S DOUBLE SCARLET—C. Monogyna (Pauli)—A tree of fine habit; flowers bright scarlet, large, full and very double in heavy clusters on long sprays. Each \$2.50.

DOUBLE WHITE—(C. Monogyna Alba Plena) Flowers small. Leaves lustrous green. \$2.50.

HORSE CHESTNUT (Aesculus)

WHITE FLOWERING (Hippocastanum)—Foliage showy, flowers stand in upright panicles. Each \$2.00.

LABURNUM (Golden Chain)

LABURNUM (L. Vulgaris)—A beautiful small growing tree, with long, drooping racemes of fragrant yellow flowers. Each \$1.50.

LINDEN (Tilia)

AMERICAN (T. Americana)—Shapely and handsome; foliage large. 6-7 ft. Each \$1.50.

EUROPEAN (T. Europea)—Similar to American. Leaf smaller. 6-7 feet. Each \$1.50.

LOCUST (Robinia)

BLACK (R. Pseudocacia)—Rapid grower, fine for street planting. 6-8 feet. Each \$1.50.

HONEY LOCUST (Gledistria Triacanthus)—Each \$1.50.

MOUNTAIN ASH (Sorbus)

EUROPEAN (S. Aucuparia)—White flowers, then beautiful red berries. 5-6 ft. Ea. \$1.50.

AMERICAN (S. Americana)—Very ornamental, handsome foliage turning orange red in fall. Red berries remain on the tree most of the winter. 5-6 feet. Each \$1.50.

MAPLE (Acer)

OREGON SOFT (A. Macrophyllum)—A rapid grower, fine for avenues. 6-8 feet. Ea. \$1.50.

NORWAY (A. Platanoides)—Large, growth compact; foliage deep green. Handsome 9 to 10 feet. Each \$1.50.

MAPLE (A. Platanoides Schwedleri)—Purple Leaf Maple. Variety Norway Maple. Young leaves are deep purple. As summer advances changes to green. 6-8 feet. Each \$3.00.

OAK (Quercus)

PIN OAK (Q. Palustris)—This Oak is by far the most largely planted of all the native oaks. Graceful in form, glossy deeply pinnated foliage. 6-8 feet. Each \$2.00.

RED OAK (Q. Rubra)—Ideal for lawn or street. 6-8 feet. Each \$2.00.

POPLAR (Populus)

6 to 8 feet, \$1.50; 8 to 10 feet, \$2.00.

BOLLE'S SILVER (P. Alba Bolleana)—A compact upright grower, foliage glossy.

LOMBARDY (P. Nigra Fastigiata)—An erect rapid grower.

SYCAMORE or PLANE (Platanus)

Erect growing tree with mottled trunk. Foliage bright green. 5-6 feet. Each \$1.50.

VARIEGATED BOX LEAF ELDER

The finest variegated tree of the hardy kinds, leaves almost pure white. Nothing finer for specimen planting. 4-6 ft. Ea. \$3.00.

WEeping WILLOW (Salix)

WISCONSIN (S. Babylonica Dolorosa)—Large glossy leaves, pendulous habit. 5-6 feet. Each \$2.00.

AMERICAN (S. Babylonica)—The well known common weeping willow. Each \$2.00.

CONIFEROUS EVERGREENS

ARBOR VITAE (Thuja)

AMERICAN (T. Occidentalis)—Native, known as cedar. Foliage bright green; yellow-green underneath; bronze in winter. Each \$1.50.

PYRAMID ARBORVITAE—THUYA LOBBI—Bright green leaves above and dark glossy green leaves beneath. An excellent tree for pyramid forms. 2 to 2½ feet. Each \$3.00.

CEDAR

DEODAR or INDIAN CEDAR (Cedrus Deodara)—Very handsome; branches drooping; foliage silvery green. Very popular. \$2.50.

RED CEDAR (Juniperus Virginiana)—Native with striking form and color. Each \$2.50.

CYPRESS (Cupressus)

NEW VARIETIES

ALUMBI—Handsome pyramid shaped conifer. Foliage greenish-blue. 2 feet, each \$3.00; 3 to 4 feet, each \$5.00; 4 to 5 feet, each \$7.

CYPRESS

LAWSON (Erecta Veridis)—Pyramid Lawson green. Specimen plants. 3 to 4 feet, each \$5.00; 4 to 5 feet, each \$6.00.

CYPRESS LAWSON'S (Chamaecyparis Lawsoniana)—Graceful and conspicuous; branches horizontal, slightly pendulous, foliage dark green. Each \$1.50 to \$5.00.

ITALIAN—Bright green. Very compact in growth, nothing finer in upright type. 2 to 3 ft. each \$2.50; 3 to 4 ft. each \$3.00.

CRYPTOMERIA

CRYPTOMERIA ELEGANS (Japanese Cedar)—A beautiful evergreen with delicate green foliage and graceful habit. Color changing to reddish-brown. 2 to 2½ feet. each \$3.50.

CRYPTOMERIA (Japonica)—The open branched tree type of Cryptomeria, resembling somewhat the Sequoia Gigantea, but of slower growth. 2 to 3 feet, each \$2.50.

FIR (Abies)

NORMAN'S (A. Normanniana)—Lustrous green foliage; very symmetrical. Ea. \$3.00.

JUNIPER (Juniperus)

IRISH (J. Communis Hibernica)—Pyramidal in form; foliage silvery gray. Very striking. 2 to 3 feet, each \$3.00.

COMMON (J. Communis)—Branches spreading. Fine trees. 2½ to 3 feet, \$3.00.

JUNIPER CHINENSIS—Compact growth, light green color. 1½ ft. ea. \$2; 2 ft. ea. \$3.

RETINOSPORA

PLUMOSA AUREA—Same as R. Plumosa but golden. 2 feet, each \$2.50.

SQUARROSA—Dense, compact. Foliage with feathery branches. Light bluish green 2 feet, each \$2.50.

SPRUCE (Picea)

NORWAY (P. Excelsa)—A lofty, rapid grower; branches drooping. Fine for hedge or windbreak. 2 to 3 feet, each \$3.00.

Write for Specimen Plants of Coniferous Evergreen Trees

ALMOND (Nut Bearing)

Almonds can be grown successfully in many sections of Oregon and Washington. We can supply most of the leading varieties at price listed. Special prices on large orders.

3 to 5 ft, each \$1; 10, \$9; 100, \$75.

I. X. L.—A vigorous grower and sure cropper, producing nuts of large size and handsome appearance; shell thin; most popular commercial sort.

NONPAREIL—Tree beautiful, slightly weeping; nut sweet and shell very thin. Best for the home.

FILBERTS

3 to 5 feet, each 60c; 10, \$5; 100, \$40
BARCELONA—Magnificent large nut from Spain, first quality; can be grown as low standard tree or bush.

DU CHILLY—The largest Filbert on Pacific Coast. Nuts are broad, 1 inch by ¾ of an inch; full fleshed and sweet; best grown as low standard. Special prices on large orders. Du Chilly is a good pollinizer for Barcelona.

WHITE AVELINE—This used with the Du Chilly considered best varieties for planting with Barcelona for pollinizer.

All Prices on Trees Are F. O. B. Portland. (Only Up to 4-Foot Sizes Can Be Mailed. Add postage.)

NUT TREES

BUTTERNUT

A beautifully formed tree bearing a rough coated nut of most attractive flavor, well known to the Middle West. Succeeds fairly well in the Pacific States.

2 to 3 feet, each 75c.

SEEDLING WALNUTS

FRANQUETTE and MAYETTE—Second generation, soft shell, selected stock. Trees hardy and prolific bearers. Nuts are rich and meaty. Ea. \$1.00, f. o. b. Portland.

CALIFORNIA BLACK—A rapid grower and very desirable; nut medium size, with hard, smooth shell. Adapts itself easily to different climates.

7-8 ft., each \$1.50; 6-8 ft., each \$1.25;

4-6 ft., each \$1.00.

WALNUTS

Walnuts are a sure and profitable crop on the Pacific Coast, and we also urge their planting for shade and ornamental purposes. They grow rapidly, are free from pests, and are handsome and lasting. Only grafted trees should be planted as they yield heavier, the nuts are of better quality and most uniform.

GRAFTED WALNUTS

FRANQUETTES—We offer a splendid strain grafted on four-year California Black Walnuts. Sturdy, thrifty trees with big fibrous roots. The best to plant. Comes to bearing much younger than seedling walnut.

3-4 ft., each \$1.25; 4-5 ft., each \$1.50; 5-7 ft., each \$1.75; 7-10 ft., each \$2.25; f. o. b. Portland.

PAYNES

PAYNES—It is one of the best bearers of all the different varieties. The description is similar to the Franquette. This variety must be kept heavily pruned or it will overbear and the tree will become stunted.

6 ft. up, each \$2.50, f. o. b. Portland. Add postage.)

FRUIT TREES

IN THE PURCHASE of fruit stocks great care should be given to the selection of varieties that will meet your conditions and requirements, as many that thrive and bear abundantly in one section often prove disappointing under variable conditions. Also many splendid sorts for home use are totally unsuited for profitable marketing. For this reason we offer a large assortment of improved varieties carefully tested and selected for their special merits and their adaptability to varying conditions, and if you will state whether you intend growing for distant or local market or for home use, giving location and general conditions, we can recommend or assist in the selection of those varieties that will give you the best results.

If trees are frozen in transit, do not unpack, but set away in a cool cellar and allow them to thaw gradually. Trees or roses that are dried out and shriveled should be buried, tops and all, in moist earth for a few days. This will restore them.

Deliveries can be made from November until May, but orders are accepted at any time for delivery in season.

NOTE—We are again able to offer the new Multnomah apple after an absence of two years, owing to a serious shortage of stock. This apple justly deserves its ever-increasing popularity.

APPLES

First Grade	Each	Per 10	Per 100
Two Year	\$.60	\$5.00	\$40.00
One Year, 4 to 5 Feet	.45	3.50	30.00
One Year, 3 to 4 Feet	.35	3.00	25.00

F. O. B. Portland; if mailed, postage extra.

SUMMER VARIETIES

EARLY HARVEST—Medium size; bright straw color; tender and fine; for table and cooking; July.

GRAVESTONE—Large, beautifully dashed with deep red and orange, aromatic flavor; tree very vigorous. August.

RED ASTRACHAN—Large, deep crimson, flesh white, moderately juicy, agreeable rich acid flavor; very productive. Aug.

YELLOW TRANSPARENT—Medium size, roundish, slightly conical; skin pale yellow; flesh tender, juicy, sub-acid; good; bears at an early age. July.

AUTUMN AND WINTER VARIETIES

BALDWIN—Large, rounded; deep, bright red; very productive; crisp, fine flavor; one of the best and most popular winter apples. Nov. to Feb.

DELICIOUS—Fruit equals name in every respect. Fine for market and home, especially adapted to Eastern Oregon and Washington. Keeps till April.

GRIMES GOLDEN—Very popular; rich golden yellow; flesh tender, juicy and rich. Tree hardy and vigorous, bearing young. November to December.

JONATHAN—Tree vigorous, long lived and an early bearer. Fruit beautiful red and oblong; fine quality. Valuable as a pollinizer with Spitzenberg and Newtown. October to January.

MULTNOMAH (New)—A hybrid between the American Pippin and Rome Beauty. Red striped yellow; flesh white and fine; sub-acid extra long keeper in its prime from Feb. to June.

NORTHERN SPY—Large, round, greenish yellow, stripes of purplish-red; flesh white, juicy, brisk subacid; valuable for "top work." Requires good soil. Dec. soil. December.

ORTLEY or WHITE BELLFLOWER—White fleshed, fine grained conical fruit of superior flavor. December to April.

SPITZENBERG—Large, oblong; yellowish with broken stripes of bright red; flesh yellowish, juicy. November to March.

WEALTHY—Medium, whitish yellow, shaded with deep red; flesh white, tender and juicy. Oct.

WINTER BANANA—Fancy market fruit; pale yellow with pink blush. November.

YELLOW BELLFLOWER—Large, oblong, yellow; flesh firm, crisp, juicy, sub-acid. Oct.-Jan.

YELLOW NEWTOWN PIPPIN—Large; skin smooth, golden yellow; firm, juicy. Dec.-May.

CRAB VARIETIES

FLORENCE—Red striped; early, juicy and crisp; fine for home gardens. September 1.

RED SIBERIAN—Yellow with scarlet cheek. Bears young and abundantly. September.

TRANSCENDENT—Very large, good for cider; yellow striped red. Adapted to Montana. Sept.

APRICOTS

Two Year 4 to 6 feet, Each	60c; 10, \$5.50; 100, \$40.00
One Year 3 to 4 feet, Each	50c; 10, \$4.50; 100, \$35.00

F. O. B. Portland; if mailed, postage extra.

BLENHEIM—Deep orange, sometimes blushed, tender, rich and juicy. Tree vigorous. Good for Pacific Coast. Last of June.

MOOSPARK—Large, yellowish, green, flesh bright orange; for canning and drying; freestone. July, August.

CHERRIES

Two year 4 to 6 feet, Each	\$1.00; 10, \$9.00; 100, \$75.00
One year 4 to 6 feet, Each	90c; 10, \$8.00; 100, \$70.00
One year 3 to 4 feet, Each	60c; 10, \$5.50; 100, \$50.00

F. O. B. Portland; if mailed, postage extra.

BING—Large, dark brown or black; very fine; late; good shipping. July.

BLACK REPUBLICAN (Lewelling)—Large, black, sweet, purplish flesh; good shipper. June.

KENTISH (Early Richmond)—Dark, red, juicy; sour, for cooking purposes. Mid-May.

LATE DUKE—Large, light red, excellent, sub-acid. Late July.

LAMBERT—Largest size; deep rich red; flesh firm; fine flavor. July.

MAY DUKE—Large, rich, dark red; sub-acid. May.

ROYAL ANN (Napoleon Bigartau)—A magnificent cherry of the largest size; pale yellow, with a bright red cheek; flesh firm, juicy, sweet; tree a rapid grower and immense bearer. July 1.

NECTARINES

One Year 4 feet and up, Each \$1.00; 10, \$9.00; 100, \$75.00
F. O. B. Portland; if mailed, postage extra.

BOSTON—Large, deep yellow, bright blush; flesh yellow. Best for Oregon. August 1.

EARLY VIOLET—Medium; skin pale, shaded violet; flesh white; good. July.

PEACHES

4 to 6 feet, Each 60c; 10, \$5.50; 100, \$45.00

F. O. B. Portland; if mailed, postage extra.

EARLY ALEXANDER—One of the largest early varieties. Almost freestone. July.

EARLY CRAWFORD—Large, yellow, red cheek; freestone. August.

ELBERTA—Large bright yellow, red cheek; juicy, sweet; freestone. Late July.

LATE CRAWFORD—Large, yellow, dark red, juicy; freestone; canning, drying. Sept.

HALE'S EARLY—Early, free; extra quality.

MAYFLOWER—Red all over; extremely early; freestone. Late June.

MUIR—Large, pale yellow; firm and sweet; best for drying; freestone. August.

SALWAY—Creamy yellow, red cheek; freestone. Late Sept.

TUSCAN CLING—Very large; yellow, blushed red. July-Aug.

PEARS

First Grade

Two Year 4 to 6 feet, Each 75c; 10, \$6.50; 100, \$55.00

One Year 4 to 6 feet, Each 60c; 10, \$5.50; 100, \$45.00

One year 3 to 4 feet, Each 50c; 10, \$4.50; 100, \$35.00

F. O. B. Portland; if mailed, postage extra.

AUTUMN VARIETIES

BARTLETT—Large; skin thin, clear, lemon yellow, with soft blush; flesh white, buttery, juicy and highly flavored; best summer pear in existence. August, September.

BEURRE BOSCH—Large, beautiful, russety; highly flavored; fine for shipping. September.

BEURRE D'ANJOU—Large, fine flavor; keeps till Christmas. September.

COMICE—A splendid commercial variety; ships well. October.

FALL BUTTER—Yellow, sweet and juicy. September.

FLEMISH BEAUTY—Large, rich and sweet; pale yellow with slight russet. Adapted to Montana and the Northwest.

SECKEL—Rich highly flavored; skin brownish green, russet brown cheek. Sept.-Oct.

WINTER VARIETIES

P. BARRY—Fine keeper. Large, yellow. December, March.

WINTER BARTLETT—Undoubtedly one of the few pears of recent introduction of real merit.

WINTER NELLIS—Medium; skin yellowish green; flesh yellowish white; fine grained. Dec.

PLUMS

Two Year 4 to 6 Feet, Each 75c; 10, \$6.00; 100, \$55.00

One Year 6 to 8 Feet, Each 50c; 10, \$4.00; 100, \$35.00

One Year 4 to 6 Feet, Each 40c; 10, \$3.00; 100, \$25.00

F. O. B. Portland; if mailed, postage extra.

BRAESHAU—Reddish purple; adheres partially to stone. July.

COLUMBIA—Largest size, brownish purple; freestone. August.

PEACH—Very large; skin brownish red; freestone. July.

DAMSON SHROPSHIRE—Dark purple; very firm; flesh greenish. Late September.

GREEN GAGE—Freestone. Mid-Jul

MAYNARD—Dull red, rich and sweet; sturdy, quick-growing, heavy-yielding; ripens in July.

COE'S GOLDEN DROP—Large; light yellow. Late September.

DAMSON—Small, bluish purple; rather tart. Trees fruitful and hardy. August.

YELLOW EGG—Very large; deep golden, rather acid; excellent for cooking; very showy. Aug.

PRINLEW PLUM—Best large Plum for market. Good shipper.

SATSUMA (Blood Plum)—Large, dark red from skin to pit, tree productive. Early July.

WASHINGTON—Large, skin dull yellow, crimson blush; flesh firm; sweet and luscious; freestone. Early August.

PRUNES

First Grade	Each	Per 10	Per 100
Two Year, 4 to 6 Feet	\$.75	\$6.00	\$55.00
One Year, 6 to 8 Feet	.50	4.00	35.00
One Year, 4 to 6 Feet	.40	3.00	25.00

F. O. B. Portland; if mailed, postage extra.

GIANT—Largest prune known; averaging 1½ to 2 oz. each.

HUNGARIAN—Very large; dark red, juicy and sweet; good shipper. August.

ITALIAN (Fellenberg)—Large, oval, tapering at both ends; dark purple; flesh greenish yellow; separates freely from stone; best for drying. Aug.

NEW STANDARD (Burbank Production)—Trees large; enormous yield; sweet, fine grained and delicious; perfect free stone; skin purple.

PACIFIC—Large, sweet; same color as Italian. Good canner or to eat raw. Early August.

PETITE (French)—Medium, egg shaped; violet purple; sweet, rich, sugary; very productive; standard for drying. August.

QUINCE

First Grade, 2 Years, Each 75c; 10, \$6.50
Postage Extra if Mailed

APPLE OR ORANGE—Well known standard variety; early; large, golden yellow; good for preserving or flavoring. Sept.

CHAMPION—Large, yellow; cooks very tender; delicious. Oct.

PINEAPPLE—Flavor is suggestive of pineapple; resembles the orange quince; making superior jelly; can be eaten raw and has a most exquisite and delicious flavor. September.

Diamond Quality Strawberry Plants

FOR
IMMEDIATE
DELIVERY

DIAMOND Quality
Strawberry Plants are large, vigorous and healthy. They are heavily rooted, have large, full crowns; have been carefully grown and are free from disease and pests. We dig as ordered and pack for shipment in ventilated crates of 1,000 plants each. They are

grown from our select strains and are always true to name; no substitution is ever allowed without instructions from the purchaser.

All our plants are officially inspected in the field by the State Horticultural officers and by our own inspectors.

NEW OREGON—Best, most uniform and heaviest yielding main crop strawberry. Large, firm, of fine form, average 15 to qt. box; brilliant deep rich red, with glossy varnished appearance when fully ripe. Color extends through to very center and they are never hollow, no matter how large. Flavor is suggestive of the wild berry. It is crisp and delicious, and will remain on the vine for three days without injury, keeping perfectly for many days after picking; stands handling and long shipments and will hold its color, shape and flavor when canned. An early bearer, being ready for marketing the first half of May in the Willamette Valley and holds up in size and quality throughout the season, which in some localities extends until frost.

GOLD DOLLAR (Extra Early)—Large size, dark red all through, fine flavor. Foliage heavy, large and spreading, which protects blooms from early frosts. Standard early berry in the big markets of the Northwest; always in demand.

PRICES—All varieties except Fall Bearing: Prepaid, 12, 30c; 25, 50c; 100, \$1.50. Not prepaid, 25, 40c; 100, \$1.00; 1000, \$3.00.

Lots of 5000 or more, \$6.00 per 1000. Not less than 500 of a kind at 1000 rate.

EVERBEARING, PROGRESSIVE—Fall bearing Strawberries, are satisfactory for home gardens and under some conditions prove profitable commercially, but require special care and attention, as the late fruit will be small and yield less if blossoms are not removed and plants are allowed to fruit early and continuously. When properly grown they are of splendid quality and yield heavily until frost. Rich, red color, firm and of delicious flavor. Good keepers and shippers. Blossoms should be cut back about 4 weeks before the berries are wanted. We consider this the best of its class.

Postpaid, 12, 60c; 25, 75c; 100, \$2.00. Not prepaid, 12, 35c; 25, 50c; 100, \$1.75; 1000 plants, \$15.00; F. O. B. Portland.

CURRANTS

CHERRY—Very large; deep red; fine for preserving; valuable market variety.

PERFECTION—Largest, most prolific; bright red, rich flavor, mild sub-acid.

FAY'S PROLIFIC—Bright red, very sweet, fruit hangs on better than most varieties.

WHITE TRANSPARENT—The best white currant known; rich flavor; mild sub-acid.

Each 20c; 10, \$1.75; 100, \$12.50.

F. O. B. Portland, Postage Extra

GOOSEBERRIES

OREGON CHAMPION—Very large; pale green; sweet, fine, bush strong, prolific bearer.

Each 20c; 10, \$1.75; 100, \$12.50.

F. O. B. Portland, Postage Extra

NORWEGIAN GIANT—Our new offering this year, as large as any yet placed on the market; unlike most large gooseberries as it has a very fine sweet flavor and is a very good keeper. Fruit the size of a Lambert cherry; trees commence bearing at 2 years.

2-year, each \$1.00; 1-year, each 75c.

F. O. B. Portland, Postage Extra

GRAPES

CAMPBELL'S EARLY—Nearly round, black, with light purple bloom; flesh rather firm but tender; quality rich, sweet, slightly vinous; a strong, vigorous grower. August.

CONCORD—Large, black grape; bunches compact; berries round, sweet, pleasant. Aug.

DELAWARE—One of the finest of our native grapes; grows freely; perfectly hardy; ripens early; berries small, bright red. August.

LUCILE—Good medium large red grape, hardy.

MOORE'S EARLY—Berry large, resembling Concord, but more pulp and earlier.

NIAGARA—Bunch medium; berry large roundish, uniform; skin thin but rough; pale yellow flesh tender and sweet; vine vigorous and productive; one of the best white. Sept.

WORDEN—Bunch large and compact; berry large, black; improved Concord. Late Aug.

2-year plants, each 20c; 10, \$1.75; 100, \$15.00.

1-year plants, each 15c; 10, \$1.25; 100, \$10.00.

F. O. B. Portland, Postage Extra

BLACKBERRIES

ELDORADO—Large, jet black, melting, sweet and rich; hardy, productive; fine for Oregon.

HIMALAYA GIANT (Evergreen)—Strong rampant grower; everbearing, enormous yield; berries large, juicy, coreless, sweet and firm, aromatic flavor. Its deep-rooting qualities enable it to produce a large, firm berry even in a very dry season.

LAWTON—Fruit large; very productive; well known; Oregon's most popular kind.

1-yr., ea. 15c; 10, \$1.25; 100, \$10.00.

F. O. B. Portland, Postage Extra

THORNLESS MAMMOTH BLACKBERRY (Cory)—Strong, vigorous grower; bears prolific; canes grow thick and stout until 5 or 6 feet, when they take trailing habit; should be trellised. Delicious flavor of its own, resembling the wild berry. Self-fertilizing—never been known to fail to bear. Almost seedless.

Tips—Spring del. only, each 29c; 100 \$12.00.

1-year transplanted, each 25c; 100 \$20.00.

RASPBERRIES

BLACK CAPS

GREGG—Fine quality; productive and hardy.

PLUM FARMER—Large, black, hardy; productive.

2-year, ea. 20c; 10, \$1.75; 100, \$15.00.

1-year, ea. 15c; 10, \$1.25; 100, \$10.00.

F. O. B. Portland, Postage Extra

RED CAPS

CUTHBERT—Deep rich red, large and firm; one of the best. Ripens medium to late.

MARLBORO—Standard, light crimson, large, firm; good commercial variety; ripens early.

1-year, ea. 10c; 10, 75c; 100, \$2.50.

F. O. B. Portland, Postage Extra

ST. REGIS EVERBEARING RED CAPS—

Each 20c; 10, \$1.75; 100, \$15.00

LOGANBERRY

DARK RED, IMMENSE CLUSTERS, JUNE—

2-year plants, ea. 20c; 10, \$1.75; 100, \$15.00.

1-year plants, ea. 15c; 10, \$1.25; 100, \$10.00.

F. O. B. Portland; Postage Extra

RHUBARB

PANAMA RHUBARB

Everbearing, growing continuously throughout year, summer and winter. Frost will not kill it, and in the absence of frost makes its best and most profitable growth during the winter. More than twice the size, stalks much heavier and larger, full grown stems often 3 feet long, weighing 2 pounds. The flavor is of the plum type. Comparatively free from acid, requires less than half the amount of sugar ordinarily used, should not be peeled. All the roots are what is known as sub-divisions.

Culture—Plant crown even with surface of ground 3 to 4 ft. apart in row and rows 4 to 5 ft. apart; water immediately; keep well cultivated close to plant for 2 ft. distance. Irrigate each week for 2 months, cultivate after each irrigation.

Postpaid, each 35c; doz. \$3.75; 100, f. o. b. Portland, \$30.00.

RIVERSIDE GIANT RHUBARB—Has stood the test of time; crisp, tender, free from stringiness, good color, delicious, distinctive flavor. The skin is so thin it disappears in cooking. Has every good quality of a commercial rhubarb and is so vigorous and productive that over 35 tons per acre is a conservative estimate for the season. Cuttings begin in March and usually four are made, the last one in July.

Each 15c; doz. \$1.50; 100, \$7.50.

F. O. B. Portland. Special Prices on Large Lots. Don't plant rhubarb along a fence, near trees or other crops. Give plenty of room. Write for cultural directions.

ASPARAGUS

GROW GIANT WASHINGTON PEDIGREED ASPARAGUS

The Best in the World.

The U. S. Government in its experiments developed the varieties of Washington, Mary Washington and Martha Washington Asparagus as showing the best results. Our grower of Giant Washington Asparagus seed under the supervision of the U. S. Government has produced the superior asparagus we list under the name, "Giant Washington," by breeding the female plants, Martha and Mary to the male plant Washington, resulting in the "Giant Washington," which combines all the best characteristics of the three. This seed is grown especially for us, and our plants are all grown from this seed by one of our best growers. Be sure to get the genuine.

PRICE No. 1 (Formerly listed 2-year) plants, postpaid, doz., 50c; 50, \$1.00; 100, \$1.50. Not prepaid, 50, 90c; 100, \$1.25; 1000, \$8.00.

PRICE No. 2 (Formerly listed 1-year) plants, postpaid, doz., 40c; 50, 75c; 100, \$1.25. Not prepaid, 50, 60c; 100, \$1.00; 1000, \$6.00.

Write for quantity prices.

HOP ROOTS

Oregon's Famous English Cluster Hops. Regular Root Cuttings, 10c each; 3 for 25c; 75c doz.; \$4.00 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 1000.

VEGETABLE PLANTS

BROCCOLI—Our famous "St. Valentine" Broccoli, a winter cauliflower. Plants can be set after June and are ready to use in March.

Postpaid, doz. 30c; 100, \$1.50.

Not prepaid, 100, \$1.25; 1000, \$12.00.

Write for Prices on Large Lots

CABBAGE—Transplanted and "pulled" plants in all standard varieties. Early and late at seasonable times. First transplanted ready about March 10th.

Transplanted—

Postpaid, doz., 25c; 100, \$1.25.

Not prepaid, 100, \$1.00; 1000, \$8.00.

Not Transplanted—

Postpaid, doz., 15c; 100, \$1.00.

Not prepaid, 100, 75c; 1000, \$6.00.

CALIFLOWER—Cauliflower seed is scarce and high in some varieties and plant prices subject to change. Early varieties; prices not prepaid.

Transplanted, doz., 30c; 100, \$1.75; 1000, \$12.00.

Not Transplanted, 100, \$1.25; 1000, \$10.00.

CELERY—Fine, healthy plants in early Winter; varieties furnished in season or grown to order. Transplanted.

Postpaid, doz., 30c; 100, \$1.25.

Not Prepaid, 100, \$1.00; 1000, \$8.50.

KALE—When you order be sure to state whether you want Garden Kale or "Cow" Kale.

Prices: Postpaid Not Prep'd

Thousand Head or Doz. 100 100 1000

"Cow Kale" \$0.20 \$1.25 \$1.00 \$6.00

Garden or Curley Kale. 25 1.50 1.25 10.00

Special prices on large lots in season.

SWEET POTATO PLANTS—Plants should be set after ground is warm. Rich, sandy bottom is best, but any good garden soil. Prices, for seasonable delivery, postpaid, doz., 35c; 100, \$1.50. Not prepaid, doz., 25c; 100, \$1.25; 1000, \$10.00.

TOMATOES—Tomato plants should not be set out before the weather is settled and ground warm, unless they are protected from frost.

Prices: Postpaid Not Prep'd

Transplanted Doz. 100 100 1000

.....\$0.30 \$1.50 \$1.25 \$10.00

DIAMOND FERTILIZERS

DIAMOND QUALITY Fertilizers are complete fertilizers of the highest grade and concentration. No inferior ingredients or cheap fillers are used in their preparation, Bone Meal and Tankage forming the base, to which is added the necessary Potash, Nitrogen and Phosphoric Acid. Each package is marked plainly, showing the percentage of available plant food.

SPECIAL FERTILIZER BOOKLET giving complete details and prices of the different fertilizers which we can supply, together with full information for their application, will be sent on request. This booklet is instructive, reliable and of great value to all interested in fertilizers.

FERTILIZERS IN SMALL GARDENS—Amateur garden makers are often puzzled as to the amount of fertilizer needed for their small plots, because the usual directions give only the amount per acre. The following table shows (approximately) the proper proportions:

200 lbs. per acre equals 1 lb. for a plot 10x21 ft. 400 lbs. per acre equals 1 lb. for a plot 10x11 ft.
100 lbs. per acre equals 1 lb. for a plot 10x43 ft. 300 lbs. per acre equals 1 lb. for a plot 10x14 ft.
500 lbs. per acre equals 1 lb. for a plot 10x9 ft.

Applied in quantities of 1,000 lbs. to a ton per acre, our fertilizers, with intelligent culture, will sustain and gradually improve the soil and increase the yield and quality of the product, even though the crop be entirely removed and no other manuring done. The roots, vines, stubble and whatever of weeds or waste there is, all assist in providing the necessary humus. A greater amount is often used to advantage by market gardeners. Complete instructions will be found in our Fertilizer Booklet, sent free. If there is any special information you require, write us; your inquiries will have our prompt and careful attention and our experience may help you.

Diamond General and Vegetable Fertilizer

An all-around fertilizer, which can be used on any crop, but is especially adapted for grain and general farm crops. 10 lbs. **50c**; 100 lbs. **\$2.60**; ton **\$50.00**; f. o. b. Portland.

DIAMOND FRUIT and ONION FERTILIZER—This fertilizer is also used for blackberries, raspberries, etc. We sell large quantities for growing the famous Hood River strawberries. 10 lbs **50c**; 100 lbs. **\$2.85**; ton **\$55.00**; f. o. b. Portland.

DIAMOND ODORLESS LAWN and ROSE FERTILIZER—Promotes a vigorous, healthy growth, giving the desired dark rich green appearance; can be used at the time seed is planted and later as a top dressing. 100 lbs. is sufficient for an ordinary city lot, is far more effective and less objectionable than stable manure. It contains no weed seeds. When used as a top dressing it is best to make several light applications about two weeks apart. 10 lbs. **50c**; 25 lbs. **\$1.00**; 50 lbs. **\$1.65**; 100 lbs. **\$3.00**; ton, **\$57.00**; f. o. b. Portland.

PLANT FOOD

DIAMOND PLANT FOOD—For ferns, palms and house plants, a complete, highly concentrated, powerful fertilizer, clean and odorless, wonderfully invigorating to all plants—producing luxuriant foliage and larger and more brilliant flowers. ½ lb. pkg. **25c**, by mail **35c**; 1 lb. pkg. **40c**, by mail, **50c**.

H. O. LIME

SUPERIOR TO FERTILIME

A blended mixture of raw ground limestone and hydrated lime. Much more effective than raw ground lime rock and goes practically twice as far. Especially recommended for sour soils and for poultry house floor coverings. 100 lbs. **\$1.35**; ton **\$23.00**; f. o. b. Portland.

BONE MEAL—Fine ground, is one of the best fertilizers. This is a very valuable enricher of the soil, and one of the most economical at present prices. 5 lbs. **30c**; 10 lbs. **50c**; 100 lbs. **\$2.50**; ton **\$48.00**; f. o. b. Portland.

SHEEP GUANO—The best natural manure, dried and ground. Concentrated, soluble; quick in action, and practically free from weed seed. Splendid for vegetables; fine for roses and flowers. Excellent for lawns. 100 lb. sack **\$1.50**; f. o. b. Portland. Write for price on larger quantities.

SUPERPHOSPHATE—A concentrated form of phosphoric acid, actually the cheapest form in which to buy phosphoric acid. Contains 17 to 18 per cent available phosphoric acid. Per lb. **5c**; 100 lbs. **\$1.75**; ton **\$33.00**; f. o. b. Portland.

TANKAGE—Ground meat scraps and bone, desiccated in a vacuum, is very rich in phosphoric acid and nitrogen. 100 lb. sack **\$2.80**; ton **\$54.00**; f. o. b. Portland.

NITRATE OF SODA—For immediate results Nitrate of Soda is the very best for stimulating and forcing the growth of plants or any other crop. 1 lb. **10c**; 100 lbs. **\$3.35**; ton **\$65**; f. o. b. Portland.

FISH GUANO—Fish cooked, dried and ground is a strong fertilizer, rich in nitrogen, carrying considerable phosphorus and largely used by vegetable growers. We do not recommend this for lawns or city use, as odor is objectionable. Write for prices.

FLORAND UREA (BASF)

92 times stronger than manure. Clean, odorless, stainless. For flowers, vegetables, berries, shrubs, lawns and trees. The most highly concentrated nitrogen fertilizer, containing 46% available nitrogen (equivalent to 55½% ammonia). Nitrogen is one of the principal constituents of plant food, the first to affect plants, producing quick, vigorous growth. Nearly all soils are deficient in nitrogen. Use 1 oz. to square yard worked into the surface soil after planting. ½ lb. tin **40c**; postpaid **50c**; 1-lb. tin **75c**; postpaid **85c**; 50-lb. bag **\$12.00**; f. o. b. Portland.

LAND PLASTER, OR GYPSUM—Made from pure gypsum, free from clay or other foreign matter, valuable for clover crops. 10 lbs. **25c**; 100 lb. sack **\$1.00**; ton **\$17.00**, f. o. b. Portland.

MURIATE—Carries 50 per cent and upwards potash. 100 lbs. **\$2.60**; ton **\$50.00**; f. o. b. Portland.

Sulphur

For lime-sulphur solution, fertilizing and general purposes.

Recent field experiments in the Northwest have demonstrated that sulphur is one of the most valuable fertilizing materials that can be applied to the soil, not only being readily taken up as a powerful stimulant by practically all classes of vegetation, but making available the insoluble potash and phosphoric acid contained in all soils, as well as being an effective fungicide and insecticide. Apply one to two sacks per acre.

DIAMOND "S" REFINED FLOUR SULPHUR—Finely powdered and 100% pure. 110 lb. sack, **\$3.30**, f. o. b. Portland.

ANCHOR BRAND VELVET FLOWERS OF SULPHUR—For dry dusting of trees, vines, bleaching fruit, etc.; also paste and wettable sulphur; an impalpable powder. 110 lb. sack **\$5.75**, f. o. b. Portland.

TORO BRAND PREPARED SULPHUR—To increase crop yields, drill into the soil 200 or 400 lbs. per acre. 110 lb. sack **\$3.75**, f. o. b. Portland.

Write for Prices in Larger Quantities

Restores and Maintains Soil Fertility

THE ORIGINAL SOIL INOCULATOR

Raise legumes—grow alfalfa, clovers, soys, vetch, peas and beans—they are valuable feed crops—but be sure to inoculate them. All Agricultural Colleges advise this. Inoculated legumes draw their nitrogen from the air—not from the soil. They are soil builders, not soil robbers. Inoculation will produce more vigor and vitality, increase yield, quality, and add fertility to the soil.

Sold in tins packed in a rich, soil-like granular medium, easy to mix with seed. Contents always fresh and bacteria active and vigorous.

The Original Soil Inoculator—Registered in the U. S. Dec. 6, 1898—over 28 years ago. ¼ Bu., Size **40c**; ½ Bu., Size **60c**; 1 Bu., Size **\$1.00**; 5 Bu., Size **\$4.75** F. O. B. Portland—Postage Extra

NITRAGIN FOR GARDEN USES

Every garden needs Nitragin; garden size is for Peas, Sweet Peas and Beans, including Lima (3 in 1 Inoculant). Price 20c.

IMPORTANT

PROTECT YOURSELF: Don't buy legume cultures without a date on labels. Date, same year seed is sown. They may be several seasons old and worthless. Agricultural Colleges recommend this protection. Every NITRAGIN label is dated.

DU PONT SEMESAN SEMESAN Jr. SEMESAN BEL

Send for these—

Booklets of Facts

Opinions of Experienced Users

Semesan is recognized by the U. S. Department of Agriculture and the Green Section of the U. S. Golf Association as the best fungicide for preventing and curing both large and small "Brown Patch" of grasses.

In Southern Idaho, Semesan-treated beans, with their 20 to 40% increased yields, so convinced prominent growers that they unite in saying they: "will always use Semesan for treating bean seeds, as well as their other crops."

Florists write us such tributes as: "We used Semesan on poinsettia cuttings last summer with excellent results;" and "My Semesan-treated aster seeds gave an almost perfect stand as nearly every seed germinated."

The U. S. Department of Agriculture's Circular No. 376 recommends treatments with Semesan as the most successful means known for preventing and controlling the "Crown Gall" disease of apple grafts.

The U. S. Department of Agriculture, in collaboration with the Illinois and Iowa State Experiment Stations, demonstrated that Semesan Jr. was a most effective dust disinfectant for controlling the diseases and increasing the yields obtained from infected field and sweet corn seeds.

Agricultural authorities in the United States, Canada, Australia and New Zealand, report that Semesan has given excellent results in the control of barley, and wheat diseases and in addition increased germination, and enlarged crop yields.

The Idaho Agricultural Experiment Station reported that Semesan Bel: "—when applied to the uncut presprinkled tubers (potatoes) at the rate of three ounces to the bushel gave better control under field conditions than any other treatment tested."

The Premier Seed Disinfectants
Control Diseases
Hasten Germination
Invigorate Seedling Growth
Produce Sturdier Plants
Promote Earlier Maturity
Increase Crop Yields
Improve Quality

THE SEMESAN DISINFECTANTS have revolutionized seed disease treatment and represent the most remarkable advancement of the century in scientific agriculture. Trained observers testify that they not only successfully control seed, plant and soil diseases but also exert a stimulatory effect upon the growth of seedlings and plants with a consequent increase in yield and improvement in quality of the crops.

SEMESAN—Commercial results prove that Du Pont Semesan is the premier seed, plant and soil disinfectant because it is the only chemical which can be applied in either the liquid or convenient dust form to prevent or control effectively a most diversified variety of parasitic diseases and fungoid growths borne by seeds, bulbs, corms, roots, tubers, plants and grafts, as well as some of those which infest the soils. Too numerous to mention here are the uses for which Semesan is endorsed by agricultural authorities, but booklets containing all the facts will be gladly furnished.

PROOF THAT SEMESAN INCREASES GERMINATION

To prove to a skeptical canner that Semesan would increase the germination and yield of his corn seed, we induced him to select a total of 40 kernels from five average ears. Twenty were dusted with Semesan, while the other 20 were untreated. These seeds were then allowed to germinate in his office with the results shown. On the right the Semesan treatment developed 100% of vigorous, healthy seedlings, while on the left are shown the untreated seeds, only 85% of which germinated weakly and of these three-quarters died from disease infections.

Semesan is harmless to seed and plant life but thoroughly sterilizes practically all kinds of seed pieces against the disease germs or fungus spores that adhere to the seed coats, as well as many of those that exist internally. Unhandicapped by diseases, Semesan-treated seeds are thus stimulated to vigorous sprouting during the critical period of their early growth and consequently bear more and finer crops than can those seeds which do not receive the beneficial treatments with Semesan.

SEMESAN JR.—This modified form of the parent product, Semesan, is exclusively a dust disinfectant used principally for the ear, root and stalk rots of field and sweet corn but also for the treatment of cereal infections. Under Government-conducted field tests, Semesan Jr. increased the crop yields from diseased field corn seeds by approximately twenty bushels to the acre and from similarly diseased sweet corn by as much as 47.7% with an average of practically 12%.

SEMESAN BEL—To meet the demand for a dust disinfectant to replace the laborious, time-consuming liquid treatments for potatoes, Semesan Bel was invented and can be applied to whole or cut seed potatoes either as a dry powder or a whitewash-like water mixture. In widely separated potato-growing sections it has influenced quicker sprouting, earlier maturity and has caused greater yields of disease-free potatoes and better disease-control than any other treatment known.

PRICES FOR DU PONT SEMESAN		SEMESAN JR. AND SEMESAN BEL	
2 ozs....	\$.50	25 lbs.....	\$ 62.50
8 ozs....	1.60	50 lbs.....	122.50
1 lb.....	2.75	100 lbs.....	240.00
5 lbs.....	13.00	350 lbs.....	822.50
		1 lb.....	\$ 1.75
		5 lbs.....	8.00
		25 lbs.....	37.50
		100 lbs.....	140.00

(Far West Brand)

For the information of those who may not be acquainted with the composition of Granulated Peat and to make certain a general conception of its nature and many uses, Granulated Peat Moss (or Mull) is decomposed vegetable matter such as leaves, etc., used by Horticulturists and Nurserymen. Fertility of soil is defined as the power to produce crops. Fertility is dependent upon water, air, light, temperature, plant food in the form of chemical consistency, soil bacteria and texture. When rightly handled Peat Moss is a valuable material for maintaining the soil fertility; it adds humus, making the land more pliable, and improves the general texture.

The United States Department of Agriculture has proven that the plant's

Imported Granulated Peat Moss

growth is directly in proportion to the water holding capacity of the soil, primarily because soil capable of moisture retention will also retain most of the other natural and immediately available plant foods. Peat Moss mixed with soil gives a greater facility for holding water; for instance, in making lawns, with Peat Moss added to the soil, it will retain its moisture longer and make a more luxurious lawn. Applying to roses and other plants, it keeps the soil in better condition for the growing of the plants. Peat Moss should be used in all landscape gardening mixed with the soil. It should also be used in all bulb beds. The use of Peat Moss should usually be at the rate of one bale to about 250 square feet.

(Turf Mull)

Peat Moss is not sold by weight. It comes in bales containing about 13 cubic feet and is capable of absorbing seven or eight times its weight of water.

This is the genuine imported Peat Moss. We have the FINE for nursery men and florists; also the MEDIUM which is used mainly by poultrymen for a litter instead of straw as it has been found more satisfactory by large poultrymen and costs less for the quantity used than straw would cost. Another thing not to be lost sight of is that when used as a litter in the henhouse it makes an extra fine fertilizer for the garden or lawn after use.

FINE. Price per bale, \$3.25.

Medium. Price, per bale, \$3.00

SPRAY MATERIALS and Insecticide

ARSENATE of LEAD

"Lucas Brand"

DRY POWDERED

Contains only Arsenic and Lead Oxides. No Fillers.

MIXES QUICKLY AND EASILY—STAYS MIXED LONGER and STICKS better to leaves, branches and fruit than ANY OTHER Arsenate.

A light, fluffy powder that cannot freeze, dry out, cake or lose its strength—carries the highest possible percentage of arsenic oxide, 33 per cent—is always uniform and requires only 1 lb. to 50 gallons of water. Efficient, economical and convenient. Highest percentage of killing power. Prices, $\frac{1}{2}$ lb. **25c**; 1 lb. **45c**; 4 lbs. **\$1.25**; 25 lbs. **\$5.50**, 1 Case 124 lbs. pkgs. **\$10.00**. F. O. B. Portland. Write for quantity prices.

POISON—CANNOT BE MAILED

For DUSTING—A safe, easily applied and efficient remedy for all chewing garden pests—for fruit trees, berry bushes and plants—insures perfect fruit and clean vegetables. **TOMATOES**—For tomato worms, flea beetles, etc., make first application two weeks after setting out the plants.

CUCUMBERS—All chewing insects that injure cucumbers are quickly destroyed by dusting leaves and stems above and below. **POTATOES**—Fatal to flea beetles and all chewing insects that damage the foliage. Mixed half and half with Dusting Sulphur will control and prevent early blight.

CABBAGE, CAULIFLOWER and KALE—To control cabbage worms, dust about 10 days after plants are set and as often as necessary until they begin to head. Do not use any poison on plants after they start to head.

SWEET CORN—The corn ear worm develops from an egg on the new silk or husk and feeds on the silk, following it into the ear. Thoroughly dust new silk as soon as it appears.

KAYSO—The combined casein spreader and adhesive—spreads the spray and makes it stay, giving an even, protecting film over every surface of fruit, leaves and bark—the most protection possible. Keeps the spray from washing off. $\frac{1}{2}$ lb. pkg. **60c**; 2 lb. pkg. **75c**. Postage extra.

WHALE OIL SOAP

For aphid, plant lice, etc. Per bar, **20c**; 100 lbs. bulk **\$12.00**; f. o. b. Portland.

DORMOIL

A miscible oil spray manufactured at Hood River, Ore., and has been used by the big commercial orchards in that section with success, especially in spraying for leaf roller.

As a **SUMMER SPRAY**—Very efficient for young San Jose Scale and certain Aphis, when diluted with 50 to 100 gallons of water to 1 gallon of oil—depending on the foliage, which, if very tender, should be sprayed with a weaker solution than 1 to 50.

As a **WINTER SPRAY**—For San Jose Scale, Pear Scylla, Leaf Roller, Woolly Aphis, use 1 gallon of Oil to 15 or 16 gallons of water.

Directions for Diluting—Shake and stir well while in original package; mix 1 part of water to 1 part of Dormoil which will readily emulsify to a creamy consistency. When this is thoroughly mixed, put it in spray tank and it will stay in suspension. Price: qt. **40c**; gal. **95c**; 5 gals. **\$3.50**; 10 gals. **\$6.50**; bbl. **\$22.00**; f. o. b. Portland.

BORDEAUX

*LION DRY BORDEAUX MIXTURE—

When mixed with cold water in the proportion of 9 lbs. to 50 gallons, gives a standard Bordeaux Mixture. Keep in a tightly closed package. Price, 1 lb. **30c**; 5 lbs. **\$1.50**; 10 lbs. **\$2.50**; 25 lbs. **\$4.50**; 50 lbs. **\$8.50**; 100 lbs. **\$15.00**; 200 lbs. **\$27.50**. F. O. B. Portland. Poison, cannot be mailed.

Dry Lime SULPHUR

Controls all scale and fungus diseases for which Lime-Sulphur Solution is recommended. More convenient to handle and saves freight on water. Put up in air-tight packages which should be used when opened. For Winter spray use 10 to 14 lbs. to 50 gallons of water. For Summer in combination with Arsenate of Lead use 2 to 3 lbs. to 50 gallons of water.

Price: 1 lb. **35c**; 5 lbs. **\$1.00**; 10 lbs. **\$1.75**; 25 lbs. **\$3.00**; 100 lbs. **\$9.50**. F. O. B. Portland.

Diamond Lime and Sulphur Solution

For San Jose Scale

Always uniform and of the highest efficiency, tests 30 Baume Scale, made of the purest and best quality of Sublimed Sulphur and of Lime, free from sediment, and ready to mix just as you get it. Add 11 gallons of water with each gallon of Lime and Sulphur Solution. 1 qt. **30c**; 1 gal. **75c**; 5 gals. **\$2.40**; 50-gal. bbl. **\$11.00**; F. O. B. Portland.

Corona Coppercarb

IMPORTANT changes have been made in the treatment of seed grains for the control of bunt, stinking smut, etc. The new way consists of dusting the grain with copper carbonate. It will supplant the commonly known and very distasteful formaldehyde method because the copper dust gives successful results in the control of the diseases, but does not in the slightest degree hurt germination, and at the same time relieves the farmer of a most irksome task.

Treating the grain with Corona Coppercarb can be carried out by a shoveling over process. The operation is very simple and does not require much time. A common barrel churn will dust a large quantity of seed.

Use 2 to 4 ounces per bushel of Seed. Price, 5 lbs. **\$1.50**; 25 lb. cans only **\$5.50**; F. O. B. Portland.

FORMALDEHYDE

Will Prevent Oats Smut, Stinking Smut of Wheat, Barley Smut and Leaf Stripe.

Use 1 pint of formaldehyde in 40 gallons of water for wheat and barley. Dip oats with one pint formaldehyde in 30 gallons of water. For potato scab soak potatoes for 2 minutes in a warm solution of 1 pint formaldehyde in 15 gallons of water. Full directions on application.

Pts., **60c**; Qts., **\$1.00**; Gal., **\$3.25**; F. O. B. Portland.

BLUESTONE—(Vitriol)—Lb. **20c**; per 100 lbs., market price. Not mailable.

PARIS GREEN—(Lion Brand)—The standard of purity. Guaranteed superior to other makes. Price: $\frac{1}{4}$ lb. **25c**; $\frac{1}{2}$ lb. **40c**; lb. **75c**. Not mailable.

P. S. CO. APHISCIDE

Our Best Summer Spray for Roses

A clean, efficient spray for aphid, thrip and kindred insects on plants of any kind. Specially fine for house plants, as it has no offensive odor and will not injure or stain the plants. Price, qt. **35c**; gal. **65c**; postage extra.

CLENSEL

(Patterson's Concentrated)

A highly concentrated spray (one gallon will make from 25 to 50 gallons of spray) used on ROSES, SWEET PEAS, BEANS and other plants as a preventative against Aphis, Red Spider, Mildew and many other forms of diseases. It is also very beneficial to the foliage on plants. Being non-poisonous it can be used safely. $\frac{1}{2}$ pints **60c**; pints, **\$1.00**; quarts, **\$1.75**; gallons **\$5.50**. Postage extra.

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. $\frac{1}{2}$ pt. **50c**; pt. **75c**; qt. **\$1.25**; gal. **\$2.75**; postage extra.

*BLACK LEAF 40 40% Nicotine

Destroys Aphis, Thrips, Leaf Hoppers on all tree, bush and vine fruits, vegetables, field crops, flowers and shrubs; also Apple Red Bug, Pear Psylla and similar soft-shelled sucking insects—all without injury to foliage. Combines readily with other sprays. 1 oz., 6 gals. spray, **35c**.

$\frac{1}{2}$ lb., 40 to 120 gals. spray..... **\$ 1.25**
2 lbs., 160 to 500 gals. spray..... **3.50**
10 lbs., 800 to 2500 gals. spray..... **13.50**

Not mailable. F. O. B. Portland

BUHACH—Oz. **30c**; $\frac{1}{4}$ lb. **\$1.00**; 1 lb. **\$1.75**; F. O. B. Portland.

TREE TANGLEFOOT—For caterpillars, moths and worms. Protects against all climbing insects. One lb. makes a band 9 feet long. Price: 1 lb. **60c**; 5 lbs. **\$2.75**; 10 lbs. **\$5.25**; 25 lbs. **\$11.00**; F. O. B. Portland.

HAMMOND'S SLUG SHOT—For destroying slugs, cabbage and turnip flea, currant worms, etc. 5-lb. pkg. **75c**, postpaid **90c**.

HAMMOND'S GRAPE DUST—To prevent mildew on roses, grapes and gooseberries. 5-lb. pkg. **\$1.00**, postpaid **\$1.15**.

LEE'S GARDEN INSECTICIDE—(Non-poisonous)—One that is suited to the needs of the average gardener, and is guaranteed to give satisfaction. 1 lb. sprinkler top can, **30c**; 2 lb. sprinkler top can, **50c**. Postage extra.

TOBACCO DUST—Lb. **15c**; 10 lbs. **\$1.00**; 100 lbs. **\$7.00**. F.O.B. Portland.

Volck

Effective against practically all of the 400 or more species of scale insects found on plants. An oil emulsion, perfectly safe on tender plants. For all kinds of plants, flowers, vegetables, berries, shrubs, trees and fruit trees. Prevents rose mildew.

Easy to handle, no disagreeable odor, no smarting of eyes or harsh skin. Simple and safe. Use one part to 50 parts of water. Can be used with Bordeaux. $\frac{1}{2}$ pint 50c; 1 pint 75c; quart \$1.00; 5 gallon can \$12.00.

"NICO-FUME" TOBACCO POWDER

Tobacco Powder impregnated with a high strength nicotine solution. Effective for fumigating in greenhouses to destroy Aphis, Thrips, etc. Fill 2½-inch flower pot heaping full of "Nico-fume" Powder, pour powder out on ground or cement walk in a narrow pile about 7 inches long and light. Use a pile to each 5000 cubic feet of air space. Place piles equal distance apart.

1 lb. can \$1.25; 5 lb. can \$4.75; 10 lb. can \$8.50. F. O. B. Portland.

"NICO-FUME" LIQUID

For fumigating and spray for greenhouse work. Kills Aphis, Red Spider, Mealy Bug, Thrip, etc. 1 lb. can \$2.25; 4 lb. can \$8.00; 8 lb. can \$15.00, f.o.b. Portland. Not mailable.

Napthalene

For Use in Treating Soil for Insect Pests

Used by truck gardeners, bulb growers and for field crops to drive away grubs, wire worms, slugs, centipedes, aphids, etc. Safest, most powerful insect repellent that can be used in quantities at low price. In granulated form, with strong odor like moth balls. Has been used in Europe for years. Drives off caterpillars, stupifies insects. Use it mixed in the soil according to directions. Send for full information.

Prices: 1 lb. can 25c; 5 lbs 75c; 10 lbs \$1.25; 25 lbs. \$2.25; 50 lbs. \$4.00; 100 lbs. \$7.50; F. O. B. Portland.

Earwig Bait

Prite for prices in season.

PURITOL—A white disinfectant paint in dry powdered form. Ready to use when mixed with cold water. Excellent for chicken house, hog house, dairy, etc. Price, 5 lb. plg. 65c. Postage extra.

For Foul Brood

D & B SOLUTION
The Re-Processed Water-Formalin Solution

The U. S. Department of Agriculture says of the Water - Formalin Solution (Department Circular No. 284): "It was found to be the most satisfactory disinfectant for use in sterilizing combs infected with American Foulbrood."

Put up in No. 10 sanitary cans, containing 110 ounces, or approximately 7½ gallon, packed in cases of six cans.

When mixed according to directions (1 part solution to 4 parts pure water) make 4½ gallons of disinfectant ready for use. This amount is sufficient to sterilize from 250 to 300 combs, according to care exercised in its use.

1 can, shipping wt. 10 lbs.....\$ 2.25
1 case, shipping wt. 55 lbs..... 12.50
Two or more cases in one shipment, \$12.00 per case. F. O. B. Portland.

This Solution cannot be sent through the mail. Special literature on request.

SPRAY CALENDAR—WHEN TO SPRAY, WHAT TO USE

This list is for quick reference only. For complete information write to Oregon Agricultural College Extension Service for latest bulletins, as unusual conditions often make necessary a change in the spray. These bulletins also give full information as to strength of sprays, when to use, etc.

Insect or Disease	Plant Attacked	What to Spray With	First Spraying
Codling Moth.....	Apple, Pear.....	Arsenate of Lead.....	Just before calyx cups close.
San Jose Scale.....		Sulphur Lime Solution, Winter Strength Oil Spray	When trees are dormant.
Oyster Shell Bark Louse	Apple, mainly.....	Standard Sulphur-Lime Solution.....	When leaves are off trees.
Peach Moth or Twig Borer	Peach,Prune,Plum.....	Sulphur Lime Solution 1 to 8.....	When insects appear.
Woolly Aphis.....	Apple, Pear.....	Wint. Strength Oil Spray (Black Leaf 40 in Sum.)	When insects appear.
Aphis.....	Roses and Plants.....	Aphicide, Nicotinic, Black Leaf 40.....	Soon as insects appear.
Cabbage Worm.....	Cabbage.....	Arsenate of Lead.....	Before worms eat into cabbage.
Cabbage Aphis.....	Cabbage.....	Black Leaf 40.....	When the insects appear.
Pear Slug.....	Pear, Cherry.....	Arsenate of Lead.....	About 15 days after petals fall.
Slug.....	Garden.....	Slug Shot.....	When the insects appear.
Slug.....	Peas, Beans.....	Black Leaf 40.....	Early, as soon as it appears.
Scab.....	Apple, Pear.....	Winter Lime-Sulphur, Summer L-S with Ars of L.	just before blossoms open.
Blackspot Canker.....	Apple.....	Bordeaux, double strength.....	Immediately after leaves fall.
Leaf Curl.....	Peach.....	Bordeaux in December and January.....	Before buds burst.
Mildew.....	Gooseberry.....	Lime-Sulphur Summer Strength.....	
Mildew.....	Roses.....	Lime-Sulphur, 1 to 10.....	
Cherry Fruit Maggot.....	Cherry.....	Arsenate of Lead.....	Just as leaf clusters expand, just before blossoming.
Thrips.....	Roses, Peas.....	Nicodust.....	Before spring growth starts.
Cutworms and Earwigs.....		Earwig Bait or Nicodust.....	

Caution Against Spraying When Trees are in Full Bloom—Spraying when trees are in bloom may destroy bees and other insects necessary to pollinate, and these natural agents should not be interfered with as their work of transferring pollen insures beautiful crops and shapely fruit.

SCHROETER'S IMPROVED SELF-SETTING MOLE TRAP—

Sets automatically, no danger to operator. Moles cannot get past alive. Operates easily, has 8 steel prongs. Height 11¼ in. Width 4 in., wt. 3 lbs. Each \$2.25. Postage extra.

Out O'Sight Mole Trap

One of the best. Sure to "get them." Weight, 2 lbs. Price, \$1.00.

Fits the hole, a sure killer and the most satisfactory trap. Weight, 1 lb. Price 75c.

THE NEVER-FAIL GOPHER GUN AND BURGLAR ALARM

For the Positive Destruction of Gophers, Moles, Squirrels, Rats and Other Burrowing Pests. Use .38 blank cartridge. Postpaid, \$2.00.

OFFICIAL RAT TRAP

The Government selected this trap from among thousands of models submitted. Spring releases with either upward or downward pressure.

Official Rat Trap, weight, 1 lb. Each 20c.
Official Mouse Trap, weight, 4 oz., Each 5c
Postage Extra

POISON GAS BALLS FOR GOPHERS OR MOLES

For the extermination of Ground Squirrels, Gophers, Prairie Dogs and Moles.

SAFE—SURE—ECONOMICAL

Will not explode. Do not deteriorate. No danger to Live Stock, Domestic Fowls or Wild Game.

Hold in mouth of squirrel's burrow, light with match; after the ball is ignited and burning freely, roll it as far as possible into the burrow. Cover hole with clod of dirt, enough fine dirt to seal tightly so that no gas fumes can escape.

Each 5c; doz. 50c; 100 \$2.00. Postage extra.

"WOOD-LARK" SQUIRREL & GOPHER POISON

Quick, Certain, Deadly

Exterminates Squirrels, Sage Rats, Field Mice, Pocket Gophers, Prairie Dogs, Crows. Use early when green food is scarce. Price: 1 lb. pkg. 60c. (Unmailable.)

COMPRESSED AIR SPRAYERS

FAVORITE HUDSON

4 gallon approximate capacity. Size 20x7½ inches. Pump is 1¼x15 inches, made of brass tubing; brass valve. Malleable handle and fittings will not break. Ship. wt. 10 lbs. With galvanized tank, **\$6.50**. With brass tank, **\$9.00**.

JUNIOR HUDSON

2½ gallon approximate capacity. Size 16x6 inches. Same as Favorite except smaller, lighter to carry. Ship. wt. 9 lbs. With galvanized tank, **\$5.25**. With brass tank, **\$8.25**.

ACME JUNIOR

1 gallon capacity. Size 12x5½ inches. Ship. wt. 6 lb. With galv'd tank, **\$4.50**. With brass tank, **\$7.50**.

All prices f. o. b. Portland

"IDEAL" SPRAYING OUTFIT

Designed especially for small growers, for city and suburban homes, poultrymen, etc. Tank holds 15 gallons. Pump has large air chamber, bronze ball valves and is easily removable. Gives a pressure of 275 lbs. Mechanical agitator and strainer. Complete with 10 ft. of ¾-inch hose, 8-ft. jointed extension, T-handle shut-off, "Ideal" non-corroding nozzle; 20-inch wheel, 2½-inch tire. Easy to wheel about. Shipping weight crated, 130 lbs. Price **\$36.90**.

BUCKET SPRAY PUMPS

SINGLE CYLINDER

A double acting high pressure spray pump of large capacity. Discharges on both up and down strokes, giving a continuous spray. Solid bronze ball valves, brass working parts. Complete with hose and nozzle, with discs for fine or coarse spray and solid stream cap. Weight 6½ lbs. Price each **\$4.25**.

F. O. B. Portland

DOUBLE CYLINDER

All operation is on the down stroke which tends to steady and hold pump down. Continuous spray. Solid bronze ball valves, all working parts brass, non-corroding. With hose and nozzle. For fine or coarse spray. Weight 7½ lbs. Price each **\$4.85**.

F. O. B. Portland

LEVER HANDLE

The lever handle and large air chamber make this the most powerful bucket pump and the easiest one to operate. All working parts are solid brass with brass ball valves and patent agitator. Graduating nozzle to throw a fine or coarse spray or a solid stream. Weight, 8 lbs. Price **\$6.95**.

F. O. B. Portland

HAND LIQUID SPRAYERS

CONTINUOUS HAND SPRAYER—Delivers a finely divided atomized mist continuously. Brass nozzle, adjustable fine or coarse spray, brass ball valve, capacity 1 quart, weight 1½ lbs. Heavy tin tank and pump, price 80c, postpaid 90c. Galvanized tank, tin pump, 90c, postpaid \$1.00. Brass tank, brass pump, \$1.25, postpaid \$1.35.

ASPINWALL SPRAYER, No. 30—Strong tin tank, holds about 1 quart. Weight 1½ lbs. Price 40c (50c postpaid).

FOG SPRAYER—Especially designed for vaporizing fly oils and household insecticides so fine as to remain in suspension in the air. Heavy tin, size 1 pint; price 40c. (50c postpaid).

GLASS JAR SPRAYER—Has quart Mason jar for tank. Easy to change from one spray to another by simply changing jars. Has wide fan-shape spray. Wt. 3 lbs. Price 65c (postpaid 75c).

DUSTER SPRAYERS

CADET DUSTER—Covers every surface with a cloud of dust, hunts every crack, nothing escapes treatment. Each 45c (postpaid 55c).

MAJOR DUSTER—Large powerful dust sprayer with extension nozzle, easy to reach into inaccessible corners. Each \$1.00 (postpaid \$1.10).

Regular \$1.40
Special **95c**
Postpaid

NO. 20 ACME POWDER BELLOWS

This well known bellows for blowing powdered insecticides on vines, bushes, etc. Very powerful. Now offered at this very low price. Easy to handle. Two nozzles.

Special Prices LEE'S FLYO-CURO

A wonderful fly spray.
Quarts, 60c regular, special **39c**
Half gal., 90c regular, special **59c**
Gallon, \$1.50 regular, special **98c**

INSECT POWDER GUNS

Small size, postpaid.....**15c**
Large size, postpaid.....**30c**

Close-out Prices on SPRAY PUMPS

We are discontinuing the handling of these larger pumps and are offering these special prices as long as our stock lasts. If you are in the market you can save money now.

GOULD'S MONARCH TWO-CYLINDER SPRAY PUMP NO. 1640—One of the best of the larger pumps. Has long lever which can be shifted to pull or push, lift or drop at any time operator desires a relief; pump is outside of barrel, easy to care for; cylinders are perpendicular; no valves in plungers; packing is outside and can be tightened in a minute, valves are each reached by simply unscrewing its cap; 2-inch cylinder.

OUTFIT A—Pump only with strainer and hose connection. Regular price \$40.00
\$32.00

OUTFIT B—Pump with 6 ft. $\frac{3}{4}$ in. suction hose. Regular price \$42.00
Special price \$34.00

OUTFIT C—Pump with suction hose, 25 ft. best spray hose, 8 ft. bamboo extension, Globe valve and nozzle. Reg. price \$50.00
Special price \$42.00

FRUITALL BARREL SPRAY PUMP NO. 1188—Working parts are all made of bronze, valves are easy to reach, automatic agitator thoroughly mixes liquids and keeps all solids in suspension. For mounting on end of barrel only. This is a well known standard pump.

OUTFIT A—Pump only. Regular price \$16.50
\$12.75

OUTFIT B—Pump with 15 ft. of spray hose and Vermorel nozzle. Regular price \$21.00. Special price \$16.95

OUTFIT C—Pump mounted in barrel, 15 ft. hose, 8 ft. bamboo extension and Vermorel nozzle and cut-off complete. Regular price \$26.50. Special price \$21.75

POMONA BARREL SPRAY PUMP NO. 1100—The best orchard spray pump for mounting on a barrel. All working parts bronze including valves and seats. Plunger is outside packed. Valves easy to reach. Adjustable stroke. Long lever. Double paddle automatic agitator thoroughly mixes liquids.

OUTFIT A—Pump only. **\$22.50**

OUTFIT B—Pump with 12 $\frac{1}{2}$ ft. hose, 8 ft. bamboo extension with cut-off, one Vermorel nozzle (no barrel). Price \$28.50

OUTFIT C—Same as outfit B, and mounted in barrel. Price \$31.00

OUTFIT D—Pump with two 12 $\frac{1}{2}$ ft. leads spray hose, two Vermorel or Seneca nozzles, two 8 ft. bamboo extensions with cut-off; pump mounted in barrel. \$36.50

SPRAY NOZZLES, CONNECTIONS, FITTINGS and EXTENSIONS

NON-CLOG NOZZLE—The best hop nozzle, perfect spray, produces a fog in great volume at a light pressure. Weight 8 oz. Price 75c.

NON-CLOG ANGLE—Weight 9 oz. Price 85c.

VERMOREL NOZZLE, with degorger; gives a conical discharge. Wt. 4 oz. Price \$1.

NOZZLE ELL—Weight 2 oz. Price 25c.

HOSE CONNECTION—For nozzle or extension. Weight $\frac{1}{4}$ lb. Price 35c.

CALDWELL BANDS—Doz. postpaid $\frac{1}{2}$ inch or $\frac{3}{4}$ inch, 35c.

DOUBLE CUT-OFF—Wt. 2 lbs. Price \$2.50.

BAMBOO EXTENSION—Has iron pipe inside of bamboo, threaded for nozzles and stopcock. Length, ft. 2 to 4 6 8 10 12
Price \$1.15 \$1.45 \$1.75 \$2.00 \$2.25

With Stopcock, add \$1.00

SENECA NOZZLE—Gives a very wide spray, discharge easily graduated. Excellent for whitewashing. Weight 5 oz. Price \$1.25.

BRASS Y— $\frac{1}{4}$ -inch, for nozzle only. Weight $\frac{1}{4}$ lb. Price 50c.

HOSE REDUCER—For nozzle or extension. Weight 3 oz. Price 45c.

BRASS YERDON'S BANDS— $\frac{1}{2}$ inch. Each 10c; doz. 75c; postpaid 85c.

STOPCOCK—Weight $\frac{1}{2}$ lb. Price \$1.00.

SPRAY HOSE COUPLINGS—2 $\frac{1}{2}$ -inch shank for heavy pressure spraying. For $\frac{1}{2}$ or $\frac{3}{4}$ inch hose, price pair 75c, postpaid.

HOSE COUPLINGS—For garden hose, $\frac{1}{2}$ -inch or $\frac{3}{4}$ -inch, complete. Price per pair 40c; postpaid 45c.

HOSE WASHERS— $\frac{1}{2}$ -inch, rubber. Doz. 10c.

SPRAY HOSE

Spray Hose can be cut in any length desired. When less than 50 ft. length is ordered, add 75c for couplings on each length.

MONARCH SPRAY HOSE—Absolutely the best we can buy; the rubber is of exceptionally high quality and we strongly recommend it to orchardists. $\frac{1}{2}$ -inch size, per foot, 24c.

AJAX SPRAY HOSE—A splendid moulded hose, stands high pressure. $\frac{3}{4}$ -inch size, per foot 16c.

KILL 'EM with Lee's Garden Insecticide

A non-poisonous dusting insecticide for use against plant lice, green bugs, potato beetles and the pests that infest shrubbery, vines, flowers and garden vegetables. Put up in sprinkler top cans, easy to use. Contains nicotine, pyrethrum, sodium fluoride, sulphur and naphthalene. It gets the pests! Prices F. O. B. Portland.)

1 lb. Can

30c

Dozen \$3.00

2 lb. Can

50c

Dozen \$4.80

GARDEN HOSE

Furnished in 50-foot lengths, coupled ready for use.

CORRUGATED NON-KINKABLE GARDEN HOSE—Especially recommended for florists and eartheners for hard service. $\frac{1}{2}$ -inch, per foot 12c; $\frac{3}{4}$ -inch, per foot 15c.

ST. HELENS GARDEN HOSE— $\frac{1}{2}$ -inch, per foot 10 $\frac{1}{2}$ c.

COTTON COVERED GARDEN HOSE—High grade rubber tubing with heavy woven cotton covering. $\frac{1}{2}$ -inch, foot 12c; $\frac{3}{4}$ -inch, foot 14 $\frac{1}{2}$ c.

LAWN SPRINKLERS

No. 1 WILGUS—The original Wilgus, used the world over, all brass, non-rusting. Price postpaid 75c.

No. 7 WILGUS—The twin sprinkler, throws a very pretty rain-like fine spray. Price postpaid 50c.

BUSY—A regular water flirter, runs easy, throws a swirling spray and turns with a low force. Price postpaid \$1.25.

Planet Jr. Garden Tools

No. 4 PLANET JR. COMBINED HILL AND DRILL SEEDER, WHEEL HOE, CULTIVATOR AND PLOW—Soon pays for itself in the family garden as well as in the larger acreage. Sows all garden seeds (in drills or in hills) plows, opens furrows and covers them, hoes and cultivates quickly and easily. Wt. 50 lbs. Holds 2 qts. **Complete, price \$19.00; Seeder only, price \$15.25.**

No. 25 PLANET JR. HILL AND DRILL SEEDER, DOUBLE AND SINGLE WHEEL HOE—A splendid combination for the family garden, onion grower, or large gardener. Weight, 60 lbs. **Price, \$22.50.**

No. 3 PLANET JR. HILL & DRILL SEEDER—A favorite among onion growers, market gardeners and seedsmen. Index and seed cut off rod is conveniently placed at top of handle. Holds 3 qts. Wt. 43 lbs. **\$18.50.**

No. 11 DOUBLE WHEEL HOE, CULTIVATOR, PLOW RAKE—These Double Wheel Hoes are the highest type of machine of this kind made. Light and durable—can be used by man, woman or boy. Wt. 39 lbs. **\$14.50.**

No. 12 PLANET JR. DOUBLE WHEEL HOE, CULTIVATOR AND PLOW—A single and double wheel hoe in one. Straddles crops till 20 in. high, then works between. Has steel frames and 14-inch steel wheels. Wt. 33 lbs. **Price \$11.50.**

No. 13 DOUBLE AND SINGLE WHEEL HOE—This is the No. 12, with 6-inch hoes only, these being the tools that are most needed. wt. 2 lbs. **\$8.75.**

No. 31 PLANET JR. COMBINED DRILL SEEDER AND WHEEL HOE—Ideal for the home garden; plants any amount, even a small packet, accurately and evenly from ¼ to 2 in. deep. Holds 1 qt. Weight 32 lb.

Special Price \$11.50

No. 16—SINGLE WHEEL HOE, CULTIVATOR, RAKE AND PLOW—Used mostly between the rows, yet by mounting wheel on other side of arm, can be used to hoe both sides at once while plants are small. Weight, 26 lbs. **Price \$9.50.**

No. 17—SINGLE WHEEL HOE—Has a most useful set of attachments. Wt. 24 lbs. **Price \$8.25.**

No. 17½—Same type as No. 17—One pair of 6-inch hoes and three cultivator teeth. **Price, \$7.25.**

No. 18—Same type as No. 17—Has one pair of 6-inch hoes only. **\$6.25.**

PLANET JR. STAR PULVERIZER, LEVELER AND WEEDER—For preparing seed bed. After crops are started, use between rows as a weeder or as a crust breaker. Width 7½ inches. Weight 5 lbs. **Price \$3.50.**

ATTACHMENTS AND RENEWAL PATS FOR PLANET JR. GARDEN TOOLS

Plow for Single Wheel Hoes. Each **\$1.50.**

Cultivator Teeth Each **40c.**

RAKES
3-tooth, pair. **\$1.50**
5-tooth, pair. **2.00**
7-tooth, pair. **3.00**

Plows for Double Wheel Hoes. Pair **\$15.00.**

Three Prong Cultivator Teeth. Pair **\$2.25.**

Disc hoes with dirt shield. Set **\$3.50.**

S100 and S101 Hoes
Size Pair
4½ inch **\$1.20**
6 inch **1.30**
7½ inch **1.50**
9 inch **1.65**

Peat Land Hoes, 6 in. Pair **\$2.60.**

S100-S101

Iron King Seed Drill

FOR ONION GROWERS—A well-made, durable easy running machine, accurate and reliable, will save the price of the machine in sowing a few acres. If you are growing onions you cannot afford to be without one. Also for lettuce, spinach, beet, cabbage and ill sow anything from turnips to peas. Weight packed, 45 pounds. **Price \$15.00. (With Fertilizer Attachment, Price \$17.50.)**

SPECIAL

No. 13 STANDARD DOUBLE & SINGLE WHEEL CULTIVATOR, with cultivator teeth, double plow and hoes. Wheels 16 inches high; adjustable gauge for depth. Wt. 30 pounds. **Special Price \$10.00**

GARDEN PLOW and CULTIVATOR

\$3.65 Without Seeder
\$7.50 With Seeder

No. 20 Standard. Price without seeder, \$3.65. Complete with Midget Drill Seeder Attached, **\$7.90.**

No. 20
Large 24-in. wheel, strong frame, complete with plow, hoe, rake, cultivator & wrench. Wt. without seeder **25 lbs.**

BROADCAST SEED SOWERS

CAHOON SEEDER—Made of steel, iron and brass; the most popular and best; force feed; does excellent work. Sows all grains and grass seeds. Weight 9 lbs. Instructions included. **Price \$5.00.**

CYCLONE—Sows any kind of seed perfectly even over the ground at rate of 50 acres a day, any amount desired per acre. Saves seed—soon saves its cost. Weight 8 lbs. **Price \$2.50.**

American Garden Wheelbarrow

\$6⁸⁵

20-inch steel wheel with 2-inch oval tire. Solid steel axle and malleable axle boxes. Oval pressed steel legs. Vermilion finish and varnished. Light but rigid—built to last. No. 1—Size of deck 17x22x29. Shipped K. D. **Price \$6.85.**

Fig. 14

Fig. 16

Fig. 20

Fig. 22

CORN PLANTERS

ACME AUTOMATIC—One Hand (Fig. 20)—Puts the right number of kernels just where you want them and at the proper depth, requiring only one hand, either right or left. Weight packed 6 lbs. **Price \$2.50.**

ACME—(Fig. 22)—A two-handed planter. Light, well made, and especially adapted to heavy, cloddy or stony soils. Adjustable—from popcorn to large kidney beans. Weight packed 4 lbs. **Price \$1.35.**

POTATO PLANTERS

PEERLESS—(Tubular)—(Fig. 16)—This light tubular planter locks itself as it is lifted out of the ground and the next potato may be dropped in at once. Opens automatically by forward movement. Weight packed 5 lbs. **Price \$1.95.**

PINGREE or ACME—(Fig. 14)—Similar in action to the tubular. You lift the planter up to drop in the potato. Weight packed 4 lbs. **Price \$1.35.**

ALL PURPOSE RAKE—Unequalled for removing dandelions. Wedges stems, leaves and blossoms in the teeth and easily pulls them out. Cleans the grass of acorns, twigs, dead leaves and trash better than with any other rake. Teeth are self-cleaning by a backward stroke. **Price 95c.**

PLANET JR. GRASS EDGER—You can edge either straight or curved walks of cement, stone or brick, rapidly and easily. Weight 4 pounds. **Price \$1.75.**

Master's Plant Setter

With a "Master's" you can set, water and fertilize 10,000 plants a day and do better work than if set by hand. Works as fast as you walk. Sets cabbage, kale, celery, tomatoes and vegetable plants of all kinds. Weight packed 5 lbs. **Price \$6.00.**

Tin Horn Seeder

A good serviceable seeder at a low price. Adjustable. Wt. 1 lb. **Price \$1.**

THE CLIPPER GRAIN AND SEED CLEANER

USED BY ALL AGRICULTURAL COLLEGES AND BY THE U. S. DEPARTMENT OF AGRICULTURE

No work done on the farm brings such large returns as thoroughly preparing the grain and seed by recleaning and grading for planting. This insures an even stand of strong, healthy plants, and a larger yield of a higher grade. The "Clipper" cleaner is especially adapted to this kind of work on account of its ability to separate the small, also the light, dead seed or grain from the perfect seed or grain.

Other mills depend entirely upon screens for this work, and with unsatisfactory results. The "Clipper" screens all straw and foreign matter from the grain before it enters the air shaft, and the "Vertical Blast" does the rest.

Screens are so arranged as to be in plain view and of easy access to the operator while machine is in operation, and a set of ten being furnished with either the No. 1B or No. 2B. These are ample for general work—but special screens can be furnished for any cleaning operation.

Guaranteed to do the most perfect work of any Hand Seed Cleaner
The "Clipper" is a first-class, inexpensive and durable mill for general use
No. 1B—Capacity 20 bu. grain or 10 bu. seed per hour. **Price \$40.00.**
No. 2B—Capacity 25 bu. grain or 15 bu. seed per hour. **Price \$50.00.**
No. 6—POWER. Capacity 200 bu. grain or 35 bu. seed per hour. **Price \$150.**
No. 16—POWER MILL. Three-step pulley air control. Capacity 200 bu. grain or 35 bu. seed per hour. **Price \$225.00.**
No. 16—POWER MILL. Variable air control. Capacity 200 bu. grain or 35 bu. seed per hour. **Price \$280.00.**

We can also supply Clipper Power Cleaners of any capacity for any purpose.

We have supplied "Clipper Cleaners" to the mills, dealers and prominent growers of the Northwest. If you grow grain or seed and do not own a "Clipper," you are losing many times its cost every year. Let us send you "The Clipper" Catalog of hand and power cleaners. All sizes and prices. **ALL PRICES ON THIS PAGE ARE F. O. B. PORTLAND.**

Cultivating Tools

**NORCROSS
ADJUSTABLE
CULTIVATOR
HOES**

Like a human hand, the fingers of the "Nor-cross" work closely around the plants without injury. Keeps down weeds, saves moisture, leaves the ground level. 4-ft. handle.

FIVE PRONG for regular garden work; weight 4 lbs. Price \$1.00.

THREE PRONG for narrower rows and close work; weight 3 lbs. Price 75c.

No. 82—ALL STEEL WEEDER, one-piece pressed steel, finished in blue enamel, easy to handle, unbreakable, length 9½ in., wt. 1 lb. Price 20c.

MAGIC WEEDER, spring steel, 3 tines, wt. 1 lb. Price. 15c.

No. 21—LANG'S WEEDER, spring steel blade, wt. 1 lb. Price 20c.

No. 23—HAZELTINE'S WEEDER, spring steel blade, wt. 1 lb. Price 30c.

No. 25—NOYE'S WEEDER, spring steel blade, wt. 1 lb. Price 25c.

No. 30—SPADING FORK, forged steel, 3 tine, 11 in., wt. 1 lb. Each 50c.

NEW BASTIAN PRUNER

The powerful lever enables you to do the same work in half the time that would be required with old style pruners. Damascus steel blades, very strong, hold their cutting edge. Simple in construction, light, strong and durable.

Size, ft. 6 8 10 12 14 16
Price \$1.75 \$2.00 \$2.25 \$2.50 \$2.75 \$3.00

No. 3—DUPLEX PRUNING SAW, one side has Tuttle steel, the other side regular teeth. Ship. wt. 1 lb. 16 in. \$1.50; 18 in. \$1.75.

Prices on this page are F. O. B. Portland unless otherwise stated. Add postage for mail shipments.

MAYNARD GARDEN TROWEL, steel socket shank, extra heavy, wt. 1 lb. Price \$1.00.

No. 85—GARDEN TROWEL, one-piece blade and socket, wt. 1 lb. Price 50c.

No. 39—ALL STEEL TROWEL, blade and handle one-piece heavy pressed steel, unbreakable, blue lacquered, sharpened blade, wt. 1 lb. Price 25c.

No. 38—GALVANIZED STEEL TROWEL, one-piece blade and handle, wt. 1 lb. Price 10c.

No. 40—ALL STEEL TRANSPLANTING TROWEL, 1½x6¼ blade, one-piece steel throughout, blue lacquered, wt. 1 lb. 25c.

VILLAGE BLACKSMITH BRAND GRASS SHEARS, full polished 6-inch hollow ground tempered steel blades, clean cutting, wt. 1 lb.

No. V51—With trowel shank, price \$1.00.

No. V1—Without trowel shank, price 75c.

VILLAGE BLACKSMITH "GRASNIP." A very practical shear for cutting grass, light vines, etc.; 6-inch steel blades, malleable handles.

Red Handles, best finish, \$1.25, postpaid \$1.35
Green Handles, med. finish, \$1.00, postpaid \$1.10.

No. 3—VILLAGE BLACKSMITH GRASS HOOK, with offset handle. Forged cutlery steel, tempered, ground sharp and whetted, wt. 1 lb. Each 65c.

GRAFT- ING WAX LION BRAND

¼ lb. 20c
½ lb. 35c
1 lb. 60c

Pruning Tools

13 6 8 4 2

No. 2—PRUNING KNIFE, wood handle, stationary blade of high quality tempered steel. Postpaid 70c.

No. 4—PRUNING KNIFE, polished wood handle, highest quality blade, strong spring. Postpaid \$1.25.

No. 6—GRAFTING KNIFE, wood handle, stationary blade of highest grade steel. Postpaid 60c.

No. 8—BUDDING KNIFE, ebony handle, ivory opener, best quality steel blade. Postpaid \$1.40.

No. 13—BUDDING KNIFE, wood handle, stationary blade. Postpaid 50c.

No. 50—PRUNING SHEARS, 5½-inch size, small size for ladies, very fine quality, full polished. Wt. 1 lb. Price \$1.00.

40 41

No. 40—PRUNING SHEARS, 9-inch, highest grade, bright finish, polished blade, spiral spring; without ratchet, wt. 1 lb. Price \$1.60.

No. 41—Same as No. 40, with ratchet. Wt. 1 lb. Price \$1.75.

No. 30—PRUNING SHEARS, 9-inch, black finish, polished blade, high grade American made, wt. 1 lb. Price \$1.10.

No. 31—Same as No. 30, with ratchet, wt. 1 lb. Price \$1.25.

LETTUCE OR VEGETABLE KNIFE, 3-inch blade, riveted into ferruled wood handle. Postpaid 35c.

ASPARAGUS KNIFE, has long shank and blade for cutting the tips below the surface. Each 50c, postpaid 60c.

CORN OR SLASHING KNIFE, 22½-in. long, strong heavy blade, wt. 2 lbs. Price 85c.

No. 13—CALIFORNIA PRUNING SAW, crescent shape, best silver steel, regular tooth. Ship. wt. 1 lb. 14 in. \$1.75.

Special
65c
each
75c
with fillers

P.S.Co. Parcel Post Egg Crate

The strongest, lightest egg carrier made. You can mail eggs in this crate for 150 miles and have crate returned for 3¼c a dozen. 12 dozen capacity.

Price without fillers, each **65c**, dozen **\$7.20**.

Price with fillers, each **75c**, dozen **\$8.25**.

F. O. B. Portland.

Kant-Krack Folding Egg Box

Especially designed for safe delivery of valuable eggs for hatching and is a great favorite with poultrymen. Made of heavy corrugated paper. Only a few seconds work to set the box up, pack it with eggs, and address it. These boxes are light but very strong, being firmly braced, and will stand the weight of several hundred pounds without crushing. 1 dozen in a package; cannot break packages.

No.	Size	Wt.	Doz.
3	15-Egg	1 lb.	\$2.00
4	30-Egg	1½ lb.	\$3.75
5	50-Egg	2 lb.	\$5.00

Egg Cases

30-doz. size, with fillers. Each **70c**.

EGG CASE FILLERS

Packed in cases containing fillers for 12 30-doz. cases. Per Case **\$3.35**.

Fillers for 1 30-doz. case, **35c**.

Fillers holding 3 doz. each. Each **5c**.

Ideal Paper Egg Boxes

For delivering eggs to private families. Nicely printed with a blank space for your name and address. Wt. 12 lbs. per 100. Prices: 1-doz. size, **20c** doz.; **\$1.10** per 100; **\$10.00** per 1000. Sample box by mail **5c**.

THE ECONOMY TRAP NESTS

It is a known fact that the successful poultryman of today is the one that trap-nests his birds. There is no guess work. You know. Plans for a successful, one-hen trap nest that can be manufactured for about 15c worth of material. A child can make one from this plan. You should have them for your whole flock. Plans, postpaid, only **\$1.00**.

WIRE HENS' NESTS

Strongly made; very durable; fasten to the wall; no harbor for vermin. Wt. 10 oz. each. Each **25c**; doz. **\$2.75**.

NEST EGGS

CHINA—Best grade Opal Eggs. Wt. doz. ¾ lb. Each **5c**; 12 for **35c**.

LIME NEST EGG—Superior to China, not so cold, and are indestructible.

Wt. doz. 2 lbs. Each **5c**; doz. **40c**.

RABBIT DISHES

Earthenware rabbit dishes have incurred edges that prevent them from rooting out their food. Very serviceable. Price, 6-inch, 20c each; 8-inch, 25c each. Cannot be mailed.

ALL PRICES ON THIS PAGE ARE F. O. B. PORTLAND UNLESS OTHERWISE STATED.

McCANDLISH CHICK FEEDER—Revolving rod, prevents chicks perching on it, making feeder sanitary; adjustable partitions for feed, ideal for drinking. Galv. iron, no rough edges, cannot capsize.
20 inch, wt. 3 lbs.....50c.
30 inch, wt. 4 lbs.....75c.

No. 1 "DIAMOND" **SANITARY SELF-FEEDING BOX**—Heavy galvanized iron; soon pays for itself in preventing waste of feed. Keeps grit, shells and charcoal before the fowls at all times.

Three Compartments, Wt. 2½ lbs. **\$1.10**.

Two Compartments, large size. Wt. 3 lbs. Each **\$1.45**.

McCANDLISH IMPROVED TIN BUTTER-MILK FEEDER, with new style hood.
20 inch, wt. 3 lbs., each **65c**.
30 inch, wt. 4 lbs., each **90c**.

CIRCULAR CHICK FEEDER—Heavy galvanized iron, chicks cannot climb in.
8 holes, each.....15c
12 holes, each.....25c

"GUARANTEED" AUTOMATIC WATER FOUNTAIN

Especially designed for poultry, can be attached to any water line, tank or barrel. Operated by gravity pressure of drinking pan, supplies fresh water to fowls automatically. **\$1.50** each or **\$1.60** postpaid.

SANITARY STONE FOUNTAIN—Strong, well finished; made in two pieces. They keep the water cool. Easy to handle and clean.

½ Gallon.....65c
1 Gallon.....75c
2 Gallon.....**\$1.25**

STAR FOUNTS AND FEEDERS—One solid piece of pressed metal, holds a Mason quart jar, has more available space for drinking or feeding than other feeders of this class.

Without Jar
Each **10c**

Thermometers

FOR INCUBATORS—TESTED
"Buckeye." Tested. Each, **\$1.00**.
Fig. 10—Straight; metal back. Each **90c**.

FOR BROODERS
Buckeye—For Nos. 20, 21, 22. Each **\$1.25**.
Fig. 2—For any style brooder. Each **85c**.

HOUSEHOLD
Metal Back. Wt. ½ lb. Each **50c**.

GILT EDGE EGG SCALE

Simple in construction, easy to operate, graduating by the ounce per dozen. Price **\$1.25**, or **\$1.35** postpaid.

THE LINCOLN EGG SCALE

No adjusting; simple, durable, accurate. Price **50c**, or **60c** postpaid.

CHAMPION EGG GRADING SCALE
Patent applied for

Improved type, grades with eggs in any position. Meets all requirements, grading pewee, pullet and standard eggs. Solid brass, will not get out of order; no loose parts to get lost. Each **\$2.00**; postpaid **\$2.10**.

BREEDER'S MAGIC EGG TESTER

No light. No electricity. No expense and lasts a lifetime. Shows the hatchable eggs before incubation. Price each **\$2.50**.

BUCKEYE EGG TESTER

Cheap but practicable. **50c** postpaid.

LEG BANDS FOR POULTRY AND PIGEONS

Every chicken must have a leg band on before it can be entered in a poultry show. In ordering Leg Bands, be sure to state size wanted, or breed of fowls bands are to be used on, and number wanted for males or females.

CHAMPION—Latest and best adjustable leg band out. Has neat, compact and smooth fastening, with no catching points; easily attached and absolutely secure. Prices, postpaid, 12 for 20c; 25 for 25c; 50 for 40c; 100 for 65c.

SPIRAL COLORED LEG BANDS

Made like a key ring—easy to put on, nothing to catch or tear off—instantly identifies your bird as far as you can see the color. All sizes from chick to mature fowls.

Ten Colors—Red, White, Yellow, Black, Pink, Green, Brown, Purple, Light Blue, Dark Blue. Prices, postpaid, 12 for 20c; 25 for 25c; 50 for 40c; 100 for 65c.

PETTEY'S POULTRY PUNCH

Can be put on a key ring or used for a watch charm. Will not clog. **25c** postpaid.

SCISSOR POULTRY PUNCH

Strong. Cuts clean. **15c**; postpaid **20c**.

QUEEN INCUBATORS

FAMOUS for BIG HATCHES of STRONG
HEALTHY CHICKS that LIVE and GROW

ALL COPPER TANKS, COILS AND HEATERS

The QUEEN style K machines are superior by far to any other machines in the moderate price class and will hatch every hatchable egg that you put in the machine. They are built to give you the highest perfection of incubation at a modest price, eliminating the necessity of trusting to risky equipment. Many low-priced incubators have hot water systems made of copperized tin, galvanized iron or other substitutes but in the Queen's genuine cold rolled copper is used.

Here are some of the special features of the Queen:

All copper tank, heater and coils, brass expansion cup.

Nursery trays, egg trays, mesh wire covered.

Double walls, inside and outside wall of redwood, scientific ventilation.

New air release tube; highest quality thermometer.

Ventilators in top and bottom of machine.

One-piece fount, cannot leak. Large Sun hinge burner (plenty of heat).

Heating system has double the capacity of normal needs.

Heat of entire machine regulated by one regulating unit.

(No. 20 is similar to No. 21 as illustrated except that it has short legs and is smaller in size.)

No. 21

No. 22

70 Egg \$18.00
130 Egg \$30.75

No.	Capacity	Floor Space	Ship. Weight	Price
20	70-egg	23 x28 in.	75 lbs.	\$18.00
21	130-egg	28½ x32 in.	90 lbs.	\$30.75
22	220-egg	34 x45½ in.	135 lbs.	\$40.50

Prices are F. O. B. Portland

220 Egg

\$40.50

QUEEN STANDARD MACHINES

No. 4

No. 5

No. 25

No. 35

Queen Incubators have been built for over twenty-five years and have thoroughly demonstrated the statement that they will hatch every hatchable egg. They are in use all over the world and have given the highest degree of satisfaction. We offer this line with confidence that we can give it our complete endorsement. Read carefully the following special features:

INSULATION—The Queen is doubly insulated, insuring a proper maintenance of uniform heat throughout hatching period, less fuel and stronger chicks. The double walls are made of redwood with corrugated strawboard between the walls forming two dead air spaces. Redwood is best as it will not warp, split, absorb moisture or odors, and insects dislike it. Double doors in front of redwood complete the double insulation. Inner doors have glass panels full length and height of egg chamber.

HOT WATER HEATING SYSTEM eliminates the injurious drying out tendency of a hot air system, provides a soft uniform heat for each egg and holds heat evenly while filling lamp or should it be forgotten for a time. Radiator and boiler are made of rolled copper (not copperized tin), and are designed to give a forced circulation. Expansion cup holds surplus water and cares for expansion of water. Lamp

has solid steel bowl, galvanized, mica window, perfected burner, and has an egg testing attachment; convenient to test eggs and watch development.

THERMOMETER is perfectly accurate and of the best quality. **AUTOMATIC HEAT REGULATOR** is guaranteed to the fraction of a degree, automatically caring for the slightest change of temperature in the incubator. **HEATER** is incased in a double jacket of heavy galvanized iron with 5 layers of asbestos between so that all the heat value is used in heating the water, greatly reducing fuel use. Heater has double the heating capacity normally required. Clear smokeless flame, no odor.

EGG TRAYS are self supporting—no danger of dropping and breaking eggs. Nursery trays included.

No.	1	2	3	4	5	25	35	45
Egg Capacity	85	135	180	275	400	600	800	1000
Floor Space, in.	23x28	18½x32	30½x35½	34½x45½	34½x63	34½x81	34x120	48x120
Egg Trays, size.	16½x18½	21x24	24x26	16½x30	16½x30	16½x30	16½x30	16½x20
No. of Egg Trays	1	1	1	2	3	4	6	12
Shipping Weight	80 lbs.	95 lbs.	105 lbs.	145 lbs.	185 lbs.	250 lbs.	410 lbs.	525 lbs.
Price	\$30.50	\$41.00	\$43.25	\$62.50	\$73.75	\$116.00	\$144.50	\$173.00

All prices f. o. b. Portland. For further information write for complete QUEEN catalog. We carry a full line of extra parts. Prices on request.

Queen Colony Brooder Stoves

A new and improved design, best quality heavy iron castings. For hard or soft coal, briquets, coke or charcoal. Automatic control of both damper and draft, by use of water thermostat the same as used on incubators. Draft and damper are in combination—when one opens the other closes. Down draft hot blast pipe draws air from above hover, heating it all the way down. Adjustable heat regulation. Feed door is above hover for easy feeding of fuel, no fire openings below insures safety to chicks. No openings in ash door, no danger to chicks from backfire or gas. Free circulation of air under stove. Asbestos lined bottom. Heat is kept perfectly uniform, night and day, cold weather and warm. Rocker grate. Hover is heavy galvanized iron with bail to attach lifting rope.

No.	0	1	2	3
Chick Size	400	800	1200	1600
Height, inches	18	23	26	30
Diam. of Grates, inches	9	9	10½	11½
Diam. of Pipe Collar, inches	4	4	4	5
Diam. of Hover, inches	42	48	56	60
Ship. Weight with Hover, lbs.	76	81	108	120
Price f. o. b. Portland	\$18.00	\$23.75	\$29.50	\$34.00

QUEEN OIL BURNING BROODERS

Keeps chicks perfectly warm—broods chicks that live and grow. Canopy of heavy galvanized iron, has top ventilator, two gallon welded metal tank, non-breakable. Asbestos wick. Queen quality throughout. Illustrated folder sent on request.

300 chick size, 32-inch Hover	\$18.75
600 chick size, 42-inch Hover	\$22.25

Prices f. o. b. Portland

QUEEN ELECTRIC BROODER

Costs but little more to operate than oil. Has thermostat to control heat automatically. Made of galvanized iron with inside heat reflector. Electricity used only as needed to keep temperature as desired.

No. B—Capacity 500 chicks, price f. o. b. Portland.....\$29.00

This damper regulates your check draft and the direct draft to your fire.

Special Closing Out Prices on Buckeye INCUBATORS & BROODERS

You can heat any "Buckeye" to 103° regardless of size in less than one hour. This cut represents Standard Machine.

As long as our stock lasts these special prices will prevail. Those who have decided to buy a Buckeye should place their order at once.

All new machines.

PRICES F. O. B. PORTLAND

Size	Style	Weight	Regular Price	Special Price
No. 16—110-egg,	Sgl. wall.....	85 lbs.	\$30.75	\$24.00
No. 17—210-egg,	Sgl. wall.....	125 lbs.	40.50	30.00
No. 1—110-egg,	Standard.....	110 lbs.	41.00	32.00
No. 3—250-egg,	Standard.....	200 lbs.	62.50	47.50
No. 5—600-egg,	Standard.....	325 lbs.	116.00	90.00

Ask for complete Buckeye catalog. Free on request.

The temperature of every Buckeye built is guaranteed to be uniform within a fraction of a degree at all times in the egg tray. The regulation of temperature is purely automatic and needs no watching. You set the regulator when the hatch is started and do not touch it again until the next hatch. The incubator can be operated in any temperature regardless of sudden changes. We guarantee every Buckeye to work satisfactorily in any temperature down to freezing. No previous incubator experience is required to operate a Buckeye. Outside of filling the lamp and turning the eggs, everything is automatic and requires no attention from the operator.

EXTRA BUCKEYE PARTS

We carry a complete stock of parts; price list sent on request or send us your order for quick service.

BUCKEYE IMPROVED BLUE FLAME BROODERS

Showing the "Improved" Buckeye Blue-Flame Brooder with a portion of the canopy cut away

OIL HEATED COLONY HOVERS

Burns Coal Oil—Has a Clean, Steady Blue Flame that Gives an Abundance of Heat. No Gas Fumes. Safe and Economical. Regulated with a Wick Guaranteeing a Continuous Oil Supply. Fill the Reservoir Every 24 Hours.

Prices F. O. B. Portland

Size of Hover	Chick Cap.	Weight	Regular Price	Special Price
No. 28—42 inch	350	50 lbs.	\$22.25	\$18.00
No. 29—52 inch	500	60 lbs.	24.75	20.00

Extra parts; full line in stock

BUCKEYE PORTABLE BROODERS

Showing a Sectional View of the "Buckeye" Brooder

The Lamp Brooder that broods like a stove Brooder. Air under the hover is drawn from the outside, into the upper chamber, discharged through exhaust tubes. Made of galvanized iron. Lamp chamber is separate from chicks. Air is heated by passing around lamp and distributed equally over entire brooding chamber. Thermometer registers temperature at all times.

Prices F. O. B. Portland

Diameter	Capacity	Regular Price	Special Price
No. 20—19 inches,	60 chicks.....	\$12.50	\$10.00
No. 21—22 inches,	100 chicks.....	16.25	13.50
No. 22—30 inches,	160 chicks.....	20.00	17.50

Above Prices Are Good Only While Present Stock Lasts

PUTMAN BROODER HEATER

You can make your own brooder out of a box, for accommodating 25 to 60 chicks, by using this heater. Heater requires filling but once a week. Uses less than a gallon of oil a month. Perfect ventilation automatically. Heat radiates from above onto backs of chicks. Can be operated anywhere, in the house or out of doors. Directions for making brooder enclosed. Postpaid **\$4.75**.

LITTLE PUTMAN STOVE

Just the thing for making a home-made oat sprouter or for warming water for poultry. New principle burner, insuring perfect combustion of oil and doubling heat value. Burns 3 to 4 weeks without refilling. Wick never needs trimming. Non-explosive—if tipped over or buried in litter it will go out. Complete directions for making oat sprouter. Postpaid **\$1.95**.

Brooder and Shipper Combined

This is a small brooder and runway combined for use with about 50 to 75 chicks and for using indoors. It is light, easy to handle, can be placed on top of incubator or on the floor. This brooder also makes an excellent shipping box. Complete with instructions for use. Price (not postpaid)

(Complete, postpaid, for **\$2.15**)

\$1.95

"DIAMOND QUALITY" POULTRY FOODS

Diamond Chick Food

A Properly Balanced Ration that will make chicks grow and keep them healthy. For young Turkeys, Pheasants and all young fowls DIAMOND CHICK FOOD is unexcelled.

The select grains that are used in the preparation of Diamond Chick Food are cut by a special process, screened to a uniform size and run through a fanning mill to remove the dust and meal, which is the fatal element in most chick foods. After this process the ingredients are carefully weighed and mixed in correct proportions. No guess work. Diamond Chick Food gives the chicks just what Nature intended they should have, a food composed of grains (cracked), small seeds, bone, etc., mixed in the right proportions to produce a quick and profitable growth without loss. Convenient, always ready for use, and you can raise so many more chicks by feeding it that it is the cheapest food you can buy. **WRITE FOR PRICES.**

Diamond Baby Chick Mash

A veritable chick insurance and is a starting and developing food for chicks without an equal. On the First Month's Feed Depends the Future Returns.

FOR EARLY MATURITY—After the chicks are a few days old, keep Diamond Baby Chick Mash constantly before them in dry form, just as it comes from the bag, in a feeder they can get at easily without getting into.

When 48 hours old, and three times a day thereafter, throw into the litter a feed of Diamond Chick Food (allow one pint to every 50 chicks per feed, at first). Feed only as much as they will eat up clean. Also scatter in the litter a handful of chick-size grit once a day for the first few days, then keep a supply in a box or hopper always before them. Plenty of fresh air, fresh clean water, fresh finely chopped green feed, and table scraps, are essential at all times. Above all watch your chicks. Do not overfeed grain or scraps, as the Mash contains every food element necessary for perfect development. It will, if necessary, keep for months if stored in a cool dry place. **WRITE FOR PRICES.**

POULTRY PEPPER COMPOUND

A tonic and invigorator; ground. 1 lb. 25c.

BLATCHFORD'S CHICK MASH

In 100, 50 and 25 lb. bags. 100 lbs. makes 100 gallons of Complete Milk-Equal. 10 lbs. 90c; 25 lbs. \$1.50; 100 lbs. \$5.75. F. O. B. Portland subject to market changes.

Diamond Scratch Food

ALL GRAIN

Complete, economical and satisfactory for every feeding requirement from the three-weeks-old chick to mature fowls. A perfect "working ration" for fowls. Carefully prepared.

When fed in conjunction with Diamond Egg Food a scant allowance scattered in the scratching material in the morning keeps the hens busy hunting for the grains. In the evening feed sufficient that hens may go to roost with crops full. Diamond Scratch Food can be fed to young chicks at three weeks and has every element necessary to hasten normal growth and build up bone and flesh. A rich, nourishing food they greatly relish. **Write for Prices.**

Meat Scraps

Perfectly prepared, fine ground and clean. **Write for Prices.**

Meat Meal

Should be mixed with the soft food. No hides or tankage in our meat meal, but, as its name implies, meat, cooked, dried and ground; unexcelled for egg-production. **Write for prices.**

Blood Meal

The most highly concentrated egg-producer on the market. To be fed in soft food. **Write for Prices.**

Bone Meal

Finely ground from hard white bones, and of a superior quality. **Write for Prices.**

Granulated Bone

Made from selected hard white raw bones, and of a superior quality; indispensable for laying hens. **Write for Prices.**

Fish Meal

A fine-ground, pure, sweet fish meal, containing protein—feed as you would meat meal; a rich, wholesome food. **Write for Prices.**

ALFALFA MEAL

Write for Prices.

ALFALFA LEAVES AND BLOSSOMS

Write for Prices.

LINSEED MEAL, OLD PROCESS

Write for Prices

COTTON SEED MEAL

Write for Prices

COCOANUT MEAL

Write for Prices

SOY BEAN MEAL

Write for Prices

Diamond Egg Food

A LAYING MASH

Makes hens lay when eggs are high, keeps poultry healthy. Unequaled for feeding young chicks. A complete ground food to be fed dry or wet. Starts hens laying and keeps them at it. Hastens moulting. Puts poultry in prime condition.

No Drugs—No Stimulants—but a rich, wholesome nourishing food for growing fowls and hens, encouraging rapid growth and increasing egg production. Can be fed dry or as a mash and is the most successful combination of egg producing elements. Feed Diamond Egg Food to the hens in your breeding pens and they will produce eggs of strong vitality that hatch into sturdy chicks. **Write for Prices.**

Powdered Buttermilk

The pure solid content of the liquid buttermilk, with only the water taken out and nothing else added. It contains all the food elements of the liquid buttermilk but the process of drying puts it in a convenient form that will keep indefinitely. **Write for Prices.**

Semi-Solid Buttermilk

This is creamery buttermilk condensed to a thick semi-solid paste. In this form it has the greatest possible feeding value. It will keep the flock up to its highest point of health and egg laying efficiency and practically free from worms. For baby chicks it should be the first food that goes into their system. Mortality will be reduced greatly by its use. **Write for booklet.**

5 gallons	\$3.00
10 gallon keg	5.25
½ barrel (30 gallons)	14.85
Barrel (52 gallons)	21.50

F. O. B. Portland

Diamond Crystal Grit

Two sizes, chick and hen size. We send hen size unless otherwise ordered. 100 lbs. \$1.00.

Diamond Oyster Shell

Clean stock, free from dust and waste. Crushed in two sizes, coarse and fine. 6 lbs 25c; 100 lbs. \$1.50.

CHARCOAL

Prepared especially for poultry; no dust; a good thing for bowel trouble, sour crop and indigestion. 50 lbs. \$2.00.

Poultry Minerals

Blatchford's, 100 lbs. \$5.50, F. O. B. Portland.

HAVE A "CONKEY CORNER" IN YOUR POULTRY HOUSE

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.

CONKEY'S POULTRY BOOK FREE if you call at our store, or mailed for 6 cents in stamps.

CONKEY'S ROUP REMEDY—

When Roup breaks out there's no time to experiment—start treatment at once—the disease is very contagious. Always at the first sign of "roupy weather" place Conkey's Roup Remedy in fountains—it's a great preventive. Pkgs. 30c, 60c, \$1.20; or 35c, 65c, \$1.30 postpaid; 1½ lb. can \$2.50 postpaid; breeder size (5 lb. can) \$5.75 postpaid.

CONKEY'S ROUP PILLS—

For treating individual cases and for use at shows when birds develop colds. These pills have saved many a valuable bird. Pkgs. 30c, 60c, \$1.20; or 35c, 65c, \$1.30 postpaid; breeder size (1000 pills) \$3.00; or \$3.10 postpaid.

CONKEY'S SOREHEAD REMEDY

For sorehead or chicken pox, pigeon pox, warts and pain. Attacks trouble from two angles—a powder for the blood and a salve for the sores.

Pkgs. 30c, 60c; or 35c, 65c postpaid; breeder size, \$3.50; \$3.65 postpaid.

CONKEY'S POULTRY WORM REMEDY

This prescription rids birds of many troublesome worms, thus promoting a return to healthy conditions. Pkgs. 30c, 60c; or 35c, 65c postpaid; breeder size, \$2.75; or \$2.85 postpaid.

CONKEY'S POULTRY LAXATIVE

Experts say, and we have found through experiments, that a poultry laxative given every week or two not only keeps the birds in better condition but also increases the egg yield very materially.

Pkg. 30c, 60c; or 35c, 65c postpaid; breeder size, \$2.75; or \$2.90 postpaid.

CONKEY'S FLY KNOCKER

For Cows and Horses
PRICES—Cans, qt. 70c; ½ gal. \$1.15; gal. \$1.75; 5 gal. \$8.00; 10 gal. \$15.50. F. O. B. Portland.

Conkey's NOX-I-CIDE DIP AND DISINFECTANT

Every poultry yard, farm, 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 spraying during the "weekly clean-up," as a preventive of disease and a help in keeping down red mites, ticks, blue bugs, etc. Very effective for washing incubators, brooders, fountains and other utensils. Widely used and highly recommended as a dip for hogs, sheep, cattle and other animals.

Try Conkey's Nox-I-cide for household uses—for assisting in driving out ants, destroying odors, routing out bedbugs and cockroaches, for making sinks, cess-pools, garbage containers, etc., sanitary and safe.

PRICES—Pint 50c; Quart 80c; ½ Gallon \$1.30; Gallon \$2.00; 5 Gallons \$9.50; 10 Gallons \$18.00; F. O. B. Portland.

CONKEY'S WHITE DIARRHEA

As a preventive of bowel troubles, White Diarrhea and other digestive complaints, it has given great satisfaction for many years. Also recommended as a preventive measure and in treatment of coccidiosis, a diarrhetic condition which attacks chicks similarly to White Diarrhea, but which differs in that a principal symptom is bloody droppings rather than white.

Pkgs. 30c, 60c, \$1.20; or 35c, 65c, \$1.30 postpaid. Breeder Size (1200 Tablets), \$4.00; or \$4.10 postpaid.

CONKEY'S CANKER & BRONCHITIS REMEDY—

Checks cankerous growths and sores and soon restores the bird to normal. Pkg. 60c; or 65c postpaid.

CONKEY'S 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.

Pkg. 30c, 60c, \$1.20; or 35c, 65c, \$1.30 postpaid; breeder size (5 lbs.) \$3.00; \$3.15 postpaid.

CONKEY'S 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 to get more out of their feed; they produce more eggs and better flesh on LESS FEED, through better digestion and assimilation.

Pkg. 1½ lbs., 30c; ¾ lbs., 60c; 7 lbs., \$1.20; or 40c, 75c, \$1.45 postpaid; pails, 12 lbs. \$2.00; 25 lbs., \$3.50; bags, 50 lbs., \$6.00; 100 lbs., \$11.00; F. O. B. Portland.

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.

Pkgs. 30c, 60c; or 35c, 65c postpaid.

CONKEY'S POULTRY CONDITIONER—

Highly concentrated fowl-regulator, blood-purifier and nerve food, to build up birds in a run-down condition or for fowls recovering from disease.

Pkgs. 30c, 60c; or 35c, 65c postpaid.

CONKEY'S BLACKHEAD REMEDY

Turkey breeders should have package on hand as Blackhead is deadly in advanced stages. Pkg. 60c; or 65c postpaid.

CONKEY'S SCALY LEG REMEDY—

This ointment applied to birds' legs in a few treatments will kill the parasites responsible for the trouble and heal up the leg with a healthy lustre. Pkg. 30c; or 35c postpaid.

CONKEY'S LIMBERNECK REMEDY

This remedy should be on hand at all times as Limberneck must be treated promptly. Pkg. 60c; or 65c postpaid.

CONKEY'S Y-O. YEAST WITH COD LIVER OIL—

Made to supply vitamins A, B and D which are essential to the life of poultry and live stock. The Conkey process seals the cod liver on the yeast so that the potency of the cod liver oil is preserved. Conkey's Y-O should be added to every feeding ration, whether for poultry or stock.

Pkgs. 1 lb., 65c; 2 lbs., \$1.15; 5 lbs., \$2.50; or 75c, \$1.25 and \$2.70 postpaid. The following larger sizes: F. O. B. Portland, 25 lb. drum, \$11.25; 50 lb. drum, \$20.00; 100 lbs., \$32.50.

CONKEY'S STOCK TONIC—

Pkgs. 30c, 60c, \$1.20; pails, 12 lbs. \$2.50; 25 lbs. \$4.25; bags, 50 lbs. \$6.25; 100 lbs. \$11.50. F. O. B. Portland.

CONKEY'S LICE POWDER (Contains Sodium Fluoride)

For dusting hens, nests, growing chicks—wherever body lice must be overcome.

Pkgs. 25c, 45c, 90c; pails, 12 lbs. \$3.00; 25 lbs. \$5.75. F. O. B. Portland.

CONKEY'S HEAD LICE OINTMENT

For overcoming and preventing the murderous head louse which "eats up" baby chicks.

Pkgs. 15c, 30c; or 20c, 35c postpaid.

CONKEY'S LICE FIX

A preparation in ointment form for fighting body lice. One application lasts a month.

Pkgs. 30c, 60c; or 35c, 65c postpaid.

CONKEY'S MITE LIQUID

For painting roosts, fittings, inside of house, nest boxes and wherever mites congregate. Cans, qt. 60c; 2 qt. 90c; gal. \$1.50; 5 gal. \$7.00. F. O. B. Portland.

Cholerine

Millions of Baby Chicks Die Annually. White Diarrhoea kills them. White Diarrhoea is a Germ disease. This disease is not only prevented but eradicated by Cholerine. 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 Chicks—We recommend it as a preventative and specific for white diarrhoea, coccidiosis (bloody diarrhoea), cholera, roup, limber neck and other germ diseases, intestinal troubles, indigestion and worms. Use it from the start as a preventative. It will pay big returns. They will brood better and have more "pep" and grow into more profitable birds.

For Laying or Breeding Fowls—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. It will aid fowls to obtain full nutriment of food consumed.

Prices F. O. B. Portland—Quart \$1.00; Gallon \$2.50; Five Gallon Can \$12.50; 30 Gallon Barrel \$50.00.

BARNES WORM EMULSION

Many so-called remedies are offered and some will cause live worms to be expelled, but the expelled worms are frequently eaten by poultry, and greater infection results than before because the worms themselves are a mass of eggs. But BARNES WORM EMULSION kills the worm, eggs and all, without harm to the chicken. Send for booklet giving full details.

16 oz. 60c; qt. \$1; gal. \$3; 5 gal. \$12.50; 30 gal. \$60.

"Gold Leaf" Tobacco Powder

As a result of extensive investigation carried on by the California Agricultural Experiment Station, it was found that finely powdered tobacco was a most effective remedy against round worms in poultry which could be used; one that is uniform in strength and texture, and contains not less than 1% and not more than 1.5% of actual nicotine. These requirements are provided in "Gold Leaf" Tobacco Powder.

Prices: 2 lb. pkgs. 30c each or \$3.00 per doz.; 10 lb. pkgs. \$1.00 each or \$5.50 per case of 6.

PULVULES (Filled Capsules)

NICOTINE AND LLOYD'S REAGENT

For the eradication of round worms in poultry. Also for eradication of worms in dogs, sheep and hogs. As suggested by the College of Agriculture of California. DOSE: For chickens, one capsule to the bird, place well down its throat, moisten with water. Per 100, \$1.00; per 1000 \$8.50; F. O. B. Portland.

LEE'S FOODS AND REMEDIES FOR STOCK AND POULTRY

THE GENUINE MERIT of the LEE FOODS and REMEDIES is their best guarantee, and you can depend upon them absolutely to do all that is claimed for them. The valuable booklets of the Lee Company are free to poultry keepers and stockmen, and contain reliable and complete information to date on poultry and stock feeding problems. We mail them on request.

Lee's Liquid Lice Killer

FOR 20 YEARS THE STANDARD

Destroys either by vapor or contact. No trouble to apply; just paint the roosts or wall at night. Rids poultry and houses of all vermin; is prepared exclusively for this purpose. Qt. 60c; ½ gal. 90c; gal. \$1.50; 5 gal. \$6.00.

Lee's Germozone

Regular use of Germozone insures BETTER health; BETTER chicks; BETTER layers; and the RIGHT kind of BREEDERS. Use it for Bowel Complaint in little chicks; for Cholera, Roup and other diseases among the older fowls; and regularly TWICE-A-WEEK for ALL fowls. It prevents contagion, tones the system, and insures BETTER health for the entire flock. Liquid, not prepaid, 4-oz. bottle 40c; 12-oz. 75c; 32-oz. \$1.50; gal. \$4.50; tablets, postpaid, pkg. 75c.

LEE'S EGG MAKER is not a tonic nor a medicine, but a meat food of great value. It will make hens lay, chicks grow, and keep them all in a healthy, vigorous condition. 2-lb. pkg. 30c; 5-lb. pkg. 60c; 25-lb. pail \$3.25.

LEE'S HEADLICE OINTMENT—For little chicks. Large box 15c.

LEE'S WHITE DIARRHOEA REMEDY—The best medicine for this dangerous disease of little chicks. Wt. 2 lbs., 12-oz. bottle 50c.

LEE'S HOG REMEDY—Cures all diseases of hogs and keeps them healthy. 7½-lb. pkg. \$1.50; mailing weight 9 lbs.; 25-lb. pail \$3.00.

LEE'S DIP—For lice, ticks, mange, itch or scab, on cattle, sheep and hogs. Qt. 75c; ½ gal. \$1.25; 5 gal. \$2.00. Mailing weights: Qt. 3 lbs.; ½ gal. 5 lbs.; gal. 10 lbs.

LEE'S WORM POWDER—For horses, cattle, sheep and hogs. Safe and sure in results. Pkg. 25c; wt. 1¼ lbs.

LEE'S LOUSE POWDER—1-lb. can, 30c.

LEE'S BEST CONDITIONER STOCK FOOD—Promotes good health, digestion and assimilation. 7-lb. pkg. \$1.50; 25-lb. pail \$4.50.

LEE'S PEERLESS GOPHER KILLER—For killing gophers, squirrels, etc. Sure death. Qt. can, wt. 3 lbs., 75c.

LEE'S PEERLESS BUG KILLER—Wt. pld. 2 lbs.; 12-oz. bottle 35c.

LEE'S SMOKE FLAVOR—Hickory Smoke Extract applied to meat preserves it indefinitely, imparting the delicious flavor that is only otherwise obtained by smoking with green hickory. 12-oz. bottle, wt. pkg., 2 lbs., 50c; 32-oz. bottle \$1.00.

LEE'S FLYO-CURO—We sell thousands of cans of this fly spray every season and it gives good satisfaction. Qt. 60c; ½ gal. 90c; gal. \$1.50; 5 gals. \$7.00; mailing weights, qt. 3 lbs.; ½ gal. 5 lbs.; 1 gal. 10 lbs.

LEE'S GARDEN INSECTICIDE—(Non-poisonous)—This is a new addition to the famous "Lee Line" of insecticides. We recommend "Lee's Insecticide" as one that is suited to the needs of the average gardener, one that is guaranteed to give satisfaction. 1-lb. sprinkler top can, 30c; 2-lb. sprinkler top can, 50c.

EGG-O-HATCH and EGG-O-LATUM

DON'T GET THE TWO NAMES MIXED

Egg-o-hatch is a dry powder. It is mixed with water and the resulting liquid is applied to eggs two or three times during the 21 days of incubation. It is a liquid that does three things—supplies oxygen for the growing chicks; absorbs carbon dioxide given off; makes more brittle and porous the shell of the egg. Price 50c, postpaid 55c. Will treat 600 eggs.

Egg-o-latium is a white cerate. Rubbed over the shell of the egg it seals every pore so no air, moisture, odors, or germs can get in. Preserves the egg in all its original freshness. The application of Egg-o-latium is easily and quickly done. A dozen a minute and they will keep a year. Fresh eggs must be used, unfertile ones are best. Price \$1.00; postpaid \$1.10.

MANN'S GREEN BONE CUTTERS THE ONLY ONES THAT WILL CUT GREEN BONES AND NOT CLOG

The Mann's Green Bone Cutter is offered on a warranty to produce a perfectly edible food, with no waste, from any lot of green bones, with less labor, and less annoyance than any other bone cutter. The Mann's has a self-governing feed, producing uniform pressure against the knife, whether the bone be hard or soft. You set the machine to suit your strength, and it never requires more power than you set it for.

No. 5—Has four knives, large solid cylinder, patent automatic governing spring feed which makes it one of the best low-priced bone cutters ever offered. We can furnish with crank, balance wheel, or mounted on iron stand.

No. 7—The New No. 7 is mounted on a strong iron stand, patent automatic governing spring feed. Large opening cylinder, instant access to all working parts, six knives, gear guard, anti-clog device, heavy balance wheel.

No. 7½—To run by hand or power without any change. The particular advantage of the 7½ is that while it is a complete power machine, it can be operated by hand just as easily as the No. 7.

No. 9—Intended for flocks of 100 to 300 hens. Similar to No. 7 but has larger cylinder, greater holding capacity, larger table, etc.

MANN'S No. 12—POWER—Capacity 120 to 150 pounds per hour. Horsepower required, one to two: power required, one to two.

No. 15—Similar to No. 12 but much larger and heavier, with more belt power. Cylinder is twice as deep; capacity 150 to 250 lbs. per hour. Takes almost any size bones.

Mann's Corn Sheller

Best low-priced corn sheller made. A profitable tool if you have corn to shell. Weight 10 lbs. Price \$3.75.

Mann's Cast Iron Mortar

For breaking glass, crockery ware or oyster shells. Weight 33 lbs.; height 12 inches; 9 inches square; pestle 4 feet long. Price \$4.00.

Styles	Price	Wgt.
No. 5G (with crank handle)....	\$15.00	30
No. 5B (with balance wheel) ..	18.50	55
No. 5BM (B.W. and iron stand) ..	24.00	80
No. 7 (B.W. and iron stand) ..	27.50	107
No. 7½ (hand or power).....	42.00	150
No. 9 (hand)	44.00	170
No. 12 (power machine)	70.00	260
No. 15 (power machine)	136.00	420

"NEW MODEL" CLOVER CUTTER FOR POULTRY

Cuts either green or dry, such growths as clover, alfalfa, vegetable tops, etc., into ¼ inch lengths.

Made only of iron and steel, a strong feeder, large capacity, runs unusually easy, will do perfect work indefinitely.

The Cutting Mechanism is the most vitally important part of a Clover Cutter. The "New Model" admits of perfect cutting at all times, because cutter bar is adjustable, easily accessible, and the four 7-inch spiral steel knives can readily be removed for sharpening. Length over all 28½ inches. Weight 70 pounds. Price \$18.00.

WILSON'S DRY BONE MILL No. 1

This is a practical mill, grinding all kinds of shell, crockery, grit, burnt dry bone, feed, etc., coarse or fine. Weight 33 lbs.

Price \$6.25

PRICES ON THIS PAGE F. O. B. PORTLAND WHEN NOT OTHERWISE STATED

SPROUTED GRAINS INCREASE THE EGG YIELD AND DECREASE THE FEED BILL

Illustration shows small base and large base, also each base with an extra section added

SMALL BASE—Holds $\frac{1}{4}$ bushel, 2 trays, 25 to 35 hens, size 18x14 in., 23 in. high, wt. 30 lbs. Price **\$9.00.**

SMALL SECTION—Holds $\frac{1}{4}$ bushel, 2 trays, wt. 18 lbs. Price for each extra section **\$3.50, F. O. B. Portland.**

All metal sectional Grain Sprouters

A bushel of oats sprouts into three bushels of nutritious green feed. Hens lay more eggs, young chicks grow faster and are more healthy on green feed. Oats, rye and wheat can be easily and quickly sprouted and make the most economical and profitable food for Winter.

Outside wall lined with asbestos—inside wall metal grain chamber, heat passing between the walls. One of the principal advantages of the Metal Sprouter is the very small floor space occupied. If an additional quantity of sprouted grain is needed, owing to an increase in the size of the flock, one or more additional sections may be added, greatly increasing the capacity without in the least enlarging the space occupied.

LARGE BASE—Holds 1 bushel, 2 trays, 100-150 hens, size 28x26 in., 26 in. high., wt. 60 lbs. Price **\$17.50.**

LARGE SECTION—Holds 1 bushel, 2 trays, wt., 30 lbs. Price for each extra section **\$7.50, F. O. B. Portland.**

WRITE FOR PRICES IF YOU WANT A LARGE SPROUTER FOR 400 TO 1200 HENS

C-A-WOOD-PRESERVER

(Carbolineum America)

STOP THAT ROT

"C-A-WOOD-PRESERVER" (Carbolineum America) is a pure unadulterated high boiling anthracene oil and only sold with an affidavit guaranteeing you superior quality. Don't confuse "C-A-WOOD-PRESERVER" with ordinary creosote oil, but buy your wood preservative according to quality—not price.

Among the largest users of "C-A-WOOD-PRESERVER" are the railroad companies, for treating railroad ties and bridge timbers; telephone and telegraph companies, for treating poles and cross arms. Used in treating timber of all kinds exposed to the weather.

POULTRY HOUSES AND STABLES can in a great measure be made proof against vermin for 5 years if thoroughly treated inside. This oil preserves wood by disinfection and in the same manner keeps down lice and mites. For this purpose it is worth 100 times its cost, and no poultry grower will ever be without it, once it is tried. It will in a great measure prevent all disease around any building where animals are kept if used every few years.

SHINGLE ROOFS can be given a nut brown color and be made to last 50 years if coated every five or ten years with this preserver. The shingles will not curl.

Prices: Qt. 75c; Gal. \$1.75; 5 Gal. \$7.50; F. O. B. Portland

Portland Seed Company, Portland, Oregon, Distributors for Northern California, Oregon, Washington and Idaho.

DISINFECTANT—DEODORANT—ANTISEPTIC—NOT A POISON

Powerful—By Government method test B-K has over ten times greater germ-killing strength than carbolic acid. Much stronger than coal tar disinfectants

Clean—B-K is colorless, leaves no stain on floors or walls.

Deodorant—B-K destroys foul odors—leaves no odor of itself.

Safe—B-K contains no poison, acid nor oil.

Cheap to use—B-K is so much stronger than other disinfectants that more water is used. It goes farther. Write for booklet.

SAFE—CLEAN—POWERFUL—SAVES TIME—SAVES LABOR

Prices, F. O. B. Portland: 1-gal. jug **\$3.00**; 5-gal. carboy **\$12.50.**

Conkey's NOX-I-CIDE DIP AND DISINFECTANT

A preventive of disease and a help in keeping down red mites, ticks, blue bugs, etc. Very effective for washing incubators, brooders, fountains and other utensils. Widely used and highly recommended as a dip.

Try Conkey's Nox-i-cide for household uses, driving out ants, bedbugs and cockroaches.

PRICES—Pint 50c; quart 80c; gallon **\$2.00**; 5 gallons **\$9.50**; 10 gallons **\$18.00**; F. O. B. Portland.

A cleaner especially prepared for creamery, cheese factory and dairy purposes, and is entirely different from what are commonly known as dairy cleaning agents. It is manufactured according to the latest scientific facts as applied to dairy cleaning, and for this reason it will accomplish many acts wholly impossible with the ordinary cleaners.

It contains no grease. It makes no suds. It has no soapy smell. It is pure and purifying. It cuts the butter fats and milk solids quickly and thoroughly, making everything sweet, clean and sanitary. 5 lbs. 50c; 80-lb. keg, **\$6.50** each, F. O. B. Portland.

Each cube makes a gallon of dip
5 lbs. (150 cubes) for
\$1.85

Postage Extra

This is a solidified soluble disinfectant for spraying hog and poultry houses, barns, etc., and for dipping. Handy, convenient to use, save freight charges. Just crush a cube in a gallon of water and you have a gallon of dip of exactly correct strength. Never loses strength, can be used in spray pumps. Send for booklet.

KOW - KARE

Makes Poor Cows Good—Good Cows Better, and Makes More Money for Cow Owners.

"The Home Cow Doctor"

A handbook for cow owners, describing diseases that effect a cow's productivity and telling how to prevent and cure them in a single cow or a whole herd. Free on request.

KOW KARE (originally **Kow Kure**) is different from anything ever discovered for cow troubles. It is the only cow medicine that is strictly for cows only. It is not a stock food, but a specific remedy especially for cow diseases, such as Barrenness, Scours, Milk Fever, Caked Udder, Bloating, Red Water, Swelling of Bag, etc. It prevents abortion and removes retained after-birth. It tones up the system, renews vitality, restores appetite to cows that are "off feed," and keeps them healthy. It increases the milk flow, and enables the cows to produce strong, vigorous calves. It is the dairyman's gold mine, and a sure profit-payer. Medium cans, Mail wt. 2 lbs., Price 65c.; Large cans, Mail wt. 4 lbs., \$1.25.

American Dairy Association Remedies

BAG BALM—A soothing, penetrating ointment for all affections of the bag. Wt. 8 oz. pkg. 60c. postage extra.

GRANGE GARGET CURE—An unsurpassed and positive cure. Wt. 2 lbs. can 65c. postage extra.

HORSE COMFORT—For wire cuts and flesh wounds. 30c bottles—wt. 1 lb.; 60c bottles—wt. 2 lbs., postage extra.

AMERICAN HORSE TONIC—A general improver for horses. 30c boxes—wt. 1 lb.; 65c boxes—wt. 2 lbs., postage extra.

SEMI-SOLID BUTTERMILK

This is creamery buttermilk condensed to a thick semi-solid paste. In this form it has the greatest possible feeding value. For hogs in building and fattening for the market. For poultry it will keep the flock up to its highest point of health and egg laying efficiency. Feeding poultry Semi-Solid Buttermilk will keep them practically free from worms. For baby chicks it should be the first food that goes into their system.

Mortality will be reduced greatly by its use. Write for booklet of instructions.

PRICES

5 gallons	\$3.00
10 gallon keg	5.25
½ barrel (30 gallons).....	14.85
Barrel (52 gallons).....	21.50

F. O. B. Portland

Blatchford's Calf Meal

The Complete Milk Equal is in reality a substitute for milk—and should not be considered as an ordinary "feed" or "meal." It contains all the elements of milk—"baby food" for calves, absolutely the only milk-substitute that contains in proper proportion the elements necessary for rapid and healthy growth, and the only calf meal that is thoroughly cooked and prepared for easy digestion.

In 100, 50 and 25-lb. bags. 100 lbs. makes 100 gallons of Complete Milk-Equal.

Calf Meal	\$2.00	\$3.15	\$6.25
Chick Mash	\$0.90	\$1.50	\$5.75

F. O. B. Portland Subject to Market Changes.

Conkey's Fly Knocker FOR COWS AND HORSES

Dairymen, horsemen, cattlemen and sheep raisers declare this to be the best investment they make—an animal free from insects do better in milk and butter fat production, while growing stock unquestionably fattens faster when relieved from disease-spreading insects.

Conkey's is not a "cheap" product when the price is compared with inferior imitations, but many declare it to be very economical because of its superior lasting qualities.

PRICES—Cans, qt. 70c; ½ gal. \$1.15; gal. \$1.75; 5 gal. \$8.00; 10 gal. \$15.50; F. O. B. Portland.

LESLIE SALT

The prepared bricks on account of shape, size and hardness are found to be the most economical method of salting stock. They come in 5 and 10 lb. cubes but can be cut with a carpenter's saw into smaller pieces. The half ground salt comes in 50 and 100 lb. bags and is found valuable for certain domestic uses.

Prices: F. O. B. Portland, if mailed, postage extra.

Half Ground, 100 lbs.....	90c
Half Ground, 50 lbs.....	50c
Comp. Bricks, 10 lbs.....	20c
Comp. Bricks, 5 lbs.....	15c

Blatchford's Cattle Minerals

For toning up the system, keeping cattle and stock in excellent condition. Write for descriptive folder. 100 lbs. \$5.65 f.o.b. Portland.

BLATCHFORD'S POULTRY MINERALS

100 lbs. \$5.50 f.o.b. Portland

MARKERS FOR CATTLE, SHEEP AND HOGS

Metal Ear Labels and Ideal Ear Buttons are satisfactory and easily applied marks of identification that are indispensable to breeders and stockmen. Your name and address on one side, number on the other.

METAL EAR LABELS

Not more than ten large letters can be used on the hog and sheep size; 15 large letters on cattle size or 22 small ones.

Prices—Two sizes.	Hog	Cattle
100 with name and number.....	\$1.75	\$2.25
50 with name and number.....	1.25	1.50
25 with name and number.....	.85	.90
100 with name only, or No. only.....	1.25	1.75
50 with name only, or No. only.....	1.00	1.25
25 with name only, or No. only.....	.75	.85
Weight for mailing, Cattle size, 2½ lbs. per 100; Sheep size, 1 lb. per 100. If mailed, postage extra.		

IDEAL EAR PUNCHES—Cattle size: \$1.75; Sheep and Hog size, \$1.40. Postage 10c each.

IDEAL EAR BUTTONS

Pure Aluminum Hardened

Medium sized, suits all animals, clinches tight, cannot come out; double strength. Name and address on top side; number or bottom, or number and name can both appear on one side if not more than 18 letters and figures; if more than 18 both sides can be used to the limit of 30 letters and figures. Easily attached with special punch and pliers.

25—Weight 3 oz.....	\$1.35
50—Weight ¼ lb.....	2.00
100—Weight ¾ lb.....	3.75
500—Weight 4 lbs.....	15.50
1000—Weight 6 lbs.....	30.00

If mailed, postage extra.

Punch and Pliers—Each \$1.50. Postage 10c.

Metal Band Ear Marker and Aluminum Ear Button

Punch for Ear Buttons

Champion Cream Separators BALL BEARING

*Built
for
Service*

THE CHAMPION CREAM SEPARATOR has many patented features not found in other separators, among them being the **Champion Perforated Distributing and Equalizing Sleeve**, which is the most valuable improvement ever placed in Cream Separators, and which, when combined with a disk skimming bowl, puts the Champion far in the lead.

THE CHAMPION "PATENTED" CENTRIFUGAL CREAM SEPARATOR represents a revolution in invention and improvements, which produces results that fill ambitions and requirements never before accomplished in separating cream from milk, with cream of any density and richness. This invention represents equal uniformity in the feeding of the whole milk from the supply to the disks or the thin spaces between the disks to the extent that each and every disk in the bowl does its equal and full proportion of skimming. The disks' uniformity for skimming is so complete that we guarantee the tests taken from the composite of skimmed milk practically equally clean to any test taken during the run; and at the same time will skim clean, with any reasonable range of temperatures, as all other separators feed the whole milk from the supply into the separator disks in a direct body flow, and, therefore, flood part of the disks and clog the balance.

CHAMPION BALL BEARING FEATURES. The vertical shaft in the larger sizes runs on ball bearings at the foot, and also intermediate ball bearings which insure quiet running and absence of vibration. These ball bearings lessen the labor of running a great deal over other types and increase the life of the separator.

CHAMPION PATENTED STEEL CLUTCH. Provides for instantly starting the separator with very little effort. It is positive in action, in every respect unbreakable and operates without a particle of noise. Simple, durable and impossible to miss a catch. It instantly stops the large driving and pinion gears when the crank is stopped, making the separator absolutely safe among children.

CHAMPION PATENTED RADIAL CUSHION SPRING. This cushion spring around the upper neck of the upright spiral shaft assures quiet running and unusual durability.

CHAMPION PATENTED AUTOMATIC OILING SYSTEM. Requires the minimum of attention and guarantees to lubricate the working parts of the separator very much better than other methods. Simply oil one place and every working part and all bearings are lubricated. Do this once a week.

CHAMPION SPEED INDICATOR. Aids the operator without special attention, to keep the speed regular, which is quite essential for close separation.

GEARS AND AUTOMATIC CLUTCH, all in one unit, is in an oil-tight, dust-proof gear case.

THE CHAMPION CREAM SEPARATOR is made by manufacturers who have for 60 years been making machinery for special high speed purposes and who have developed the highest grade bearing metals and materials for high speed. The Champion Separator was invented and created by some of the most scientific and ablest Cream Separator Engineers of the world and is guaranteed, when properly set up and run the number of revolutions shown on the crank, to skim milk at a wider range of temperatures, as clean or cleaner than any other separator manufactured. It has been on the market for several years and is widely known in most sections of the country. In introducing it to our trade we guarantee that each size separator will skim to its full rated capacity and will produce a fine smooth quality cream of any density required.

ALL PARTS coming in contact with milk are triple tin plated. Parts are easily and quickly removed and cleaned. Finished in a beautiful baked enamel, of rich blue color, with gold lettering and striping, giving it a very handsome appearance.

PRICES on Separators F. O. B. Portland. TERMS—Send references, state amount you can pay down and payments you can make and we will advise you immediately if acceptable. Note discount for cash at bottom of page.

PRICES—Subject to factory changes.

No.	Capacity	For	Type	Bearings	Height Over All	Ship. Weight	Price F.O.B. Portland
1½	150 lbs. per hr.	(1 to 3 cows)	Bench	Plain	20 in.	55 lbs.	\$30.00
3	300 lbs. per hr.	(1 to 5 cows)	Bench	Plain	21 in.	60 lbs.	40.00
3S	300 lbs. per hr.	(1 to 5 cows)	Floor	Plain	44 in.	95 lbs.	50.00
25	250 lbs. per hr.	(1 to 3 cows)	Bench	Ball Bearings	24 in.	90 lbs.	50.00
30	300 lbs. per hr.	(1 to 5 cows)	Floor	Ball Bearings	45 in.	165 lbs.	80.00
50	500 lbs. per hr.	(1 to 8 cows)	Floor	Ball Bearings	46 in.	215 lbs.	90.00
70	700 lbs. per hr.	(1 to 14 cows)	Floor	Ball Bearings	47½ in.	215 lbs.	95.00
90	900 lbs. per hr.	(1 to 20 cows)	Floor	Ball Bearings	47½ in.	220 lbs.	100.00

Prices on Separators Are Less 10% for Cash With Order

BEE SUPPLIES

Our Western hives, either Pine or Cedar, are standard sizes and well made of selected material dovetailed. When ordering note the different figures. Fig. 1 means complete with sections and foundation for starter. Fig. 2 means without sections and foundation starter. Story and a half hives are preferred by many, consisting of brood chamber, brood frames, excelsior cover, bottom board, super for sections, with section holders and separators. Single story hives are equipped with brood frames, covers and bottom boards. Supers used for sections or extracting with half Hoffman frames or hive bodies with full depth frames require no extra cover or bottom boards. In complete or Fig. 1 hives, we send one sheet of foundation as starter for brood frames and one sheet of super foundation for starter in sections. If full sheets are wanted, these must be ordered by the pound. Hives and supers are packed and shipped in crates of 5 K. D. and no less than 5 will be shipped K. D. except at nailed price, the added cost being for breaking crates and repacking.

NOTE—Original crates of five hives are too large for Parcel Post. Nailed hives and supers are sold at increased price to cover cost of nailing and these take a higher freight rate than crates K. D. All supers for sections take the regular size $4\frac{1}{4} \times 4\frac{1}{4} \times 1\frac{1}{8}$ sections.

PORTLAND SEED COMPANY'S DOVETAILED PINE HIVES

	Each Nailed	Five K. D.	Wt. of 5
8 Frame—Fig. 1, One and a half story.....	\$4.15	\$17.00	140
8 Frame—Fig. 1, Single story, no Super.....	2.70	11.00	103
8 Frame—Fig. 2, with Super, no Section or Starter.....	3.50	13.75	135
8 Frame—Fig. 2, Single story, no Super.....	2.60	10.50	100
8 Frame—Hive Body, empty.....	1.00	4.25	35
10 Frame—Fig. 1, One and a half story.....	4.45	18.50	178
10 Frame—Fig. 1, Single story, no Super.....	2.85	11.75	123
10 Frame—Fig. 2, with Super, no Sections.....	3.75	15.00	163
10 Frame—Fig. 2, Single story, no Super.....	2.75	11.25	127
8 Frame—Hive Body and brood frames.....	1.40	6.00	
8 Frame—Covers.....	.70	2.75	
8 Frame—Bottom Boards.....	.50	2.00	
10 Frame—Covers.....	.75	3.25	
10 Frame—Bottom Boards.....	.60	2.50	
10 Frame—Hive Body, empty.....	1.05	4.25	
10 Frame—Hive Body and Brood Frames.....	1.50	6.25	

We can also supply the same equipment as above, in CEDAR HIVES.

DOVETAILED SUPERS

This is one of the best supers sold for the use of $4\frac{1}{4} \times 4\frac{1}{4} \times 1\frac{1}{8}$ sections having beeways. We use wood separators (or slat separators), beeway sections, and section holders having bottom bars scored out to correspond with the beeways in the section.

	Each Nailed	5 K. D.	Wt. 5 Lbs.
Pine or Cedar			
Fig. 1 8 fr. Complete.....	\$1.35	\$5.75	40
Fig. 2 8 fr. Less Sec. and Fdn.....	1.05	4.50	35
Fig. 0 8 fr. Empty.....	.55	2.25	22
Fig. 1 10 fr. Complete.....	1.75	7.75	45
Fig. 2 10 fr. Less Sec. and Fdn.....	1.20	5.00	38
Fig. 0 10 fr. Empty.....	.90	3.75	25
8 fr. Extracting.....	1.10	4.50	40
10 fr. Extracting.....	1.30	5.25	45

Extracting supers are deeper and take the Half-Hoffman shallow extracting frames.

HOFFMAN BROOD FRAMES

The Hoffman Improved Foundation Fastening Frames are the most satisfactory. Top bar has a beveled strip which holds foundation in place, perfectly straight and exactly in center of top bar. Wt. per 10, $2\frac{1}{2}$ lbs.

	10	100
Improved F. F. Western.....	\$0.75	\$6.00
Half Hoffman Western.....	.75	5.90

The Half Hoffman Frame is used in the Ideal super or shallow extracting super.

SECTION HOLDERS

Six section holders with separators, one follower and springs are put in each super, and each section holder holds four one-pound honey boxes. The bottom strip is $\frac{1}{4}$ -inch thick and is cut out to fit insets of sections. Western, $1\frac{1}{8} \times 18\frac{1}{2}$ inches, slotted. Wt. 20 lbs. per 100. Ea. 5c; per 100 \$4.50. Blocks— $1\frac{1}{8}$ Western: Per 100, \$1.25. Bottoms only— $1\frac{1}{8}$ inches wide, slotted. Western. Wt. 11 lbs. per 100. Each 3c; per 100 \$2.50.

SEPARATORS—Should be placed between each two section holders so bees will build honey comb even in each section. Wt. 8 lbs. per 100. Western (Veneer)—Per 100 90c.

DIVISION BOARDS—Wt. 5 oz. Each 20c—10, \$1.50.

FOLLOWERS—Each 6c—10, 50c.

TIGHTENING SPRINGS—12 for 15c—100, 90c.

VAN DEUSEN HIVE CLAMPS—For fastening bottom board to hives. Without screws, per pair 10c; 10 pairs 90c.

No. 30 TINNED WIRE

$\frac{3}{4}$ -oz. spools, each.....	10c
$\frac{1}{4}$ -lb. spools, each.....	25c
$\frac{1}{2}$ -lb. spools, each.....	40c
1-lb. spools, each.....	60c
5-lb. coils, each.....	\$2.50

T-TINS AND RABBETS

	Per 10	Per 100
T. Rabbits, 12-in.....	20c	\$1.90
14-in.....	25c	2.40
T. Tins, 13-in.....	25c	2.35
15-in.....	25c	2.45
Flat Tins, 13-in.....	20c	1.40
15-in.....	20c	1.45

HONEY SHIPPING CASES

With glass front, designed for marketing honey. For the best market price put your honey up in nice cases. 24-lb., $4\frac{1}{4} \times 1\frac{1}{8}$ Section, Nailed, each 55c; 24-lb. for $3\frac{3}{4} \times 5$ Sections—Ideal, Nailed, each 30c.

QUEEN BEES

We are in a position to furnish untested Italian queens after the middle of April, weather conditions being favorable. It takes about seven days to get these in from the apiary, so do not expect queens by return mail. Untested Queen, May, June, July, August, Sept. Price \$2.00. Tested Queens cannot be furnished before May. Price each, \$2.50.

Section Honey Boxes

Our No. 1 Sections are made of choicest white basswood, perfect in finish and free from defects. They vary from snow-white to a light cream color. $4\frac{1}{4} \times 4\frac{1}{4} \times 1\frac{1}{8}$ sent unless otherwise ordered.

P. S. Co's No. 1, 100 \$1.70, 500 \$7.25.
P. S. Co's No. 2, 100 \$1.50, 500 \$6.25.

No. 1 or 11 No. 7 or 8 ZINC HONEY BOARDS

Nos. 1 and 11 are of unbound zinc, and are placed directly on top of frames. This allows bees to pass through holes directly over spaces between the frames. When placed on the dovetailed or other similar hives there is a bee space above and below the zinc.

No. 11—8-frame, unbound, $12 \times 19\frac{1}{2}$ in.....\$0.45
No. 1—10-frame, unbound, $14 \times 19\frac{1}{2}$ in..... .50
No. 8—8-frame, wood, wire, $13\frac{1}{8} \times 20$ in. .90
No. 7—10-frame, wood, wire, 16×20 in. 1.00
8-frame, 7-wire.....Each 1.10
10-frame, 7-wire.....Each 1.10

DRONE AND QUEEN TRAP

This is placed before entrance of hive, to catch and cage the drones in an apartment by themselves. They can then be carried to another apiary, or be destroyed. The trap will also catch the queen when a swarm issues, and hold her confined until the apiarist can give her his attention. As she cannot get away, the bees will, in all likelihood, return into the hive. An excellent non-swarming device. Directions for use included. Wt. 1 lb. Each, 8-frame, \$1.00—10-frame \$1.10.

BEE ENTRANCE GUARDS—ROOT'S OR TINKER'S—These are to admit workers, and to exclude drones. After the drones are out, fix the guards over the entrance; at night the drones can be destroyed. Price. Zinc Front, 30c.

IMPROVED WIRE FRONT ENTRANCE GUARDS—Wt. 6 oz. 8-fr., 35c; 10-fr., 40c.

PORTER BEE ESCAPE—For use when taking off the honey. Does away with shaking the supers and smoking the bees. Saves stings. Price, as per illustration, postpaid.....25c
Price, mounted on board (weight $2\frac{1}{4}$ lbs.), not postpaid.....70c

Full Sheet, Triangular and Quarter Sheet
Method of Using Foundation

COMB FOUNDATION

It pays to use foundation in full sheets in brood frames and sections, especially the latter. You should at least use a strip for a starter from one inch up. Our foundation is made by the "Weed process," and is a very superior article. Packed in 1, 2, 3, and 5-lb. cardboard boxes in a case. State grade you want.

GRADE	Size	No per	In Lots of
	of Sheets	lb.	1 lb. 10 lbs.
Medium Brood	7 3/4 x 16 3/4	7	\$0.80 \$7.50
Extra Light Brood	7 3/4 x 16 3/4	9	.85 8.00
Light Section	3 7/8 x 15 1/2	28	.90 8.50
Extra Light Section	3 7/8 x 15 1/2	39	.95 9.00

SPUR WIRE IMBEDDER—This is like a tracing wheel, with the teeth set to firmly imbed the wire and not injure the comb. By mail, 50c, postpaid.
ELECTRIC WIRE IMBEDDER—A practical device that imbeds the wire by heating it electrically, the wire melting its way into the center of the wax foundation, only requires two common dry cells. Price, without batteries, \$1.50.

PARKER

PARKER'S FOUNDATION FASTENER—Wt. 1 lb. Price 50c.

ROOT'S FOUNDATION FASTENER—Complete with lamp, weight 8 oz. Price 75c; without lamp, 35c.
DAISY FOUNDATION FASTENER—One of the best for putting starters into sections. Easily operated. With lamp, Wt. 6 1/2 lbs., \$3.40. Owing to danger of breakage, no chimney is sent with lamp.

VAN DEUSEN WAX TUBE FASTENER—For fastening foundation sheets to thin top-bars. It is a tube half an inch in diameter, six inches long and tapering. This is filled with hot wax, and point slowly drawn along edge of foundation in contact with top-bar, leaving a fine stream of hot wax to cement in. Price 45c each; by mail, 50c.

BEE FEEDERS

ALEXANDER

ALEXANDER FEEDER—Bottom board slides forward, feeder is placed at back and under hive. Bees go into feeder from brood chamber. Wt. 1 1/4 lbs. Price 75c.

BOARDMAN'S FEEDER—Wt. 1/2 lb. Price, without jar, 35c.

DIVISION BOARD FEEDER—Made to hang in brood chamber to one side or between the frame. Weight 1 3/4 lbs. Price 55c.

BOARDMAN

ROOT NICKEL STEEL HIVE TOOL—Spring steel; will stand any strain as a pry or scraper; the best tool made. Wt. 4 oz. Price each, 65c.

BENTON QUEEN CAGE

The best cage for mailing and is adapted likewise for introducing. Directions for introducing are printed on the cover. Price, no candy, 5c each, 100 \$4.50.

ROOT'S QUEEN REARING OUTFIT

A complete set of tools and materials with instructions, enabling one with little experience to rear his own queens at small expense. Price \$6.50.

WEST QUEEN-CELL PROTECTOR—Each, by mail, 15c.

SPIRAL CAGES—For holding queen after she hatches. Each 15c, by mail.

DOOLITTLE CELL PROTECTORS—Each, by mail, 10c.

EXTRACTOR

P. S. CO'S TWO-FRAME EXTRACTOR—Now takes the lead over all others in use, as it is easily reversed. Always the best machine when rapid work is required. Price \$45.00.

MANUM'S SWARMING DEVICE—To have a swarm, place the open basket under a cluster of bees, so that when they are shaken from their position they will fall into basket. Close lid, and as most of the bees will be inside, they can be carried and emptied into hive. Light and conveniently carried. Price, wire basket, without pole, ball only, \$2.50. Weight 3 1/2 lbs.

BEE HEALTH

Found at last, a treatment for American and European FOUL BROOD B-H. A clear, clean liquid, a preventative. If interested, send for Bulletin 638-B, this gives all details and information. Price, gallon, each \$3.00.

BOOKS ON BEES

A. B. C. AND X. Y. Z. OF BEE CULTURE. A. I. and E. R. Root. The new and revised edition of this work is the most complete and best book ever issued and is equally valuable to the advanced beekeeper as well as the beginner. Mailing weight 4 pounds. Price \$3.15.

EXTRACTED HONEY, HOW TO PRODUCE. Root. 40 pages. 20c.

FEEDS AND FEEDING. Root. 10c.

FIRST LESSONS IN BEEKEEPING. Dadant. 150 pages. \$1.10.

HABITS OF THE HONEY BEE, THE. 10c.

WINTERING BEES. Root. 10c.

MONTHLY BEE PAPERS

AMERICAN BEE JOURNAL. Illinois. Per year \$1.50.

GLEANINGS IN BEE CULTURE. Ohio. Per year \$1.00.

WESTERN HONEY BEE. California. Per year \$1.00.

ROOT STEAM HEATED UNCAPPING KNIFE

For a large amount of uncapping, this knife is the best tool ever devised. Handle is one piece, fastened securely to blade. Will slice off cappings much more rapidly than a cold knife or one that has to be dipped in hot water. Knife is kept constantly hot, cappings slide off from it without sticking. The copper boiler used with this knife is equipped with a fool-proof safety-valve. It is adjustable, and opening is also used as a filler hole. This boiler, in connection with a suitable oil or gasoline stove, completes outfit. Three feet of rubber steam hose furnished with knife. Steam-heated 10-inch knife, 3-ft. tubing. Wt. 2 lbs. Price \$5.50.

Steam boiler with safety valve for use with above. Wt. 3 lbs. Price \$3.00.

BEE SMOKERS

Root's Improved Cornell—Burns anything, preferably greasy rags for their dense smoke.

Small, 3x5 1/2 in., wt. 2 lbs. each \$1.10

Medium, 3 3/4 x 7 in., wt. 2 1/2 lbs., each 1.60

Large, 4x7 in., wt. 2 lbs., ea. 2.00

CLARK'S COLD BLAST SMOKER

Probably the most popular smoker in use today is the cold blast, although many are now changing to the hot blast, claiming that they are more effective. The Clark is the best low priced smoker. Weight 1 1/4 lbs. Price \$1.10.

HAT BEE VEILS—Rubber band around top, to fit hat snugly. (Postpaid)

No. 1—Silk tulle.....\$1.69

No. 2—Cotton tulle, with silk tulle face 1.40

No. 3—Cotton tulle.. 1.20

GLOBE BEE VEIL—No trouble to put on or take off. Protection against mosquitoes, flies, bees, gnats, etc. Weighs only 5 oz. \$1.65.

ALEXANDER—Fine Bronze Wire Cloth. Stands clear of face; muslin top and bottom. Wt. 1 lb. Price \$1.50.

BEEKEEPERS' GLOVES

CANVAS—Long Sleeve, Oiled, Ladies' or Misses'. Price \$1.25; postpaid \$1.35.

BINGHAM HONEY KNIFE—Price \$1.80; by mail \$1.85.

COGGSHALL'S BEE BRUSH—For brushing bees off combs when extracting. Price 30c; by mail 35c.

HANDY BEE BRUSH—Horse hair. One of the best, most lasting brushes. Price 45c; by mail 50c.

Unless Otherwise Stated, All Prices
On This Page Are F.O.B. Portland

BIRD SEEDS, FOODS AND REMEDIES

ROLLER SPECIAL SEED MIXTURE, the very finest, put up especially for singers. 1 lb. Sealed pkg. 35c Postpaid; 5 pkgs. \$1.25 Postpaid.

PORTLAND SEED CO. DIAMOND MIXTURE, next to our roller special, the best put up. 1 lb. Pkg. 25c Postpaid; 10 lbs. \$1.35 Postpaid.

Canary Seed, re-cleaned.
Postpaid, lb. **20c**, 10 lbs. **\$1.75**

Hemp Seed, re-cleaned.
Postpaid, lb. **20c**, 10 lbs. **\$1.10**

Rape, Sweet Summer
Postpaid, lb. **20c**, 10 lbs. **\$1.45**

Millet, Ppd., lb. **20c**, 10 lbs. **\$1.45**

Bird Manna.....Postpaid, Pkg. **25c**

Bird Paste.....Postpaid, Pkg. **25c**

Bird Gravel.....Postpaid, Pkg. **25c**

Birdolene.....Postpaid, Pkg. **20c**

Haller's Canary Pie, Postpaid.....**20c**

Kaempfer's Canary High Ball,
Postpaid, 2 for.....**30c**

Cuttlebone, Postpaid, **10c**, doz. **75c**

Bird Bitters, Postpaid, each.....**30c**

Spratt's Song Restorer, Ppd.....**30c**

Spratt's Nestling Food, Postpaid **30c**

Red-Mite Liquid, Postpaid.....**30c**

Coloring Food, Postpaid, Pkg.....**30c**

Bird Lice Destroyer and Gun
Postpaid.....**30c**

Bird Nests, Postpaid, each.....**20c**

Nesting Hair, Postpaid, Pkg.....**25c**

PARROT FOODS

Portland Seed Co. Diamond Parrot Mixture, the best formula known. 1 lb. **25c**; 2 lbs. **45c**; postage extra.

Parrot Sunflower Seed, specially selected, heavy meat and sweet. 1 lb. **20c**; 5 lbs. **75c**; postage extra.

Song Birds

ST. ANDREASBERG ROLLERS

The finest singers among the canaries, having only the soft, clear, musical notes that have made them the leading favorites both in Europe and the United States. We secure these songsters only from the best imported European strains.

Prices: Good Young Singer, **\$10**; Selected Singer, **\$15**; Trainer, **\$25**; Females, **\$5**.

GOOD AMERICAN CANARIES

Excellent singers of the popular American type, in all colors from bright yellow to green tones.

Prices: Male Singer, **\$5**; Females, **\$1.50 to \$2.50**.

Birds Are Shipped Only by Express.

"HENDRYX" BRASS CAGES and STANDS

With brass wire guard, polished base. Complete as shown.

No.	Dia. Ins.	Hgt. Ins.	Price
1274	10 1/4	13 1/4	\$4.75
1275	11	13 3/4	5.75
1276	11 1/2	15 1/4	6.75

With extra top rail, brass wire guard and foot piece.

No.	Dia. Ins.	Hgt. Ins.	Price
274	10 1/4	15 1/4	\$5.00
275	11	15 3/4	6.00
276	11 1/2	17 1/4	7.00

With brass wire guard. Handsome dull brass finish, very attractive.

No.	Dia. Ins.	Hgt. Ins.	Price
525	10 1/4	13	\$6.60
530	11	14	7.00
535	11 1/2	14 1/4	8.25

All Prices on Cages and Stands Are F. O. B. Portland

Hendryx Enameled Cages

Ivory enameled, with fine green striping. With wire guard attached. Height 14 in.

No.	Dia. Ins.	Price
6	10 1/4	\$4.75
6 1/2	10 3/4	\$5.25
7	12	\$6.50

IVORY FINISH CAGES "HENDRYX"

Ivory finish ja panned cages, in all sizes. Very attractive, yet inexpensive.

No.	Length	Width	Hgt.	Without Guard	With Guard
165	9 3/4	6 1/4	12 1/2	\$2.75	\$3.65
166	10 1/4	6 3/4	13 1/2	2.85	4.50
167	11	7 1/2	14	3.25	4.90
168	12 1/4	8	14 1/2	3.50	5.50
169	12 3/4	8 3/4	15 1/4	3.75	6.00

CAGE STAND

An exceptionally attractive brass stand, polished brass tubing upright and solid arch. Weighted base. Hgt. 5 1/2 ft.

No. 18A—Stand without cage.

Price **\$5.50**

OVAL RING STAND

With brass tubing upright and solid arch. Polished brass. Base weighted. Height 5 ft. 6 in.

No. 19A—Stand without cage.

Price **\$7.25**

(Any cage may be used with these stands. Simply add price of cage you select to price of stand.)

SWINGING CAGE HOOK
Brass plated, 12 in. long. Each **25c**.

CAGE SPRINGS

No. 160—Single, brass plated, postpaid, each **15c**.

Double, brass plated, postpaid, ea. **25c**.

BATH DISHES

Opal or plain—**25c** and **30c** each. Postpaid, **30c** and **35c**.

CAGE SUPPLIES

Covered Cups

No. 1907 — Opal glass. Each **15c**.

No. 1904 — Flint glass. Each **15c**.

Cuttle Bone Holder

Postpaid **10c**

Food Holder

Postpaid **10c**

Pointer

English Setter.

English Bull Dog

Bull Terrier

Irish Setter

Scotch Collie.

Pekinese Spaniel

Cocker Spaniel

Pomeranian

Airedale Terrier

Spratt's Dog Foods and Remedies

We are selling agents for these famous preparations which have the endorsement of the big breeders and fanciers—and are the standard in their line. We can only list a few items in this catalog, but will mail free to dog owners "Spratt's Dog Culture," which gives reliable and interesting information on care of dogs and about "Spratt's" preparations.

SPRATT'S OVALS—Pocket biscuit. 10 lbs. **\$1.65**; 25 lbs. **\$3.55**; 50 lbs. **\$7.25**; 100 lbs. **\$14.00**; F. O. B. Portland.

SPRATT'S DOG CAKES—10-lb. bags, **\$1.60**; 25-lb. bags, **\$3.25**; 50 lbs. **\$6.50**; 100 lbs. **\$12.50**; F. O. B. Portland.

SPRATT'S PUPPY CAKES—10-lb. bags, **\$1.60**; 25-lb. bags, **\$3.50**; 50 lbs. **\$6.75**; 100 lbs. **\$13.00**; F. O. B. Portland.

SPRATT'S FIBO—10-lb. bags, **\$1.75**; 25-lb. bags, **\$3.75**; 50 lbs. **\$7.50**; 100 lbs. **\$15.00**; F. O. B. Portland.

SPRATT'S DOG SOAP, **30c**, postpaid.

SPRATT'S PUPPY WORM CAPSULES, **60c**, postpaid.

SPRATT'S DOG WORM CAPSULES, **60c**, postpaid.

SPRATT'S DIARRHOEA TABLETS, **60c**, postpaid.

SPRATT'S DISTEMPER TABLETS, **\$1.00**, postpaid.

SPRATT'S DISTEMPER TABLETS—For Toy dogs and puppies, **\$1.00**, postpaid.

SPRATT'S EAR CANKER OINTMENT, **75c**, postpaid.

SPRATT'S EYE LOTION TABLETS, **60c**, postpaid.

SPRATT'S FLEA POWDER, **40c**, postpaid.

SPRATT'S MANGE MEDICINE, **60c**, postpaid.

Delcreo Dog Remedy

The one recommended remedy for distemper, black tongue, pneumonia, colds, etc. Every breeder should keep it on hand. 4 oz. bottle **\$1.50**; 16 oz. bottle **\$5.00**; F. O. B. Portland.

Canned Dog Foods

These foods are used and recommended by the leading Veterinarians, also used by fanciers and breeders. A perfectly balanced ration ready to serve. Prices F. O. B. Portland—Add Postage for Parcel Post.

KEN-L-RATION, 1 lb. Cans, Each **20c**; Doz. **\$2.00**; 7 lb. Cans, Each **\$1.00**; 6 Cans **\$5.75**.

PUPP-E-RATION, 1 lb. Cans, Each **20c**; Doz. **\$2.25**; 2½ lb. Cans, Each **50c**; Doz. **\$5.50**.

HEMO-RATION, 1 lb. Cans, Each **20c**; Doz. **\$2.25**.

MARO-MEAT, 2½ lb. Cans, Each **60c**.

FOX BISCUIT

Especially prepared for silver foxes, for maintaining perfect condition and health, increasing the growth of coat and improving its lustre and quality. Better than dog biscuit for foxes, and also very good for dogs. Try them. Per lb. **20c**; 100 lbs. **\$12.00**; F. O. B. Portland.

Clayton's Dog Remedies

Send for Clayton's free book full of valuable information to dog owners, describing full line of Clayton's Remedies.

For Parcel Post Add Postage to Prices Below

CLAYTON'S MANGE REMEDY **60c**

CLAYTON'S LAXATIVE PILLS **60c**

CLAYTON'S WORM PILLS **60c**

CLAYTON'S COUGH REMEDY **60c**

CLAYTON'S PUPPY TONIC **60c**

CLAYTON'S KILFLEA SOAP **35c**

CLAYTON'S KILFLEA POWDER **35c**

CLAYTON'S CEOLINE SOAP **25c**

Glover's Dog Remedies

GLOVER'S VERMIFUGE, **65c**, postage extra.

GLOVER'S MANGE CURE, **65c**, postage extra.

GLOVER'S DISTEMPER REMEDY, **\$1.25**, postage extra.

California Brand Dog Foods

Made in a new factory, under conditions as sanitary as are maintained in the manufacture of the food you eat. Not medicine, but foods that make medicines seldom necessary. Prices F. O. B. Portland.

CALIFORNIA MEAT BONE BISCUITS, for grown dogs.

10-lb. bags, **\$1.50**; 20 lbs. **\$2.65**; 50 lbs. **\$6.50**; 100 lbs. **\$12.50**.

CALIFORNIA NUT BONE BISCUITS, for puppies and small dogs.

10-lb. bags, **\$1.50**; 20 lbs. **\$2.65**; 50 lbs. **\$6.50**; 100 lbs. **\$12.50**.

CALIFORNIA PUP-O, makes a tempting dish and an excellent change of food for any size dog. 10 lbs. **\$1.50**;

20 lbs. **\$2.65**; 50 lbs. **\$6.50**; 100 lbs. **\$12.50**.

CALIFORNIA CIRCLES—A small size convenient biscuit for all sizes of dogs. They do not crumble in the pocket.

10 lbs. **\$1.50**; 20 lbs. **\$2.65**; 50 lbs. **\$6.50**; 100 lbs. **\$12.50**.

CALIFORNIA KIBBLE—Dog biscuits partly broken up for mixing with soup or vegetables. 10 lbs. **\$1.50**; 20 lbs. **\$2.65**; 50 lbs. **\$6.50**; 100 lbs. **\$12.50**.

CAT REMEDIES

SPRATT'S CAT WORM CAPSULES, **60c**, postpaid.

CAT DIARRHOEA REMEDY, **60c**, postpaid.

CAT TONIC AND CONSTIPATION TABLETS, **60c**, ppd.

CAT CONSTIPATION REMEDY, **60c**, postpaid.

CAT CHOREA REMEDY, **60c**, postpaid.

CATNIP, package **15c**; postpaid **20c**.

CATNIP MICE, each **15c**; postpaid **20c**.

GOLD FISH AND AQUARIUMS

We carry a large and complete variety of gold fish and many designs of aquariums, together with all the types of castles and other furnishings for aquariums. Write us for prices and full description.

Breeding Cage for Birds

White enameled, green trimmed. With solid and wire partitions, metal drawer and closed back. Four glass cups, 6 perches, 2 nests.

No.	Length in.	Width in.	Height in.	Price
86S	17 ¼ x	8 ¾ x	14	\$5.00
86	19 ½ x	10 x	14 ¾	6.00
87	22 x	11 x	16 ¾	7.00
88	24 ½ x	12 ½ x	17	8.00

FISH FOODS

Natural Fish Food, postpaid, **20c**
Rice Flakes, pkg., postpaid, **20c**

Dog Collars

Blankets, Harness
Muzzles, Leads, etc.

We have a complete attractive line of dog furnishings. Come in and see the display at our retail store, 187 6th street, or write us for descriptive folder.

DEPARTMENT INDEX — IMPORTANT NOTICE

For your convenience we have listed the flower seeds **ALPHABETICALLY** in **THEIR DEPARTMENT**, which saves you the trouble of looking in the index. We have also listed perennial plants, Alpine plants, shrubs and trees alphabetically in their departments. For all other items see the special index below.

ALPINE PLANTS	48 to 51	FLOWER SEEDS	32 to 44	SHRUBS	68 to 70
ANNUAL PLANTS	52 to 54	PERENNIAL PLANTS	45 to 51	TREES	71 to 72
FIELD SEEDS	26 to 31	ROSES	63 to 67	VEGETABLE SEEDS	3 to 25

SPECIAL INDEX—In this index you will find the items not included in departments above

A	Alfalfa29	Celery Seed11	Fish Oil Soap.....76	Knives82	Perennial Plants.....45-51	Spraying Outfits78
Anise Seed7	Celery Plants73	Flavoring Seeds14	Flax26	Kohl Rabi15	Plants, Annual.....52-54	Sprays76-77
Aphisicide76	Charcoal86	Flax26	Floranid74	Kow Kare89	Plant Food74	Sprinklers79
Arsenide of Lead.....76	Chard11	Flower Seeds32-44	Foods, Bird94	L	Plants, Perennial45-51	Squash20
Artichokes4	Cheat26	Foods, Dog95	Foods, Poultry.....86-88	Land Plaster74	Plants, Rockery.....48-51	Squirrel Poison.....77
Asparagus Plants.....73	Chervil9	Foods, Dog95	Formaldehyde76	Leek15	Plant Setters81	Stock Tonics87-90
Asparagus Seed4	Chick Mash86	Foods, Poultry.....86-88	Founts, Poultry.....83	Lee's Remedies88	Planting Tables4	Stoves, Brooder85
	Chives9	Fruit Trees72	Fuchsias Plants54	Leg Bands83	Plows80	Strawberries73
	Cholerine87			Lettuce13	Poison Gas Balls.....77	Sulphur74
B	Chrysanthemum54			Lilies60	Poisons, Pest77	Sunflower28
Bag Balm90	Cinnamon Vine68	G		Lime and Sulphur.....76	Potatoes24-25	Superphosphate74
Barley26	Cleaners, Seed81	Garden Cultivators.....80		Loganberries73	Potato Planters81	Sweet Peas40-42
Beans6-7	Clematis68	Garden Hose79			Poultry Foods86-88	Sweet Potato Plants73
Bedding Plants52	Cliensei77	Garlic14		M	Poultry Remedies.....86-88	Swiss Chard11
Bee Supplies92-93	Clipper Cleaner81	Geraniums53		Mangels5	Poultry Supplies.....83-88	
Beets5	Clover29	Germozone88		Meals, Poultry86	Pruning Tools82	T
Begonias52	Clover Cutters88	Gladoliolus58-59		Melons17	Pulvules87	Tangier Peas27
Berries73	Collards9	Gooseberries73		Millet26	Pumpkin20	Tanglefoot76
Bird Foods94	Conkley's Remedies.....87	Gopher Traps77		Mills, Bone88	Pumps, Spray78-79	Tankage74
B-K Disinfectant89	Coppercarb76	Grafting Wax82		Minerals, Poultry.....86	Puritol77	Tarx89
Black Berries73	Corn12-13	Grain Cleaner81		Mole Traps77		Thermometers83
Black Leaf "40".....76	Corn Planters81	Grain Sprouters89		Montbretias61		Tiger Lilies60
Blue Stone76	Corn Salad9	Grape Dust76		Muriate74		Tobacco22
Bone Cutters and Mills88	Cream Separators.....91	Grapes73		Muskmelon17	R	Tobacco Dust76
Bone Meal74	Cress9	Grass Edger81		Mustard14-17	Rabbit Dishes83	Tobacco Powder, Spray77
Fertilizer74	Cucumbers14	Grass Seeds30-31			Radish21	Tobacco Powder, Poultry87
Books75	Cultivators80	Grass Shears82		N	Rakes81	Tomato Seed22
Bordeaux76	Currants73	Greenhouse Flower Seeds44		Nest Eggs83	Rape27	Tomato Plants73
Broccoli Seed9		Grit, Poultry86		Nests83	Raspberries73	Traps77
Broccoli Plants73	D	Guano18		New Guinea Bean.....77	Rat Poisons77	Trees, Fruit72
Brooders84-85	Dahlias55-57	Gumbo18		Nico-fume77	Rat Traps77	Trees, Nut71
Brussels Sprouts8	Dairy Supplies.....89-91	Gypsum74		Nitrate of Soda74	Remedies, Pet95	Trees, Shade71
Buckwheat26	Delphinium Seed.....36			Noxicide89	Remedies, Poultry and Stock86-88	Trowels82
Buhach76	Dill Seed14			Nozzles79	Rhubarb78	Turnips23
Bulbs55-62	Disinfectants89	H		Nursery Stock71-73	Roses63-67	
Butter Bean7	Dog Supplies95	Heliotrope Plants.....52		Nut Trees71	Rutabaga23	V
Buttermilk86-90	Dormoil78	Herb Seeds14			Rye27	Vegetable Oyster21
	Dust Guns78	Hives92		O		Vegetable Plants73
C		Hose92		Oats27	S	Vegetable Seeds.....3-23
Cabbage Seed8	E	Hoes, Cultivator82		Oat Sprouters89	Salsify21	Vetches28
Cabbage Plants73	Ear Label, Buttons.....90	Honeyvine Vine.....68		Okra18	Salt90	Vine Plants68
Cages, Bird94	Egg Carriers83	Hop Roots73		Onions18	Saws82	Vine Seed, Balloon.....34
Calc Meal90	Egg Plant14	Horseshoe Roots.....73		Onion Sets18	Seeders80-81	Violets54
Cannas61	Egg Scales83	Hotkaps15		Oyster Shell86	Semesan75	Volck77
Cantaloupe17	Egg Hatch88	Hydrated Lime74			Separators, Cream.....91	
Caraway Seed14	Eggolatum88			P	Sheep Guano74	W
Carbolineum39	Endive14	I		Pampas Grass68-70	Sheep Markers90	Watermelon17
Carco76	Evergreens70	Incubators84-85		Pansy Seed39	Shrubs69-70	Wax, Grafting82
Carnation Plants.....54		Insecticides76		Parcel Post Rates.....2	Silver Pine Healing Oil11	Weeders82
Carrots10	F	Iris61		Paris Green76	Slug Shot76	Wheat28
Cat Supplies95	Feeders, Poultry83	Ivy Vines68		Parsley18	Soilxet75	Wheelbarrows81
Cattle Markers90	Ferns52			Parsnips18	Sorghum28	Wheel Hoes80
Cattle Minerals90	Fertilizers74-75	K		Peas, Garden19	Spelt27	Wisteria Vine68
Cauliflower Seed.....9	Field Peas27	Kale Seed15		Peas, Field27	Spinach21	Wyandotte89
Cauliflower Plants.....73	Field Seeds26-31	Kale Plants73		Peat Moss74	Spray Calendar77	
Celeriac11	Fish Foods95	Kayso76		Peonies62	Travels78-79	Z
	Fish Guano74			Pepper, Poultry86		Zelio77
				Peppers19		

Practical Books for Poultrymen (Postpaid)

ALL ABOUT INDIAN RUNNER DUCKS. 92 pages. 75c.

AMERICAN STANDARD OF PERFECTION. Official guide for judges and breeders. Cloth. \$2.60.

CALL OF THE HEN. By Walter Hogan. Explains the Hogan System of Breeding and Selection. 138 pages. Cloth. \$2.10.

DUCKS AND GEESE. Based upon the "American Standard of Perfection." 104 pages, 9x11½ inches, illustrated. 80c.

EGG RECORD AND ACCOUNT BOOK. By H. A. Kuhns. 40c.

DISEASES OF POULTRY. D. E. Salmon, D. V.M., 248 pages. \$1.10.

FIVE HUNDRED QUESTIONS AND ANSWERS ON POULTRY RAISING. 30c.

HIGH EGG PRODUCTION BY HENS, PENS AND FLOCKS. \$2.00.

GARDEN GUIDE, the Amateur Gardeners' Hand Book. 380 pages of the best information available, with planting charts, profusely illustrated, 5x7½ in., paper covers. Postpaid \$1.00.

LEGHORNS, THE. New Edition. Color Plates. Illustrated. \$1.10.

ORPINGTONS, THE. By J. H. Drevestadt. Fully illustrated. 80c.

PLYMOUTH ROCKS. New edition, color plate of each variety, 160 pages. \$1.10.

POULTRY HOUSES AND FIXTURES. Used as textbook at Cornell University. 110 pages, illustrated, new edition. \$1.10.

RHODE ISLAND REDS. By D. E. Hale. Illustrated. 80c.

SUCCESSFUL BACKYARD POULTRY KEEPING. Homer W. Jackson. \$1.00.

USE OF ARTIFICIAL LIGHT TO INCREASE WINTER EGG PRODUCTION. \$1.60.

WYANDOTTES, ALL VARIETIES. New edition, 160 pages. \$1.00.

PROFITABLE CULLING AND SELECTIVE FLOCK BREEDING. 120 pages, illustrated. \$1.60.

Agricultural Books

ASPARAGUS. Hexamer. 166 pages, 5x7½ inches, cloth. \$1.00.

CABBAGES AND CAULIFLOWER, BROCCOLI, ETC. Gregory. 93 pages, 5x7½ inches, paper. 45c.

CELERY CULTURE. Beattie. 150 pages, 5x7½ inches, cloth. \$1.10.

FERTILIZER. Vooreheis. 335 pages, cloth. 58 inches. \$2.50.

GREENHOUSE CONSTRUCTION. Taft. 210 pages, 5x7½ inches, cloth. \$2.35.

GREENHOUSE MANAGEMENT. Taft. 382 pages, 5x7½ inches, cloth. \$2.35.

LANDSCAPE GARDENING. Waugh. 152 pp., 5x7½ inches, cloth. \$1.35.

ONION CULTURE, NEW. Greiner. 115 pages, 5x7½ inches, cloth. \$1.00.

PRUNING MANUAL, THE. Bailey. 407 pages, 5x7½ inches, cloth. \$3.35.

STRAWBERRY IN NORTH AMERICA. Fletcher. 234 pages, 5x7½ in., cloth. \$2.25.

SMALL FRUIT CULTURIST. Fuller. 298 pages, 5x7½ inches, cloth. \$1.70.

TOMATO CULTURE. Day, Cummings and Root. 150 pages, 5x7½ inches, cloth. 40c.

BELGIAN HARE GUIDE, paper bound. 25c.

RAFFIA BASKETS, HOW TO MAKE. Cloth bound. 50c.

**Our "Rose City"
Collection of Roses**

10 Beautiful ROSES for \$5.25

(For shipment by parcel post add 50c for postage and packing)

Our roses are all large sturdy two-year-old, field-grown, budded on disbudded Manetta stock and will give you splendid flowers the first season. The roses in this collection consist of one each of the following true-to-name varieties:

1. **COLUMBIA**, Peach-blow Pink.
2. **HADLEY**, Crimson Scarlet, Shaded Maroon.
3. **HOOSIER BEAUTY**, Crimson Scarlet.
4. **K. OF K.**, Intensest Scarlet Known.
5. **LADY HILLINGDON**, Deep Apricot Yellow.
6. **MADAME BUTTERFLY**, Brilliant Pink, suffused with Apricot and Gold
7. **MADAME EDOUARD HERRIOTT**, Coral Red, shaded Yellow at base, passing to Bronze and Geranium Red
8. **OPHELIA**, Orange Salmon buds, opening to dainty Pink.
9. **SUNBURST**, the finest of all Yellow Roses. Very large size.
10. **WHITE LA FRANCE**, Silvery White, with delicate Pink shadings.

For full descriptions of these roses as well as complete list of all our roses for this season see pages 63 to 67.

**WING'S WREXHAM STRAIN
DELPHINIUM
HYBRIDS**

Named Varieties

**FEATHERS
JOAN OF ARC
MILLICENT
PAUL REVERE
SALLY ANN
SPRINGTIDE
TOWN FOLK
VANITY FAIR.**

Pkts. 100 Seeds \$1.50 each
Collection 8 Pkts. \$10.00

POST PAID

Complete description given
in flower seed section.

**FLOWER SEEDS
PLANTS**

**ROSES·TREES
SHRUBS**