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PORTLAND SEED COMPANY

COMPLETE SEED
ANNUAL

1929

1929

TALL
TELEPHONE
PEAS

GRADUS PEAS

*All P. S. Co. Garden Peas are
Hand-picked at our Warehouse*

P.S. Co's Garden Peas, The Finest Grown

TELEPHONE, TALL — Our Western grown selection and a standard market variety; immensely productive, 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.

Pkt. 10c
Lb. 35c

Postpaid

See page 32
for full list

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

3 Favorites

Full descriptions on pages 11-13

1. P. S. Co's Oregon Giant Greenpod Bean
10 to 12 inch pods, free from strings. Pkt. **20c.**
2. P. S. Co's Stringless Wax Bean
Best early dwarf, entirely stringless. Pkt. **20c.**
3. Oregon Pole Lima Bean
Very fine for the Northwest. Pkt. **15c.**

OFFER F-1 pkt. each of above, postpaid **50c**

"Golden West" **Yellow Sweet Corn**

The most popular variety for this section. It is a selection from the original strain of Golden Bantam, and is earlier, has larger ears and more vigorous growth. Rich golden yellow. Preferred for both market garden or home garden.
Pkt. **10c**; $\frac{1}{2}$ lb. **20c**;
lb. **35c**; postpaid.
10 lbs. **\$2.50**; f.o.b. Portland.

See pages 21-23
for complete list
of seed corn.

"Hearts of Gold" Muskmelon Seed and Plants

For full description see
page 29. Seeds, pkt. **10c**;
oz. **20c**; lb. **\$1.50**; ppd.

Individual Potted Plants
in April, May, ea. **10c**; doz.
\$1.00; f.o.b. Portland.

SPARK'S EARLI-ANA, 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 and heavy bearer, continuing until frost. Especially recommended for this coast. Pkt. **10c**; oz. **40c**; $\frac{1}{4}$ lb. **\$1.25**; lb. **\$3.75**; postpaid.

P. S. CO'S CRISP-ETTE — A beautiful lettuce, perfect in quality. Large white main ribs of leaves, each curving strongly toward the center, makes it impossible for leaves to open outward and expose the center, which will always be found crisp, tender, sweet and melting. Pkt. **10c**; oz. **35c**; $\frac{1}{4}$ lb. **\$1.00**; lb. **\$3.00**; postpaid.

P. S. CO'S MARKET GARDENER BEET—Extra early, remarkable for its fine quality and rapid growth; deep red color and handsome shape; as an early market sort it is unrivaled. Holds its color and cooks quickly. Market gardeners prefer it as it matures evenly, stands a long time and does not split. Pkt. **10c**; oz. **20c**; $\frac{1}{4}$ lb. **45c**; lb. **\$1.25**; postpaid.

For complete list of beets see page 14

PLANT THESE in your garden

Carrots P. S. Co's New Coreless, the finest carrot for home gardens, larger than other early varieties, fine flavor, crisp and solid (see page 18). Pkt. **10c**.

Onions P. S. Co's Oregon Yellow Danvers, developed in Oregon, the best market garden variety for this section. Especially grown for us, laboratory tested (see page 30.) Pkt. **10c**, postpaid.

Radishes Early Scarlet White Tip-ped, crisp, tender, sweet; very early, fine for forcing. Be sure to plant it (see page 34.) Pkt. **10c**, postpaid.

Turnips Purple Top White Globe, large, handsome and of excellent quality, recommended for family garden or field crop (see page 38). Pkt. **10c**.

OFFER G—One pkt. each of above, **35c**, ppd.

Complete Seed Annual and Planter's Guide for 1929 of

PORTLAND SEED COMPANY

Diamond Quality Seeds

Portland, Oregon

Over a "Third of a Century" of Service

Established in 1892, for over 36 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."

What our "Diamond" Trade Mark Means

By reason of our business standing and long years of experience, 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.

**See Index on last
pages of book**

**Order Blanks are
in back of book**

Instructions for Ordering, Etc.

When to Order

Send in your combined order for seeds, plants and supplies, etc., 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.

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.

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.

PARCEL POST RATES

Seeds and plants weighing 8 oz. or less are mailable at 1 cent for each 2 oz. or fraction thereof, regardless of zone. Packages weighing over 8 oz. are charged at ZONE rates. Weight limit, 70 lbs. 1st to 3rd zones, 50 lbs. 4th to 8th zones.

Zone	Distance	1st lb. or fraction thereof	Ea. add. lb. or fraction
1-2	to 150 m.	\$.07	\$.01
3....	150 to 300 m.	.08	.02
4....	300 to 600 m.	.08	.04
5....	600 to 1000 m.	.09	.06
6....	1000 to 1400 m.	.10	.08
7....	1400 to 1800 m.	.12	.10
8....	Over 1800 m.	.13	.12

See
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on back
pages
of
book

In common with all other responsible seed houses, we sell our goods subject to the disclaimer adopted by the American Seed Trade Association, as follows:

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 Co.

**Diamond
Quality**

VEGETABLE SEEDS

Special 1929 Collections

Here are our special vegetable garden offers for 1929, 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.

Collection "A" \$1.00

\$1.50 value for

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
BEETS, Detroit Dark Red.....	10c
CABBAGE,	
Early Jersey Wakefield.....	10c
CARROT, Danvers Half Long.....	10c
CORN, Golden Bantam.....	10c
CUCUMBER, Long Green.....	10c
LETTUCE, New York Head.....	10c
PARSLEY, Double Curled.....	10c
PEAS, Laxton's Superb.....	15c
RADISH, White Icicle.....	10c
RADISH, Scarlet Globe.....	10c
SPINACH, Thick Leaved.....	10c
SWISS CHARD, Lucullus.....	10c
TURNIP, Purple Top White Glb.....	10c

All for \$1.00, value.....\$1.50

[COUPON OFFER]

Free seeds with \$1.00 order

This coupon when enclosed with an order and payment amounting to \$1.00 or more for merchandise in this catalog (excepting our offers A or B) entitles you to TWO ten-cent packets of vegetable or flower seed free.
This offer expires Sept. 1, 1929.
PORTLAND SEED COMPANY.

Collection "B" \$2.00

\$3.10 value for

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, Copenhagen Early Market.....	10c
Danish Ball Head.....	10c
CARROT, Chantenay.....	10c
Oxheart.....	10c
CORN, Golden West.....	10c
Oregon Evergreen.....	10c
CUCUMBER, Boston Pickling.....	10c
Davis Perfect.....	10c
LETTUCE, Early Curled Simpson.....	10c
New York Head.....	10c
MUSKMELON, Burrell Gem.....	10c
WATERMELON, Black Seeded Ice Crm.....	10c
ONION, Oregon Yellow Danver.....	10c
White Bunching.....	10c
PARSLEY, Double Curled.....	10c
PEAS, Little Marvel.....	15c
Laxton's Superb.....	15c
RADISH, French Breakfast.....	10c
White Icicle.....	10c
SALSIFY, Mammoth Sandwich Island.....	10c
SPINACH, Improved 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 \$2.00, value.....\$3.10

NOTICE! These collections are put up in advance of the season ready to mail upon receipt of order and therefore the assortments cannot be changed. These offers expire September 1, 1929.

Asparagus Seed and Roots

GIANT WASHINGTON—THE GREATEST RUST-RESISTING ASPARAGUS—Our grower of "Giant Washington," under the supervision of the U. S. government has produced this superior asparagus 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.

SEEDS, pkt. **15c**; oz. **25c**; ¼ lb. **75c**; lb. **\$1.75**; postpaid.
PLANTS, 1 year old, f.o.b. Portland, doz., **30c**; 50, **60c**; 100, **\$1.00**; 1000, **\$6.00**. 2 year old, f.o.b. Portland, doz., **40c**; 50, **90c**; 100, **\$1.50**; 1000, **\$8.00**. (Plants are ready October to April.)
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. **15c**; oz. **35c**; ¼ lb. **\$1.35**; lb. **\$4.00**; postpaid.

ARGENTEUIL—A popular French asparagus of great merit; 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.

Asparagus 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.

ASPARGUS 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 spread 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 the roots; 7260 roots will plant an acre.

Artichoke Seed & Plants

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 used for hedges and display in parkings. **SEEDS**, pkt. **10c**; oz. **90c**; postpaid. **PLANTS**, f.o.b. Portland, ea. **10c**; doz. **\$1.00**. (Plants ready in April and May)

GLOBE
ARTI-
CHOKE

Artichoke Tubers

The tubers are planted and cultivated the same as potatoes. Of great value for feeding stock, the best hog feed known, remarkable for fattening properties. They need not be dug as the hogs help themselves by rooting;

an acre will keep 20 to 30 hogs in condition from October to April. Equally valuable for cows, increasing the milk and improving their condition.

NEW FRENCH—Greatest in productiveness (over 1000 bushels have been raised on one acre). Plant 10 bu. per acre. 10 lbs. **\$1.00**, postpaid; 100 lbs. **\$3.00**, f.o.b. Portland.

JERUSALEM WHITE—A fine variety for the table as well as being so valuable as a hog feed. 10 lbs. **\$1.00**, postpaid; 100 lbs. **\$2.50**, f.o.b. Portland. (Ready in February)

Anise Seed

For flavoring, ¼ lb. **15c**; lb. **40c**; postpaid.

OREGON GIANT GREEN POD

Increase your bean production by the use of prepared fertilizer

Write for free instruction book on fertilizing, what to use and why. You can increase greatly the amount produced per acre at a small fraction of its value.

Climbing or Pole 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. Plant in drills about two inches deep and from eighteen inches to two feet apart, as soon as ground is dry enough and warm (about May 1st), 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, 60 pounds per acre. Pole Beans—one pound to 100 hills, requiring about 25 lbs. per acre.

P. S. CO'S OREGON GIANT GREENPOD BEAN—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. 20c; ½ lb. 35c; lb. 60c; postpaid. 10 lbs. \$5.00; f.o.b. Portland.**

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. **Pkt. 15c; ½ lb. 30c; lb. 50c; postpaid. 10 lbs. \$4.00; f.o.b. Portland.**

SCARLET RUNNER—A favorite as a shell bean and for its flowers, which are bright scarlet; seeds broad and kidney shaped. **Pkt. 10c; ½ lb. 25c; lb. 45c; postpaid. 10 lbs. \$3.50; f.o.b. Portland.**

OREGON POLE LIMA—An excellent bean for the Northwest. Strong, vigorous grower, very prolific. Bearing continuously until frost. Blooms from the top shoots in long panicles. Pods are well filled, having three to five large beans of the finest quality. May be planted as early as April. Care and culture same as other beans. They are at their best when the full, green pods begin to turn yellow. **Pkt. 15c; ½ lb. 30c; lb. 50c; postpaid. 10 lbs. \$4.00; f.o.b. Portland.**

KENTUCKY WONDER—The old reliable greenpod pole bean. The most widely and universally planted of the pole varieties. Early, very prolific, vigorous climber, bearing in clusters. Long, flat, thick and very fleshy pods. Stringless when young. **Pkt. 10c; ½ lb. 25c; lb. 45c; postpaid. 10 lbs. \$3.50; f.o.b. Portland.**

LAZY WIFE—One of the best later green podded pole beans for snaps of green shell use. Pods four to five inches in length. Dark green, thick, fleshy and stringless. Borne in large clusters. When young they have a rich buttery flavor. The dried beans are pure white and oval shaped. Excellent for winter use. **Pkt. 10c; ½ lb. 25c; lb. 45c; postpaid. 10 lbs. \$3.50; f.o.b. Portland.**

KENTUCKY WONDER WAX—This vigorous wax podded pole bean is very similar to the Kentucky Wonder green pod, except that pods are a little broader. Commences to bear when scarcely higher than the average bush variety, and it keeps on producing until killed by frost. Pods are long—golden yellow, very fleshy and stringless. When cooked are deliciously rich and buttery. **Pkt. 10c; ½ lb. 25c; lb. 45c; postpaid. 10 lbs. \$3.50; f.o.b. Portland.**

For larger quantities of bean seed ask for special quotations.

DAVIS WAX

See our three favorite varieties of beans in full colors on page 3.

Yellow Podded Bush or Dwarf Beans

All varieties on this page (except as noted)

Pkt. 10c; $\frac{1}{2}$ lb. 25c; lb. 45c; postpaid
10 lbs. \$3.50, f. o. b. Portland

(For larger quantities ask for latest quotations)

P. S. CO'S STRINGLESS WAX—We consider this the best of our early dwarf wax podded varieties. An excellent bean for the home and market. Habit of growth, size, and shape same as the Stringless Greenpod. The pods are a golden yellow entirely stringless. This bean is proving to be a great favorite among the early wax podded varieties. Pkt. 20c; $\frac{1}{2}$ lb. 30c; lb. 50c; postpaid.

PENCIL POD BLACK WAX—One of the best round pod wax beans, both for home use and market. Bushy growth, about fifteen inches high, heavy foliage. Pods 6 to 7 inches long, round as a pencil, clear yellow, very brittle and stringless, rich mild flavor. An early sure cropper of the finest quality.

GOLDEN WAX—One of the best dwarf sorts for market or private gardens. Plants are erect, compact, and very productive. Pods medium length, nearly straight, very fleshy, broad and flat, golden yellow color. 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.

DAVIS WAX—The plants are very hardy and productive. Pods long, rustless, very tender when young, fine for canning. The dry, white, kidney-shaped beans are excellent for baking.

BLACK WAX—Black seeded, very productive. Produces handsome yellow, waxy pods. Pods are curved, well rounded, and stringless.

IMPROVED KIDNEY WAX—An 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.

Inoculate your Beans and Peas [Sweet Peas] with "Nitragin"

The Original Soil Inoculator that has been used for over 20 years with the greatest success.

The lack of necessary bacteria in the soil is often the cause of poor results or failure. Inoculation hastens maturity, increases the crop and improves the quality due to the increased amount of nitrogen taken from the air to supply the plants. Those who have not used a soil inoculator will be wonderfully surprised with the results. Garden size only 20c. For larger sizes look for NITRAGIN in the index.

Every garden needs
"NITRAGIN"

STRINGLESS GREENPOD

Green Podded Bush or Dwarf Beans

PRICES ON ALL GREEN PODDED
BEANS IN THIS LIST

Pkt. 10c; $\frac{1}{2}$ lb. 25c; lb. 45c;
POSTPAID

10 lbs. \$3.50; f. o. b. Portland

(For larger quantities ask for latest
quotations)

STRINGLESS GREENPOD—One of the best varieties for early spring planting. Plants are large, spreading and productive. Pods are 5 to 6 inches long, absolutely stringless and are ready for market two weeks earlier than any other green-podded bean. Immense value to the market gardener and those who seek early beans of rare quality for the table.

STRINGLESS REFUGEE—A splendid improvement on the Refugee Thousand to One, with which it compares in season and earliness, but it is absolutely stringless. Pods are round, more even in length, 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. Foliage is scant and usually falls before 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—One of the best dwarf varieties for green shell beans, for the home garden and market. Plants are very productive, compact and upright, with large leaves. Pods are 5 to 6 inches long, broad, thick, curved, with splashes of bright red on a yellowish ground. They are ready for use as green shelled beans early. The beans being very large and easily shelled. A great favorite among the 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 Stringless Greenpod, but continues in bearing throughout the season, and is excellent shelled green.

BROAD WINDSOR or HORSE BEANS—Grows on erect self-supporting stalks 2 to 3 feet tall. The bean is large, broad and flat. Should be planted early and is best green shelled. Does particularly well in Pacific Northwest.

New Guinea Butter Bean

AN EDIBLE GOURD

FRUIT GROWS 3 TO 4 FEET 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 arbor covering and 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 when about 16 inches long and 3 inches in diameter or smaller, while fuzzy growth is yet on. Cut into cubes about $\frac{3}{4}$ inch, bring to a boil, pour off water once or twice; season well with pepper and salt; add butter. 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.

BEETS

"Diamond Quality"

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 16 inches apart, covered $1\frac{1}{2}$ 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 6 or 8 inches apart in the rows.

P. S. CO'S MARKET GARDENER—Extra early and remarkable for its fine quality and rapid growth; deep red color, handsome shape; as an early market sort it is unrivaled. It is superseding Egyptian, being 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**; $\frac{1}{4}$ lb. **45c**; lb. **\$1.25**; postpaid.

P. S. CO'S
MARKET
GARDENER

DETROIT DARK RED TURNIP BEET—Splendid for the market and home garden; tops are small and upright in growth; roots turnip shape with small tap root. One of the deepest red beets, excellent for canning. Pkt. **10c**; oz. **20c**; $\frac{1}{4}$ lb. **40c**; lb. **\$1.00**; 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. **20c**; $\frac{1}{4}$ lb. **40c**; lb. **\$1.00**; postpaid.

EXTRA EARLY EGYPTIAN—The best variety for forcing and fine 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. **20c**; $\frac{1}{4}$ lb. **40c**; lb. **\$1.00**; postpaid.

EARLY BLOOD TURNIP BEET, 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. Pkt. **10c**; oz. **20c**; $\frac{1}{4}$ lb. **40c**; lb. **\$1.00**; ppd.

SUGAR BEETS

KLEIN WANZLEBEN—Best variety for sugar making; roots a little larger than White French, hardier and easier grown. Pkt. **10c**; $\frac{1}{4}$ lb. **35c**; lb. **75c**; postpaid.

WHITE FRENCH or VILMORIN'S IMPROVED SUGAR—Most generally grown for stock as it contains a heavy sugar yield. Pkt. **10c**; $\frac{1}{4}$ lb. **35c**; lb. **85c**; postpaid.

Commercial FERTILIZERS Profitable

A 100-lb. Bag of High Grade Commercial Fertilizer

will contain more soluble and available plant food than 4000 pounds (two tons) of stable manure of average quality. How much easier and cleaner to handle one 100-pound bag than 2 tons of manure, and there are no weed seeds to worry over. Our booklet, **FERTILIZERS**, tells what fertilizers are best and how to use them profitably.

**Fertilizer Book is Free
Write for it**

See page 51 for our Diamond
Fertilizer prices

Mangel Wurzel

YELLOW GIANT SLUDSTRUP GOLDEN TANKARD ECKENDORF

Mangels 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. 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.

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**; oz. **15c**; $\frac{1}{4}$ lb. **25c**; lb. **60c**; 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 government. Pkt. **10c**; oz. **15c**; $\frac{1}{4}$ lb. **25c**; lb. **60c**; postpaid.

GIANT RED ECKENDORF—Straight, cylindrical form, very blunt, grows mostly above surface. A very heavy cropper. Pkt. **10c**; oz. **15c**; $\frac{1}{4}$ lb. **25c**; lb. **60c**; postpaid.

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**; oz. **15c**; $\frac{1}{4}$ lb. **25c**; lb. **60c**; 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**; oz. **15c**; $\frac{1}{4}$ lb. **25c**; lb. **60c**; postpaid.

MANMOTH LONG RED—An improvement on the Long Red. Very uniform, smooth, of good shape. Grow in deep loose soil. Pkt. **10c**; oz. **15c**; $\frac{1}{4}$ lb. **25c**; lb. **60c**; postpaid.

**Be sure to plant
Portland Seed Company's
"Heaviest Cropper"
Mangel**

P. S. CO'S HEAVIEST CROPPER MANGELS—One of the largest and best Yellow Mangels. It is 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 of Yellow Mangels. Pkt. **10c**; $\frac{1}{4}$ lb. **25c**; lb. **60c**; postpaid.

Cabbage Seed and Plants

DANISH
BALLHEAD

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. **SEEDS**, pkt. **10c**; oz. **35c**; ¼ lb. **\$1.25**; lb. **\$3.75**; postpaid.

TRANSPLANTED PLANTS, f.o.b. Portland, doz. **20c**; 100 **\$1.00**; 1000 **\$8.00**.

NOT TRANSPLANTED PLANTS, f.o.b. Portland, doz. **10c**; 100 **75c**; 1000 **\$6.00**. Transplanted plants are in season April, May, June; not transplanted are ready in May and June.

Golden Acre Cabbage

GOLDEN ACRE—This is a new round-headed cabbage which closely resembles the Copenhagen Market in type, but is 8 to 10 days earlier and on account of being smaller can be planted closer. Head is medium size, quite round and has few outer leaves. Very firm and fully equal to any of the late sorts in this

respect. Very hardy, will stand in the field a long time without bursting and can be shipped long distances. Because of its earliness and fine quality it commands a higher price than any round head cabbage. **SEEDS**, pkt. **10c**; oz. **60c**; ¼ lb. **\$1.75**; lb. **\$6.00**; postpaid.

PLANTS, not transplanted, f.o.b. Portland, doz. **10c**; 100 **75c**; 1000 **\$6.00**. In season May and June.

DANISH ROUND HEAD (Select Short-Stem)

—A ball shaped cabbage of great solidity. Color rich dark green, has few outer leaves and is very hardy. Our stock 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. **Seeds**, pkt. **10c**; oz. **35c**; ¼ lb. **\$1.25**; lb. **\$3.75**; postpaid.

Transplanted plants, f.o.b. Portland, doz. **20c**; 100 **\$1.00**; 1000 **\$8.00**; April, May, June. **Not transplanted plants**, f.o.b. Portland, doz. **10c**; 100 **75c**; 1000 **\$6.00**; May, June.

COPENHAGEN MARKET—A Splendid Cabbage for Home Gardens—Early globe-shaped cabbage slightly flattened, large solid heads, very uniform, with few outer leaves, keeps well and stands handling. Copenhagen Market is a favorite market variety and we recommend it to our customers. **Seeds**, pkt. **10c**; oz. **35c**; ¼ lb. **\$1.25**; lb. **\$3.75**; postpaid.

Transplanted plants, f.o.b. Portland, doz. **20c**; 100 **\$1.00**; 1000 **\$8.00**; April, May, June. **Not transplanted plants**, f.o.b. Portland, doz. **10c**; 100 **75c**; 1000 **\$6.00**; May, June.

Early Jersey Wakefield

is the Market Gardener's Favorite

It's best for wintering and early setting; plant it

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. Seeds, pkt. **10c**; oz. **35c**; $\frac{1}{4}$ lb. **\$1.25**; lb. **\$3.75**; postpaid. Plants, transplanted, f.o.b. Portland, doz. **20c**; 100 **\$1.00**; 1000 **\$8.00**; in season April, May and June. Plants, not transplanted, f.o.b. Portland, doz. **10c**; 100 **75c**; 1000 **\$6.00**; in season May and June.

Use plenty of Diamond Fertilizer for Cabbage to develop crisp, solid heads

RED CABBAGE—Odense Market—Used for pickling. The heads are very fine and remarkably sure of heading. The best red cabbage.

SAVOY CABBAGE—Vertus—Late Savoy—Large, compact heads, crisp and tender with a rich flavor. Desirable for cooking or salads.

STEIN'S EARLY DWARF FLAT DUTCH CABBAGE—Grows low on the stem; a sure header; firm, fine grained, tender and excellent flavor.

SUCCESSION CABBAGE—Heads large, slightly flattened; grows low on the stem.

PREMIUM LATE FLAT DUTCH CABBAGE—Improved strain of the old favorite, "Late Flat Dutch," one of the largest of the late varieties; a sure header.

PRICES ON ABOVE VARIETIES

SEEDS, pkt. **10c**; oz. **35c**; $\frac{1}{4}$ lb. **\$1.25**; lb. **\$3.75**; postpaid. PLANTS, transplanted, f.o.b. Portland, doz. **20c**; 100 **\$1.00**; 1000 **\$8.00**. Not transplanted, f. o. b. Portland, doz. **10c**; 100 **75c**; 1000 **\$6.00**. Transplanted plants in season April-June; not transplanted, May-June.

CHINESE IMPROVED or PE-TSAI CABBAGE

—Resembles Cos Lettuce rather than cabbage. It is often called Celery Cabbage on the market. Leaves when young are crimped, light green, appear like smooth leaved mustard, with broader and heavier midribs. As it matures it forms heads much like Cos Lettuce. The inner leaves blanch light yellow or creamy white with white midribs. Very mild and pleasant flavor. Served as a salad or cooked. Sow in this latitude after July 1 at the same time as turnips.

Pkt. **10c**; oz. **35c**; $\frac{1}{4}$ lb. **\$1.00**; lb. **\$3.60**; postpaid.

Caraway Seed

FOR FLAVORING

Well preserved seed for the use of bakers, confectioners and druggists. Oz. **10c**; $\frac{1}{4}$ lb. **20c**; lb. **55c**; postpaid.

Brussels Sprouts

SEEDS AND PLANTS

Grow two to three feet high and produce, from the sides of the stalks, numerous little sprouts which resemble very small cabbages one or two inches in diameter. The leaves should be broken down in the Fall to give the little heads more room to grow. 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.

Seeds, pkt. **10c**; oz. **30c**; $\frac{1}{4}$ lb. **90c**; postpaid. Transplanted plants, f.o.b. Portland, doz. **20c**; 100 **\$1.25**; 1000 **\$10.00**.

P. S. CO'S
NEW
CORELESS

CARROTS

CULTURE—A sandy loam is best for carrots, but any good land, if thoroughly and deeply worked, will produce satisfactory crops. Sow as early in the Spring as 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 that soil is well firmed above the seed.

P. S. CO'S NEW CORELESS—A splendid carrot, larger than other early varieties, crisp, solid, fine flavor, grows smooth and uniform, a true stump rooted type. 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. Ideal for home gardens. Pkt. **10c**; oz. **25c**; $\frac{1}{4}$ lb. **45c**; lb. **\$1.25**; postpaid.

DANVER'S HALF LONG—Grown for its productiveness and adaptability to all classes of soil. Medium sized tops, coarsely divided, smooth roots of medium length, tapering uniformly to a blunt point; flesh sweet, crisp, tender; deep orange in color. Although the roots are short, they produce as large bulk as the longer field sorts and are more easily harvested. Pkt. **10c**; oz. **20c**; $\frac{1}{4}$ lb. **40c**; lb. **\$1.00**; postpaid.

IMPROVED LONG ORANGE—Popular for farm use on deep, mellow soil. The roots of this strain are often 12 inches long and 3 inches in diameter at the crown, tapering to a point. Tops rather large. Suitable for table use and one of the best varieties for feeding stock.

Pkt. **10c**; oz. **20c**; $\frac{1}{4}$ lb. **40c**; lb. **\$1.00**; postpaid.

OX HEART—Especially desirable for a hard, stiff soil. Roots thick, 5 or 6 inches long ending abruptly in small tap root. Flesh bright orange, fine grained, tender and of good flavor. Grows very rapidly. Roots attain a weight of more than one pound.

Pkt. **10c**; oz. **20c**; $\frac{1}{4}$ lb. **40c**; lb. **\$1.00**; postpaid.

EARLY SCARLET HORN—Best early kind for general use; larger than the forcing variety; fully as good in quality; produces a much larger crop.

Pkt. **10c**; oz. **20c**; $\frac{1}{4}$ lb. **40c**; lb. **\$1.00**; postpaid.

DANVER'S
HALF LONG

CHANTENAY—Tops medium sized, necks small, roots tapering slightly, stump-rooted and smooth; color deep orange red; flesh crisp and tender. Although 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 market and private garden, while its great productiveness makes it very desirable as a field sort. Pkt. **10c**; oz. **20c**; $\frac{1}{4}$ lb. **40c**; lb. **\$1.00**; postpaid.

CHANTENAY

Favorite
for Market

Stock Carrots

LARGE WHITE BELGIAN—Extensively grown for stock feeding; very productive. Grows so much above the ground that entire crop can be pulled by hand. Pkt. **10c**; oz. **20c**; $\frac{1}{4}$ lb. **40c**; lb. **\$1.00**; postpaid.

IMPROVED SHORT WHITE—"MASTODON"—A field carrot of enormous productiveness, easy to harvest. Roots half long, smooth, very heavy at shoulder, tapering regularly to point; light green at the crown, white below; flesh white, solid, crisp, excellent flavor. Pkt. **10c**; oz. **20c**; $\frac{1}{4}$ lb. **40c**; lb. **\$1.00**; postpaid.

P. S. CO'S YELLOW GIANT—(No seed this season, but expect to have it for next season.)

CAULIFLOWER and BROCCOLI Seeds and Plants

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.

P. S. CO'S "MT. HOOD" SNOWBALL CAULIFLOWER—The seed that produces 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.

Seeds, pkt. **20c**; ¼ oz. **90c**; oz. **\$2.75**; ¼ lb. **\$8.50**; postpaid.
Plants, transplanted, f.o.b. Portland, doz. **25c**; 100 **\$1.50**; 1000 **\$12.00**; season April to June.
Plants, not transplanted, f.o.b. Portland, doz. **20c**; 100 **\$1.25**; 1000 **\$10.00**; season April-June.

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 it must have rich soil and cultivation to give best results. Also does well under moist conditions. Pkt. **15c**; ¼ oz. **70c**; oz. **\$2.00**; ¼ lb. **\$7.00**; postpaid.

EARLY SNOWBALL CAULIFLOWER—This is the regular grade of "Early Snowball" that is generally offered and can be depended upon to produce a good crop.

Seeds, pkt. **10c**; ¼ oz. **60c**; oz. **\$2.00**; ¼ lb. **\$5.00**; postpaid.
Plants, transplanted, f.o.b. Portland, doz. **25c**; 100 **\$1.50**; 1000 **\$12.00**; season April to June.
Plants, not transplanted, f.o.b. Portland, doz. **20c**; 100 **\$1.25**; 1000 **\$10.00**; season April-June.

AUTUMN GIANT CAULIFLOWER—A late variety with long stems and dark green leaves. Heads white, large, compact and protected by foliage.

Seeds, pkt. **10c**; ¼ oz. **35c**; oz. **\$1.00**; ¼ lb. **\$3.25**; postpaid.
Plants, not transplanted, f.o.b. Portland, doz. **20c**; 100 **\$1.25**; 1000 **\$10.00**; season April-June.

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

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.

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.

Seeds, pkt. **15c**; oz. **\$1.50**; ¼ lb. **\$5.00**; lb. **\$16.00**; postpaid.
Plants, transplanted, f.o.b. Portland, doz. **25c**; 100 **\$1.50**; 1000 **\$12.00**; season April to June.
Plants, not transplanted, f.o.b. Portland, doz. **20c**; 100 **\$1.25**; 1000 **\$10.00**; season April-June.

EARLY LARGE WHITE FRENCH BROCCOLI—A valuable hardy variety with large, white heads, com-

pect and of good quality.
Pkt. **10c**; oz. **90c**; ¼ lb. **\$3.00**; postpaid.

CELERY Seed and Plants

**GOLDEN
SELF-
BLANCHING**

Celery Culture

Sow the seeds early, about February, in a hot bed or cold frame. When 3 inches high transplant, setting 4 inches apart. When grown 6 inches, and fine, stocky plants, set in richly fertilized deep soil, in rows 3½ feet apart, 9 inches from plant to plant. Water if dry weather follows transplanting. During the next two months all the attention required is to keep down 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.

CHICORY

The roots, dug in the Fall, dried, cut in thin slices and ground are used 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. **25c**; ¼ lb. **75c**; lb. **\$2.50**; 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. SEEDS, pkt. **10c**; oz. **\$1.10**; ¼ lb. **\$3.75**; lb. **\$12.00**; postpaid. PLANTS, transplanted, f.o.b. Portland, dozen **25c**; 100 **\$1.25**; 1000 **\$10.00**; in season April, May and June. (Plants, not transplanted, ask for price.)

GOLDEN PLUME—A week to 10 days earlier than Golden Self-Blanching. It is self-blanching with the yellow color decided while the large heart blanches to a beautiful pearly white color. 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. **20c**; oz. **\$1.75**; ¼ lb. **\$5.00**; ppd.

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

WINTER QUEEN—The most valuable variety for winter and spring use. Has double the amount of heart of any known celery. The plant is of compact growth and blanches to a cream white. Ribbs solid, crisp and entirely free from strings. Brittle and of sweet, nutty flavor. Excellent keeper. Pkt. **10c**; oz. **30c**; ¼ lb. **\$1.00**; lb. **\$3.00**; postpaid.

GIANT PASCAL—A fine winter variety. Produces large thick stalks of fine nutty flavor. Easily blanched. Pkt. **10c**; oz. **30c**; ¼ lb. **\$1.00**; lb. **\$3.00**; postpaid.

Celery Seed for Flavoring

For all flavoring purposes. Not to be planted. Oz. **10c**; ¼ lb. **15c**; lb. **50c**; postpaid.

Celeriac—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.

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. Clumps, each **20c**; doz. **\$2.00**; f. o. b. Portland.

Corn Salad

FETTICUS or LAMB'S LETTUCE—A refreshing salad, used in winter and spring as a substitute for lettuce or cooked like spinach. Sown in drills 1 foot apart; in spring or fall. Pkt. **10c**; oz. **30c**; ¼ lb. **\$1.00**; ppd.

Cress

TRUE WATER CRESS—A distinct variety of cress with small oval leaves. Grown easily in shallow ponds or along the edges of shallow streams of running water. One ounce will sow a plot or seed bed 16 feet square. Pkt. **10c**; oz. **75c**; postpaid.

CURLED or PEPPER GRASS—This salad is used with lettuce. The leaves are much frilled or curled. Sow thickly in drills allowing one ounce for 200 feet. Pkt. **10c**; oz. **20c**; ¼ lb. **50c**; lb. **\$1.50**; postpaid.

Portland Seed Company's "Diamond Quality"

Field Corn

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, and 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 fertilizer and thorough tillage will help offset the cold nights.

Prices for all Field Corn Below

**Pkt. 10c; 1 lb. 20c; postpaid
10 lbs. \$1.50; f.o.b. Portland**

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.

MINNESOTA No. 13 YELLOW DENT—Earliest of the early Yellow Dent corns and 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 90 days under favorable conditions.

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.

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, productivity and very early ripening.

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.

OREGON YELLOW DENT

POPCORN

For Planting or Popping

P. S. CO'S "BUTTER CRISP" POP-CORN—The kernels of this variety pop out large and fluffy and are creamy colored, resembling buttered popcorn. For seed, per lb. **30c**; postpaid; for popping, **20c**; lb.; postpaid.

WHITE RICE POPCORN—The standard variety; kernels pop out large and snowy white. For seed, per lb. **25c** postpaid; for popping, **15c** lb. postpaid.

Sweet Corn Yellow Varieties

EARLY SUNSHINE—Our new extra early yellow corn. This variety is earlier and larger than Golden Bantam but still retains the famous Golden Bantam color. The kernels are broad, 12 rows to the ear, tender, sweet and of excellent quality. We consider this corn our best early yellow variety. **Supply limited.** Pkt. **20c**; $\frac{1}{2}$ lb. **25c**; lb. **40c**; postpaid.

GOLDEN BANTAM

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 3 feet apart; for later large varieties, 4 feet and the hills 2 or 3 feet in the rows.

**All varieties below: Pkt. 10c; $\frac{1}{2}$ lb. 20c; lb. 35c; postpaid
10 lbs. \$2.50; f.o.b. Portland**

GOLDEN EVERGREEN—A cross between Golden Bantam and Stowell's Evergreen. Larger and more productive than Golden Bantam and retains the tender skin of the Evergreen. Ears 8 to 9 inches long. Color rich golden yellow. This is a splendid yellow sweet corn with a most delicious flavor. An excellent variety to follow first early sorts.

GOLDEN GIANT—Yellow sweet corn, much larger than Golden Bantam which it resembles. An excellent sort for successive planting. Grows to a height of about 5 feet and usually bears two good eating ears 9 to 10 inches long, well filled from tip to butt.

GOLDEN WEST—A selection from the original strain of Golden Bantam and is earlier than Golden Bantam. Produces larger ears and has a more vigorous growth. Ears are a rich golden yellow with a quality that is ahead of other early varieties. Excellent for the market or home garden.

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

STOWELL'S EVERGREEN

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.

Sweet Corn

White Varieties

Prices on all varieties below
Pkt. 10c; $\frac{1}{2}$ lb. 20c; lb. 35c
POSTPAID

10 lbs. \$2.50; f.o.b. Portland

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.

STOWELL'S EVERGREEN—Remarkable for remaining a long time in a fresh condition suitable for the table. Hardy, productive, 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. When ripe the seed is bluish or black; when ready for table use the seed is white.

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
2. GOLDEN WEST

COLLECTION

Four 10c pkts., one each of above four varieties—40c value for **35c** postpaid

3. GOLDEN BANTAM
4. STOWELL'S EVERGREEN

COLLECTION

Four $\frac{1}{2}$ lb. pkts., one each of above four varieties—80c value for **70c** postpaid

Kohl-Rabi SEED and PLANTS

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; $\frac{1}{4}$ lb. 85c; postpaid.

EARLY PURPLE VIENNA—Same as above except in color, which is purple. Seed, pkt. 10c; oz. 25c; $\frac{1}{4}$ lb. 85c; postpaid. Plants, transplanted, doz. 25c; 100 \$1.50; f.o.b. Portland. In season April, May and June.

Diamond Quality Cucumbers

**DIAMOND
LONG GREEN**

Seed and Plants

"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. SEEDS, pkt. **10c**; oz. **20c**; ¼ lb. **45c**; lb. **\$1.35**; postpaid. INDIVIDUAL PLANTS, f.o.b. Portland, each **10c**; doz. **\$1.00**; in season April, May and June.

DAVIS PERFECT

DAVIS PERFECT—The Davis Perfect is of perfect form, deep green in color. Fruits average 10 inches or more in length. Slender, symmetrical, tapering slightly at both ends. Flesh is crisp, tender and of good quality. The seed cavity is small. One of the best varieties for home and market. Pkt. **10c**; oz. **20c**; ¼ lb. **45c**; lb. **\$1.35**; 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.

GHERKIN or WEST INDIA GHERKIN—A small oval, prickly fruited sort grown exclusively for pickles. Fruits about 2 inches and quite seedy. Seed is small and slow to germinate, requiring 2 to 3 weeks. Pkt. **10c**; oz. **25c**; postpaid.

GHERKIN

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. Pkt. **10c**; oz. **25c**; ¼ lb. **75c**; postpaid.

SHORT GREEN or EARLY FRAME—Early and very hardy. Fruit straight, small at each end, bright green, with crisp, tender flesh. An excellent variety for slicing and pickling. Pkt. **10c**; oz. **20c**; ¼ lb. **35c**; lb. **\$1.25**; ppd.

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**; ppd.

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.

Culture of Cucumbers

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.

Pickling Cucumbers

CHICAGO
PICKLING

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. **35c**; lb. **\$1.00**; postpaid.

SNOW'S PERFECTION CUCUMBER—Like the Chicago Pickle except that it is smaller. One of the most smooth, symmetrical kinds grown and is highly recommended for its uniform early pickles. Average 5x2¼ inches in size, enormously productive and very attractive. Pkt. **10c**; oz. **20c**; ¼ lb. **35c**; lb. **\$1.00**; postpaid.

LEMON CUCUMBER—A very productive variety. The fruits resemble a lemon in both form and color, having distinctive flavor. Ready for slicing when just starting to turn yellow. For pickling may be used either green or ripe. Pkt. **10c**; oz. **25c**; ¼ lb. **60c**; postpaid.

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. **35c**; lb. **\$1.00**; postpaid.

EGG PLANT, Seed and Plants

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. SEEDS, pkt. **10c**; oz. **70c**; ¼ lb. **\$2.00**; postpaid.

TRANSPLANTED PLANTS, doz. **25c**; 100 **\$1.50**; f.o.b. Portland. **INDIVIDUAL POTTED PLANTS**, each **10c**; doz. **\$1.00**. Plants are f.o.b. Portland and are in season April, May and June.

NEW YORK IMPROVED, LARGE PURPLE—The leading market variety. Large and productive. Pkt. **10c**; oz. **70c**; ¼ lb. **\$2.00**; ppd.

ENDIVE

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

BROAD LEAVED BATAVIAN (Escarole)—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, when the soil is right. In western Oregon plant in October. Per lb. **25c**; f.o.b. Portland. (Write for cultural instructions and quantity prices.)

DILL SEED

The seed and leaves are used to flavor soup, stews and pickles. The plants are branchy and 2 to 3 feet in height.

Dill Seed for Planting—Pkt. **10c**; oz. **20c**; ¼ lb. **50c**; postpaid. For Flavoring Use—Oz. **10c**; ¼ lb. **15c**; postpaid.

HERB SEEDS

FOR FLAVORING AND PICKLING

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

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

CARAWAY—For flavoring. Oz. **10c**; ¼ lb. **20c**; lb. **55c**; postpaid.

MUSTARD—For flavoring. Lb. **20c**; postpd.

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

PARSLEY—For flavoring. ¼ lb. **10c**; lb. **35c**; postpaid.

Horseradish Roots

Plant in spring, 18 to 24 inches apart, setting the whole root small end down. Three for **20c**; doz. **50c**; 100 **\$2.00**; f.o.b. Portland.

Hop Roots

Oregon's famous English Cluster Hops. Regular root cuttings, 3 for **25c**; doz. **75c**; 100 **\$4.00**; f. o. b. Portland.

TALL GREEN KALE

Leeks

LARGE ROUEN or American Flag—The leek belongs to the onion family. Prized for soups. Cultivate same as onions and hill up about the neck to blanch. Pkt. **10c**; oz. **30c**; ¼ lb. **75c**; postpaid.

CHICKEN LETTUCE

Just the thing for poultrymen

Garden Kale

Seed and Plants

EMERALD ISLE, Finest in the World—Entirely distinct from other strains, of medium height, very hardy and vigorous, throwing out new shoots as fast as the leaves are used. Will furnish excellent greens all winter. The closely curled, handsome leaves are the most attractive and of fine flavor. Pkt. **10c**; oz. **20c**; ¼ lb. **50c**; lb. **\$1.50**; postpaid.

TALL GREEN CURLED SCOTCH—Grows about 2 feet high; leaves dark green, curled and wrinkled; very hardy and is improved by a slight frost.

Seeds, pkt. **10c**; oz. **20c**; ¼ lb. **50c**; lb. **\$1.50**; postpaid.

Plants, transplanted, doz. **20c**; 100 **\$1.25**; 1000 **\$10.00**; f.o.b. Portland.

Not transplanted, doz. **15c**; 100 **\$1.00**; 1000 **\$8.00**; f.o.b. Portland. Season April to July.

DWARF GREEN CURLED—Leaves beautifully curled and bright green. Pkt. **10c**; oz. **20c**; ¼ lb. **50c**; lb. **\$1.50**; postpaid.

Cow Kale

or Thousand Headed Kale

The most valuable green feed for Pacific Coast dairy and stockmen; endorsed by agricultural colleges and government stations. Grown the same as cabbage; the rows 4 feet apart, 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.

Seeds, oz. **10c**; ¼ lb. **25c**; lb. **60c**; postpaid.

Transplanted plants, doz. **20c**; 100 **\$1.25**; 1000 **\$10.00**; f.o.b. Portland.

Not transplanted plants, doz. **15c**; 100 **90c**;

1000 **\$7.00**; f.o.b. Portland. Write for quantity prices. Plants in season April to July.

Kohl-Rabi

For description and prices of Kohl-Rabi see page 23

Chicken Lettuce

This lettuce yields an immense amount of chicken or rabbit feed. It does not form a head but sends up stalks 3 to 4 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. **20c**; ¼ lb. **50c**; lb. **\$1.35**; postpaid.

Diamond Quality

LETTUCE

SEED AND PLANTS

**New York
Heading
Varieties**

P. S. CO'S CRISPETTE—A beautiful lettuce, perfect in quality. Large, bright green, curly leaves cover the outside. Unusual solidity of the heads is insured by large white main ribs of leaves, each of which, curving strongly toward the center, makes it impossible for 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; ppd.
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. A hardy, rapid grower, deep rooted and resistant to drought; a slow seeder and sure to head. Thin to 12-14 in. One-year seeds, pkt. 10c; oz. 25c; ¼ lb. 85c; lb. \$2.50; postpaid. Two-year seeds, pkt. 10c; oz. 40c; ¼ lb. \$1.00; lb. \$3.50; postpaid.
Transplanted plants, doz. 25c; 100 \$1.50; f. o.b. Portland. In season April and May.

Lettuce, like many other vegetables, requires 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 1 to 2 ounces to the 100 yards. An ounce will produce 3000 plants. Four pounds should plant an acre. Lettuce matures in 40 to 60 days from time of planting.

HANSON—Improved Hard Heading Stock—One of the very best. Heads green outside and cream inside. It withstands the hot sun well.

Pkt. 10c; oz. 20c; ¼ lb. 60c; lb. \$1.50; ppd.
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; ppd.
BIG BOSTON—Very large, smooth-leaved, solid-heading variety, 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; ppd.
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.

Pkt. 10c; oz. 20c; ¼ lb. 60c; lb. \$1.75; ppd.
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; ppd.

LOOSE-LEAF VARIETIES

GRAND RAPIDS—For greenhouse forcing, this variety stands at the head of the list. Of quick growth and stands for some days after being fit to cut. Plant is upright and forms a loose head or cluster of large, light yellowish green leaves, slightly crimped and blistered; good flavor, crisp and tender. It will stand shipping better than most curled sorts.
Pkt. 10c; oz. 20c; ¼ lb. 60c; lb. \$1.75; postpaid.

SIMPSON'S EARLY CURLED—A leading market variety 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. 60c; lb. \$1.75; 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.

GRAND RAPIDS

Write for our new book on How to Fertilize; it's free

Melons

Seed and Plants

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 with fertilizer worked into each hill. 1 oz. of seed will plant 30 hills; 2 to 3 lbs. per acre.

KLONDIKE

Watermelons

KLONDIKE—For genuine merit the Klondike is surpassed by no other melon. 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 lbs.

SEEDS, pkt. **10c**; oz. **25c**; ¼ lb. **65c**; lb. **\$2.00**; postpaid.

INDIVIDUAL POTTED PLANTS, each **10c**; doz. **\$1.00**; f.o.b. Portland. Ready April-May.

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. **20c**; ¼ lb. **45c**; lb. **\$1.25**; ppd.

TOM WATSON—18 to 24 in. long, 10 to 12 in. 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. **20c**; ¼ lb. **45c**; lb. **\$1.25**; postpaid.

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. **10c**; oz. **20c**; ¼ lb. **45c**; lb. **\$1.25**; 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. **20c**; ¼ lb. **35c**; lb. **\$1.00**; postpaid.

BLACK-SEEDED ICE CREAM

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 meated, black seeded, a fine keeper. Drought-resistant, ripens early. Pkt. **10c**; oz. **20c**; ¼ lb. **50c**; lb. **\$1.50**; postpaid.

CASABA

GOLDEN BEAUTY CASABA—One of the best casabas, grown extensively for shipment from southern California. Fruit nearly globular, bright yellow with golden tint, wrinkled skin, 6 to 8 inches in diameter. Flesh white, very thick, juicy and sweet. Will mature in most localities where melons can be grown. Pkt. **10c**; oz. **20c**; ¼ lb. **50c**; lb. **\$1.50**; postpaid.

GOLDEN BEAUTY CASABA

Our seeds are all tested in our laboratory for purity and germination, assuring the best.

"HEARTS OF GOLD"

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 shape, netting, flavor, long keeping and good shipping qualities. Pkt. **10c**; oz. **20c**; ¼ lb. **50c**; lb. **\$1.50**; 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**; ppd.

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

Mushroom Spawn

Our free pamphlet gives general instructions.

NEW AMERICAN SPORE CULTURES—Produced from original spores by a 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**.

OKRÀ [or Gumbo]

Grown for its green pods which are used in soups, stews, etc., for their rich flavor and substance.

IMPROVED DWARF GREEN—Very early, with long, green slender pods. Pkt. **10c**; oz. **15c**; ¼ lb. **35c**; postpaid.

WHITE VELVET—Large pods, smooth or very slightly ribbed, remain tender a long time. Pkt. **10c**; oz. **15c**; ¼ lb. **35c**; postpaid.

Muskmelons

Seed and Plants

CULTURE—Plant in hills 4 to 6 feet apart, after frost is past and ground is warm; enrich with fertilizer; 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.

HEARTS OF GOLD—This melon runs very uniform in size. It is a splendid shipping variety, a little larger than the Rocky Ford variety. While it is a ribbed melon the ribs are not prominent and the melon is very heavily netted. The flesh is a rich orange color, fine grained and of excel-

lent flavor. The seed cavity is small. Will not turn yellow when ripe but retains its natural green color and remains solid and firm for days after it is picked from the vine. Seeds, pkt. **10c**; oz. **20c**; ¼ lb. **50c**; lb. **\$1.50**; postpaid. Individual Potted Plants, each **10c**; doz. **\$1.00**; f.o.b. Portland; in season April and May.

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. **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. **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. **50c**; lb. **\$1.50**; postpaid.

Mustard Seed

FOR PLANTING

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

SOUTHERN GIANT CURLED—Pkt. **10c**; oz. **15c**; ¼ lb. **35c**; lb. **90c**; postpaid.

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. **90c**; postpaid.

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

MUSTARD SEED FOR FLAVORING

For flavoring and pickling, not for planting; lb. **20c**, postpaid. Write for special price on quantities.

THE SECRET of the best results with vegetables is **FERTILIZER**. Get our free book.

ONIONS

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

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

AUSTRALIAN BROWN—Resembles the Oregon "Yellow Danvers" in general appearance, but has a clear amber-brown skin. 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**; ¼ 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**; ¼ lb. **75c**; lb. **\$2.25**; postpaid.

PRIZETAKER, 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**; ¼ 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**; ¼ lb. **65c**; lb. **\$2.25**; postpaid.

WHITE PORTUGAL—One of the standard American onions. 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**; ¼ lb. **75c**; lb. **\$2.50**; postpaid.

CULTURE—For the best results in onion growing, soil should be deep and rich, bottom land or rather loose texture being preferred—(beaverdam soil is best). Sow 2½ 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."

P. S. CO'S OREGON YELLOW DANVERS, developed in Oregon and the standard market variety in this section. The bulbs are uniformly large, half globe form, small neck, thin, brownish-yellow skin, firm, fine grained flesh very white and mild. Produce the largest crops, ripen up hard and early, the best keepers and bring the highest price in the Coast markets. As a table or market onion it has no rival. The seed we offer is produced under the most approved methods of culture. Pkt. **10c**; oz. **25c**; ¼ lb. **75c**; lb. **\$2.50**; ppd.

**Riverside
Sweet Spanish
Onion
Try it!**

RIVERSIDE SWEET SPANISH ONION—This is the genuine Sweet Spanish. 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 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. Pkt. **10c**; oz. **50c**; ¼ lb. **\$1.50**; lb. **\$4.00**; postpaid.

White Bermuda Plants

In season April and May. 100 **60c**;
1000 **\$5.00**; f.o.b. Portland. Write
for special price on larger quantities.

WHITE BUNCHING

EXTRA DOUBLE CURLED—The plants bear a great number of leaves, so abundant and so finely curled they resemble a bunch of moss. Seed, pkt. **10c**; oz. **15c**; $\frac{1}{4}$ lb. **40c**; postpaid. Plants, in season April, May and June; individual potted plants, each **15c**; doz. **\$1.50**; f.o.b. Portland.

White Bunching Onions

WHITE "BUNCHING" ONION—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. **70c**; lb. **\$2.00**; 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. **15c**; f.o.b. Portland. Write for latest quotation on quantities.

PARSLEY—Seed and Plants

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

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.

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. **\$1.00**; postpaid.

Peppers

Seed and Plants

CULTURE—Sow early in hotbeds; or later, when the weather becomes warm, in open beds. When 2 or 3 inches high, transplant to a warm, mellow soil, in rows 18 inches apart and a foot apart in the rows. Guano and hen manure are excellent fertilizers and will greatly increase the yield.

PERFECTION PIMIENTO PEPPER—Unequalled 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**; $\frac{1}{4}$ lb. **\$2.00**; postpaid.

LARGE BELL or **BULL NOSE**—Large, mild, thick-fleshed variety. Fine for stuffed pickles. Seeds, pkt. **10c**; oz. **65c**; $\frac{1}{4}$ lb. **\$2.00**; ppd. Plants, transplanted, f.o.b. Portland, doz. **30c**; 100 **\$1.75**; 1000 **\$12.00**. Individual potted plants, each **10c**; doz. **\$1.00**; f.o.b. Portland. In season April, May and June.

CAYENNE—Pods long; bright red; very pungent and used with pickles when green.

Seeds, pkt. **10c**; oz. **65c**; $\frac{1}{4}$ lb. **\$2.00**; postpaid.

Transplanted plants, in season April, May and June, doz. **30c**; 100 **\$1.75**; 1000 **\$12.00**; f.o.b. Portland.

CHINESE GIANT—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 five inches in diameter, almost square in shape, and divided into four sections. Our seed of this variety grown from especially selected stock. Pkt. **10c**; oz. **75c**; $\frac{1}{4}$ lb. **\$2.50**; ppd.

RUBY KING—Very large, sweet and mild; bright scarlet. Pkt. **10c**; oz. **65c**; $\frac{1}{4}$ lb. **\$2.00**; postpaid.

CHILI—Pods small and pointed; brilliant scarlet; very pungent when ripe.

Seeds, pkt. **10c**; oz. **65c**; $\frac{1}{4}$ lb. **\$2.00**; postpaid.

Transplanted plants, in season April, May and June, doz. **30c**; 100 **\$1.75**; 1000 **\$12.00**; f.o.b. Portland.

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 Peas on this page

Pkt. 10c; 1/2 lb. 20c; lb. 35c; postpaid
5 lbs. \$1.25; 10 lbs. \$2.50; f.o.b. Portland

MAIN CROP VARIETIES

GRADUS or PROSPERITY—This early wrinkled pea bears pods of large size and combines quality with earliness. Very hardy and prolific; can be planted fully as early as the smooth peas; growth vigorous and healthy; vines 2 1/2 feet in height; quality and flavor are delicious and they remain tender and sweet for a long time.

TELEPHONE—TALL—Our Western grown selection and a standard market variety; immensely productive, 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.

LAXTON'S SUPERB—Produces more pods and larger pods than any other early dwarf pea. The flavor is exceptional; pods are slightly curved and contain an average of 8 to 9 peas of finest marrow flavor. Vines are stout, 18 to 24 inches high. A fine variety for home or market garden.

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 4 inches, with square ends, uniformly well filled and of unexcelled quality. One of the very best sorts for market and home garden.

PILOT—A large podded extra early smooth pea. Pods and peas nearly as large as those of the "Gradus" and are produced three days earlier. Vines grow 3 feet tall, bearing pods 3 3/4 inches long, 6 to 7 peas to the pod. Foliage medium green, pods darker. Excellent for home garden and market.

EARLY AND DWARF VARIETIES

EARLY DWARF GRADUS—Slightly earlier and more dwarf than the regular Gradus. Vines are 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 8 to 10 peas.

LITTLE MARVEL—The dwarf, bushy vines, averaging 15 inches, are loaded with firm, square-ended pods 2 1/2 to 3 inches long, tightly filled with plump, luscious, deep green peas. As early as American Wonder and far outyields it.

AMERICAN WONDER—One of the most popular and best of the early wrinkled sorts; stout, branching vines, covered with well filled pods containing 7 or 8 large, exceedingly sweet, tender and well flavored peas. Height 10 to 12 inches.

PREMIUM GEM—One of the earliest and best of the dwarf garden peas. The vigorous, luxuriant vines average about 15 inches in height, 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. Splendid 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 4 to 7 long pods, filled with medium sized, bright green peas of excellent flavor. A favorite with our market gardeners for fall or early spring planting.

PICTURES IN COLORS

of Garden Peas shown on page 2

Use "NITRAGIN" for greatly increasing your production of peas. Refer to index for information.

PUMPKINS

LARGE YELLOW

SWEET OR SUGAR

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.

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. **35c**; 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. **40c**; lb. **\$1.35**; 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. **40c**; 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. **35c**; lb. **\$1.00**; postpaid.

RHUBARB PLANTS

CULTURE—Plant crown even with surface of ground 3 to 4 feet apart in row and rows 4 to 5 feet apart; water immediately; keep well cultivated close to plant for 2 feet distance. Irrigate each week for 2 months, cultivate after each irrigation.

IMPROVED PANAMA RHUBARB—Everbearing, growing continuously throughout the year, summer and winter. 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 are known as sub-divisions. Each **35c**; doz. **\$3.75**; postpaid; 100 **\$30.00**, f.o.b. Portland.

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 price on large lots.

Write for more complete cultural directions

Don't plant rhubarb near trees. Give plenty of room.

IMPROVED PANAMA

Radishes

EARLY CRIMSON GIANT

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 CRIMSON GIANT, the Largest Early Scarlet Turnip-Shape Radish—Double the size of any turnip-shaped type, but notwithstanding its size, does not get hollow or pithy. The flesh is a sparkling white, solid, crisp, juicy and of the mildest flavor. Shape varies from round to almost oval. Excellent for both forcing and open ground. Pkt. **10c**; oz. **20c**; ¼ lb. **40c**; lb. **\$1.00**; postpaid.

EARLY SCARLET WHITE-TIPPED TURNIP-SHAPE RADISH—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. **20c**; ¼ lb. **40c**; 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. **20c**; ¼ lb. **40c**; lb. **\$1.00**; postpaid.

LONG BLACK SPANISH—One of the hardiest garden radishes adapted for winter use. Roots are long, thick, almost black and somewhat wrinkled. Flesh white, of firm texture and well flavored. Pkt. **10c**; oz. **20c**; ¼ lb. **40c**; lb. **\$1.00**; postpaid.

WHITE ICICLE—Ready for use in 20 to 25 days; the long, slender form and pure, paper-white skin most attractive when bunched for market. 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. **20c**; ¼ lb. **40c**; lb. **\$1.00**; postpaid.

FRENCH BREAKFAST or **HALF LONG**—Medium size, quick growth, crisp and tender; lower end and taproot white. Pkt. **10c**; oz. **20c**; ¼ lb. **40c**; lb. **\$1.00**; postpaid.

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. **20c**; ¼ lb. **40c**; 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. **20c**; ¼ lb. **40c**; lb. **\$1.00**; postpaid.

WHITE ICICLE

See the special Early Scarlet White Tipped Radish in full colors—page 6

Write for **FREE BOOK** on **HOW TO FERTILIZE** and increase your production

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.

NEW ZEALAND—This spinach thrives in hot weather and in any soil, rich or poor. The tender shoots are of good quality and may be cut throughout the summer. The leaves are comparatively small, broad and pointed. Pkt. **10c**; oz. **20c**; $\frac{1}{4}$ lb. **40c**; lb. **95c**; ppd.

IMPROVED THICK LEAVED—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**; oz. **15c**; $\frac{1}{4}$ lb. **25c**; lb. **60c**; postpaid.

KING OF DENMARK—The most valuable of early sorts, remaining in good condition one to two weeks after other varieties have gone to seed. Of rapid growth, leaves thick and stand well after cutting. Pkt. **10c**; oz. **15c**; $\frac{1}{4}$ lb. **25c**; lb. **75c**; postpaid.

SAVOY LEAVED—Bloomsdale—Very early; upright growth; leaves pointed. Plant in the autumn for spring use; grows quickly. Pkt. **10c**; oz. **15c**; $\frac{1}{4}$ lb. **25c**; lb. **55c**; postpaid.

PRICKLY WINTER—Hardest variety; must be sown in the fall; seed prickly; leaves long, pointed, thick and succulent. Pkt. **10c**; oz. **15c**; $\frac{1}{4}$ lb. **25c**; lb. **55c**; postpaid.

LONG STANDING—Large, fleshy, savoyed leaves remain in an edible condition over a long period; slow to go to seed. Pkt. **10c**; oz. **15c**; $\frac{1}{4}$ lb. **25c**; lb. **55c**; postpaid.

IMPROVED THICK LEAVED

Best for
Market
Gardeners

SALSIFY

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**; $\frac{1}{4}$ lb. **75c**; lb. **\$2.50**; postpaid.

Swiss Chard

NEW SAVOYED LEAF "LUCULLUS"—An improved variety about 2½ feet high. The heavy stalks are over an inch thick and bear 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.

Pkt. **10c**; oz. **20c**; $\frac{1}{4}$ lb. **40c**; lb. **\$1.00**; postpaid.

Sweet Potato Plants

The plants should be set after the ground is warm; any good garden soil, but rich sandy bottom is best. Plants in season May and June.

F. O B. Portland, doz. **50c**; 3 doz. **\$1.00**; 100 **\$2.00**.

SWISS CHARD

WHITE BUSH

Summer Varieties

WHITE BUSH—The best sort for home garden and market. Early, somewhat flattened, scalloped and of medium size. Color is creamy white. Slightly warted surface. Vines vigorous. Pkt. **10c**; oz. **20c**; ¼ lb. **45c**; lb. **\$1.25**; postpaid.

COCOZELLE or ITALIAN MARROW—The dwarf bushes produce larger elongated, slightly curved, smooth dark green fruits which became marbled with yellow and lighter green. Best when 6 to 8 inches long. The flesh is very tender, marrowy and delicious. Fine for market. Pkt. **10c**; oz. **20c**; ¼ lb. **45c**; lb. **\$1.25**; postpaid.

SQUASH

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.

CROOKNECK

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

COCOZELLE

Winter Varieties

WARTY HUBBARD

WARTY HUBBARD SQUASH—Round with elongated ends. Slightly larger than the Improved Hubbard. Hard, deeply warted shell. Dark olive green in color. Flesh is bright orange yellow. Fine grained. Thick, dry and rich. Makes an excellent winter squash. Pkt. **10c**; oz. **20c**; ¼ lb. **45c**; lb. **\$1.25**; ppd.

TABLE QUEEN SQUASH—Small, very dark green, acorn shaped. Flesh lighter in color than the Hubbard squash. Fine grained. Has an excellent flavor when baked. Cooks right up to the shell which is thin and quite tough. Can be cooked whole when young and bakes splendidly when mature. Fruits are 5 to 6 inches in length and 3 to 4 inches in diameter. Matures early and is a good keeper. Pkt. **10c**; oz. **25c**; ¼ lb. **50c**; lb. **\$1.60**; ppd.

BANANA SQUASH—One to two feet in length, flesh firm and solid, of beautiful orange-yellow; rind smooth, grayish-green color. Resists heat of sun better than the Hubbard; excellent flavor, splendid keeping qualities, remains in good condition from one season to another. Pkt. **10c**; oz. **20c**; ¼ lb. **50c**; lb. **\$1.50**; postpaid.

IMPROVED HUBBARD—The most popular variety on our list. Large and of Warty Hubbard shape. Shell is dark green, moderately warted and very hard. Flesh is light orange, very dry and rich flavored. One of the best winter squashes. Pkt. **10c**; oz. **20c**; ¼ lb. **45c**; lb. **\$1.25**; ppd.

MAMMOTH CHILI—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**; ppd.

GOLDEN HUBBARD—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**; ppd.

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**; ppd.

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

TABLE QUEEN

TOMATO

Seed and Plants

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 it is a control measure for flea beetles, spraying the under side of foliage.

MARIGLOBE—A new variety developed by United States Department of Agriculture. Very wilt-resistant and is a handsome deep red, globe-shaped tomato of great merit. Plants are vigorous, dark green and productive; fruits are quite large. A very desirable tomato for salad or slicing. Excellent for canning. Pkt. **15c**; oz. **\$1.50**; lb. **\$8.00**; postpaid.

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. **40c**; ¼ lb. **\$1.25**; lb. **\$3.75**; ppd.

BONNY BEST—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**; lb. **\$3.75**; ppd.

"BURBANK" TOMATO—Earliest, smoothest, most productive and best early tomato, 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 feature of being easily peeled, the skin slipping readily from the flesh. Resistant to wilt and other diseases.

Pkt. **10c**; oz. **45c**; ¼ lb. **\$1.25**; lb. **\$3.75**; ppd.

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. We recommend it as an early tomato for either market or home gardens.

Pkt. **10c**; oz. **40c**; ¼ lb. **\$1.25**; lb. **\$3.75**; ppd.

DWARF CHAMPION—Dwarf, upright growth; smooth, purple fruit.

Pkt. **10c**; oz. **45c**; ¼ lb. **\$1.50**; postpaid.

JOHN BAER—Perfect, solid, high crown, brilliant red; ripens 10 days before Earliana, bearing 50 to 100 fruits per plant. Flavor is deliciously sweet. Will stand plenty of fertilizer without going to vine; keeps well; a good shipper; a prolific, continuous bearer, easily peeled. Resistant to wilt and other diseases.

Pkt. **10c**; oz. **40c**; ¼ lb. **\$1.25**; lb. **\$3.75**;

STONE—Popular with canners, growers and market gardeners. Solidity and carrying qualities are remarkable. Color a desirable red. Shape perfect. Thicker from stem to blossom end than most varieties. Pkt. **10c**; oz. **40c**; ¼ lb. **\$1.25**; lb. **\$3.75**; postpaid.

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**; postpaid.

GOLDEN QUEEN—A first class, large, smooth, pure yellow tomato.

Pkt. **10c**; oz. **50c**; ¼ lb. **\$1.65**; postpaid.

YELLOW PEAR TOMATO—Small, pear-shaped, borne in great profusion, vine literally covered with clusters of fine, solid fruit; excellent for preserving. Very hardy.

Pkt. **10c**; oz. **50c**; ¼ lb. **\$1.75**; postpaid.

YELLOW PLUM TOMATO—A small plum-shaped, deep yellow skin and flesh. For preserving. Pkt. **10c**; oz. **50c**; ¼ lb. **\$1.75**; postpaid.

YELLOW CHERRY TOMATO—Cherry-shaped fruit, deep yellow.

Pkt. **10c**; oz. **50c**; ¼ lb. **\$1.75**; postpaid.

TOMATO PLANTS

In season April, May and June. We have a complete stock of healthy transplanted plants in the following varieties: **SPARK'S EARLIANA**, **BONNY BEST**, **BURBANK**, **CHALK'S EARLY JEWEL**, **JOHN BAER** and **DWARF CHAMPION**. Transplanted plants, f.o.b. Portland, dozen **25c**; 100 **\$1.25**; 1000 **\$10.00**. Individual potted plants, Bonny Best or Early Jewel only, f.o.b. Portland, each **10c**; dozen **\$1.00**.

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. **50c**; ¼ lb. **\$1.75**; postpaid.

Transplanted Plants, in season April, May, June, f.o.b. Portland, doz. **25c**; 100 **\$1.25**.

Tobacco

CULTURE—Sow 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**; postpaid.

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

Transplanted plants, in season April, May and June, f.o.b. Portland, doz. **30c**; 100 **\$1.25**.

GLOBE

MILAN

Turnips

Diamond Quality

CULTURE—For early use sow the small sorts as soon as the ground can be worked in the spring, in drills 14 inches apart. As the seed is very fine, it should be covered but slightly, except in very dry weather. For fall and winter use, sow the early kinds during July, August and September.

Early Garden Varieties

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. **45c**; lb. **\$1.25**; ppd.

EARLY WHITE MILAN—Same as Purple Top Milan, but pure white, sweet and tender; best early market variety. Pkt. **10c**; oz. **20c**; ¼ lb. **45c**; lb. **\$1.25**; postpaid.

EARLY SNOWBALL—Early round turnip, maturing in seven weeks; is of perfect form, snowy whiteness, crisp fine flavor. Pkt. **10c**; oz. **15c**; ¼ lb. **35c**; lb. **80c**; postpaid.

GOLDEN BALL—One of the most delicate and sweetest yellow-fleshed turnips. Not of large size, but firm, hard and most excellent flavor. Keeps well and is superior as a table variety. Extensively used by market gardeners. Pkt. **10c**; oz. **15c**; ¼ lb. **35c**; lb. **80c**; postpaid.

PURPLE TOP STRAP LEAF—A leading white-fleshed variety and one of the best, either for 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. **35c**; lb. **80c**; postpaid.

EARLY FLAT WHITE 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. **35c**; lb. **80c**; ppd.

Main Crop Turnips

POMERANIAN WHITE GLOBE—One of the most productive kinds, and in good, rich soil, roots will frequently grow to 12 pounds in weight. Perfect globe shape; skin white and smooth; leaves dark green, of strong growth. One of the highest yielding varieties in the state, experimental root trials. Has unusually long feeding period without becoming pithy. "STANDARD VARIETY." Pkt. **10c**; oz. **15c**; ¼ lb. **35c**; lb. **80c**; postpaid.

PURPLE TOP WHITE GLOBE—A large, globe-shaped variety; purple above ground. It is handsome and of excellent quality; recommended both for family garden and field crop. Pkt. **10c**; oz. **15c**; ¼ lb. **35c**; lb. **80c**; postpaid.

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 dairymen. Pkt. **10c**; oz. **15c**; ¼ lb. **35c**; lb. **80c**; ppd.

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. **35c**; lb. **80c**; postpaid.

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 бага, being a very choice kind for table use; of excellent flavor; sweet and mild. Pulls clean from the ground. Pkt. **10c**; oz. **15c**; ¼ lb. **35c**; lb. **80c**; postpaid.

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. **35c**; lb. **80c**; postpaid.

Ruta Baga or Swede

IMPROVED AMERICAN PURPLE TOP—The leading variety; large, immense yielder. Superior in every way. Pkt. **10c**; oz. **15c**; ¼ lb. **35c**; lb. **80c**; postpd.

"STANDARD VARIETY"

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**; postpaid.

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. **35c**; lb. **80c**; postpaid.

"STANDARD VARIETY"

(Above—Some scenes where our grass seeds were used)

Astorian Creeping Bent Grass

This variety is a true type and not a mixture. It is more suited to highlands than ordinary bent grasses. Astoriana Bent requires much less moisture. The photograph below shows one of the nursery fields where Astoriana Creeping Bent is raised under the most careful supervision. In **CERTIFIED SEALED PACKAGES**. 1 lb. **\$2.05**; 10 lbs. **\$19.00**; postpaid.

Lawn Grass Seeds

The lawn is the setting for the home; a beautiful, well kept lawn is the sign of

Diamond Quality

thrifty home loving people. Flowers and shrubs appear far more beautiful when in contrast with a neat, carefully trimmed lawn. Establishing a good lawn requires careful preparation and the selection of good seed of the proper mixture for the location and soil.

Tested

Our special lawn grass mixtures have been carefully worked out by the tests and observation of practical experts and are the result of many years of experience. They cover practically all requirements but if in doubt, write us and we will gladly make special suggestions. Also write for complete instructions for lawn culture, especially when planting a new lawn.

All choicest new crop seeds, recleaned in our special cleaning machines and tested for purity and germination in our own seed laboratory

Prices on grass seeds are subject to change without notice

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. **70c**; 10 lbs. **\$6.00**; postpaid.

DIAMOND FANCY LAWN GRASS MIXTURE 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 sq. ft.

1 lb. **90c**; 10 lbs. **\$8.00**; postpaid.

DIAMOND FANCY LAWN GRASS MIXTURE WITH WHITE CLOVER—This is our regular Diamond Mixture with the addition of one-fourth white clover for those who prefer a mixed lawn. Sow one pound to 200 square feet.

1 lb. **65c**; 10 lbs. **\$5.50**; postpaid.

FINE MIXED LAWN GRASS—A good clean mixture for general use. Makes a quick lawn and if kept cut will be lasting.

1 lb. **50c**; 10 lbs. **\$4.00**; postpaid.

WHITE DUTCH CLOVER

WHITE DUTCH CLOVER—Diamond Fancy, the very finest quality for use on lawns. Makes an attractive lawn while grass is getting a good start. 1 lb. **60c**; 10 lbs. **\$5.50**; postpaid.

Creeping Bent Grasses

ASTORIANA CREEPING BENT GRASS—

This variety differs from Pacific Creeping Bent in that it is a true type and not a mixture. It is more suited to highlands than ordinary bent grasses. Astoriana Bent requires much less moisture. The photograph at bottom of page 40 shows one of the nursery fields where Astoriana Creeping Bent is raised under the most careful supervision. The higher cost is well repaid in the superiority of results. In **CERTIFIED SEALED PACKAGES**.

1 lb. **\$2.00**; 10 lbs. **\$19.00**; postpaid.

PACIFIC CREEPING BENT GRASS (Agrostis Maritima)—Grown on this coast, acclimated to this country and especially recommended for golf courses. It makes an exceptionally fine turf that smothers out weeds.

1 lb. **\$1.80**; 10 lbs. **\$17.00**; postpaid.

IMPORTED CREEPING BENT GRASS—This furnishes an unusually fine turf on ordinary soils. It is very hardy and thrives in both summer and winter owing to the fact that it is a mixture of various varieties of bent grown under nearly all conditions.

1 lb. **\$1.00**; 10 lbs. **\$9.00**; postpaid.

Grass Mixtures for Golf Courses

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 have had the pleasure of furnishing the grass seed for the majority of the golf and country clubs in and around Portland as well as throughout Oregon, Idaho and Washington, and invite correspondence and specification bids.

It pays to use fertilizer on your lawn. Ask for our free book on **FERTILIZING**

Prices on grass seeds subject to change without notice. Write for special quantity prices

FOR PASTURES, LAWNS AND HAY

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 releaning department in order to give the very purest seed.

PRICES ARE POSTPAID TO FOURTH ZONE ONLY; BEYOND THAT ADD ADDITIONAL POSTAGE

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.

Blue Grasses

BLUE GRASS, CANADIAN (*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. **45c**; 10 lbs. **\$4.00**; ppd.

BLUE GRASS, KENTUCKY (*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. Also used extensively for lawns. Sow 28 lbs. per acre. 1 lb. **65c**; 10 lbs. **\$6.00**; postpaid.

MESQUITE (*Holcus lanatus*)—Usually sown on virgin soil without cultivation, after ground is burned over. Sow 35 lbs. to the acre chaff seed, hulled, 15 lbs. per acre. Fancy hulled seed, 1 lb. **30c**; 10 lbs. **\$2.75**; postpaid.

OAT GRASS, TALL MEADOW—The earliest grass to start in the spring and the last to die in the fall; withstands drouth, heat and cold much better than other grasses. A long lived deep rooted perennial and with proper care will make large annual yields for a period of 3 to 6 years or longer. In favorable seasons it will produce two crops in a year (second crop does not produce seed). First crop grows 5 to 6 feet tall, making an abundance of forage and pasture; can be grown with red or alsike clover and matures for hay with these legumes. Grows equally on bottom or upland clay soils. Its deep root system does not rob the surface soils of its fertility. 1 lb. **40c**; 10 lbs. **\$3.10**; 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. 1 lb. **35c**; 10 lbs. **\$2.80**; 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. **35c**; 10 lbs. **\$3.00**; postpaid.

ROUGH STALK MEADOW GRASS—For shady lawns or wood pastures. An excellent grass. 1 lb. **30c**; 10 lbs. **\$2.70**; postpaid.

Rye Grasses

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

RYE GRASS, PACEY'S Short Seeded English—Used by many gardeners. Sown thickly, it makes a fine lawn very quickly, and for large grounds and parks is very successful. Used extensively for polo grounds on account of its tough heavy sod. 1 lb. **25c**; 10 lbs. **\$1.80**; postpaid.

RYE GRASS, ITALIAN (*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**; postpaid.

RYE GRASS, OREGON—The finest rye grass grown, far superior to imported; over 1½ million bushels threshed this past season and sold not only on the Coast but in all parts of the world, as it is just now coming into its own. See the report reprinted in part on top of next page. Sow 40 to 80 lbs. per acre. 1 lb. **20c**; 10 lbs. **\$1.50**; postpaid.

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, 1 lb. **20c**; 10 lbs. **\$1.65**; postpaid.

Winter Blue Grass for Winter Pasture

POA BULBOSA—A new winter grass, grows from October to June, producing a beautiful green dense growth 3 to 6 inches high, furnishing splendid pasture the entire winter and spring. Cattle do not track it up on account of the heavy sod. The milk is very sweet with a rich color. No risk of bloat. Solves the poultryman's problem for winter greens. Hogs thrive remarkably on it. Crowds out weeds such as foxtail, broncho, etc. 1 lb. **\$1.05**; 10 lbs. **\$9.00**; ppd.

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.

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 pasturage. Use 20 lbs. per acre if sown alone. 1 lb. **70c**; 10 lbs. **\$6.30**; ppd.

Fescues

FESCUE, CHEWING (*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. **50c**; 10 lbs. **\$4.50**; postpaid.

FESCUE, MEADOW (*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.

FESCUE, RED or CREEPING (*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.

FESCUE, TALL (*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**; postpaid.

Creeping Bent Grasses
See page 41

All prices above subject to change without notice. For larger quantities ask for special quotation

Oregon Rye Grass—The Finest Pasture Grass Grown

Read this report . . .

OREGON RYE GRASS PRODUCTION

By PROF. H. A. SCHOTH
Ass't Agronomist, U. S. Dept. of Agriculture

Oregon Rye Grass, quite often referred to as Domestic, Western or Pacific rye grass, is a distinctive type common to western Oregon.

In general it is a combination of the rapid growing Italian type with a small per cent of English or Perennial. This rye grass has been grown for many years in Western Oregon. During the past six years seed production of Oregon rye grass has developed very rapidly and now represents the major grass seed production industry of the Pacific Northwest.

Oregon rye grass is a rapid grower, very winter hardy, leaves and stems medium fine, stools heavily, has a bright green color and has a rapid comeback after mowing, especially during the winter months. It is considered an annual. It is valuable for forage uses such as pasture and hay, also for lawn and park use where a rapid growing and quickly greening grass is desired. Seed is of high quality because of good growing conditions for production. Germination is high. The seed is large, plump, mostly short awned and usually dark colored.

Oregon rye grass is adaptable to rather dry, shallow, poor soil conditions as well as to the better soils. It makes excellent growth on rather low, heavy, poorly drained soils. In many sections Oregon rye grass is interseeded with grasses that are dormant during the winter so that a year around green surface is possible. This practice is common in Bermuda grass sections. The use of Oregon rye grass is rapidly expanding because of the successful growth it has made in the western, southern and eastern states. In the western states it is used primarily for seed and forage production. In southern and eastern states it is used primarily for winter lawn purposes.

Seedings should be made in early fall. Rates of seeding vary from 40 to 80 pounds per acre. The seed is usually broadcast. Germination is usually more rapid and even where the seed can be raked in or lightly covered with soil, the heavier the rate of seeding the finer the texture of the grass.

1 lb. 20c; 10 lbs. \$1.50; ppd. Write for quantity prices

Special Pasture Mixtures of Grass Seeds

Postpaid prices are to 4th zone only. Beyond that include additional postage

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**; ppd.

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**; postpaid.

No. 4: FOR DRY LAND—Mixed especially for the regions between the Cascade 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. 5: 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.

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

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. 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 for 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 drought resisting, deep rooting qualities. 10 lbs. **\$2.30**, postpaid; 100 lbs. **\$17.50**; f.o.b. Portland.

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 for sowing on burns and logged-off land. Splendid value and very economical for such purposes. 10 lbs. **\$2.05**, postpaid; 100 lbs. **\$15.00**, f.o.b. Portland.

Write for quantity prices on all above

All prices subject to change without notice

ALFALFA SEED

Alfalfa 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. The value of Grimm has been demonstrated beyond question. 1 lb. **60c**; 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. **40c**; 10 lbs. **\$3.20**; 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. **40c**; 10 lbs. **\$3.20**; postpaid. Write for quantity prices. Postpaid prices are to 4th zone only. Include additional postage beyond that. Prices on alfalfa subject to market changes.

CLOVERS

Postpaid prices are to 4th zone only. Add extra postage if beyond. Clover prices subject to market changes.

LADINO WHITE CLOVER—Also known as Giant White or Italian White, is a very large form of clover, usually making a growth of 8 to 12 inches as compared to the usual 3 or 4 inch height. It is a perennial. The stems lie flat on the ground and commonly root at the joints. It is not a deep rooted plant and consequently can be grown on rather shallow land where well supplied with humus and moisture. Ladino clover makes especially vigorous growth on the lower, medium heavy types of soils in western Oregon, under irrigation or natural moisture during growing season. Grown for hay, pasture and seed. Will carry twice as much stock per acre as blue grass. Three cuttings can ordinarily be made per year. Sow 4 to 6 lbs. per acre. 1 lb. **\$1.65**; 10 lbs. **\$16.00**; postpaid.

YELLOW SWEET CLOVER, BIENNIAL (*Melilotus Officialis*)—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 pasture. Produces high quality hay. Per lb. **25c**; 10 lbs. **\$2.00**; 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. **20c**; 10 lbs. **\$1.50**; postpaid. Write for quantity prices.

WHITE SWEET or BOKHARA CLOVER, BIENNIAL (*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. **25c**; 10 lbs. **\$2.00**; 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. 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 quantity prices.

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. **25c**; 10 lbs. **\$2.00**; postpaid. Write for quantity prices.

MAMMOTH RED CLOVER—Grows very large and is used almost exclusively for plowing under for manure. Per lb. **50c**; 10 lbs. **\$4.50**; 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. **45c**; 10 lbs. **\$4.25**; 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. **45c**; 10 lbs. **\$4.00**; 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. **60c**; 10 lbs. **\$5.50**; postpaid. Fancy, 1 lb. **50c**; 10 lbs. **\$4.75**; postpaid.

Inoculate Clover and Alfalfa with

Inoculated legumes take nitrogen from the air to supply the plant, resulting in faster growth, earlier maturity, larger crops. Inoculated legumes develop larger root systems than when not inoculated and therefore reach the immense stores of potash and phosphorus in the sub-soil, bringing them up to supply the plant. Inoculated legumes contain more protein matter than when not inoculated, greatly increasing their feeding value.

GARDEN SIZE
For Peas, Sweet Peas and Beans
(3 in 1) **20c**;
postage extra

Alfalfa, clovers, soybeans, vetches, beans, cowpeas and other legumes should always be inoculated with Nitragin. The lack of necessary bacteria in the soil is often the cause of a poor legume crop—a weak start—or a total failure.

PRICES FOR FIELD NITRAGIN

IMPORTANT—Be sure to state variety of seed for which you want Nitragin.

1/4 bu. size inoculates 15 lbs. seed	\$0.40
1/2 bu. size inoculates 30 lbs. seed	\$0.60
1 bu. size inoculates 60 lbs. seed	\$1.00
5 bu. size inoculates 5 bu. seed	\$4.75

f.o.b. Portland; postage extra

Field Seeds

Standard varieties selected by your experiment stations

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.

SUCCESS BEARDLESS BARLEY

HANNCHEN BARLEY—A heavy yielding, medium early, two-row barley, giving the best average yields west of the Cascades, and yields second to Trebi under irrigation. Heavy yielding, plump seed, very thin hulled, making it the best quality of grain in the barley line. The most readily marketed barley in the Northwest. Standard variety. 10 lbs. **\$1.00**; postpaid.

MARIO—A six-row bearded barley introduced by the Moro Experiment Station, probably the best of the dry land barleys for the short, hot season section of the Columbia Basin. Plump, uniform seed, threshing reasonably clean from beard. Especially suited to early spring planting in the hot dry areas. Standard variety. 10 lbs. **\$1.00**; postpaid.

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.

SILVER HULL—Light gray color, rounder than common; thin husk; matures earlier, yields heavily, excellent milling variety. 10 lbs. **\$1.15**; postpaid.

JAPANESE—Ripens early and yields the largest crops. Grains extra large, dark brown, very thin hulled, makes the highest grade flour. 10 lbs. **\$1.15**; postpaid.

what “Standard Variety” means

All varieties of field seeds mentioned as ‘STANDARD’ are recommended by the Oregon Experiment Station as Standard Varieties, after exhaustive tests.

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.

Write for quantity prices. Prices subject to market change. Postpaid prices are up to 4th zone only.

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. 10 lbs. **85c**; postpaid.

TREBI BARLEY—A new, blue, six-row barley, particularly suited to short growing seasons and where there is danger of lodging. The best variety under irrigation. Very good east of the Cascades where the rainfall exceeds 16 inches a year. Large plump grains, stiff straw; an excellent feeding barley. Standard variety. 10 lbs. **85c**; postpaid.

O. A. C. NO. 7 BARLEY—The highest yielding winter barley for fall sowing west of the Cascade Mountains, and one of the better kinds for spring sowing. Originated at the Corvallis Experiment Station on bottom land. A white six-row bearded barley, threshing reasonably clean, plump kernels, thin hulls. One of the most attractive of the white six-row barleys. It will also succeed as a spring barley in high irrigated and reasonably moist areas. Somewhat resistant to some of the leaf diseases. Standard variety. 10 lbs. **\$1.00**; postpaid.

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 livestock—especially valuable in a mixed ration. Grain plump, heavy and when threshed is hullless like wheat. A heavy cropper. When grown for hay it produces a magnificent fodder, very rich and almost equal to a grain feed. Culture same as Common Barley. 10 lbs. **\$1.00**; postpaid.

WHITE CLUB BARLEY—Also known as Irish and Utah winter barley. A six-row bearded barley, with stiff straw, rather uniform kernels and considerable winter hardiness. One of the best of the barleys for fall sowing in Eastern Oregon and Washington, and a good barley for spring sowing in the same territory. Standard variety. 10 lbs. **\$1.00**; postpaid.

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

CHEAT

EVERGREEN CHEAT (*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. 1 lb. **15c**; postpaid. 10 lbs. **50c**; f.o.b. Portland. 100 lbs. **\$3.60**; f.o.b. Portland.

FLAX SEED

Western grown, large plump seed. New crop selected. Recleaned. The flax industry in Oregon will greatly stimulate the planting of flax. Write for special information and quantity prices: 1 lb. **20c**; postpaid. 100 lbs. **\$12.00**; f.o.b. Portland.

Seed Oats

ECLIPSE

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 dairy-men, 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. Prices subject to market changes. Write for price on larger quantities. Postpaid prices are to 4th zone only inclusive. Add postage to points beyond.

ECLIPSE SIDE OATS—A reselection from our famous "Shadeland Challenge," being equally as vigorous and early, with large, well filled heads. kernels plump, well filled and heavy, sometimes giving the appearance of clipped oats. Eclipse is a medium, late oat, and is best suited to soil well supplied with moisture and capable of supporting a late growth. Standard variety.. 10 lbs. **\$1.00**; postpaid.

CLIMAX TREE

OATS—A very generally grown variety of oats in many sections of the Northwest. A medium early oat producing large, white, well filled kernels with rather thin hulls. Especially grown in Western Oregon and in irrigated areas in Eastern Oregon. 10 lbs. **75c**; postpaid.

"CLIMAX"—Always a winner

VICTORY OATS—A medium maturing tree oat with stiff straw, large, white kernels and a heavy yield. One of the highest yielding varieties at several Northwest Experiment Stations. Recommended for Western Oregon and for unirrigated areas east of the Cascades. Standard variety. 10 lbs. **\$1.00**; ppd.

MARKTON OATS—A tree oat introduced through the Moro Experiment Station. Immune to both loose and closed smut, erect straw, early maturing and producing high yields of thin hulled oats. Recommended for hot dry areas east of the Cascades. Standard variety. 10 lbs. **\$1.00**; postpaid.

Common 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 Field or Blue Bell varieties. 10 lbs. **\$1.50**; postpaid.

Tangier Peas

This field pea is used for silage and soiling purposes. Grows from 3 to 6½ feet high, produces 15 to 25 tons of green feed per acre. Plant 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. 1 lb. **20c**; 10 lbs. **\$1.75**; postpd.

MILLETS

Sow in April, May or June, 12 to 15 pounds for seed, or 20 to 30 pounds for hay per acre. Prices are subject to change without notice. Write for quantity prices. Postpaid price includes to the 4th zone only.

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. 10 lbs. **\$1.50**; postpaid.

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. 10 lbs. **\$1.50**; postpaid.

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. 10 lbs. **\$1.50**; postpaid.

JAPANESE BARNYARD MILLET—Also called Billion Dollar Grass. Entirely distinct from any other millet. Grows 6 to 8 feet high and produces an enormous crop, often yielding 15 to 20 tons of green feed per acre. This millet is exceedingly palatable and is the best of the summer green feeds for the cool coast sections. It is used almost exclusively for green feeding purposes. Excess yields of the millet may be stored in the silo, or may be made into hay. It is principally used for green feeding to dairy cows but may also be used in connection with other stock feeding. Sow the seed at 15 to 20 pounds an acre. Our seed is the genuine Japanese Barnyard Millet and not the common water grass sometimes substituted. Standard variety. 10 lbs. **\$2.00**; postpaid. Write for quantity prices.

NEW SIBERIAN—Wonderfully productive, extremely hardy, about two weeks earlier than German Millet. Grows four feet tall. 10 lbs. **\$1.50**; postpaid.

WHITE WONDER MILLET—Grows four feet tall, bearing large heads covered profusely with bristles which repel attacks by birds. 10 lbs. **\$1.50**; postpaid.

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. 1 lb. **25c**; 10 lbs. **\$1.55**; postpaid. Write for prices in quantities.

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 pounds per acre. Write for quantity 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. 10 lbs. **75c**; postpaid.

ROSEN RYE—A fall or winter rye. 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. 10 lbs. **75c**; postpaid.

COMMON WINTER RYE—Choice re-cleaned seed. 10 lbs. **75c**; postpaid.

Spelt or Emmer

EMMER (Triticum Dicoccum)—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, re-cleaned seed, 10 lbs. **85c**; postpaid. Write for quantity prices.

IMPORTANT: All field seed prices are subject to market changes. You will always get your money's worth or we will quote on request.

Sorghums

Non-Saccharine

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. Prices subject to change without notice. Write for quantity prices. Postpaid including fourth zone, beyond that add extra postage.

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. 10 lbs. **\$1.75**; postpaid.

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. 1 lb. **25c**; 10 lbs. **\$1.50**; postpaid.

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 drouth resistant and succeeds on alkali soil. Plant late when ground is warm, 3 to 6 lbs. per acre. 1 lb. **20c**; 10 lbs. **\$1.25**; postpaid.

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. 1 lb. **20c**; 10 lbs. **\$1.25**; postpaid.

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 3 feet apart. 1 lb. **20c**; 10 lbs. **\$1.25**; postpaid.

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 inches 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. 1 lb. **25c**; 10 lbs. **\$1.65**; postpaid.

Diamond Quality SEED WHEAT

It is impossible to market mixed varieties of wheat or other grains at the best prices, and growers 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.

STANDARD VARIETY in the descriptions below means that the variety is recommended by the Oregon Experiment Station as Standard Variety.

All varieties of wheat 10 lbs. 85c postpaid

Write for prices on larger quantities. Prices subject to market change. Postpaid prices include 4th zone only.

SPRING WHEAT

HARD FEDERATION SPRING WHEAT—This stiff strawed high yielding wheat was introduced by the Experiment Station at Moro, Oregon. It produces hard, flinty white kernels of excellent milling value. Suited to the hot dry areas of the Columbia Basin and to medium high irrigated lands for spring planting. Beardless, stiff strawed, brown chaffed and non-shattering. Standard variety.

EARLY BAART SPRING WHEAT—Very early bearded spring wheat producing large white kernels of high milling value, particularly suited to sections where the growing season is short, because of lack of moisture in the hotter section, or because of short growing seasons in some of the high altitude areas. While the straw is slightly weak, no lodging occurs under the dry land conditions where it is recommended. Standard variety.

HUSTON SPRING WHEAT—A red spring wheat introduced from Bulgaria. Stiff straw, high yielding, being one of the best varieties on the red hill lands. Grain of good quality, but heads inclined to shatter. Standard variety.

FEDERATION SPRING WHEAT—A high yielding Australian white spring wheat introduced by the Moro Experiment Station. Beardless, brown chaffed, white wheat. The highest yielding spring variety for growth under irrigation or in the dry land areas with mellow soils and where rainfall is reasonably good. Will stand medium late fall planting in favored areas of mild winters and good rainfall in the Columbia Basin and south of Lane County, Oregon. Unsafe for fall planting where winter killing is severe. Primarily a wheat for spring planting on warm soils. Standard variety.

JENKIN—A spring, brown chaffed, white club wheat. The highest yielding variety for fall sowing in Western Oregon and one of the high yielding varieties for fall sowing in some of the sections of mild winter in Eastern Oregon and Washington. Generally not as productive as Federation for fall or spring sowing east of the Cascades. Tall, stiff straw, rather long club head, large plump kernels, finding a ready market through export channels. Standard variety.

FALL WHEAT

HYBRID 128—A very hardy winter white club wheat developed at the Washington Experiment Station. Generally the highest yielding of the true winter dry land varieties in the Columbia Basin and the irrigated areas except where straw growth is excessive and where yields commonly exceed 50 bushels an acre. Stiff strawed and non-shattering, the grain finds a ready market through Pacific Coast export channels. Standard variety.

HOLLAND WINTER WHEAT—A winter wheat introduced by the Corvallis Experiment Station, very similar to White Winter in yield and quality. Especially suited to the medium heavy and somewhat cold soils of the Western Oregon area. Standard variety.

WHITE WINTER WHEAT—White Winter is one of the oldest of the wheat varieties grown in Western Oregon. Apparently resistant to a number of the diseases common to that area. Recommended for west of the Cascades on soils of medium fertility and drainage or where winter killing is a problem. Large soft white kernels, particularly valuable for pastry flour and for export purposes. One of the highest yielding of the genuine winter varieties. Erect straw, medium height, holds its grain well and may be harvested either with combine or by the binder, threshing method. Standard variety.

Write for information about our special seed cleaning service for growers

Write for information about our seed testing service for growers

VETCH

Write for latest quantity price. Prices are subject to change without notice. Postpaid prices include the 4th zone only; beyond that add extra postage to cover.

HUNGARIAN VETCH—A very important annual leguminous farm crop for the region west of the Cascade Range. Introduced by the Corvallis Experiment Station. Its suitability to slightly acid soils, to soils that are rather heavy and sometimes poorly drained, and its resistance to attacks of aphids, has made it the most generally grown vetch crop in Western Oregon. During years when aphids practically destroyed other vetches, this one was practically uninjured and produced good hay crops and seed crops. Hungarian vetch is finer stemmed and leafier than most of the forage vetches. It is best as a fall sown crop, altho with early spring sowing in high altitude areas, as under irrigation in Central Oregon, it shows promise. Usually sowed with oats for forage. Very commonly fall planted with rye or winter barley as a cover crop in orchards. **Standard variety.** 10 lbs. **\$1.00**; postpaid; 100 lbs. **\$5.00**; f.o.b. Portland.

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. **\$1.75**; ppd.

COMMON VETCH, SPRING VETCH—Often called fall vetch or winter vetch because it is generally fall sowed in Western Oregon. Well suited to the well drained rather mellow soils, west of the Cascade Mountains, not as winter resistant, acid resistant or aphid resistant as Hungarian vetch. An excellent hay, green feed pasture or silage vetch, usually sowed with oats. Very commonly fall planted with rye or winter barley as a cover crop in orchards. **Standard variety.** 10 lbs. **\$1.00**; ppd.

HAIRY 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 to 4 feet; can be cut twice, when bloom appears and afterwards for seed. 10 lbs. **\$1.75**; postpaid.

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. **\$2.00**; postpaid.

Planting Tables

Quantity of seeds to produce a given number of plants and to sow an acre

Quantity 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 2 1/2 bu.
Beans, dwarf, 1 lb. to 100 ft. of drill	1 bu.
Pole, 1 lb. to 100 hills	1/2 bu.
Beet, Garden, 1 oz. to 100 ft. drill	6 to 7 lbs.
Mangel, 1 oz. to 100 ft. of drill	5 lbs.
Broccoli, 1 oz. to 2000 plants	4 oz.
Brussels Sprouts, 1 oz. to 2000 plants	4 oz.
Buckwheat	1/2 to 1 bu.
Cabbage, 1 oz. to 2000 plants	4 oz.
Carrot, 1/2 oz. to 100 ft. of 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, 1/2 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, 1/4 oz. to 100 ft. drill	4 lbs.
Flax broadcast	3/4 bu.
Grass—Kentucky Blue, pasture	1 to 2 bu.
Kentucky Blue, lawns	100 lbs.
Meadow Fescue	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.
Wood Meadow	1 bu.

Quantity per acre	
Horseradish Roots	15,000 to 25,000
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 Seed	20 lbs.
Fw Hay	30 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, 1/4 lb. to 100 hills	3 to 5 lbs.
Radish, 1 oz. to 100 ft. drill	10 lbs.
Rape	3 to 5 lbs.
Rye	1 1/2 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.
Sunflower	8 lbs.
Squash—Summer, 4 oz. to 100 hills	3 lbs.
Winter, 8 oz. to 100 hills	4 lbs.
Tomato, 1 oz. to 2000 plants	4 oz.
Turnip, 1 oz. to 150 ft. drill	2 to 3 lbs.
Vetches	1 1/2 to 2 bu.
With Grain	1 bu.
Wheat	1 1/2 to 2 bu.

WEIGHTS OF VARIOUS ARTICLES	
	Per bushel
Artichokes	60 lbs.
Barley	48 lbs.
Beans	60 lbs.
Buckwheat	48 lbs.
Blue Grass, Kentucky	14 lbs.
English	24 lbs.
Cheat	34 lbs.
Clover Seed	60 lbs.
Corn, shelled	56 lbs.
Emmer	40 lbs.
Flax Seed	56 lbs.
Grass Seeds (unless otherwise stated)	14 lbs.
Hemp Seed	44 lbs.
Hungarian Millet	48 lbs.
Lawn Grass	20 lbs.
Meadow Fescue	24 lbs.
Millet	50 lbs.
Oats	32 lbs.
Onion Sets	32 lbs.
Orchard Grass	14 lbs.
Peas, smooth	60 lbs.
Peas, wrinkled	56 lbs.
Perennial Rye	20 lbs.
Potatoes	60 lbs.
Rape	60 lbs.
Rye	56 lbs.
Red Top	14 lbs.
Red Top, solid seed	42 lbs.
Timothy	45 lbs.
Vetches	70 lbs.
Wheat	60 lbs.

Number of plants per acre at various distances

In planting trees the greater distance should be given in the richer soils

DISTANCE APART	Square Method	Triangular
1 foot apart each way	43,560	50,300
2 feet apart each way	10,890	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

DISTANCE APART	Square Method	Triangular
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

Certified Seed Potatoes

The Three Best for the Northwest

Burbank

**Earliest
of All**

**Netted
Gem**

P. S. Co. Earliest of All, Certified

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**; 25 lbs. **\$1.60**; 50 lbs. **\$2.50**; f.o.b. Portland. Add postage for parcel post. Write for special low price on quantities.

Burbanks Certified

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. 10 lbs. **75c**; 25 lbs. **\$1.25**; 50 lbs. **\$2.25**; f.o.b. Portland. Add postage for parcel post shipment. Write for special prices on quantities.

Netted Gem Certified

(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. 10 lbs. **85c**; 25 lbs. **\$1.35**; 50 lbs. **\$2.35**; f.o.b. Portland. Add postage for parcel post shipment. Write for special low prices on quantities.

Prices on this page are subject to change without notice

Write for information regarding treatment for skin diseases of potatoes

Pride of Multnomah Certified Seed Potatoes

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. 10 lbs. **85c**; 25 lbs. **\$1.35**; 50 lbs. **\$2.35**; f.o.b. Portland. Add postage for parcel post shipments. Write for special low rates on quantities.

AMERICAN WONDER— Certified

Vigorous vine, profuse bloomer, heavy setter. Used by truck gardeners for early crops. The elongated shape meets the Pacific Coast market demands. We have the only certified American Wonders in the Northwest. 10 lbs. **\$1.00**; 25 lbs. **\$1.50**; 50 lbs. **\$2.40**; f.o.b. Portland. Write for quantity prices.

EARLY OHIO—Certified Seed Potatoes

Vines erect with rather heavy stems, easy to cultivate, somewhat light yielder but catches the very early markets. Tubers are cylindrical and blocky, skin pink with russet dots. The ship well as NEW POTATOES. 10 lbs. **75c**; 25 lbs. **\$1.25**; 50 lbs. **\$2.25**; f.o.b. Portland. Write for quantity prices.

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 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.

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. We have the most modern storage facilities.

RESULT OF GOOD STORAGE

Fertilizers

Use "Diamond Quality" for Better Crops

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 percentages of available plant foods so you can know exactly what you are getting.

For over thirty years the Portland Seed Company has been working in co-operation with the farmers of the Pacific Northwest in studying, experimenting and demonstrating by every manner of test the value of each fertilizing ingredient. In our own laboratory, scientific tests are being made continuously to prove the results of practical experiments and investigations under regular farming conditions.

Based on these tests, our Diamond Quality Mixed Fertilizers have been developed and have consistently been perfected. Full descriptions of each fertilizer are given below. The first figure in the formula is the per cent of nitrogen, the second figure the per cent of phosphorous and the third figure the per cent of potash.

"DIAMOND A" General Vegetable Fertilizer

2-10-2

This is our all-purpose fertilizer, which can be used on any crop. It is especially adapted for grain and general farm crops. The base of this fertilizer is bone meal and tankage to which the necessary chemical elements are added to make the 2-10-2 formula. In the most modern machinery it is thoroughly mixed and ground to a fineness that makes it readily available to the plant roots.

10 lbs. 50¢; 100 lbs. \$2.60; ton \$50.00; f.o.b. Portland

"DIAMOND B" Heavy Cropper Fertilizer

3-7-10

This fertilizer is mixed to give the best possible ratio of nitrogen, phosphorous and potash for heavy root crops and general garden truck. Especially fine for onions. A big favorite among the market gardeners.

10 lbs. 60¢; 100 lbs. \$3.00; ton \$58.00; f.o.b. Portland

DIAMOND Fruit and Berry Fertilizer

4-6-8

By practical experience this has been found the best formula for all-around use with fruit trees and berries of all kinds. It is especially preferred by many strawberry growers, on account of its high nitrogen content, in the spring of the bearing year. It should be used to assure plenty of plant food quickly available for the new plants in the row.

10 lbs. 60¢; 100 lbs. \$3.10; ton \$60.00; f.o.b. Portland

DIAMOND Lawn and Garden Grower

4-7-3

Promotes a vigorous, healthy growth of the lawn, giving the dark rich green appearance so greatly desired. It can be used at the time the seed is planted and later as a top dressing; 100 pounds is sufficient for the ordinary city lot. It is far more effective and far less objectionable than stable manure. It contains no weed seeds to cause trouble as is the case with manure. Especially recommended for roses, shrubs, flowers and the home garden.

10 lbs. 55¢; 100 lbs. \$2.85; ton \$55.00; f.o.b. Portland

DIAMOND Bulb Fertilizer

2-10-10

For the use of commercial bulb growers as well as the home gardeners. Contains ample potash and phosphorous to produce healthy bulbs and beautiful flowers.

10 lbs. 60¢; 100 lbs. \$3.00; ton \$58.00; f.o.b. Portland

Ask for SPECIAL FERTILIZER Book. It's FREE

Fertilizer Prices subject to change without notice

Diamond Plant Food—for House Plants and Ferns

Everyone should have a package of this plant food in the house for use on ferns, palms and indoor plants of all kinds. A complete highly concentrated powerful fertilizer, clean, wonderfully invigorating to all plants, producing luxuriant foliage and larger and more brilliant flowers. A pound package will feed a dozen large plants for a whole year.

½ lb. pkg. 25c, postpaid 35c; 1 lb. pkg. 40c, postpaid 50c

Sheep Guano

The best natural manure, dried and ground to a fine powder. Soluble, quick in action and practically free from weed seed. Especially fine for lawns, as there is no trash to bother mowers or tools. A complete odorless fertilizer, containing nitrogen, phosphorous and potash; combined in nature's own way, and recommended for vegetables, flowers, roses, shrubs, plants, florists' use, etc.

100 lb. sack \$1.35; f.o.b. Portland.

(On larger quantities write for price)

Raw Bone Meal

One of the best fertilizers; a valuable enricher of the soil; containing most of the elements needed. Finely ground.

10 lbs. 70c; 100 lbs. \$3.50; ton \$65.00; f.o.b. Portland.

Tankage

Ground meat scraps and bone, dissociated in a vacuum. Very rich in phosphoric acid and nitrogen.

100 lbs. \$3.25; ton \$60.00; f.o.b. Portland.

Fish Guano

This is the fish cooked, dried and ground; a strong fertilizer, rich in nitrogen and phosphorous and largely used by vegetable growers. Not recommended for city use as odor is objectionable. Write for price.

Superphosphate

A concentrated form of phosphoric acid, the cheapest and best form in which to get phosphoric acid. Contains 17 to 18% available phosphoric acid.

10 lbs. 50c; 100 lbs. \$1.65; ton \$30.00; f.o.b. Portland.

Nitrate of Soda

The very best for immediate results in stimulating and forcing the growth of any crops or plants.

10 lbs. 85c; 100 lbs. \$3.60; ton \$70.00; f.o.b. Portland.

Muriate of Potash

The best form of securing potash. Carries upward of 50% of potash. Especially necessary for filling out the fruit or grain, forming the sugar and starch.

100 lbs. \$3.10; ton \$60.00; f.o.b. Portland.

H. O. Lime

Superior to fertile lime. A blended mixture of raw ground limestone and hydrated lime. More effective than raw ground lime-rock and goes about twice as far. Especially recommended for sour soils and poultry floor coverings.

100 lbs. \$1.35; ton \$23.00; f.o.b. Portland.

Land Plaster or Gypsum

Made from pure gypsum, free from clay or other foreign matter, used particularly for clover crops.

10 lbs. 25c; 100 lbs. \$1.00; ton \$18.00; f.o.b. Portland.

Sulphur

For increasing crop yields. It is a powerful stimulant, makes available the insoluble potash and phosphoric acid contained in the soil and is an effective fungicide and insecticide. Its continued use, however, will cause a too rapid depletion of plant food in the soil.

Diamond "S" Refined Flour Sulphur, 110 lb. sack \$3.30, f.o.b. Portland.

Sulphate of Ammonia

A valuable fertilizer for all plants in which a large leaf development or rapid growth is desired; will stimulate almost immediately. Excellent for lawns; apply it in liquid form, 1 tablespoonful to a gallon of water sprinkled from watering pot.

10 lbs. 75c; 100 lbs. \$4.50; ton \$85.00; f.o.b. Portland.

FLORANID UREA(BASF)

For Flowers, Vegetables, Lawns, Berries, Shrubs and Trees

92 times stronger than manure. For flowers, vegetables, berries, shrubs, lawns and trees. Highly concentrated, 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.

Fertilizer Prices subject to change without notice

Peat Moss—Diamond Quality

Especially recommended for use about roses, the garden, greenhouse, pot plants, window boxes and for growing bulbs, etc. It is excellent for clayey soils, light, sandy or gravelly soils and as a mulch on strawberry beds, perennial beds and as a top dressing for evergreens. Adds humus to the soil, increasing its fertility and its ability to absorb and hold water and other plant foods. Increases the luxuriance of lawns. Should be used in all landscape gardening mixed with the soil and in all bulb beds.

IN SACKS

Our Diamond Quality Peat Moss in sacks is especially re-ground, is easy to handle and ready for immediate use. Preferred by home gardeners.

Per sack (about 30 lbs.) \$1.25
f.o.b. Portland

IN BALES

Put up in bales containing about 13 cubic feet just as it is imported to us. Its increasing use is adding much to the value of gardens.

Per bale (13 cu. ft.) \$3.00
f.o.b. Portland

Colorful
Flowers

A Velvety
Lawn

Delicious
Vegetables

By Using VIGORO Nationally Specially prepared plant food Advertised

Everyone realizes that a plant is a living object yet very few people understand how it breathes, feeds, grows and reproduces.

Essential to maintain plant life are light, heat, air, moisture and plantfood. Of these, plantfood is possibly the only factor over which we can exercise much control.

Most failures in plant growing can be attributed to the lack of proper plantfood. It is just as necessary to supply our plants with the right plantfood as it is to feed ourselves properly.

The soils in towns and cities are usually quite deficient in plantfood. Either nature failed to deposit a good supply originally or the plantfood once stored in the soil has been consumed by the plants grown year after year.

A sure sign of plant starvation is evidenced by a sparse growth of grass, lacking a rich green color;

vegetables that are slow to reach maturity, lacking crispness and flavor; flowers with spindling stalks and poorly developed blossoms; trees and shrubbery with yellowish or undersized leaves, dying branches and short twig growth.

Scientifically balanced and complete, VIGORO is a specially prepared plantfood. It contains all of the elements necessary to grow richly colored flowers, velvety lawns, succulent vegetables, luxuriant shrubbery and healthy trees.

VIGORO is odorless and clean. It can be applied by hand just like grass seed. Complete directions in every bag.

5 lbs. **60c**; 25 lbs. **\$2.00**; 50 lbs. **\$3.75**; 100 lbs. **\$6.00**; f.o.b. Portland.

VEX Automatic Lawn Fertilizer

Lawn Vex is the most concentrated fertilizer known. It is 100% plant food, an organic and water soluble; it is a neutral and leaves no residue. Lawn Vex contains 46% available nitrogen, the equivalent to 55.9% ammonia. Lawn Vex has no odor, is non-poisonous and will not stain. Lawn Vex is automatically applied as a liquid as you sprinkle and goes right to the roots of every blade of grass. It is available immediately and benefits grass at once. The container is 13" long, made of brass and attached to your hose. Puts the fertilizer at the roots in a liquid form where the grass can feed on it at once. No danger of burning, sanitary, odorless, a child can apply it. Anyone can have a perfect, velvet green, vigorous lawn by feeding it regularly with Lawn Vex.

Price complete including container, refill and short length of hose, **\$8.00**. Price of extra fertilizer refills, each **\$2.15**. Prices f.o.b. Portland. A refill is sufficient for one fertilizing of the usual lawn.

Diamond

Quality

1929

Ceresan & Semesan

Seed Disinfectants

Controls Diseases, Hastens Germination, Invigorates Seedling Growth, Produces Sturdier Plants, Increase Yield and Quality

Semesan

for flower and vegetable seeds

Semesan may be applied in dust or liquid form to the seed before planting. It is harmless to the seed but deadly to disease organisms that may be on the seed. Semesan is such a powerful and effective disinfectant that seed treatment with it is ridiculously low in cost, ranging from $\frac{1}{4}$ c to 1c per pound of seed. One ounce treats 15 lbs. of seed. Effective in controlling damping off and such devastating gladiolus diseases as hard rot and scab. Du Bay Semesan succeeds the products sold as Du Pont Semesan and Bayer Upulun.

2 oz. **50c**; 1 lb. **\$2.75**; 5 lbs. **\$13.00**; 25 lbs. **\$56.25**; 100 lbs. **\$220.00**; f.o.b. Portland. Poison, not mailable.

Ceresan

for seed treatment of small grains

Ceresan has proven effective in controlling such seed-borne diseases as bunt or stinking smut of wheat; stripe disease of barley; loose and covered smuts of barley and oats and covered kernel smut of sorghum. It is the only dust treatment which has successfully controlled these destructive grain diseases. Ceresan does not injure the seed nor the grain drill. Only 2 oz. of Ceresan required per bushel of wheat, rye or sorghum and 3 oz. for barley and oats. Easy to apply, economical to use.

8 oz. **50c**; 1 lb. **75c**; 5 lbs. **\$3.00**; 25 lbs. **\$12.50**; 100 lbs. **\$49.00**; f.o.b. Portland. Poison, not mailable.

Semesan Bel

for seed white and sweet potatoes

Simply mix, dip, drain, dry and your seed potatoes are ready for planting. Semesan Bel may be used on either whole or cut seed pieces. Semesan Bel effectively controls such seed-borne disease organisms as scab, rhizoctonia and black-leg. By controlling these diseases, germination is generally increased, stand improved and the resultant crop bigger and of better quality. One pound treats 16 to 20 bushels of seed. Du Bay Semesan succeeds the products sold as Du Pont Semesan Bel and Bayer Dipdust.

4 oz. **50c**; 1 lb. **\$1.75**; 5 lbs. **\$8.00**; 25 lbs. **\$31.25**; 100 lbs. **\$120.00**; f.o.b. Portland. Poison, not mailable.

Semesan Jr.

for seed field and sweet corn

Semesan Jr. is especially effective in controlling seed-borne infections of diplodia, Gibberella and Basiporiopsis, without harming the seed embryo in the least. Its use protects the seed from rotting in the ground and makes possible earlier planting which generally results in increased yields. Improved germination, better stands, control of certain diseases, increased yields are the benefits which thousands of farmers are reaping, at a cost of less than 3c an acre. Succeeds the products sold as Du Pont Semesan Jr. and Bayer Dust.

4 oz. **50c**; 1 lb. **\$1.75**; 5 lbs. **\$8.00**; 25 lbs. **\$31.25**; 100 lbs. **\$120.00**; f.o.b. Portland. Poison, not mailable.

Inoculate Clover and Alfalfa with

THE ORIGINAL SOIL INOCULATOR

BENEFITS OF INOCULATION

The principal reasons for inoculation can be stated in five short paragraphs, viz: First, inoculated legumes take nitrogen from the air to supply the plant, resulting in faster growth, earlier maturity and larger crops.

Second, inoculated legumes take up more nitrogen than the plant itself requires, the surplus remaining to the benefit of future crops.

Third, inoculated legumes develop larger root systems than when not inoculated and therefore reach the immense stores of potash and phosphorus in the sub-soil, bringing them up to supply the plant. When the roots and stubble decay these elements are also returned to the soil in a form available for future crops.

GARDEN SIZE
For Peas, Sweet Peas and Beans
(3 in 1) **20c**;
postage extra

Alfalfa, clovers, soybeans, vetches, beans, cowpeas and other legumes should always be inoculated with Nitragin. The lack of necessary bacteria in the soil is often the cause of a poor legume crop—a weak start—or a total failure.

Fourth, inoculated legumes, by taking their nitrogen from the air, save the soil. When not inoculated they drain the soil of its nitrogen just the same as wheat or timothy or other leguminous plants.

Inoculated legumes contain more protein matter than when not inoculated, greatly increasing their feeding value.

Inoculation hastens maturity, increases the crop, improves its quality, enriches the soil and saves fertilizer bills.

PRICES FOR FIELD NITRAGIN
IMPORTANT—Be sure to state variety of seed for which you want Nitragin.

$\frac{1}{4}$ bu. size inoculates 15 lbs. seed	\$0.40
$\frac{1}{2}$ bu. size inoculates 30 lbs. seed	\$0.60
1 bu. size inoculates 60 lbs. seed	\$1.00
5 bu. size inoculates 5 bu. seed	\$4.75

f.o.b. Portland; postage extra

Annual Flower Seeds and Plants

Annuals

are listed
alpha-
betically
on pages
57 to 69

Important Notice

In our catalog this season we are separating the lists of Annual and Perennial Seeds and in the following pages show a wonderful list of annual seeds, and also for the first time we are listing a great many varieties of plants which we will be prepared to furnish "in season," the season being mentioned on each variety. Many people prefer to buy plants for transplanting on the later varieties, to secure flowers earlier and we feel sure our new plant service will be welcomed.

Annual Seeds and Plants, pages 57-69
Perennial Seeds and Plants, pp. 76-91

Perennials

are listed
alpha-
betically
on pages
76 to 91

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.

Wild Garden Mixture

In this we offer a splendid collection of hardy annuals consisting of special selections from a fifty-acre trial grounds; wild flowers and standard sorts, to meet the demand for odd corner mixtures or to beautify the vacant lot where cultivation is difficult and weeds predominate. One oz. packet.

25

Cents
Postpaid

Cut Flower Mixture

This consists of a specially put up mixture of hardy annuals blended to give a continuous succession of cut flowers from early summer until late fall. For two seasons we have sold great quantities of these packets and they have evidently proved very desirable. Try one for your "surprise garden." Put up in ounce packets at **50c** each, postpaid.

50

Cents
Postpaid

List of
Annuals
suggested
for edging
walks, etc.

AGERATUM
ALYSSUM
ASTERS, DWARF
CANDYTUFT
AMARANTHUS
LOBELIA
MARIGOLD, DWARF
NASTURTIUM,
DWARF
PHLOX, DWARF
PINKS, CHINESE
ZINNIA, DWARF

Garden Guide

The Amateur
Gardener's
Hand Book

380 pages of
the best infor-
mation avail-
able, with
planting
charts, pro-
fusely illus-
trated, 5x7 1/4
inches,
paper covers

Postpaid

\$1.00

List of some
Tall Annuals
for back-
grounds, etc.

ASTERS, ANNUAL
CHRYSANTHEMUM,
ANNUAL
COSMOS
DAHLIAS
HELICHRYSUM
HUNNEMANIA
HOLLYHOCK,
ANNUAL
PHLOX, ANNUAL
SHIRLEY POPPY
SCABIOSA, ANNUAL
SUNFLOWER
ZINNIA

1929 Springtime Collection

"Quick Germinating, Free
Flowering Annuals"

Ten Pkts. \$1 value **75¢**
One each of varieties
below postpaid for •

	Pkt.
* 1. Asters, California Giants.....	10c
* 2. Zinnias, mixed	10c
* 3. Shirley Poppies, mixed.....	10c
* 4. Candytuft, mixed	10c
* 5. Sweet Alyssum	10c
* 6. Clarkia, Elegans, mixed.....	10c
* 7. Cosmos, mammoth, mixed.....	10c
* 8. Calendula, double, mixed.....	10c
* 9. Annual Hollyhock, mixed.....	10c
* 10. Helichrysum (strawflower).....	10c
- *Early Flowering.
*Late Flowering.

All favorites—try this collection

**1929 Collection of
"Superb Spencer"**

Sweet Peas 50¢
7 pkts., 70¢ value, postpaid for

	Pkt.
1. Crimson King	10¢
2. King White	10¢
3. Royal Purple	10¢
4. Countess Spencer	10¢
5. Illuminator	10¢
6. Daffodil	10¢
7. Asta Ohn	10¢

For complete list of
Sweet Peas see
pages 66-67

ASTERS

CALIFORNIA
GIANT
ASTERS—
the finest
of all

Asters grow to their greatest 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 Giant Asters

Today the most popular asters in all flower shops and also in exhibition shows. 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. The

petals are stronger and last longer than the Crego. We offer the following shades: Peach Blossom, Light Blue, Deep Rose, Dark Purple, White.

Pkt. **15c**; ¼ oz. **75c**; Mixed, pkt. **10c**; ¼ oz. **65c**; postpaid.
Plants, f.o.b. Portland, **40c** doz.

Early Beauty Asters

The plants grow 2 to 3 feet high, are of branching habit; 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 forms a shrub more than a plant and does exceptionally well in this section.

EARLY BEAUTY—For localities where the season is too short to flower the late type before frost, also for early forcing. However, it is as early as 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.
Pkt. **15c**; ¼ oz. **50c**; postpaid.

Other Varieties of Asters

CREGO GIANT ASTERS—Distinct in every way; magnificent flowers of rare beauty of form and brilliant coloring; very vigorous and free flowering. Shades: Pink, Rose, Crimson, White, Lavender, Purple or Mixed Colors. Pkt. **10c**; ¼ oz. **50c**; ppd. Plants, **40c** doz., f.o.b. Portland.

ASTER-MUM—Resembling chrysanthemums in form, hence the name "Aster-Mum." Plants about 2 ft. high with good stems. Earlier than Crego; mixed. Pkt. **10c**; ¼ oz. **50c**; postpaid.
GIANT COMET—Flowers large and beautiful; petals long and twisted. Mixed. Pkt. **10c**; ¼ oz. **50c**; postpaid.

LATE BRANCHING—Flowers large, beautiful, double and borne on long stems; mixed. Pkt. **10c**; ¼ oz. **50c**; postpaid.

MIKADO or ROCHESTER—Long, narrow petals, toward the center they cross and recross in splendid confusion, strong branching habit; mixed. Pkt. **10c**; ¼ oz. **50c**; postpaid.

QUEEN OF THE MARKET—Best early aster, of graceful spreading habit; mixed. Pkt. **10c**; ¼ oz. **50c**; postpaid.

GARDEN GUIDE, the Amateur Gardener's Hand Book. 380 pages of the best information available, with planting charts, profusely illustrated, 5x7¼ in. \$1.00 ppd.

ACROCLINUM — Everlasting — About 15 inches high, white or 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**; postpaid.

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 1½ ft. tall. Dark Blue, White or Mixed. Pkt. **10c**; ¼ oz. **25c**; postpaid.
Plants, **40c** doz., f.o.b. Portland.

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**; postpaid.
Plants, f.o.b. Portland, doz. **40c**.

Little Gem. Pkt. **10c**; oz. **\$1.00**; ppd. Plants, f.o.b. Portland, doz. **40c**.

Procumbens—Of trailing habit; profuse bloomer. Pkt. **10c**; oz. **\$1.00**; postpaid.

Annual Flower Seeds and Plants—Alphabetically Listed

TRI-COLOR AMARANTHUS
AMARANTHUS—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**; postpaid.
Caudatus (Love Lies Bleeding)—Graceful drooping flowers. Pkt. **10c**; oz. **25c**; postpaid.
Tri-color or **Joseph's Coat**—Foliage scarlet, yellow and green. Pkt. **10c**; oz. **75c**; postpaid.

ARCTOTIS GRANDIS
ARCTOTIS GRANDIS (African Daisy)—Plants form bushes about 2 feet across with deeply cut foliage and daisy-like flowers often 2½ inches in diameter, color of a lilac tinge. Pkt. **10c**; ¼ oz. **50c**; postpaid.

BACHELOR'S BUTTON (*Centaurea Cyanus*, or **Corn Flower**)—A hardy annual, easily cultivated. Flowers of a great variety of rich colors on tall, branching stems, with but little foliage. Sow in open ground early and transplant. 1-2 ft. tall.

Blue Single Mixed. Pkt. **10c**; oz. **40c**; postpaid.
Fine Double Mixed. Pkt. **10c**; oz. **75c**; postpaid.
Single Blue. Pkt. **10c**; oz. **50c**; postpaid.
Double Blue Florist Strain. Pkt. **10c**; oz. **75c**; ppd.
Double Rose Florist Strain. Pkt. **10c**; oz. **75c**; ppd.
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.

Pkt. **10c**; oz. **35c**; postpaid.
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 Camellia Flowered, Mixed. Pkt. **10c**; ¼ oz. **30c**; postpaid.

BLUE LACE FLOWERS (*Didiscus*)—Plants about 18 inches high, covered with clusters of tiny petaled flowers of exquisite light blue, giving the effect of dainty lace. Pkt. **15c**; ¼ oz. **65c**; postpaid.
 Plants, **60c** doz., f.o.b. Portland.

CALENDULA (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 they bloom nearly the year around. Colors, yellow, orange and gold. 1 to 2 feet tall. Sow in early spring in open ground.

Orange King—Double. Pkt. **10c**; oz. **50c**; ppd.
Meteor—Double. Pkt. **10c**; oz. **25c**; postpaid.
Lemon Queen—Double. Pkt. **10c**; oz. **35c**; ppd.
Double Mixed, pkt. **10c**; oz. **20c**; postpaid.
 Plants, **40c** doz. f.o.b. Portland.

Use these to flavor soups and stews

CALLIOPSIS—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 for cut flowers. 1 to 2 feet tall.

Crimson King—Pkt. **10c**; oz. **50c**; postpaid.
Golden Wave (*Drummondii*)—Pkt. **10c**; oz. **50c**; ppd.
Coronata Maxima—Pkt. **10c**; oz. **75c**; postpaid.
Tall Single Mixed—Pkt. **10c**; oz. **35c**; postpaid.
Tall Double Mixed—Pkt. **10c**; oz. **40c**; postpaid.
Dwarf Mixed—Pkt. **10c**; oz. **50c**; postpaid.
Dwarf Mixed Plants—**40c** doz., f.o.b. Portland.

CANDYTUFT (*Iberis*)—One of the most highly prized annuals for beds and masses. 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. 1 to 1½ feet.

Coronaria—Giant White Hyacinth Flowered. Pkt. **10c**; ¼ oz. **30c**; postpaid.

Umbellata Type—Carmine, Flesh Pink, Rose, Cardinal, Crimson, Lavender, White, Mixed. Pkt. **10c**; oz. **65c**; postpaid. Plants, **40c** doz; f.o.b. Portland.

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. Pkt. **15c**; ¼ oz. **95c**.

CARNATION

CARNATION (*Dianthus Caryophyllus*)—Carnations are tender perennials, being easily winter killed and therefore listed with the annuals. Splendid for cut flowers, deliciously fragrant. Colors pink, white, red. Sow indoors in March; transplant to other boxes when 1 inch high. Keep them growing until soil is warm, then transfer to open garden. Height 1 to 1½ feet.

Chabaud Everblooming—Extra choice double mixed. Flower in 5 to 6 months. Pkt. **15c**; postpaid.

Double Grenadin—Blooms very early and the double flowers are valuable for bouquets. Red, white. Pkt. **15c**; postpaid.

Margaret—Finest double mixed. Bloom in 4 months from seeding. Pkt. **10c**; ¼ oz. **50c**; postpaid.

Giant or Malmaison—Mixed. Pkt. **15c**; postpaid.

Double Dwarf Vienna—Mixed. Large flowered, blooms early, flowers of many colors and markings; largely double. Pkt. **10c**; postpaid.

Plants, per doz. **\$1.00**, f.o.b. Portland. (Also see plants in index.)

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 3-5 ft. **Sanguineus**—Brilliant scarlet stems and fruit. Pkt. **10c**; oz. **25c**; ppd. **Zanzibariensis**—Surpasses in size and beauty of colors. Mixed. Pkt. **10c**; oz. **25c**; postpaid.

Best Varieties Mixed—Pkt. **10c**; oz. **25c**; postpaid.

CATCHFLY (*Silene*)—A hardy annual, yielding a profusion of umbels of bright colored flowers in various shades of pink. Fine for border or rockery. 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**; ppd.

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**; postpaid.

Dwarf Fine Mixed, pkt. **10c**; ¼ oz. **65c**; postpaid.

CELOSIA PLUMOSA (Feathered)—Large plumy heads. For pots or open ground. Keeps well when cut. 1-2 ft. **Finest Mixed**, pkt. **10c**; oz. **\$1.00**; postpaid.

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**; postpaid.

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 feet tall.

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

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

Moschata Mixed—Pkt. **10c**; ¼ oz. **30c**; postpaid.

Candidissima—Pkt. **15c**; ½ oz. **75c**; postpaid.

CHRYSANTHEMUM—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 Hybrida—Finest double mixed. Pkt. **15c**; ¼ oz. **25c**; postpaid.

Plants, **10c** each; **\$1.00** doz.; f.o.b. Portland.

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

Coronarium—Double, finest mixed. Pkt. **10c**; oz. **40c**; postpaid.

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

Hybrida Grandiflora—Choicest mixed. Pkt. **50c**; ppd.

Hybrida—Fine mixed. Pkt. **25c**; postpaid.

Maritimas—Beautiful silvery-leaved border plant; half hardy perennial. Pkt. **10c**; ¼ oz. **35c**; postpaid.

CLARKIA—Hardy annual of easy growth; produces 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.

Chamois, with touch of pink, pkt. **10c**; ¼ oz. **35c**; ppd.

Scarlet Queen, pkt. **10c**; ¼ oz. **35c**; postpaid.

Salmon Queen, pkt. **10c**; ¼ oz. **35c**; postpaid.

Purple Prince, pkt. **10c**; ¼ oz. **35c**; postpaid.

White, pkt. **10c**; ¼ oz. **35c**; postpaid.

Fine Mixed, pkt. **10c**; ¼ oz. **30c**; postpaid.

Plants, doz. **40c**; f.o.b. Portland.

COBEA SCANDENS—A 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.

White, pkt. **10c**; ¼ oz. **50c**; postpaid.

Purple, pkt. **10c**; ¼ oz. **25c**; postpaid.

Plants, **20c** each; **\$2.00** doz.; f.o.b. Portland.

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**; postpaid.

CYPRESS VINE (*Ipomoea Quamoclit*)—A climber of rapid growth; delicate fern-like foliage and great numbers of star-shaped blossoms with long tubes. Does best in warm, sunny location. Grows 10 to 15 ft. **Scarlet or mixed**. Pkt. **10c**; oz. **75c**; ppd.

Annual Flower Seeds and Plants—Alphabetically Listed

COSMOS

COSMOS—Beautiful plants producing thousands of artistic flowers in pure white, pink and crimson shades, furnishing an abundance of cut blooms. 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.

Extra Early Mammoth Flowering—Crimson, pink, white. Pkt. **10c**; oz. **65c**; postpaid.

Finest Mxd., pkt. **10c**; oz. **60c**; ppd. Plants, doz. **40c**; f.o.b. Portland.

Extra Early Double Crested or Anemone Flowered—The newest thing in Cosmos. Crimson, pink, white or mixed. Pkt. **20c**; postpaid.

Klondyke—Blooms very early and continuously, 3 to 4 feet high; large orange flowers on long stems. Pkt. **10c**; ¼ oz. **75c**; postpaid.

DAHLIA—A magnificent, fall-blooming tuberous-rooted plant. Sow seeds 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 the following season.

Double Mxd, pkt. **15c**; ¼ oz. **50c**; ppd. **Single Mixed**, pkt. **10c**; ¼ oz. **40c**; postpaid.

Cactus—Odd fantastic shapes; all colors, finest mixed. Pkt. **15c**; ¼ oz. **50c**; postpaid.

(For dahlia tubers see index.)

DAISY, Orange African (Dimorphotheca Aurantiaca)—Extremely showy annual with bushy plants 12 to 15 inches high. Flowers are 2½ inches across, rich orange gold, with dark disc and halo; a magnificent sight in bloom. Pkt. **10c**; oz. **50c**; postpaid.

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**; postpaid. **Cornucopia**, pkt. **15c**; oz. **\$1.25**; postpaid.

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**; ppd.

Heterophyllia—Painted leaf. Annual poinsettia; 3 ft. Pkt. **15c**; ¼ oz. **35c**; postpaid.

EVENING PRIMROSE (Oenothera Lamareckiana)—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. As this interesting feature becomes better known the Evening Primroses are found in increasing numbers in our flower gardens. For exposed positions, in border or on rockery; a constant bloomer all summer. Shades of yellow. Sow seeds early in boxes, covering very lightly with fine soil firmly pressed down. Transplant seedlings. Pkt. **10c**; oz. **75c**; postpaid.

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. 2 to 3 feet high. Choice Mixed, pkt. **10c**; oz. **25c**; ppd.

GAILLARDIA (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 ft.

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

Picta Single—Fine mixed. Pkt. **10c**; ¼ oz. **25c**; ppd.

Plants, double and single mixed, doz. **40c**; f.o.b. Portland.

Geranium—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 or transferred to open garden.

Zonale—Extra choice single mixed, the well known bedding geranium. Pkt. **15c**; ¼ oz. **95c**; postpaid.

Lady Washington (Pelargonium)—Foliage green; flowers large. Finest mixed. Pkt. **25c**; 100 seed **\$2.25**; postpaid. (For geranium plants see index.)

GAILLARDIA

Annual Flower Seeds and Plants—Alphabetically Listed

GODETIA—Bushy growth, profuse constant bloomers. 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**; ppd. **Gloriosa**, dark red, pkt. **10c**; ¼ oz. **35c**; ppd. **Duch. of Albany**, white, pkt. **10c**; ¼ oz. **35c**; postpaid.

GOURDS—Good climbers, for covering verandas and trellis work; rapid growth, bearing fruits of curious shapes. Plant after soil is warm. 10-12 ft. **Calabash**, pkt. **10c**; oz. **35c**; postpaid.
Mixed Varieties, pkt. **10c**; oz. **35c**; postpaid.

GYPHOPHILA—Easily raised from seed. Grows 18 to 24 inches, bearing beautiful star-shaped flowers in great profusion. First sowings in flats very early and transplant, later sowings in open ground. **Grandiflora Elegans**, white Paris market, pkt. **10c**; oz. **30c**; postpaid.

HELICHRYSUM (Straw Flower), **Monstrosum**—Everlasting; one of the best for winter bouquets; hardy annual; red, yellow and white. Sow in open and transplant or thin to 12 inches. **Double Mixed**, pkt. **10c**; ¼ oz. **25c**; postpaid.

HOLLYHOCKS (New Annual), **Hybrida Semperflorens**—This splendid variety will bloom in August, from spring planting, continuing until frost; a great advantage, as other varieties do not bloom until the second year.
Finest Single Mixed, pkt. **10c**; ¼ oz. **30c**; ppd. **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**; postpaid.

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

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 6 to 12 in. Pkt. **10c**; oz. **75c**; postpd.

KOCHIA CHILDSII (Summer Cypress)—Forms symmetrical decorative bushes, foliage green, turning fiery red in autumn. Sow in open and thin to 15 inches. Valuable for summer hedges. 1-2 ft. Pkt. **10c**; oz. **35c**; postpaid.
Plants, each **15c**; doz. **\$1.50**; f.o.b. Portland.

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 feet.
Dwarf Rockets, double, colors mixed. Pkt. **10c**; ½ oz. **75c**; postpaid.
Tall Double Stock Flowered, carnine, dark blue, light blue, rose, white or mixed. Pkt. **10c**; ½ oz. **75c**; postpaid. **Plants**, doz. **40c**; f.o.b. Portland.

LEMON VERBENA—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**; postpaid.

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

LUPINUS—Hartwegi; annual variety; dark blue, light blue, rose white or mixed. Pkt. **10c**; oz. **35c**; postpaid.

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, rich, bright blue; finest for bedding and edging. Pkt. **10c**; ¼ oz. **90c**; postpaid. **Plants**, doz. **40c**; f.o.b. Portland.

Gracilis—Blue, trailing; beautiful for baskets. Pkt. **10c**; ¼ oz. **40c**; postpaid. **Plants**, doz. **40c**; f.o.b. Portland.

Royal Purple—Very dark blue, dark foliage. Pkt. **10c**; ¼ oz. **75c**; postpaid.

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

Speciosa—Dark blue and dark leaved. Pkt. **10c**; ¼ oz. **65c**; postpaid.

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 sanded. 1-2½ ft.

African—Tall or dwarf, double. **Fistulosa** type, mixed. Pkt. **10c**; ¼ oz. **35c**; postpaid. **Plants**, doz. **40c**; f.o.b. Portland.

French—Dwarf or tall double, mixed. Pkt. **10c**; oz. **65c**; postpaid. **Plants**, doz. **40c**; f.o.b. Portland.

Golden Ball—New dwarf. French double; compact. Pkt. **10c**; oz. **65c**; postpaid.

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

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, fragrant flowers. Pkt. **10c**; oz. **25c**; postpaid.

Machet—White with reddish tinge. Dwarf. Pkt. **10c**; oz. **75c**; postpaid.

Golden Queen—Dense, dwarf growth; flower golden yellow; fragrant. Pkt. **10c**; oz. **75c**; postpaid. **Plants**, doz. **40c**; f.o.b. Portland.

Dobbies Giant Red—Mammoth red spikes. Pkt. **10c**; ¼ oz. **35c**; ppd.

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

MORNING GLORY—Rapid growing climbers of easy cultivation, attaining a height of 10 to 12 feet. The dwarf varieties flower very freely and do not require support. Plant early where it is to remain.

Convolvulus Major—Tall, choice single, mixed all colors. Pkt. **10c**; oz. **15c**; postpaid.
Double Mixed, tall, pkt. **10c**; ¼ oz. **35c**; postpaid.

Convolvulus Minor, dwarf mixed. Pkt. **10c**; postpaid.

Imperial Japanese Fringed—Very large fringed flowers in a variety of exquisite colorings; variegated foliage. Pkt. **10c**; ½ oz. **40c**; postpaid.

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. Pkt. **10c**; ¼ oz. **25c**; ppd.

LARKSPUR

NASTURTIUMS

Hardy annuals of easy culture, blooming in uninterrupted splendor from early summer to frost.

Mixture Tall Varieties, pkt. **10c**; oz. **15c**; ¼ lb. **50c**; ppd.

Mixture Dwarf Varieties, pkt. **10c**; oz. **20c**; ¼ lb. **60c**; ppd.

NASTURTIUM

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, pkt. **20c**; postpaid.

Triumph Mixed, pkt. **20c**; postpaid.

NICOTIANA—A 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, pkt. **10c**; postpaid.

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

Sanderac—Covered with carmine-red, fragrant flowers. Pkt. **10c**; oz. **\$1.25**; postpaid.

PETUNIA (Hybrida)—During the whole season it is covered with large, showy blossoms, always bright and fresh; an infinite variety of colors, markings and forms, 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**; postpaid. Plants, doz. **75c**; f.o.b. Portland.

Double Choicest Mixed, pkt. **35c**; postpaid. Plants, doz. **75c**; f.o.b. Portland.

Double Fringed Mixed, pkt. **50c**; postpaid. Plants, doz. **75c**; f.o.b. Portland.

Giants of California, choicest ruffled mixed (large throat), pkt. **25c**; postpaid. Plants, doz. **75c**; f.o.b. Portland.

Elks Pride, deep purple, very large flowers, pkt. **35c**; postpaid. Plants, potted, each **20c**; doz. **\$2.00**; f.o.b. Portland.

City of Portland, finest shade of pink, flowers large and ruffled, pkt. **35c**; postpaid. Plants, potted, each **20c**; doz. **\$2.00**; f.o.b. Portland.

Rosy Morn, pink, white throat, fine for bedding, pkt. **20c**; ¼ oz. **60c**; postpaid. Plants, each **20c**; doz. **\$2.00**; f.o.b. Portland.

PHLOX DRUMMONDI—Annual; unrivaled 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, 1 foot high. Sow as soon as soil is warm. Transplant about 1 foot apart.

Large Flowering, crimson, white or mixed, pkt. **15c**; ½ oz. **50c**; postpaid. Plants, mixed, doz. **40c**; f.o.b. Portland.

Chamois Rose, pkt. **10c**; ¼ oz. **75c**; postpaid.

Isabellina, pale yellow, pkt. **10c**; ¼ oz. **75c**; postpaid.

Kermesina Splendens, crimson with white edge, pkt. **10c**; ¼ oz. **75c**; postpaid.

Dwarf Mixed, pkt. **10c**; ¼ oz. **75c**; postpaid.

Star Phlox (Cuspidata)—Flowers have a distinctive star-like appearance, with white margins, excellent for bouquets. Pkt. **10c**; ¼ oz. **75c**; postpaid. Plants, doz. **40c**; f.o.b. Portland.

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**; postpaid.

Double Mixed, pkt. **10c**; ¼ oz. **35c**; postpaid.

HEDDEWIGH TYPE

Crimson Belle, single, 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 scarlet, pkt. **15c**; ¼ oz. **60c**.

Salmon King, double, pkt. **15c**; ¼ oz. **65c**.

Snowball, double white, pkt. **15c**; ¼ oz. **65c**.

Finest Double Mixed, pkt. **10c**; ¼ oz. **30c**.

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**; postpaid. Plants, doz. **60c**; f.o.b. Portland.

Double Mixed, pkt. **15c**; ½ oz. **75c**; postpaid.

Use **EVERGREEN** for insect pests.
See index

Write for free book on Fertilizer telling how to easily have larger, more beautiful flowers and plants

Annual Flower Seeds and Plants—Alphabetically Listed

POPPIES—Papaver

Magnificent, showy flowers borne separately on tall stalks in many bright and charming colors. Some are hardy annuals, others are perennials. (For the perennial varieties see our list of perennial seeds.) Sow seeds very early where they are to remain. Barely cover seed with fine soil and press down firmly. Thin to 1 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.

Carnation Flowered Poppies

TALL DOUBLE

American Flag, white, scarlet edged. Blood Red, violet blotch.

Bright Rose

Finest Mixed

Pkts., each **10c**; oz. **40c**; postpaid. King Edward—Single, large flowers produced with great freedom. Deep scarlet shaded crimson, with large black blotch. H.t. 2½ ft. Pkt. **10c**; ¼ oz. **25c**; ppd. G'aucum (Tulip Poppy) — Brilliant scarlet flowers 3 inches across. Pkt. **10c**; oz. **75c**; postpaid.

California Poppies

ESCHSCHOLTZIA

Commence to bloom within a few weeks' time from spring-sown seed and flower profusely until late 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 inches. Aurantiaca—Rich orange, true California poppy. Pkt. **10c**; oz. **35c**; ppd. Carmine King—Deep carmine. Pkt. **10c**; ½ oz. **45c**; postpaid.

Golden West—Yellow with orange center. Pkt. **10c**; oz. **30c**; postpaid. Mikado—Orange. Pkt. **10c**; ½ oz. **40c**; postpaid.

The Geisha—Inside brilliant gold, outside orange-crimson, petals fluted. Pkt. **15c**; ¼ oz. **40c**; postpaid. Hybrida Mixture—New large flowering type, new colors, including soft pink, scarlet, chrome, copper-red, claret and royal purple. Pkt. **10c**; ½ oz. **50c**; postpaid.

Shirley Poppies

Beautiful satiny flowers of various colors from white through rose, pink and carmine to the deepest crimson. Fine for cutting and will keep fresh in water for several days if cut before blooms are fully expanded.

American Legion, orange scarlet, yellow anthers, pkt. **10c**; ¼ oz. **25c**; postpaid.

Eldorado, double, pink, pkt. **15c**; ¼ oz. **40c**; postpaid.

Eldorado Double Mixed, pkt. **10c**; ¼ oz. **25c**; postpaid.

Flesh Pink, pkt. **10c**; ¼ oz. **35c**. Picotee, white cup, scarlet edging, pkt. **10c**; ¼ oz. **35c**; postpaid.

Rose Pink, pkt. **10c**; ¼ oz. **35c**. Salmon Pink, pkt. **10c**; ¼ oz. **35c**.

Finest Mixed, pkt. **10c**; oz. **40c**; postpaid.

Splendens—Brilliant scarlet. Pkt. **15c**; postpaid.

Bonfire (Clara Bedman)—One of the finest ever introduced; compact bush about 2 feet in height and diameter. Pkt. **15c**; postpaid.

Plants, doz. **40c**; f.o.b. Portland. All varieties of Salvia above are stocked in season.

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**. Plants, doz. **40c**; f.o.b. Portland.

Azure Fairy, pkt. **10c**; oz. **75c**; postpaid.

Black Purple, pkt. **10c**; oz. **75c**; postpaid.

Fiery Scarlet, pkt. **10c**; oz. **75c**; postpaid.

Rose, pkt. **10c**; oz. **75c**; postpaid.

Pure White, pkt. **10c**; oz. **75c**; postpaid.

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 feet.

Rose and Amber shades, pkt. **15c**; ¼ oz. **95c**; postpaid.

Grandiflora Hybrids, mixed, pkt. **10c**; postpaid.

SNAPDRAGON

SNAPDRAGON, Antirrhinum

— One of the showiest border plants of almost every color; splendid for cut flowers. Greatly improved in recent years and really magnificent. Plant indoors very early, transplanting when about 3 inches high. Height 2 to 3 ft.

TALL GIANT FLOWERED

Scarlet, pkt. **10c**; ¼ oz. **25c**.

Golden King, pkt. **10c**; ¼ oz. **25c**.

Queen Victoria, white, pkt. **10c**; ¼ oz. **25c**.

Rose Queen, pink, pkt. **10c**; ¼ oz. **30c**.

Mixed Varieties, pkt. **10c**; ½ oz. **50c**.

MEDIUM TALL VARIETIES

Florist Strains

Purity, pure white	} Each pkt. 15c ¼ oz. 50c
Gloria, deep rose	
pink	
Nelrose, deep rose	
Philadelphia, pink	
Defiance, orange	
scarlet	
Empress, velvety	
crimson	
Silver Pink	

Rose Dore, rose, suffused with orange

Golden Queen, giant yellow

Mixed Varieties, each pkt. **10c**; ¼ oz. **25c**.

PLANTS, white, pink, red, yellow, doz. **40c**; f.o.b. Portland.

Sweet Peas DIAMOND QUALITY

Giant Spencers

THE NEW "SPENCER" type has lovely waved fluted flowers of giant size. In exquisite colorings, length of stem and lasting qualities they are 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—Plant as early in the spring as conditions will permit. Sow at rate of 1 ounce to 15 feet. Make a trench 3 to 4 inches deep, pressing soil down firmly. After plants are well up, thin to 4 or 5 inches apart, draw soil around them until trench is filled above the level. This gives depth to the roots, preserving moisture. Keep ground well worked and water if needed, an occasional thorough soaking being better than a daily sprinkling. Keep flowers cut close; pruning tips of vines will aid in prolonging the season of bloom and insuring better flowers.

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 in your plantings.

VERY GENEROUSLY FILLED PACKETS

EARLY GIANT ROSE—Awarded silver medal at the New York show. A vigorous grower, with blooms brighter and half as large again as Zvelanek's Rose. The vines are free flowering, flowers large and the bunches are larger than bunches made up with an equal number of stems of other varieties. The stems average 20 inches long, 5 blossoms on many stems and flowers with great standards 2½ in. across. Pkt. **20c**; oz. **\$2.00**; postpaid.

SUPERIOR PINK—Awarded silver medal at International Flower Show at New York City and certificate of merit by the Chicago Florist Club. Beautiful rose pink, very slightly shaded salmon, strong growth and under good growing conditions the stems measure 18 inches and carry four flowers. Pkt. **15c**; oz. **75c**; postpaid.

VULCAN—The brightest of all scarlets. Never burns or scalds. The hotter the sun, the brighter and more intense is the color.

Pkt. **15c**; oz. **75c**; postpaid.

WHITE HARMONY—Growers have been looking for a black seeded white, of pure white color. White Harmony, being black seeded, germinates readily and the plants are vigorous from the start. Stems are long, flowers are large, pure paper white and of grand substance. Does not show the green edge on the flowers which other black seeded whites have shown. Pkt. **15c**; oz. **\$1.00**; postpaid.

HARMONY LAVENDER—A splendid variety, rich true deep lavender throughout. Flowers of large size, beautifully waved. Considered the best in the lavender class. Pkt. **15c**; oz. **65c**; postpaid.

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**; postpaid.

EARLY BLUE BOY—A fine large clear blue. A vigorous grower and a good cut flower variety.

Pkt. **15c**; oz. **60c**; postpaid.

Special Collection EARLY FLOWERING SPENCERS

7 packets \$1.10 value for
Postpaid

75c

Consisting of one pkt. of all the Early Flowering Sweet Peas as follows: Early Giant Rose, Superior Pink, Vulcan Scarlet, White Harmony, Lavender Harmony, Glitters Orange, Early Blue Boy. The most beautiful variety possible and the complete list at a great saving. 7 packets, \$1.10 value, only **75c** postpd.

Diamond Mixture Sweet Peas

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 packets only at **15c** each, postpaid.

15c

Grandiflora Sweet Peas

Old time favorites. Our Packet mixture is of named varieties. Pkt. **10c**; oz. **15c**; ¼ lb. **40c**; postpaid.

10c
Postpaid

Superb Spencer Sweet Peas

Our wonderful Diamond Quality Superb Spencers, with giant size waved and fluted flowers are so superior to the older types you will have the greatest of pleasure in your sweet pea garden. We have selected the very best in each color to offer you this season.

ALL PRICES ON THIS PAGE ARE POSTPAID

Pink and Cream

COUNTLESS SPENCER—Extremely large, beautifully expanded, crumpled and waved. Color silvery, tinted with soft shell pink. Pkt. 10c; oz. 40c.

DAFFODIL—A strong growing black seeded cream. Very deep color. Pkt. 15c; oz. 60c.

DOBBIES CREAM—Primrose, a strong grower and four flowers to a stem. Pkt. 10c; oz. 50c.

HAWLMARK PINK—Glowing deep rose pink flushed salmon; large flowers borne in fours, beautifully waved, long stems. Pkt. 10c; oz. 50c.

HEBE—Largest and best rose pink variety, of great vigor, exceptionally long stems. Pkt. 10c; oz. 50c.

MARY PICKFORD—A dainty cream pink with faintest suffusion of salmon. Sturdy grower with an abundance of four-flowered sprays on long stout stems, decidedly waved. Pkt. 15c; oz. 75c.

MRS. HUGH DICKSON—Flowers very large; usually four on strong stem. Color apricot on cream ground, shading lighter toward center. Pkt. 10c; oz. 40c.

MARGARET ATLEE—Duplex type, warm salmon pink suffused over a cream ground; deepens to a buff at base; four on a stem. Pkt. 10c; oz. 50c.

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. Pkt. 15c; oz. 65c.

CHARMING—Rosy cerise, sometimes described as a brilliant reddish rose. Pkt. 15c; oz. 60c.

CRIMSON KING—A solid, deep crimson, richer in the throat; extremely strong growth with long stemmed sprays, usually with four blooms. Free from sunburn or wind scald. Pkt. 10c; oz. 50c.

DOREEN—Huge bright rose carmine, the very best of this color class; a particularly robust grower; ideal variety for the garden. Popular with exhibitors on account of its large size. Pkt. 15c; oz. 60c.

FIERY CROSS—Fiery red or orange scarlet; scintillates and glitters in the bright sunlight with a glowing radiant fire-like sheen. 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.

VERMILION BRILLIANT—Intense scarlet of rare beauty and substance. Absolutely sunproof. A stocky, vigorous grower, profuse bloomer; the long stems carry four perfect flowers. 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.

GEORGE SHAWYER—Usually described as a large orange pink; requires slight shading to bring out the color to perfection. Pkt. 10c; oz. 50c.

GLORIOSA—Brilliant orange scarlet, very intense but has to be shaded. Pkt. 15c; oz. 60c.

ILLUMINATOR—A brilliant orange salmon, illuminated with bright cerise pink. Pkt. 10c; oz. 40c.

MISS CALIFORNIA—Orange-salmon cream-pink blending of shades. Large beautifully waved form in fours on long stout stems. Pkt. 15c; oz. 60c.

ROBERT SYDENHAM—Glowing orange salmon; strong grower, four flowers on a stem; the largest of this shade. Pkt. 10c; oz. 40c.

ROYAL SOVEREIGN—A most brilliantly colored orange variety, but requires shading; flowers attain a very large size. Pkt. 15c; oz. 60c.

White

CONSTANCE HINTON—The finest black-seeded white variety; large size. Pkt. 10c; oz. 40c.

KING WHITE—Immense petals gracefully frilled, remarkable for the glistening purity of whiteness and perfection of flower. Pkt. 10c; oz. 50c.

See the beautiful collection in colors, page 58

Lavender and Blue

ASTA OHN—Lavender, suffused with mauve; of perfect form, large size, four blossoms on long, strong stems; very vigorous. Pkt. 10c; oz. 40c.

AUSTIN FREDERICK IMPROVED—More of the rosy lavender than the blue. Flowers very large and stems extra stout. Pkt. 10c; oz. 50c.

FLORENCE NIGHTINGALE—Immense, bold, erect flowers of soft, rich lavender with very delicate suffusion of rose; 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, large spreading wings; four sprays on long stems. Pkt. 15c; oz. 60c.

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.

MRS. TOM JONES—Bright delphinium blue, very large, beautifully waved, usually four on a stem of great length. Pkt. 15c; oz. 60c.

ORCHID—A pleasing lavender with sufficient pink to give it warmth and softness. Pkt. 10c; oz. 50c.

ROYAL PURPLE—A rare new shade, rich purple, almost true royal. Pkt. 10c; oz. 50c.

Mixed Superb Spencers

(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 brilliancy of color. Pkt. 10c; oz. 30c; ¼ lb. 95c; lb. \$2.75.

Annual Flower Seeds and Plants—Alphabetically Listed

STOCKS

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 high.

IMPERIAL LARGE FLOWERING TEN WEEKS

Blood Red
Canary Yellow
Chamois
Dark Blue
Flesh Pink
Lavender
Rose
White
Choice Mixed

Each pkt. **15c**; ¼ oz. **75c**; postpaid
Plants, doz. **40c**;
f.o.b. Portland

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
LaFrance, bluish pink
Brilliant, blood red
Sapphire, violet
Creole, canary yellow
May Queen, pale blue
Rose Pink
Choice Mixed

Each pkt. **15c**;
¼ oz. **75c**; ppd.

Virginian Stocks—A fine, early flowering plant. Hardy annual. Mixed.

Pkt. **10c**; ¼ oz. **15c**; postpaid.
Plants, doz. **40c**; f.o.b. Portland.

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**; postpaid.

SUNFLOWER (Helianthus)—Stately growing annuals with immense golden yellow flowers. Height 6 to 8 feet.

Dwarf Double—Bright golden yellow flowers 3 in. across. Pkt. **10c**; oz. **65c**; ppd.
Globosus Fistulosus—Saffron, very large, double and handsome. Pkt. **10c**; oz. **45c**; postpaid.

Multiflora—Beautiful double yellow flowers. Pkt. **10c**; oz. **60c**; postpaid.

THUNBERGIA (Black Eyed Susan)—Rapid growing annual climbers; splendid for trailing over trellises, fences, etc.; buff, white, orange, etc.; 4 to 6 feet high. Grows readily from seed sown in the open.

Mixed Colors, pkt. **10c**; ¼ oz. **45c**; postpaid. Plants, each **15c**; f.o.b. Portland.

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**; postpaid.

Fine Mixed, pkt. **10c**; ¼ oz. **40c**; postpaid.
Scarlet Defiance, pkt. **10c**; ¼ oz. **50c**; postpaid.

Fink Shades, pkt. **10c**; ¼ oz. **50c**; postpaid.

Blue Shades, pkt. **10c**; ¼ oz. **50c**; postpaid.

Candidissima, white, pkt. **10c**; ¼ oz. **50c**; postpaid.

Plants, in season, doz. **40c**; f.o.b. Portland.

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 4 inches in depth and 6 inches in diameter. Easily grown from seed sown in the open.

Exquisite—Light rose, center a deep rose.

Golden State—Rich orange yellow. Yellow in bud, turning orange when in full bloom.

Crimson Monarch—Largest and best red.

Dream—Fine, deep lavender, turning to purple (mallow).

Old Rose—For charm and beauty ranks next to Exquisite.

Scarlet Flame—A beautiful bright scarlet with a blending of orange throughout 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. 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. **85c**; postpaid. Plants, doz. **50c**; f.o.b. Portland.

Gold Medal Mixed—All colors, dahlia flowered. Pkt. **15c**; ½ oz. **\$2.00**; postpaid. Plants, doz. **40c**; f.o.b. Portland.

GRANDIFLORA ROBUSTA ZINNIAS—Double giants. A special strain, producing mostly double flowers of immense size. Plants are of extremely robust growth; height about 3 ft.

Apricot, Yellow, Deep Flesh, Golden Yellow, Rose King, Salmon, Shrimp Pink, White and Mixed, pkt. **10c**; oz. **\$1.85**; postpaid.

DWARF DOUBLE MIXED ZINNIAS, pkt. **10c**; oz. **\$1.85**; postpaid.

Plants, doz. **40c**; f.o.b. Portland.

PICOTEE ZINNIAS—All colors mixed. Pkt. **10c**; ¼ oz. **25c**; postpaid.

VICTORY QUILLED ZINNIAS—All colors mixed. Pkt. **10c**; ¼ oz. **25c**; postpaid.

Flower Seeds for Greenhouse Culture

We list below a number of varieties of seeds, used principally by nurserymen, although home growers plant some varieties. Generally, however, the home gardener orders plants instead of seed. The plants are listed in their separate departments. See Index.

ASPARAGUS SPRENGERI (Emerald Feather)—One of the best of the 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 page 74. Pkt. **10c**; $\frac{1}{4}$ oz. **75c**; postpaid.

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 page 74. Pkt. **25c**; $\frac{1}{8}$ oz. **95c**; postpaid.

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 blooms. For plants see page 70. Hybrid—Finest mixed. Pkt. **50c**; postpaid.

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 page 72. Crozy's Best Mixed, pkt. **10c**; oz. **50c**; postpaid.

COLEUS—Popular 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. For plants see page 72. Extra Choice Mixed, pkt. **25c**; postpaid.

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**; postpaid.
Papilio Hybridum or **Butterfly Cyclamen**, pkt. **25c**; postpaid.

DRACAENA—Ornamental greenhouse plant. Very desirable. Narrow, dark foliage.

Indivisa Lineata, pkt. **10c**; $\frac{1}{4}$ oz. **30c**; postpaid.

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**; postpaid.

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. For plants see page 72.

Fine Mixed—All colors. Pkt. **10c**; $\frac{1}{4}$ oz. **50c**; ppd.
Choicest Mixed, from new varieties, pkt. **15c**; $\frac{1}{4}$ oz. **75c**; postpaid.

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. For plants see page 72.

Hybrida Fine Mixed, pkt. **10c**; $\frac{1}{4}$ oz. **20c**; postpd.

PRIMULA (Primrose)—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 2 inches high. For plants see perennial department.

Polyanthus—Early blooming, dwarf growing plants. Valuable for outdoor bedding. Mixed colors. Pkt. **25c**; $\frac{1}{16}$ oz. **75c**; postpaid.

Vulgaris—Yellow English Primrose. Pkt. **25c**; $\frac{1}{32}$ oz. **75c**; postpaid.

PRIMULA (*Obconica Grandiflora*)—Beautiful single flowers. This is really an everblooming plant, producing elegant clusters of flowers continuously throughout the year. Fine mixed. Pkt. **25c**; $\frac{1}{64}$ oz. **\$2.25**; postpaid.

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 perennial department. Pkt. **10c**; $\frac{1}{4}$ oz. **20c**; postpaid.

Florist's and Gardening Supplies

We carry a complete stock of florists' supplies, including wire designs, cords, ribbons, chiffons, foil, wire, clips, pins, 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 have a complete stock of general items used in the garden, as described below.

PECO PLANTING POTS

Keep plants from drying out as, when soaked with water, they retain moisture for a long time. Plants never become pot-bound as plants are set out without disturbing roots or removing from the pot. Square shape easy to handle. Prices f.o.b. Portland.

3-in., 2-in. hole, doz. **50c**; 100 **\$3.25**.

PECO POTS

ROUND PLANT STAKES

PAINTED GREEN

Length 3 ft. $3\frac{1}{2}$ ft. 4 ft. $4\frac{1}{2}$ ft.
Dozen **50c 65c 80c 95c**
f.o.b. Portland

BAMBOO PLANT STAKES

Size, in. $\frac{1}{4}$ x24 $\frac{1}{4}$ x30 $\frac{3}{8}$ x36
Per 100 **\$1.00 \$1.15 \$1.25**

Size, in. $\frac{3}{8}$ x48 $\frac{3}{8}$ x60 $\frac{1}{2}$ x72
Per 100 **\$2.00 \$2.50 \$3.75**
f.o.b. Portland

WOODEN POT LABELS

PAINTED WHITE

Size 4 in. 5 in. 6 in. 8 in.
100 for **30c 35c 45c 90c**
f.o.b. Portland, postage extra

TREE LABELS

Painted, wired with copper wire. Per 100 **40c**; postage extra.

WEATHERPROOF PENCILS

For marking pot and tree labels. **15c**.

RAFFIA

For basket weaving and other purposes. natural color. Per lb. **35c**. All colors, $\frac{1}{4}$ lb. **40c**; lb. **\$1.25**; postage extra.

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. Price **75c**; postage extra.

Plants for Winter Indoor Blooming & Spring Bedding, Alphabetically Listed

ABUTILON ECLIPSE—Handsome variegated foliage; bright pendant flowers of scarlet and gold colors. Fine for vases and baskets. Each **20c**; 6 for **\$1.00**; f.o.b. Portland.

AGERATUM (Blue Star)—Bedding and border plant growing one foot high. Feathery blue flowers all summer. Each **15c**; doz. **\$1.25**; f.o.b. Portland.

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, ea. **25c**; larger plants **40c** to **60c** ea.; postage extra.

FLOWERING BEGONIAS

Price **20c** each; set of 6 sorts **\$1.00**; f.o.

b. Portland

ALBA PICTA—Dark green leaves dotted with white spots; dwarf growing; fine house plant.

BERTHA CHATEROCH-ER—Glossy green foliage, clusters of bright scarlet flowers nearly all year.

COMPTA—Pointed purplish green leaves with silvery shadings. Pure white flowers.

FOLIOSA—The freest flowering Begonia we have. Makes a handsome window plant, with its glossy green leaves and bright pink flowers.

MARGUERITE—Foliage dark bronzy green on upper surface, reddish purple on under side.

Panicles of white flowers with downy red hairs.

MARJORIE DAW—A strong variety of slender habit, glossy green foliage, large racemes of salmon pink flowers, drooping gracefully.

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.

TUBEROUS BEGONIA

Single Flowering—
Ea. **25c**; doz. **\$2.50**;
f.o.b. Portland.

Double Flowering—
Ea. **30c**; doz. **\$3.00**;
f.o.b. Portland.

CALCEOLARIA

CALCEOLARIA

(Shower of Gold)—Pretty clusters of golden yellow flowers all thru the season. Each **20c**; doz. **\$2.00**; f.o.b. Portland.

CAMPANULA ISOPHYLLA ALBA

(Creeping Charley or Falling Star)—Splendid old fashioned trailing plant suitable for hanging baskets. Flowers pure white, about half inch in diameter and produced with great freedom throughout a large part of the year. Each **25c**; f.o.b. Portland.

CARNATION

Chrysanthemums, English

Each 20c; set of 12 sorts \$2.00; f.o.b. Portland

- CAMILLE BERNADINE—Large fluffy flowers of violet and carmine shaded with white.
 CHALDRON—Bronzy red tipped with chamois; dwarf.
 CHAMPAGNE—Bright red with golden yellow reverse.
 CRANFORD WHITE—Flowers in great profusion; dwarf.
 GLORY OF SEVEN OAKS—Deep golden yellow, free blooming; dwarf habit.
 GOACHERS CRIMSON—Rich crimson, very early.
 HENRY VINCENT—Rose pink flushed with silver, free blooming.
 LE PACTOLE—Bright lemon yellow; one of the best.
 MIGNON—Rosy pink shaded silvery; vigorous grower, very free.
 QUEEN OF WHITES—Snowy white flowers cover the plant early in the fall.
 SOURCE DE OR—Tawny red flushed with bronze and chamois.
 WOLVERINE—Golden yellow, splendid texture; dwarf, very free.

JAPANESE CHRYSANTHEMUM

For Chrysanthemum SEED
see page 61

Carnations—10 Choice Varieties

Carnations thrive in any good garden soil and are easily grown inside for winter flowers. Their spicy fragrance is delightful. A group of these 10 sorts is especially fine.

Each 20c; set of 10 sorts \$1.75; f.o.b. Portland

- ALICE—Large fringed flowers on stout stems. Color light pink with silvery shadings.
 AVIATOR—Large and massive with finely fringed petals and strong calyx. Color bright rich scarlet, true ever-bloomer.
 BELLE WASHBURN—Deep scarlet, largest size, perfectly double.
 BONORA—Fancy variety of fine size and form, borne on long, stout stems. White, splashed with red.
 ENCHANTRESS—Flowers very large, long stems; flesh pink; early and continuous bloomer.
 MATCHLESS—Very large, white maculated with apple blossom.
 MRS. C. W. WARD—Brilliant dark pink, of immense size.
 POCAHONTAS—Rich crimson maroon flowers of fine size.
 WHITE ENCHANTRESS—A pure white.
 WHITE WONDER—Snow white flowers, strong wiry stems. Nicely fluted, very fragrant.

For Carnation SEED see page 61

ENGLISH CHRYSANTHEMUM

FINEST JAPANESE Chrysanthemums

Each 20c; set of 12 sorts \$2.00; f.o.b. Portland

- BETSY ROSS—Pure white, very large globe shaped, finely incurved petals.
 BRONZE QUEEN—Golden bronze, relaxed form; early and free blooming.
 BRUTUS—Rich chestnut red, reverse of petals gold.
 CHIEFTAIN—Very large, perfectly incurved flowers, silvery pink.
 CHRYSOLORA—The finest yellow in the collections. Large incurved flowers.
 EARLY FROST—Pure snowy white flowers, inner petals incurving and outer reflexing.
 GOLDEN GLORY—Deep yellow flowers of incurved form. Early and free blooming.
 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.
 ROSE CHOCARD—Rose pink, perfectly incurved flowers of wonderful substance, on stout stems.
 WHITE CHIEFTAIN—Compact incurved flowers of elegant form, pure white tinged pearl.
 W. H. WAITE—Immense full flowers of incurved form, golden bronze shaded terra cotta.

Write for Free Book on Fertilizing and Feeding Plants

King Humbert Canna

CANNAS

Quick growers, these new varieties, blooming continuously until frost, charming ornamental plants and make striking beds. Bulbs or plants in season, ready in April. Ea. **25c**; doz. **\$2.50**; f.o.b. Portland

FIREBIRD—Green leaved; flowers fiery, bright red, in immense trusses. 4 feet.

KING HUMBERT—Mammoth flowers of brilliant orange-scarlet, broad foliage rich coppery bronze with brownish green markings. Height 5 to 6 feet.

METEOR—Large spikes of deep crimson flowers on tall stalks, green foliage.

NOKOMIS—Vivid crimson flowers with silky sheen, bronze colored foliage.

ORANGE BEDDER—Dazzling mass of bright orange.

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.

YELLOW KING HUMBERT—Immense spikes of golden yellow, with scarlet spotted throat.

SPECIALS IN CANNAS

Ea. **35c**; doz. **\$3.50**; f.o.b. Portland

CITY OF PORTLAND—A magnificent pink with salmon suffusion. Luxuriant green foliage, very hardy.

THE PRESIDENT—The best red-flowered green-leaved Canna. Flowers glistening scarlet. Height 4 feet.

COLEUS

COLEUS (Fancy Leaved)—The most important of all fancy leaved bedding plants. They make very fine pot plants if you have a warm room to winter them in. Ea. **15c**; 6 sorts **75c**; f.o.b. Portland.

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.

Fuchsia

SHOWER OF GOLD

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**; 3 for **70c**; postage extra.

HELIOTROPE

Price **20c** each, set of 4 sorts **65c**; postage extra

ALBATROSS—Elegant dwarf, bushy growing; large panicles of pure white flowers in great profusion.

HEAVENLY BLUE—Large, close panicles of exquisite light blue flowers with a white eye.

LAVENDER QUEEN—A beautiful lavender, suffused with rosy mauve. Dwarf, robust, free continuous bloomer.

ROYAL PURPLE—Color deep violet purple with white eye; very floriferous; highly recommended for bedding. Dozen **\$1.00**; f.o.b. Portland.

IVY VINE FOR HANGING BASKETS

COMMON IVY—Waxy green leaves, strong growing vine for window and porch boxes or for hanging baskets. Each **20c**; 3 for **55c**; postage extra.

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 **20c** each, set of 6 sorts **\$1.00**; postage extra

AMEIL—Covered all summer with umbels of little florets, red on the outer edge and orange yellow in the center.

COUNTLESS DE BIENCOURT—Rich rose centered primrose yellow. Each floret with golden throat.

COURBEILLE DE ARGENT—Large umbels of pure white florets centered with yellow; free blooming.

DELICATISSIMA—The weeping lantana, lilac pink flowers in great profusion; splendid bedding plant; fine for basket or porch box.

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.

LANTANA DELICATISSIMA—The Weeping Lantana, has lilac pink flowers all season. A fine basket plant. Each **20c**; 3 for **55c**; postage extra if mailed.

MARGUERITE, Mrs. Sanders—A superb new Marguerite or Paris Daisy coming from England. Covered all summer with large, anemone-shaped, semi-double white flowers of great beauty. A fine garden plant. Ea. **20c**; doz. **\$2.00**; postage extra.

Geraniums

Geraniums are of the easiest culture, requiring only to be kept cool and given plenty of air, with an occasional sprinkling of the foliage to clean and freshen it. Keep the roots moist, not too wet, 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.

FINE SINGLE GERANIUMS

Price **20c** each; set of 12 sorts **\$2.00**

Add postage on parcel post orders

ALICE LEMON—White shaded with peach pink in center.
ALBION—Free flowering snow white; always in bloom.
EMANUEL ARENE—Rich velvety crimson, maculated orange red; immense trusses.
EUGENE SUE—Russet orange; very distinct.
JAQUERIE—Rich, vivid crimson, immense trusses.
MRS. A. BLANC—Silvery salmon shaded to peach.
MADAME MOSNAY—Carmine lake, shaded to violet and white.
METEOR—Crimson maroon; fine 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—Scarlet; large trusses; produces freely all season.

FINE DOUBLE GERANIUMS

Price **20c** each; set of 12 sorts **\$2.00**

Add postage on parcel post orders

ABBIE SCHAEFFER—Crimson maroon in fine large trusses.
ALPHONSE RICARD—Immense trusses of 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—Salmon pink, shaded with scarlet.
MME. RECAMIER—Snow white; strong vigorous grower.
MRS. LAWRENCE—Satin pink shaded to white.
S. A. NUTT—Rich dark crimson in large trusses.
SCARLET BEDDER—Bright scarlet, large trusses; never out of bloom; dwarf grower; handsome foliage.
THOMAS MEEHAN—Vinous rose marked with orange.

PELARGONIUMS

LADY WASHINGTON GERANIUMS

25c each; set of 5 sorts **\$1.00**; postage extra

AGATHEA—White, flushed apple blossom, blotched maroon.
DUCHESSE OF PORTLAND—Vinous cerise shaded to vermilion, upper petals darkly blotched and veined.
EASTER GREETING—Fiery amaranth red, blotched maroon.
FAIR MAID—Lower petals white flushed light pink; upper petals maroon surrounded with crimson and bordered white.
MARGARET DAWSON—Deep rose pink, feathered crimson; maroon blotches on upper petals.

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 each; set of 6 sorts **\$1.00**; postage extra

BALLADE—Large double; lilac, 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.
INCOMPARABLE—Exquisite rosy carmine; free blooming.
MADAME THIBAUT—Soft rose pink, upper petals feathered with crimson; undulated petals, immense trusses, luxuriant foliage.

NOVELTIES SINGLE GERANIUMS

Price **25c** each; set of 10 sorts

\$2.00; f.o.b. Portland

FIAT—Bright salmon, peach shaded; large free trusses; splendid bedder.
GABRIEL MONTOYA—Bright reddish purple; large full trusses; very striking.
HALL CAINE—Immense circular flowers, bright scarlet; large, heavy trusses.
MAXINE KAVOLENSKI—Orange scarlet; in large trusses freely produced.
PAMELA—Vinous rose color, upper petals shaded to white at base; free blooming.
QUEEN OF WHITES—Free flowering white, pure as snow; always in bloom.
ROMILDA VICINI—White overlaid with salmon, upper petals feathered with crimson.
UNIVERSE—Large circular florets in umbels of fine size; bright scarlet, white eye.
VITTO MUSSI—Velvety crimson, fine size; one of finest dark sorts.
VICTOR GROSSET—Rich apricot salmon shaded vermilion; very brilliant.

NOVELTIES DOUBLE GERANIUMS

Price **25c** each; set of 10 sorts

\$2.00; f.o.b. Portland

BLANCAFLUER—Double white flowers of wonderful purity of color.
E. H. TREGOE—Soft velvety scarlet, fine size; splendid bedding variety.
ERNEST CHEBROUX—Large trusses of bright cerise flowers, each floret with large distinct white eye.
FLEURE BLANC—Large double florets in great trusses, white tinted with rose.
FRANCES PERKINS—Bright rose pink in massive trusses; always in bloom.
JEAN OBERLE—Apple blossom pink flowers of fine size freely produced.
LOUIS MAZIEUX—Gorgeous vermilion scarlet, white markings in center of floret.
MADAME TURIN—Vigorous, free blooming, 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.

For Geranium Seed
See page 62

Plants for Winter Indoor Blooming & Spring Bedding, Alphabetically Listed

MESEMBRYANTHEMUM SPECTABILIS — Quilled shaped, succulent leaves with large single thistle-like cerise pink flowers. Fine for baskets, vases or porch boxes. Each **20c**; 3 for **55c**; postage extra.

NEPETA GLECHOMA VARIEGATA — The variegated ground ivy. Well known trailing plant with green and white foliage. A fine basket and window box plant. Each **20c**; 3 for **55c**; postage extra.

LARGE FLOWERING PETUNIA

PETUNIA (Irvington Beauty) — Single flowered. Covered with beautiful light pink flowers veined green and shaded to white in throat. Each **20c**; 3 for **50c**; postage extra.

SNAPDRAGON, New English — This fine strain grows about 1½ feet high. The flowers are closely set in large spikes and cover all the range of color known in this popular bedding plant. Among the most satisfactory summer bedding plants. Ten choice sorts as follows: Enchantress, pink; Flame, scarlet; Fiery-Belt, orange; Golden Queen, yellow; Golden Morn, raspberry; Matchless, apricot; Nelrose, pink; Peace, salmon; Prima Donna, apricot; White Queen, white. Each **15c**; set of 10 sorts **\$1.25**; postage extra.

VINCA VARIEGATA — Leaves are a glossy green, broadly margined a creamy white. The best of trailing plants for window boxes. Each **20c**; 3 for **50c**; postage extra.

WANDERING JEW (Tradescantia) — White and red variegated. Each **20c**; 3 for **55c**; postage extra.

VERBENA (New

Mammoth) — The

Verbena is, next

to the Geranium,

the most popular

of all bedding

plants. Assorted

colors. Each **15c**;

doz. **\$1.25**; post-

age extra.

Sweet Violets

Price **20c** ea.; set of 6 sorts **\$1**; postage extra

SINGLE

BARONESS ROTHSCCHILD — Similar to Princess of Wales but blooms more freely.

CALIFORNIA — Very showy flowers of enormous size, deep violet blue, very fragrant.

PRINCESS OF WALES — Gigantic flowers, a rich shade of blue, extremely fragrant.

DOUBLE

LADY HUME CAMPBELL — Beautiful light blue, free blooming, exquisitely fragrant.

MARIE LOUISE — A constant bloomer, producing large flowers, deep violet purple.

MARY D. EVANS — Beautiful double sort with lavender flowers; very distinct.

Beautiful Ornamental Ferns

6 Fine Table Ferns for \$1.25

Each separately **25c**
F. O. B. Portland

Adiantum Cuneatum (Maiden Hair Fern).

Aspidium Tussimense — Of graceful habit.

Pteris Argylea (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.

BOSTON FERN — The original 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.

ROOSEVELT FERN — Resembles a Boston Fern, produces more fronds; a wonderful decorative plant. 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.

TEDDY JUNIOR FERN — A new dwarf fern, sport from the Roosevelt; compact in form. 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.

ASPARAGUS FERNS

20c each, postpaid; larger plants **35c** and **50c** each, f.o.b. Portland

SPRENGERI (Emerald Feather) — One of the handsomest, most valuable evergreen trailing plants for the house and conservatory. Beautiful sprays of lovely green feathery foliage, charming for the window or conservatory.

PLUMOSA (Japanese Lace Fern) — Finer and more delicate than Sprengeri, but hardy and easily grown. A graceful window climber, bright green feathery foliage, as fine as silk or lace.

Collections of Gladiolus

Prices f.o.b. Portland, postage extra. See full list on page 104

No. 1—DR. W. VAN FLEET	3 for 30c; doz. 95c
No. 2—SCHWABEN	3 for 20c; doz. 50c
No. 3—JACOBA VON BEIJEREN	3 for 30c; doz. 85c
No. 4—ALTON	3 for 25c; doz. 75c
No. 5—DORRITT	3 for 30c; doz. 85c
No. 6—VIRGINIA	3 for 30c; doz. 95c

Collection of 3 each, \$1.45 value, **\$1.25**
Collection of 12 each, \$4.85 value, **\$4.25**

Regal Lily

"Lilium Regale or Myriophyllum," the most interesting ever discovered. Perfectly hardy, of medium height, bearing 5 to 8 large handsome blooms. Color white, outer petals shaded with pink, throat suffused primrose-yellow. Delightfully perfumed.

SEEDS—Postpaid
Packet **50c**
See other lilies on
pages 102-103

**PORTLAND
SEED CO.**

BULBS—Postpaid
1 yr. size, each **35c**
2 yr. size, each **65c**
3 yr. size, ea. **\$1.00**

Hardy Flower Seeds and Plants for your Perennial Borders

SEEDS

Collection of Ten
pkts., one each of
list below

\$1.00 value,
postpaid,
for..... **75¢**

PLANTS

Collection of Ten
Plants, one each

\$2.15 value,
f.o.b. Portland, **\$1.75**
for.....

	SEEDS pkt.	PLANTS each	doz.
Alyssum Saxatile	10c	20c	\$2.00
Arabis, Rock Cress, Alpina.....	10c	20c	\$2.00
Delphinium, Bellamosum	10c	20c	\$2.00
Digitalis (Fox Glove)	10c	20c	\$2.00
Gaillardia, Grandiflora	10c	20c	\$2.00
Geum, Mrs. Bradshaw	10c	25c	\$2.50
Gypsophila, Paniculata	10c	20c	\$2.00
Hollyhock, Perennial	10c	20c	\$2.00
Pyrethrum, Persian Daisy.....	10c	30c	\$3.00
Sweet William, mixed.....	10c	20c	\$2.00

\$1.00 \$2.15

Seeds are postpaid
Plants are f.o.b. Portland

HOLLYHOCK

DELPHINIUM

ALYSSUM

GYP SOPHILA

ARABIS

SWEET WILLIAM

GEUM

GAILLARDIA

PYRETHRUM

FOX GLOVE

Perennial Alpine & Border Plants and Seeds

IMPORTANT NOTICE. In our catalog this season we have separated the Annual and Perennial Seeds and Plants and in the following pages show a more complete list of Perennials than ever before. Many are NEW and RARE; the original plants having been secured from

**For
Annual
Seeds and
Plants see
pages 57-69**

**For
Perennial
Seeds and
Plants see
pages 76-91**

NEW INTERESTING ALPINES

The popularity of rockeries, rock gardens, lily ponds, etc., has increased so greatly we have selected and include in our compilation an exceptionally large and fine list of alpenes especially

suited for these purposes and have endeavored to make the descriptions as clear and concise as possible. We hope that you will enjoy reading through the entire list as much as we have enjoyed preparing it and that you will find many new and pleasing selections for your rockeries. 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, plants propagated from seed, especially hybrids. Please do not specify straight colors on hybrids that are listed "in mixture of colors only."

An interesting chart showing the varieties that bloom each month will be sent free on request

ALPINE OR ROCKERY PLANTS MARKED WITH A STAR (*); BORDER PLANTS WITH A DAGGER (†)

ACAENA

*GLAUCA. A carpeting plant for dry situations. Evergreen foliage of bluish hue. Plants, each 30c; doz. \$3.00.

ACHILLEA

All the Achilleas are drought-resisting and will thrive in any kind of soil.

*ARGENTEA. Dwarf tufted hoary alpine plants, silvery foliage, white flowers. 3 to 4 in. high. May-July. Plants, each 25c; doz. \$2.50.

*MILLEFOLIUM-ROSEUM. Dense heads of rosy pink flowers. 18 in. June to August. Plants, each 25c; doz. \$2.50.

*PTARMICA "THE PEARL." Pure white flowers all summer. For drying. 18 in. high. Plants, each 25c; doz. \$2.50.

*TOMENTOSA. A beautiful alpine species, close tufts of finely divided foliage and compact heads of golden yellow flowers. 12 in. high. June to August. Plants, each 25c; doz. \$2.50.

ACONITUM (Monkshood)

Bushy clumps for planting under trees and in shady places or in the sun. Bold spikes of hood-shaped flowers.

†ANTHORA. A pale yellow flowering Monkshood. 30 in. July-Aug. Plants, each 30c; doz. \$3.00.

†FISCHERI. Dwarf, pale blue flowers. 18 in. high. July to August. Plants, each 40c; doz. \$4.00.

†NAPELLUS. Violet blue, glistening. 3 to 4 ft. July to August. Plants, each 30c; doz. \$3.00.

†WILSONI. Large dark blue flowers on 4 to 6 ft. stems. Sept.-Oct. Plants, each 40c; doz. \$4.00.

Seed prices are postpaid
Plant prices are f.o.b. Portland

ADENOPHORA

†LILIFOLIA. Closely resembles the Campanula but flowers are smaller, dainty light blue, bell shaped on 3 ft. stems. May to July. Plants, each 25c; doz. \$2.50.

AETHIONEMA (Persian Candytuft)

Plant in light, sandy soil on dry, sunny slopes and will last for many years without replanting or renewing. They dislike moist soil and shady places.

*CORIDIFOLIUM. Rosy-lilac flowers in dense short racemes, numerous branches. 4-6 in. May-July. Plants, each 50c; doz. \$5.00.

*GRANDIFLORUM. Strong twiggy branches resembling Iberis in growth with clusters of rosy pink flowers in May and June. 12 in. Plants, each 30c; doz. \$3.00.

*OVALIFOLIUM. Compact bushlet about 8 in. tall; light pink flowers. Plants, each 40c; doz. \$4.00.

*PERSICUM. Rosy pink flowers of deep tone, dense. 4 to 6 in. high. May to July. Very fine. Plants, each 50c; doz. \$5.00.

AGROSTEMMA (Rose Campan)

†ALTRIO-SANGUINEA. Strikingly beautiful for beds and borders, silvery white foliage, showy crimson blossoms resembling single pinks. Sow where the plants are to remain and thin to prevent crowding. 24 to 36 in. June to July. Seeds, pkt. 10c; oz. 65c.

AJUGA (Bugleweed)

*REPTANS-BROCKBANKII. Forms a close carpet 2 to 4 inches high of richly bronzed purple leaves with blue flowers like mint blooms, for shaded or moist positions. Plants, each 25c; doz. \$2.50.

ALSTROEMERIA- AURANTIACA

†PERUVIAN LILY. Handsome plants, especially when grown in groups, yellow flowers, streaked with red, in umbels on stems 2 to 4 ft. high. Require a well drained, partly shaded position, and roots must have an abundance of water during growth. July to Sept. Seeds, pkt. 25c. Plants, each 30c; doz. \$3.00.

ALYSSUM (Rock Madwort)

*ARGENTEUM. Dwarf dense growth, foliage silvery beneath, large panicles of bright yellow flowers, blooming all summer. 12 in. high. Seeds, pkt. 25c. Plants, each 25c; doz. \$2.50.

*MOELLENDORFIANUM. Makes a dense cushion about 18 in. across; fine for carpeting, growing about 4 in. high; silvery foliage, yellow flowers. June to August. Plants, each 30c; doz. \$3.00.

*SAXATILE COMPACTUM. The old favorite gold dust, large heads of golden yellow flowers, excellent for rockery or in front of borders. 8 to 10 inches. May to June. Plants, each 20c; doz. \$2.00.

*SAXATILE CITRINUM. Dwarf, compact habit. Especially good for rockeries or edging work. Masses of pale yellow flowers. 10 in. high. May to June. Plants, each 30c; doz. \$3.00.

*SAXATILE LUTEUM. Compact habit, sulphur yellow flowers. 6 to 12 inches high. May to June. Seeds, pkt. 10c; ¼ oz. 40c. Plants, each 20c; doz. \$2.00.

Dozen price applies to a dozen of one variety, not to mixed lots

Perennial ALPINE & BORDER PLANTS & SEEDS—Alphabetically Listed

ALPINE OR ROCKERY PLANTS MARKED WITH A STAR (*); BORDER PLANTS WITH A DAGGER (†)

ANCHUSA

†ITALICA (Dropmore). Stout well balanced bushes of dark green broad foliage, for borders. Smoothed with brilliant gentian blue flowers. 3 to 5 ft. Sow seeds in sheltered place outdoors, transplant 2 to 3 ft. apart. April-July. Seeds, pkt. 15c; ¼ oz. 50c. Plants, each 20c; doz. \$2.00.

ANDROSACE (Rock Jasmine)

*LANUGINOSA LEICHTLINI. "The most alpine of all alpines," a free growing trailing plant with gray silky foliage and umbels of white flowers with small crimson eye. Plant in gritty soil, the roots requiring the cool moisture of the stones. Protect from extreme moisture during winter months. May to October. Plants, each 35c; doz. \$3.50.

ANEMONE (Windflower)

*HUPHENSIS. A pretty species from central China, closely resembling anemone Japonica in a miniature way; pleasing mauve-rose flowers about 1½ in. across. 12 to 18 in. high. From August till late fall. Plants, each 25c; doz. \$2.50.

*PULSATILLA (Pasque Flower). A delightful plant for rockery or border, large flowers, colors from lilac to purple, 8 to 12 in. high. April to May. Seeds, pkt. 25c.

Plants, each 40c; doz. \$4.00.

*ST. BAVO. A new race of starry windflowers, closely allied to A. Fulgens. Colors range from scarlet, rose salmon and brick red to dark carmine, lilac and blue, all with a silvery white center. Can supply in mixture only. 8 to 10 inches high. March to May. Plants, each 35c; doz. \$3.50.

*ST. BRIGID (Irish Anemone). Their fine cut foliage and pretty blue, pink and white flowers make them one of the most popular spring flowers. 12 to 18 in. high. March to May. Mixture only. Seeds, pkt. 25c.

Plants, each 25c; doz. \$2.50.

ANEMONE JAPONICA

Among the most important fall flowering hardy perennials that thrive in the shade. Valuable for massing or single specimens. They grow rapidly and are profuse in bloom, increasing in beauty and strength each year and furnishing abundant cut flowers. August to November. Stems 2 to 4 ft. high.

†LOUISE UHINK. Large double pure white flowers, 3 to 4 feet. Plants, each 35c; doz. \$3.50.

†MAX VOGEL. Large pink, semi-double flowers, 2 to 3 feet high. Plants, each 35c; doz. \$3.50.

†QUEEN CHARLOTTE. Very large semi-double, LaFrance pink, 3-4 ft. Plants, each 20c; doz. \$2.00.

†RICHARD AHRENSD. Large single shell pink flowers with lilac tinge. Plants, each 35c; doz. \$3.50.

†RUBRUM. Rosy red, semi-double, 2 feet high. Plants, each 20c; doz. \$2.00.

†WHIRLWIND. Fine double white, 2 to 3 feet high. Plants, each 20c; doz. \$2.00.

ANTHEMIS (Marguerite)

*KELWAYI. Blooms all summer and thrives in the poorest soil. Large lemon yellow flowers, finely cut foliage. 2 feet high. Plants, each 20c; doz. \$2.00.

AQUILEGIA (Columbine)

In all of our gardens there is no daintier, more airy a flower than the long spurred Columbines, with their handsome foliage and long sturdy stems. While a light shade and loose loamy soil are best, they will do well in the full sun and in any soil from light loam to adobe. Colors of every sort, blooming for a long season. In this list we also include some very charming dwarf types for rockeries.

*ALPINA. A beautiful short spurred form, blue and white flowers, 12 inch stems. May to August. Plants, each 30c; doz. \$3.00.

*ATRATA (European Columbine). On 18 in. stems, many flowered, violet color with 1 in. spurs, all summer blooming. A rare and delightful rockery plant. Plants, each 30c; doz. \$3.00.

†CHRYSAETHA. Long spurred waxy yellow flowers, free blooming. 2 feet high.

Plants, each 25c; doz. \$2.50.

†LONG SPURRED HYBRIDS. Extra large long spurred flowers, sweet scented in blue, pink, white, yellow and lavender, color combinations, mixture only.

Seeds, pkt. 25c; 1/16 oz. 50c.

Plants, each 25c; doz. \$2.50.

*PYRANICA. The most dwarf of all the aquilegias. A very rare and beautiful plant, compact clumps of dark green foliage with clear blue flowers on stems 6 to 8 in. high. June to July.

Seeds, pkt. 50c.

Plants, each 35c; doz. \$3.50.

†SINGLE MIXED. A desirable mixture of all colors.

Seeds, pkt. 15c; ¼ oz. 50c.

†DOUBLE MIXED. All colors. Seeds, pkt. 15c; ¼ oz. 50c.

ARABIS (Rock Cress)

One of the earliest and prettiest spring flowers for rockeries or edging. Sow seeds in permanent location and thin to 6 in. Gray green foliage, sheets of fragrant flowers. Will stand drouth. 6 to 8 inches high. April and May.

*ALPINA. Pure white flowers. Seeds, pkt. 10c; ¼ oz. 30c.

Plants, each 25c; doz. \$2.50.

*ALPINA FLORE PLENO. Double white flowers with pinkish tinge. Plants, each 25c; doz. \$2.50.

*ROSEA. Dainty sprays of rose colored flowers. Plants, each 30c; doz. \$3.00.

ARENARIA (Sandwort)

*BALEARICA. Close turf-like habit, a real gem for carpeting a moist shady spot. Small white flowers. May to Sept.

Plants, each 25c; doz. \$2.50.

*MONTANA. A charming trailing species with silvery white flowers, makes an excellent rockery or edging plant in dry soils. June-Sept.

Plants, each 30c; doz. \$3.00.

ARMERIA (Sea Pink or Thrift)

Very attractive dwarf plants, forming evergreen tufts of bright green foliage with many flowers in dense heads on stiff wiry stems, flowering from spring until fall, foliage being attractive the year round. Will succeed in any soil.

*FORMOSA. Light pink flowers, 12 to 15 inch stems.

Seeds, pkt. 15c.

Plants, each 20c; doz. \$2.00.

*MARITIMA. Rose pink flowers in great abundance, 8 to 12 inches, grass-like foliage.

Seeds, pkt. 15c.

Plants, each 20c; doz. \$2.00.

*MARITIMA ALBA. White flowering form of above.

Plants, each 25c; doz. \$2.50.

*VULGARIS. A native of the Coos Bay country, rose pink flowers, 6-inch stems.

Seeds, pkt. 15c.

Plants, each 25c; doz. \$2.50.

ARTEMESIA

†LACTIFLORA. A Chinese species of exceptional merit, dark green finely cut foliage with large terminal spikes of creamy white flowers, filling the air with fragrance. Makes a graceful cut flower. 3 to 5 ft. July to Sept.

Plants, each 30c; doz. \$3.00.

ASCLEPIAS (Butterfly Weed)

†TUBEROSA. Very showy native plant, thriving in the full sun and not particular as to soil. Flowers are first salmon pink, changing to light orange, then brilliant orange scarlet, putting three colors on each flower stem. 2 ft. June-Aug.

Plants, each 20c; doz. \$2.00.

ASPERULA (Woodruff)

*CYNANCHICA. A spreading trailing plant with masses of rosy-pink flowers all summer. Dainty foliage. Plants, each 25c; doz. \$2.50.

ASPHODELUS (King's Spear)

†LUTEUS. Bright yellow lily-like flowers on tall spikes, sword-like foliage, very fragrant, fine for borders. 3 to 4 ft. high.

Plants, each 30c; doz. \$3.00.

ASTERS-PERENNIAL ALPINES

The list of perennial asters is divided into two classes, the spring and summer flowering and dwarf types especially suited for rockeries and edgings and the late flowering taller types for borders.

*ALPINUS. Large purplish blue flowers with golden yellow center. 10 inches. May and June.

Plants, each 20c; doz. \$2.00.

*ALPINUS GOLIATH. Large beautiful flowers of lilac shade with yellow center. 12-15 in. May-June.

Seeds, pkt. 15c.

Plants, each 25c; doz. \$2.50.

*AMELLUS KING GEORGE. The amellus type is a large flowering early blooming Michaelmas daisy, the individual flowers measuring 2 to 3 in. Erect bushy habit, with trusses of bluish violet flowers. 2 ft. high. May to August.

Plants, each 50c; doz. \$5.00.

*AMELLUS RUDOLPH GOETHE. Very free flowering with large trusses of lavender blue flowers. Especially fine. 2 ft. June-Aug.

Plants, each 40c; doz. \$4.00.

Seed prices are postpaid
Plant prices are f.o.b. Portland

Dozen price applies to a dozen of one variety, not to mixed lots

PERENNIAL ALPINE & BORDER PLANTS & SEEDS—Alphabetically Listed

ALPINE OR ROCKERY PLANTS MARKED WITH A STAR (*); BORDER PLANTS WITH A DAGGER (†)

ASTERS—Continued

- *FARRERI-BIG BEAR. Narrow rays of richest violet hanging loosely from a flat center disc of vermilion orange. Suggested for a dry spot in the rockery. 12 to 18 in. high. May to July. Plants, each **50c**; doz. **\$5.00**.
- *MAUVE CUSHION. A new hardy Japanese perennial of distinct species forming a circular cushion-like plant 2 to 3 ft. in diameter and 6 to 8 in. high, with delicate mauve colored flowers in such profusion as to completely cover the plant from September to November when they are at their best. Plants, each **20c**; doz. **\$2.00**.
- *SUBCOERULEUS - A P O L L O. Large soft lavender blue flowers with orange center disc. Stems 12 to 18 in. May to July. Plants, each **25c**; doz. **\$2.50**.

ASTERS-PERENNIAL Fall-Flowering Hardy 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 a soft pleasing shade of green and makes an excellent contrast in other groups. They succeed well in any garden soil with moderate watering, either in full sun or light shade. (The rockery or alpine varieties are shown in the list above.)

- †ABENDROTHER (Evening Glow). Rosy red flowers, height 3 ft. Plants, each **30c**; doz. **\$3.00**.
- †BARR'S PINK. A new variety, large open bright rose pink, semi-double flowers, with showy gold bronze center. 4 ft. Sept.-Oct. Plants, each **60c**; doz. **\$6.00**.
- †CLIMAX. Spikes of large light blue-lavender with golden yellow disc, very free, one of the showiest. 4 to 5 ft. Plants, each **20c**; doz. **\$2.00**.
- †FELTHAM BLUE. Aniline blue, very free, a pretty plant. 3-4 ft. Plants, each **20c**; doz. **\$2.00**.
- †LITTLE BOY BLUE. The finest rich blue aster yet introduced, of neat habit, about 2 ft. high. Aug. to Oct. Plants, each **50c**; doz. **\$5.00**.
- †LOUVAIN. Soft pink, free flowering. 3 to 4 ft. high. Plants, each **30c**; doz. **\$3.00**.
- †MAGGIE PERRY. Very large flowers about 2½ inches across in large trusses, lovely shade of mauve. 3 to 5 ft. high. Plants, each **20c**; doz. **\$2.00**.
- †MESA GRANDE SPECIOSA. Grandiflora, very late flowering species covered in October and November with immense purple flowers. 3 ft. high. Plants, each **30c**; doz. **\$3.00**.
- †MME. MICHAUD. A semi-dwarf French aster, soft lavender pink. 1 ft. high. Plants, each **40c**; doz. **\$4.00**.
- †PERRY'S WHITE. Pure white, very large, with a golden center which turns to crimson when fully developed, perfect in habit and the best white aster yet introduced. Very free flowering, stout well branched stems. 4 ft. high. Plants, each **20c**; doz. **\$2.00**.

ASTERS—Continued

- †RYECROFT'S PINK. Rosy pink flowers, free branching. 5 ft. Plants, each **20c**; doz. **\$2.00**.
- †RYECROFT'S PURPLE. Large rich purple flowers. 5 ft. high. Plants, each **20c**; doz. **\$2.00**.
- †ST. EGWIN. Free flowering, soft rosy pink flowers. 3 ft. high. Plants, each **20c**; doz. **\$2.00**.
- †TARTARICUS. A bluish violet color. One of the tallest and latest flowering varieties. 7 ft. high. Plants, each **20c**; doz. **\$2.00**.

ASTILBE (Spiraea)

- †ARENDSSE. Hybrid varieties of vigorous growth, producing many branched feathered heads of flowers. Prefer a half shady moist position in any ordinary garden soil. About 90% are pink flowering. June and July. Plants, each **50c**; doz. **\$5.00**. Larger plants, each **75c**.

AUBRIETIA (Wall Cress)

- *HYBRIDS. Neat tufts of foliage, smothered during spring and early summer with gorgeous colored flowers. Fine for planting in rock crevices or on walls. 4 to 6 in. Seeds, pkt. **15c**. Plants, each **20c**; doz. **\$2.00**.

AURICULA (Alpine Primrose)

- *Handsome smooth-leaf foliage, covered with fine powder. Flowers in clusters, fragrant at times and many attractive color combinations. 6 to 8 in. April to May. Seeds, pkt. **25c**. Plants, each **25c**; doz. **\$2.50**.

BELLIS PERENNIS (Daisy)

- EXTRA DOUBLE MIXED. Low-growing hardy perennials. Sow seed in boxes in August and transplant to cold frame over winter, then to permanent position in early spring. Seeds, pkt. **10c**; ¼ oz. **50c**.
- *FIRE KING. Shining white flowers with yellow center, quilled petals. Plants, each **20c**; doz. **\$2.00**.
- *GIANTS OF ARNSTADT. Giant white flowers. Plants, each **20c**; doz. **\$2.00**.
- *GIANT DOUBLE MONSTROSA. Dark red, rose pink and white. Seeds, pkt. **25c**; 1/16 oz. **60c**.
- *LONGFELLOW ROSEA. Large double pink flowers. Plants, each **20c**; doz. **\$2.00**.
- *SHASTA ALASKA. Very hardy, profuse bloomer, very large glistening white flowers on long stems. Seeds, pkt. **15c**; ¼ oz. **95c**. Plants, each **25c**; doz. **\$2.50**.

BOCCONIA (Plume Poppy)

- †CORDATA. Should be planted for its beautiful foliage as well as for its flowers. Leaves are glaucous heart shaped and deeply veined. Flowers creamy white, great feathery, plummy masses in terminal panicles raised high above the heavy foliage. 6-8 ft. July-Aug. Plants, each **20c**; doz. **\$2.00**.

BOLTONIA (False Chamomile)

- †ASTEROIDES. Pure white, showy aster-like flowers in great profusion, thousands of flowers open at a time. 6 ft. high. Sept. to Oct. Plants, each **20c**; doz. **\$2.00**.
- †LATISQUAMA. More dwarf growing than above and the flowers are pink tinged with lavender. 4 ft. Plants, each **30c**; doz. **\$3.00**.

CALAMINTHA

- *ALPINA. A graceful little rock plant with spreading tufts of pretty foliage, spangled with lavender blue flowers. 6-8 in. June-Aug. Seeds, pkt. **25c**. Plants, each **20c**; doz. **\$2.00**.

CALANDRINIA

- *UMBELLATUM. Suitable for hot dry places. Dark crimson flowers on 6 to 8 in. stems. All summer. Plants, each **25c**; doz. **\$2.50**.

CAMPANULA (Hardy Bellflower)

- One of the most popular families of hardy garden flowers, ranging from tall, imposing border varieties to dainty dwarf types for the rockery or edgings. A good rich soil is preferred and if partly shaded the blooms last longer.
- *CARPATICA (Carpathian Hare Bells). Compact tufts not over 8 inches high with clear blue flowers on erect wiry stems. For rockery or edging. June to Oct. Seeds, pkt. **25c**. Plants, each **20c**; doz. **\$2.00**.
- *CARPATICA ALBA. A pure white form of the preceding. Plants, each **20c**; doz. **\$2.00**.
- *GARGANTICA. The jewel of the rock garden. The plants form rosettes of small leaves, covered from June to September with light blue star-shaped flowers with white eyes. Trailing, 3 to 4 in. Plants, each **40c**; doz. **\$4.00**.
- *GLOMERATA ACAULIS. An almost stemless variety, flowers coming in clusters 4 to 6 in. long and 3 to 4 in. in diameter. Rich violet. May and June. Plants, each **40c**; doz. **\$4.00**.
- †LACTIFLORA. Large trusses of open bell-shaped flowers of blue or lavender on stiff stems, excellent for cutting. Graceful, height 3 ft. May to July. Seeds, pkt. **25c**. Plants, each **25c**; doz. **\$2.50**.
- *LAURII. A new species from the Greek Islands, flowers a beautiful shade of lavender, about 1 inch across. When in bloom the plants are a mass of color with scarcely a leaf visible. The flowers, instead of drooping, turn upward. 10 in. high. May to July. Plants, each **40c**; doz. **\$4.00**.
- *MURALIS (Portenschlagiana). Dense tufts of dark green foliage, smothered with large light blue flowers for months. Very dwarf, 3 to 6 inches. June to September. Plants, each **30c**; doz. **\$3.00**.
- †PERSICIFOLIA (Peach Bells). Blue or white separate colors, excellent for cutting. 2 ft. high. May to July. Seeds, pkt. **15c**. Plants, each **20c**; doz. **\$2.00**.
- †PERSICIFOLIA FLORE PLENO. The double flowered Peach Bell, bright blue flowers. Plants, each **30c**; doz. **\$3.00**.

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Plant prices are f.o.b. Portland

Dozen price applies to a dozen of one variety, not to mixed lots

Perennial ALPINE & BORDER PLANTS & SEEDS—Alphabetically Listed

ALPINE OR ROCKERY PLANTS MARKED WITH A STAR (*); BORDER PLANTS WITH A DAGGER (†)

CAMPANULA—Continued

*PUSILLA. Very dense spreading clump of fine foliage with many nodding blue flowers on slender stems 4 to 6 in. high. June-Oct. Seeds, pkt. **25c**.

Plants, each **30c**; doz. **\$3.00**.

*PUSILLA ALBA. The white flowering form of above.

Plants, each **40c**; doz. **\$4.00**.

†PYRAMIDALIS (Chimney Bell-Flower). The most conspicuous of all Campanulas, forming a perfect pyramid crowned with large porcelain blue flowers. A stately plant for garden or pot culture. 4 to 5 ft. high. June to September.

Seeds, blue or white, pkt. **10c**;

Plants, blue only, ea. **30c**; dz. **\$3**.

†PYRAVERSII. Open bell-shaped flowers, lavender blue with indigo center, borne freely on pyramidal stems. 3 to 5 ft. July to Sept. Plants, each **40c**; doz. **\$4.00**.

*ROTUNDFOLIA (Blue Bells of Scotland or Harebells). Slender branching stems covered with dainty pale blue flowers. Especially fine for rockery crevices or steep slopes. 10-15 in. May-Sept. Seeds, pkt. **25c**.

Plants, each **25c**; doz. **\$2.50**.

*ROTUNDFOLIA MISS C. M. HARK. Our new introduction, flowers larger and bloom 2 to 4 weeks longer than the preceding. Plants, each **35c**; doz. **\$3.50**.

*TURBINATA. A beautiful variety forming close mats of foliage with large saucer cups of blue, close to the plant and smothering it. June to July.

Seeds, pkt. **25c**.

Plants, each **25c**; doz. **\$2.50**.

CAMPANULA-MEDIA

Canterbury Bells

Hardy biennials about 2½ ft. high with large nodding bell-shaped flowers of many exquisite shades. Sow seeds in May, keep well watered and transplant to permanent location in July or August. Give rich soil and plenty of room.

†CALYCANTHEMA (Cup and Saucer). White, blue, pink or mixed. Seeds, pkt. **15c**; ¼ oz. **60c**.

†MEDIUM SINGLE. Blue, rose, white or mixed.

Seeds, pkt. **10c**; ¼ oz. **25c**.

Plants, each **20c**; doz. **\$2.00**.

CARNATIONS (Hardy Border)

Carnations are tender perennials, being easily winter killed. They are splendid for cut flowers, spicily fragrant. Sow indoors in March, transplant to boxes when 1 inch high, keep them growing until the soil is warm, then transfer to the open garden.

†CHABAUD EVER-BLOOMING. Extra choice double mixed. Seeds, pkt. **15c**.

*DIANTHUS CARYOPHYLLUS. Colors pink, white, red. 12-18 in. Seeds, pkt. **15c**.

*DOUBLE DWARF VIENNA. Large flowers, mostly double, many colors and markings, early. Seeds, mixed, pkt. **10c**.

†DOUBLE GRENADIN. Red and white, early blooming. Seeds, pkt. **15c**.

†MARGUERITE. Bloom 4 months from seeding. Finest double mixed. Seeds, pkt. **10c**; ¼ oz. **50c**.

Seed prices are postpaid
Plant prices are f.o.b. Portland

CATANANCHE (Cupid's Dart)

†COERULEA. Lovely blue daisy-like flower, excellent for cut flowers. 2 ft. high. June to August. Plants, each **25c**; doz. **\$2.50**.

†COERULEA BI-COLOR. White flowers with slight suffusion of purple in the center. 2 ft. high. July to August.

Plants, each **25c**; doz. **\$2.50**.

CENTAUREA (Hardheads)

†DEALBATA. Large striking rose-pink flowers borne above the finely cut handsome foliage. 2 feet. May to September. The finest of the genus.

Plants, each **50c**; doz. **\$5.00**.

†MONTANA (Perennial Cornflower). Large violet-blue flowers. 18 in. high. May to September.

Plants, each **20c**; doz. **\$2.00**.

†MONTANA ALBA. White flowering form of the preceding.

Plants, each **20c**; doz. **\$2.00**.

CEPHALARIA (Roundhead)

†ALPINA. Flat heads of sulphur yellow flowers. Fine for the background of borders. Height 5 to 7 feet. June to August.

Plants, each **20c**; doz. **\$2.00**.

CERASTIUM

(Snow-in-summer)

*TOMETOSUM (Jerusalem Star). Neat tufts of silvery foliage, low growing with many slender sprays of pure white flowers. June-Aug. Plants, each **20c**; doz. **\$2.00**.

CHEIRANTHUS

(Siberian Wallflower)

*ALLIONI. Dazzling fiery orange flowers on stems about a foot high. A beautiful rock plant and a good winter bloomer.

Plants, each **25c**; doz. **\$2.50**.

*LINIFOLIUS. Beautiful new species with lilac mauve flowers, very free flowering. For dry rockeries and borders. 8 in. June-July. Plants, each **25c**; doz. **\$2.50**.

CHELONE (Shellflower)

†BARBATA HYBRIDS. Slender, tubular flowers on tall erect stems in red and pink shades. 3 to 4 ft. high. June to August.

Plants, each **20c**; doz. **\$2.00**.

†PRAECOX HYBRIDA. Very early spring flowering species. Many new colors. May to August.

Plants, each **30c**; doz. **\$3.00**.

CHRYSANTHEMUM

Hardy Garden Varieties

†BUTLER'S RED. A new introduction, dark red Pompon. Early. Plants, each **25c**; doz. **\$2.50**.

†JULETTE. A rich garnet, button type. Plants, each **25c**; doz. **\$2.50**.

†MRS. W. E. BUCKINGHAM. Beautiful single flowering salmon pink, midseason. Plants, each **25c**; doz. **\$2.50**.

†OLD ROSE. A flower of unusual beauty in old rose, midseason. Plants, each **25c**; doz. **\$2.50**.

†XMAS GOLD. Golden yellow, button type. Plants, each **25c**; doz. **\$2.50**.

†JAPANESE FRINGED. A large flower with long narrow petals, very hardy and early flowering. A decidedly interesting novelty. Plants, each **35c**; doz. **\$3.50**.

CIMICIFUGA

(Black Snakeroot)

†RACEMOSA. A tall plant best suited for the back of a border. Elongated racemes of pure white flowers. Prefers a most shady spot. 4 to 6 ft. high. June to August. Plants, each **40c**; doz. **\$4.00**.

CISTUS (Rock Rose)

*LAURIFOLIUS. A neat trim bushy plant smothered with large pure white flowers 2½ in. across. Prefers a warm position in the rockery. 3 to 4 ft. June-July. Plants, each **50c**; doz. **\$5.00**.

COREOPSIS (Tick Seed)

Fine for cutting or for garden decoration. Sow seeds indoors very early, transplanting to open when soil is warm. One of the best hardy plants.

†GOLDEN STAR. Dazzling orange flowers. 2 ft. high. June to Oct. Plants, each **20c**; doz. **\$2.00**.

†LANCEOLATA. Bright yellow flowers. 2 ft. high. June to Oct. Seeds, pkt. **10c**; dz. **65c**.

CRUCIANELLA (Crossover)

*STYLOSA. Tangled masses of elegant trailing foliage with crowded heads of bright rosy-purple flowers. Very unique and attractive for rock work. 6 in. May-Aug. Plants, each **20c**; doz. **\$2.00**.

CYPRIPEDIUM

(Lady's Slipper)

Hardy orchids with very interesting and odd shaped flowers, the colors and markings being quite unusual.

†ACAULE. Rosy-purple flowers on one-foot stems. Plant in well drained soil with some leaf mold or peat moss. May.

Plants, each **50c**; doz. **\$5.00**.

†PUBESCENS. The yellow lady's slipper. 18 in. May to June.

Plants, each **50c**; doz. **\$5.00**.

†SPECTABILE. The finest of all our native orchids. Large rose-purple or white flowers on 2-ft. stems. Plant in moist, partly shaded bed of peat moss or leaf mold. May to June.

Plants, each **60c**; doz. **\$6.00**.

DAPHNE (Garland Flower)

*CNEORUM. Long trailing branches, leaves small dark green, evergreen. Perhaps the most beautiful dwarf shrub in cultivation. Heads of rose-pink very fragrant flowers. Excellent for front row in shrubberies. 6-10 in. May-July. Plants, each **50c** and **\$1.00**.

Monthly Blooming Chart of Perennials Sent free on request

Alphabetically by the month it shows the time of blooming, aiding you to keep flowers in your garden throughout the year.

Dozen price applies to a dozen of one variety, not to mixed lots

Perennial ALPINE & BORDER PLANTS & SEEDS—Alphabetically Listed

ALPINE OR ROCKERY PLANTS MARKED WITH A STAR (*); BORDER PLANTS WITH A DAGGER (†)

DELPHINIUM (Hardy Larkspur)

"The new popular flower of the day." Within the past few years the culture of Delphinium has advanced greatly in the Pacific Northwest, the climatic conditions here being so favorable to perfect development. Profuse in their blooming with tall spikes of many colors and special characteristics of bee they offer the greatest interest and possibilities in their culture.

†**BELLADONNA.** The freest, most continuous bloomer of all Delphinium, making also the best cut flowers and giving 3 crops a season. Clear azure blue, white bee. Seeds, pkt. 25¢; ½ oz. \$1.35. Plants, each 20¢; doz. \$2.00.

†**BELLAMOSUM.** Habit and growth the same as Belladonna, but a deep blue with white bee. Seeds, pkt. 15¢; ½ oz. \$1.25. Plants, each 20¢; doz. \$2.00.

†**CARDINALE.** Bright scarlet, 3 to 5 ft. high. Seeds, pkt. 15¢; ½ oz. \$1.00.

***CHINENSIS.** A very pretty species with fine feathery foliage and intense, gentian blue flowers. 18 in. high. May to July. Seeds, pkt. 10¢; ¼ oz. 60¢. Plants, each 20¢; doz. \$2.00.

***CHINENSIS ALBUM.** A pure white of the preceding. Seeds, pkt. 10¢; ¼ oz. 50¢. Plants, each 20¢; doz. \$2.00.

***CHINENSIS AZURE FAIRY.** A charming color. Seeds, pkt. 10¢; ¼ oz. 50¢.

†**CLIVEDEN BEAUTY.** An improved Belladonna, with larger flowers on taller stems. Cambridge blue. Seeds, pkt. 15¢. Plants, each 30¢; doz. \$3.00.

†**EXCELSIOR STRAIN HYBRIDS.** From the best named varieties in one of the largest perennial gardens in England. Plants, each 30¢; doz. \$3.00.

†**FORMOSUM.** Improved form of the dark blue larkspur, white bee. Plants, each 20¢; doz. \$2.00.

†**GOLD MEDAL HYBRIDS.** Selected from the finest strains named varieties, mostly in the charming lighter blue tints. 3 to 5 ft. Plants, each 20¢; doz. \$2.00.

***NUDICAULE.** A free flowering dwarf 15 to 20 in. high, brilliant scarlet flowers. June to Sept. Plants, each 25¢; doz. \$2.50.

***WREXHAM STRAIN HYBRIDS.** The original strains from the north of Wales, carefully developed and the rarest and best varieties selected for this climate and soil. With proper care and cultivation they produce stalks as tall as 7 feet, filled with flowers 2 to 3 inches in diameter. The range of colors runs the most delicate combinations of mauve and light blue, Crater Lake blue, heliotrope, pinkish lavender, creamy white, deep blues, purples, with the most interesting bees in each flower. Seed produces best results when planted in the fall and requires more careful attention than other varieties, but the extra care is more than rewarded.

Seeds, mixed, pkt. of 30 for 25¢. Plants, first quality, each \$1.00.

DIANTHUS (Alpine Species)

This genus contains some of the most charming of our alpine gems. They are of the easiest culture and thrive best in any well drained gritty soil. Charming for dry rockeries, dry walls or sunny spots.

***ALPINUS.** Very dwarf, the flower stems rarely being more than ¾ in. high. Dark shining foliage, flowers deep rose or purplish and crimson spotted with darker ring around the eye, about 1 in. across. May to July. Plants, each 35¢; doz. \$3.50.

***CAESIUS** (Cheddar Pink). A dainty tufted species, a cushion of bright pink flowers on 6 to 8 in. stems. Very fine for dry banks, rocks and old walls. Very easily grown. Fragrant. June to August. Plants, each 25¢; doz. \$2.50.

***CAUCASICUS.** Compact tufts covered with deep rose colored flowers. 6 in. high. May to July. Plants, each 25¢; doz. \$2.50.

***DELTOIDES** (Maiden Pink). A delightful little plant, trailing, with narrow leaves and a profusion of small deep rose flowers. 4 to 6 in. high. May to July. Seeds, pkt. 15¢. Plants, each 25¢; doz. \$2.50.

***GRANITICUS.** Branching habit, bright red flowers with sometimes a purple or vivid rose among them. 6 to 8 in. high. July to Sept. Plants, each 25¢; doz. \$2.50.

***NEGLECTUS.** Perhaps the most beautiful of all alpine pinks. Very dwarf tufts 3 to 4 in. high with flowers of salmon rose, reverse of petals tawny yellow. June-Aug. Plants, each 40¢; doz. \$4.00.

***SEMPERFLORENS PERFECTIO.** A splendid strain, producing an infinite variety of shades of crimson, carmine, pink, rose, salmon, cinnabar, etc., with eyes of deeper hue. 10 to 12 in. stems. May to July. Mixture only. Plants, each 30¢; doz. \$3.00.

***STERNBERGII.** An excellent plant for the rockery, bearing white fringed flowers in great profusion. 4 to 8 in. high. May to July. Plants, each 35¢; doz. \$3.50.

***SUPERBUS.** Has grassy foliage with quantities of the palest lilac (or sometimes white) flowers, very fragrant and splendid for cutting. 12 in. high. July to Sept. Plants, each 25¢; doz. \$2.50.

***SYLVESTRIS.** Tufted plant, salmon pink flowers, especially fine. 12 in. high. July to Sept. Plants, each 30¢; doz. \$3.00.

DIANTHUS (Hardy Garden Pinks)

Perpetual Flowering

†**ALLWOODI.** Improved type of the old hardy pink, blooming continuously from early summer to late fall. Larger flowers, larger stronger stems, with a delicious fragrance, propagated from cuttings. Elsie, double bright rose. Gertrude, double, deep rose. Harold, double, pure white. Jean, white, violet crimson center. Robert, old rose, maroon center. Snow, early white. White Reserve, late white. Plants, each 30¢, doz. \$3.00. One each 7 varieties above, \$1.90.

DIANTHUS BARBATUS (Sweet William)

Remarkably free flowering plants of brilliant flowers ranging from snow white to darkest crimson and purple, with a delicate refreshing fragrance. Heights 12 to 18 in.

†**COPPERY RED.** Single. Seeds, pkt. 10¢; ¼ oz. 75¢.

†**DUNNETT.** Single dark crimson. Seeds, pkt. 10¢; ¼ oz. 75¢.

†**JOHNSON'S GIANT.** The finest of the Sweet William mixtures, "calico patterns," giant flowers. Plants, each 20¢; doz. \$2.00.

†**LATIFOLIUS ATROCOCINEUS** (Everblooming Sweet William). A beautiful summer bedding variety producing masses of brilliant colored double flowers all season. 12". Plants, each 20¢; doz. \$2.00.

†**NEWPORT PINK.** Watermelon. Plants, each 20¢; doz. \$2.00.

†**OCULATUS.** Large red flowers in various shades. Plants, each 20¢; doz. \$2.00.

†**PINK BEAUTY.** Single, soft pink. Seeds, pkt. 10¢; ¼ oz. 75¢.

†**PUNICEUS.** Pink, overlaid with scarlet. Plants, each 25¢; doz. \$2.50.

†**PURE WHITE.** Double. Seeds, pkt. 10¢; ¼ oz. 75¢.

†**SCARLET BEAUTY.** A rich deep scarlet, bright green foliage. Plants, each 20¢; doz. \$2.00.

†**SWEET BEAUTY.** Single. Seeds, pkt. 10¢; ¼ oz. 75¢.

†**DOUBLE MIXED.** Seeds, pkt. 10¢; ¼ oz. 75¢.

†**SINGLE MIXED.** Seeds, pkt. 10¢; ½ oz. 60¢.

DICTAMUS

(Gas Plant or Burning Bush)

One of the most satisfactory as well as unusual hardy plants in cultivation. The foliage is rich and durable. During early summer it produces flowers of pink or white, and from the flower heads and seed capsules exudes a volatile inflammable oil in hot weather. If lighted early on a warm summer evening the whole flower heads will be enveloped in a bluish flame and a very pungent odor emitted. †**FRAXINELLA ALBA.** White. †**FRAXINELLA RUBRA.** Pink. Plants, 2-year-old, each 50¢; 3-year-old 75¢.

DIELYTRA or DICENTRA

Bleeding Heart

One of the prettiest and most popular hardy perennials, with heart shaped flowers in long drooping racemes.

†**EXIMIA** (Plumy Bleeding Heart). Dwarf growing variety with beautiful finely cut foliage and showy racemes of rose-pink flowers thru-out a long blooming period. Equally at home in full sun or shade and will grow in any climate under any conditions. 12 to 15 in. April to July. Plants, each 30¢, doz. \$3.00.

†**SPECTABILIS.** This variety splendid for forcing, and prefers shady nooks in the borders. Especially valuable for planting in clumps. Rose crimson flowers in long racemes. April to June. Plants, each 75¢.

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ALPINE OR ROCKERY PLANTS MARKED WITH A STAR (*); BORDER PLANTS WITH A DAGGER (†)

DIGITALIS (Foxglove)

Valuable gloxinia flowered plants for the garden or shrubbery. It is a biennial but renews itself from self-sown seed and may be treated as a perennial. They make a splendid showing in masses or naturalized on edges of streams or ponds.

†BUXBAUMI. Golden yellow flowers. 3 to 6 ft. May to July.

Seeds, pkt. 15c.

Plants, each 25c; doz. \$2.50.

†GLOXINIAEFLOREA. Ranges in color from rose to deep purple. Sow seeds in May, keep seedlings well watered and transfer to permanent position July or August. Give rich soil and plenty of room.

Seeds, pkt. 10c; ¼ oz. 35c.

†LUTEA HYBRIDS. Plants raised from seeds of the finest salmon-yellow varieties in England's largest perennial garden. We cannot guarantee the color tone but you will be highly pleased. 3 to 6 ft. May to July.

Plants, each 40c; doz. \$4.00.

†SHIRLEY GIANTS. Extra large flowers in a wonderful range of colorings, principally in the pinks, many with varicolored dots. 5 to 6 ft. high. May to July.

Plants, each 25c; doz. \$2.50.

†DORONICUM (Leopardbane) One of the most effective early spring flowering plants. Large yellow daisy-like flowers on stems 2 to 3 ft. high. Equally attractive as a single plant or in a hardy border, succeeds anywhere. Splendid for cutting.

Plants, each 20c; doz. \$2.00.

DRABA (Whitlow Grass)

*CUSPIDATA. An alyssum-like plant of tufted habit about 4 in. high and festooned with soft yellow flowers in early spring, February and March. Prefers full sun. One of the important spring flowering plants for the rockery.

Plants, each 30c; doz. \$3.00.

DRYAS

*SUNDERMANII. Evergreen, dwarf tufted, somewhat shrubby plants, with large creamy white anemone-like flowers from May to July. Prefer well drained soil in a sunny but not dry situation in the rockery. 4 to 6 in. high.

Plants, each 50c; doz. \$5.00.

EDELWEISS

(See Leontopodium)

ERIGERON (Fleabane)

*AURANTIACUM. Close tufts of dark green foliage with bright golden orange daisy-like flowers, very showy. 6 to 8 in. May to July.

Plants, each 25c; doz. \$2.50.

*CAUCASICUS. Dwarf habit with large heads of dainty lavender flowers. 5 to 7 in. May to Sept.

Plants, each 25c; doz. \$2.50.

*MUCRONATUS. Neat tufting of dark green foliage, trailing habit. Small pink and white daisy-like flowers. May to October.

Plants, each 30c; doz. \$3.00.

*MULTIRADIATUS. Very dwarf, pink flowers. 4 in. May-July.

Plants, each 30c; doz. \$3.00.

†SPECIOSUS. Large handsome blue flowers with violet tintings and yellow centers, not unlike a large Michaelmas daisy. Fine for cutting. 18 to 24 in. June to July.

Plants, each 20c; doz. \$2.00.

ECHINOPS (Globe Thistle)

†RITRO. Large globular heads of rich blue flowers on stems 3 to 4 ft. high, which when dried, form one of the everlasting group and remain attractive for a long time.

Plants, each 20c; doz. \$2.00.

ERINUS

*ALPINUS. Diminutive evergreen rock plants; from close tufts of dark green foliage emanate numbers of short spikes well set with purplish carmine flowers. Especially desirable for old walls, between steps or stepping stones. 3 to 4 in. high. May to July.

Plants, each 25c; doz. \$2.50.

*ALPINUS ALBA. A white flowering form of the preceding.

Plants, each 25c; doz. \$2.50.

ERIOPHYLLUM

(Oregon Sunshine)

*CAESPITOSUM. Tufted herbaceous perennials of finely cut gray foliage with yellow flowers. Prefers a poor soil. 12 to 18 in.

Plants, each 20c; doz. \$2.00.

ERODIUM (Heron's Bill)

*MANESCAVI. A native of the Pyrenees and especially recommended for dry sunny spots in the rockery. Valued for their steady succession of bloom from June to September. Rosy-purple flowers 2 in. across on 12 to 15 in. stems.

Plants, each 40c; doz. \$4.00.

ERYNGIUM (Sea Holly)

*BOURGATI. A very distinct species; spiny stems and bracts often of a bright steel blue color. The flower heads are blue (sometimes, though rarely, green). Dwarf for rockeries. 15 in. June to August.

Plants, each 35c; doz. \$3.50.

†PLANUM. 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 to 4 ft. July-Aug.

Plants, each 20c; doz. \$2.00.

ERYSIMUM

(Fairy Wallflower)

*RUPESTRE AURANTIACUM. A delightful dwarf plant, with its dense tufts of bright green foliage and lemon yellow or bright orange flowers. For dry sunny spots on rock work. 6 to 8 in. April-June.

Plants, each 25c; doz. \$2.50.

EULALIA

†JAPONICA. A hardy ornamental plumed grass, having long narrow graceful grass-like foliage and plumes 5 to 7 ft. high when in flower. Excellent as single lawn plants or in borders or by lily ponds or bird baths.

Plants, each 30c; doz. \$3.00.

EUONYMUS

*RADICANS. This trailing Euonymus, with its 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 coverings. It makes a splendid ground cover and one of the best creepers for the rockery.

Plants, each 75c; doz. \$7.50.

EUPHORBIA (Milkwort)

*CYPARISSIAS. Many short plume-like branches from the crown and adventitious root beds, covered with spreading dark green leaves. Has bright yellow flower-like bracts. 8 to 10 in. high. May and June.

Plants, each 20c; doz. \$2.00.

FELICIA

*PETIOLATA ROSEA. A beautiful trailing plant, flowering almost continuously with pink daisy-like blossoms. When planted on a wall it will hang down from 2 to 4 ft. Very strong grower.

Plants, each 25c; doz. \$2.50.

FRAGARA

(Creeping Strawberry)

*INDICA. Grows rapidly with runners as long as 5 ft. bearing small red fruit. Excellent for hanging baskets, walls, rocks and banks.

Plants, each 20c; doz. \$2.00.

FUNKIA (Plantain Lily)

Very handsome and distinctive, whether or not they are in flower, due to their broad massive foliage. They prefer a partial shade and moist soil but do well in almost any location.

†SUBCORDATA GRANDIFLORA. Very large pure white flowers, lily-like in shape and fragrant. Prefer shade. August and Sept.

Plants, each 60c; doz. \$6.00.

†UNDULATA VARIEGATA. The leaves are widely edged and striped with white. Light blue flowers are on 16 to 20 in. stems. A beautiful edging plant. June to Aug.

Plants, each 30c; doz. \$3.00.

GAILLARDIA

(Blanket Flower)

One of the showiest and most desirable hardy plants in cultivation, responding to very simple care and treatment and giving a profusion of blossoms continuously from June to November, even with the driest weather and least amount of water.

†GRANDIFLORA. Many color combinations of reds, yellows and orange. 18 to 24 in. high. June to November. Mixture of colors only.

Seeds, pkt. 10c; ¼ oz. 40c.

Plants, each 20c; doz. \$2.00.

†PORTOLA. Strong vigorous upright growth, heavy glaucous foliage 2 to 3 ft. high. Flowers are 3 to 4 in. in diameter on long strong straight stems. Petals are broad, overlapping and spread out flat, forming a very symmetrical flower of coppery marlet, margined with golden yellow. Our plants are grown from root divisions.

Seeds, pkt. 25c; doz. \$2.50.

†THE KING. The best gaillardia introduced to date; the flowers measure up to 6 to 7 inches across on stout stems 18 to 24 inches long. Vivid crimson center with wide yellow margin. Plants are propagated by our grower from root divisions imported from Holland and guaranteed true to name.

Seeds, pkt. 25c; doz. \$2.50.

Plants, each 40c; doz. \$4.00.

GALEGA (Goat's Rue)

†HARTLANDII. Strong growing bushy plants of easy culture, attractive and graceful foliage, with flowers of pale pinkish lavender. 2 to 4 ft. high.

Plants, each 25c; doz. \$2.50.

Dozen price applies to a dozen of one variety, not to mixed lots

Seed prices are postpaid
Plant prices are f.o.b. Portland

Perennial ALPINE & BORDER PLANTS & SEEDS—Alphabetically Listed

ALPINE OR ROCKERY PLANTS MARKED WITH A STAR (*); BORDER PLANTS WITH A DAGGER (†)

GAURA

†LINDENHEIMERI. One of the finest hardy plants, a continuous bloomer with about 18 in. branches of white and pink orchid-like flowers. Very good for massing effects. Easy to cultivate. Prefer moist positions. July to October. Plants, each 20c; doz. \$2.00.

GENTIANA (Blue Gentian)

*ANDREWSII. The closed bottle Gentian. One of the most fascinating native hardy plants. The flowers, which are tightly closed, are borne at the top of 8 to 12 inch stems. An intense blue. July-Aug. Plants, each 25c; doz. \$2.50.

GERARDIA

*HYBRIDIA. Resembles a Pentstemon. Gloxinoides in growth and flowers, the stems being more slender and the flowers smaller. Colors range from pinkish lavender to light purple. Drought resistant. 2 ft. high. May to August. Plants, each 25c; doz. \$2.50.

GEUM (Avens)

An invaluable group of plants for rockeries and borders, of easy cultivation, flowering for a long period thru the spring and summer.

*BORISII. The finest of this showy family. Neat tufts of evergreen foliage in an abundance of branching stems, covered with large well formed flowers of a vivid tangerine or orange scarlet. (Propagated from root divisions, not seedlings.) Dwarf, 8 to 10 in. May to Nov. Plants, each 50c; doz. \$5.00.

*BULGARICUM. Large orange yellow flowers, dark green leaves. Rare. Plants, each 40c; doz. \$4.00.

*HELDREICHII. Resembles Borisii in habit but is a dwarf species from Greece with deep orange red flowers and light green foliage. 8 in. high. May to September. Plants, each 35c; doz. \$3.50.

*MONTANUM. Dwarf alpine species with large golden strawberry flowers. Plants, each 40c; doz. \$4.00.

†LADY STRATHEDEN. Rich golden yellow flowers, very double. Plants, each 25c; doz. \$2.50.

†MRS. BRADSHAW (Chilense). Hardy free blooming, with large double flowers of a fiery red. Blooms all summer. 8 to 12 in. Seeds, pkt. 25c; ½ oz. 75c. Plants, each 25c; doz. \$2.50.

GLAUCIUM (Horned Poppy)

†The horned poppy, so called on account of the seed pods resembling long slender horns: is one of the very best of the older perennials that we are bringing back into favor. Being practically unknown here, it attracts attention wherever it is seen. The large flowers are usually yellow, although sometimes they are orange-scarlet with four large black spots in the center. Foliage is bright green. Height about 2 ft. and distance across the same. Prefer rather poor soil and resent much water at any time. Plants, each 25c; doz. \$2.50.

GYPSOPHILA

(Baby's Breath)

*CERASTOIDES. A dense growing creeper with small clusters of large flowers, often 2½ in. across, of a silvery white or lilac color with pink veins. June to July. Plants, each 25c; doz. \$2.50.

†PANICULATA. 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. Sow seeds in boxes indoors, cover very lightly with sifted soil pressed firmly, transplant as soon as large enough to handle. Height 2 to 3 ft. May to July. Seeds, pkt. 10c; ¼ oz. 25c. Plants, each 20c; doz. \$2.00.

†PANICULATA FLORE PLENO. Double flowering form of the preceding. (Seeds are about 50% double.) Plants are 2-year-old and guaranteed double flowering. Seeds, pkt. 15c. Plants, each 50c; doz. \$5.00.

*REPENS. A trailing plant with stems ascending at the end, not over 4 in. high. Rather large pinkish-white flowers, July to autumn. Plants, each 30c; doz. \$3.00.

†ROKEJEKA (Acutifolia). Rose-colored Baby's Breath. Tall graceful grower making a fine border plant and especially good for cut flowers. Seeds, pkt. 25c. Plants, each 30c; doz. \$3.00.

HELENIUM (Sneezewort)

This species is allied to the Sunflower, being tall growing and bearing in the summer and early fall great masses of large daisy-like flowers.

†AUTUMNALE RUBRUM. Oxblood red, changing to terra cotta. 5 to 6 ft. high. September. Plants, each 20c; doz. \$2.00.

†GARTENSONNE. Flowers of a brilliant golden yellow with velvety brown center. Aug. to Oct. Plants, each 30c; doz. \$3.00.

†HOOPESII. Low growing early flowering plants, excellent for positions where they will receive a little sunshine. The earliest of all Heleniums and the only variety with pure orange colored flowers which are 3 to 4 in. across on 18 to 24 in. stems. May to June. Plants, each 25c; doz. \$2.50.

†RIVERTON BEAUTY. Lemon yellow with large cone of purplish black. August to September. Plants, each 20c; doz. \$2.00.

†RIVERTON GEM. Old gold, suffused with terra cotta, changing to wallflower red. July to Oct. Plants, each 20c; doz. \$2.00.

HELILANTHEMUM

(Rock or Sun Rose)

*BOULE DEFEU. A low growing evergreen shrub. During the flowering season covered with a mass of brilliant red double flowers. They form broad clumps suited to borders, edgings, rockery or dry sunny banks. 10-12 in. May-July. Plants, each 30c; doz. \$3.00.

*MUTABILE. Single flowers in white and various shades of red and pink, in mixture only. 10 to 12 in. high. May to August. Plants, each 20c; doz. \$2.00.

HELILANTHUS

(Hardy Sunflower)

Very effective perennials for planting in masses among shrubs or in clumps on the lawn where they can have plenty of room.

†RIGIDUS JAPONICUS. Golden yellow with dark center. 5 to 6 ft. high. July to Sept. Plants, each 20c; doz. \$2.00.

†SPARSIFOLIUS. Golden yellow flowers, the best of the summer blooming varieties. Very free blooming, flowers about 3 inches across. Spreads rapidly. 4-5 ft. Plants, each 20c; doz. \$2.00.

HELIOPSIS (Hardy Zinnia) Quite like the Helianthus, but earlier and of rather dwarf habit.

†PITCHERIANA. Deep golden yellow flowers 2 to 3 in. across on 24 to 30 in. stems, two crops each season. 4 to 5 ft. high. Plants, each 20c; doz. \$2.00.

†SCABRA GRATISSIMA. New. Large semi-double orange flowers 3 to 4 in. across. More compact dwarf growing than the preceding. Plants, each 30c; doz. \$3.00.

HELLEBORUS

(Christmas Rose)

*HYBRIDUS. Hardy herbaceous perennials, admired for their very early flowers and very attractive leaves. Erect growing, with large palmately divided leaves. Large pink white or maroon flowers 4 to 6 in. across; a few mild days in December will bring out the buds and flowers. A moist well drained partly shaded situation is preferable. Do not disturb after they have become established. 12 to 18 in. high. December to January. 2-year plants, each 50c; 3-year-old plants, each \$1.00.

HEMEROCALLIS (Day Lily)

Excellent for naturalizing along streams or moist banks of lily ponds or other rather moist shady places.

†DUMORTIERII. Early blooming dwarf, orange flowers 2 to 2½ in. across, 12 to 18 in. high. One of the first to bloom. Plants, each 30c; doz. \$3.00.

†FLAVA (Lemon Lily). Sweet scented clear yellow flower. 24 to 30 in. high. June and July. Plants, each 30c; doz. \$3.00.

†FULVA (Tawny Day Lily). Coppery orange, shaded crimson. 3 ft. high. July. Plants, each 30c; doz. \$3.00.

†LUTEOLA MAJOR. Golden yellow flowers 6 inches across on stout branching stems 4 ft high. One of the best and hardest. July. Plants, each 40c; doz. \$4.00.

HEPATICA (Wood Anemone)

A charming group of early spring flowering plants, remarkable for the way in which they flower. They prefer a north or east slope where there is partial shade, but do fairly well in open positions in moist rich soil. Clumps of several crowns.

*ACUTILOBA. White, pink or purple flowers, mixture only. Plants, each 25c; doz. \$2.50.

*TRILOBA ALBA. White flowers. Plants, each 25c; doz. \$2.50.

*TRILOBA COERULEA. Blue Plants, each 30c; doz. \$3.00.

Seed prices are postpaid
Plant prices are f.o.b. Portland

Perennial ALPINE & BORDER PLANTS & SEEDS—Alphabetically Listed

ALPINE OR ROCKERY PLANTS MARKED WITH A STAR (*); BORDER PLANTS WITH A DAGGER (†)

HERNIARIA

*GLABRA. Makes a dense mat of moss-like foliage which turns a deep bronzy red in winter. Has a small greenish flower in summer. Thrives in the poorest soils, makes a solid covering and is one of the hardiest trailers.
Plants, each 25c; doz. \$2.50.

HESPERIS (Sweet Rocket)

†MATRONALIS. Fragrant spikes of purple flowers (sometimes white) adapted for mixed border, shrubby or wild garden. 2½ to 4 ft. high. May to July.
Plants, each 20c; doz. \$2.00.

HEUCHERA (Coral Bells)

*SANGUINEA. Beautiful heart-shaped leaves form a low evergreen clump 6 to 8 in. high, with coral red flowers on 12 to 18 in. stems from June to August.
Plants, each 25c; doz. \$2.50.

HIBISCUS (Mallow)

†MOSCHOTUS HYBRIDS (Giant Flowered Mallows). The mammoth hollyhock-shaped flowers range in color from white to intense crimson, with a soft delicacy that harmonizes with any color scheme. The flowers are 6 to 10 in. across on stems 5 to 7 ft. high. Suitable for any soil or condition, dry or wet. One of the most beautiful of all herbaceous plants, and very striking in large groups and mixed borders. 2-yr.-old plants furnished.
Plants, each 30c; doz. \$3.00.

HOLLYHOCKS (China)

†Natives of China, being one of the very oldest cultivated flowers. Prefer a full sunny position. Mixed colors from scarlets and pinks to white. Double or single flowering.
Plants, each 20c; doz. \$2.00.

HOLLYHOCKS

(Althaea Rosea)

Larger flowers and richer colorings than the old type. Biennial. Seeds should be sown in open from spring to midsummer and transplanted in the late fall in rich soil.
†CHATERS. Superb strains, double varieties, scarlet, rose, pink, maroon, yellow, white and mixed.
Seeds, pkt. 10c; ¼ oz. 85c.

HUTCHINSIA

*AUERSWALDI. Dense rounded cushions, 3 in. high, of rich glossy emerald, starred over with dainty white flowers. Under favorable conditions it will bloom for 3 mo., May to July.
Plants, each 40c; doz. \$4.00.

HYPERICUM

(St. John's Wort)

*CALYGINUM (Rose of Sharon). Low growing evergreen, with underground runners, producing a beautiful carpet of green about 10 in. thick, with large yellow flowers during June to August.
Plants, each 25c; doz. \$2.50.
*MOSERIANUM. Beautiful summer flowering variety, golden yellow flowers 2 to 3 in. across, marvelously free, crimson tipped anthers. 12 to 18 in. high.
Plants, each 35c; doz. \$3.50.
*REPENS. Prostrate masses of evergreen foliage with large golden yellow flowers from June to September.
Plants, each 30c; doz. \$3.00.

IBERIS (Hardy Candytuft)

*GIBALTARICA. Neat bushes of dark evergreen foliage smothered with close heads of flowers, ranging from white to lavender in the spring. 10 in. high.
Seeds, pkt. 15c.
Plants, each 20c; doz. \$2.00.
*PRUITII. Early blooming, pure white flowers, very dwarf.
Plants, each 40c; doz. \$4.00.
*TENORENNA. Dwarf 6-in. shrub with white flowers changing to pale purple. May to July.
Seeds, pkt. 15c.
Plants, each 25c; doz. \$2.50.

IBERADELLA

*ROTUNDIFOLIA. Neat compact tufts of dark green foliage covered with small white flowers from May to July.
Plants, each 25c; doz. \$2.50.

INCARVILLEA

(Hardy Gloxinia)

*BREVIPES GRANDIFLORA. Umbels of large crimson purple flowers with conspicuous white markings. Glossy green foliage. The flowers appear while stem is only 3 to 4 in. above ground and advance with the growth of plant. Height 12 to 15 in. May to June.
Plants, each 30c; doz. \$3.00.
†DELAVAYI. Large trusses of rich rose pink flowers with deep yellow throat on spikes 2 to 3 ft. high. June to August.
Plants, each 30c; doz. \$3.00.

INULA (Fleabane)

*ENSIFOLIA. Compact bushes smothered with golden yellow flowers. Prefer full sun and one of the finest plants for the rockery during July and August when yellow is scarce in the rockery. Rather poor soil. 18 in. June-Sept.
Seeds, pkt. 15c.
Plants, each 25c; doz. \$2.50.
*ROYLEANNA. A new Himalayan species with rich orange colored flowers 4 to 6 in. across, very conspicuous black buds. 12 to 18 in. July to Sept.
Seeds, pkt. 25c.
Plants, each 40c; doz. \$4.00.

JASIONE

*PERENNIS. Bright blue flowers not unlike Scabiosa on close tufts of pretty foliage. 6-8 in. June-Aug.
Seeds, pkt. 15c.
Plants, each 25c; doz. \$2.50.

KUDZU

*PUERERIA THUNBERGIANA. Beautiful Japanese vine with fragrant purplish violet Wisteria-like flowers. Will grow 50 feet in a season.
Seeds, pkt. 10c; oz. 75c.
Plants, each 50c; doz. \$5.00.

LEONTIPODIUM (Edelweiss)

Prefers 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 in. May to August.
Plants, each 35c; doz. \$3.50.
*SIBERICUM. Resembles the above with larger flower heads.
Plants, each 40c; doz. \$4.00.

LAVENDULA

(French Lavender)

*NANA ATROPURPUREA. Very dwarf compact bushes of silvery gray foliage with an abundance of tiny spikes of rich purplish blue flowers. 8-10 in. July to Sept.
Plants, each 35c; doz. \$3.50.

LIATRIS

(Blazing Star or Gay Feather)

†PYCNOSTACHYA. One of the most attractive perennials in cultivation. Long narrow spikes of rich purple flowers which last a long time. It has a great attraction for butterflies. 3 ft. high. July to September.
Seeds, pkt. 15c.
Plants, each 20c; doz. \$2.00.

†SPICATATA. Two weeks earlier; reddish purple. 30 in. high.
Plants, each 20c; doz. \$2.00.

LINARIA (Toad Flax)

*AEQUITRILLOBA. Close growing, creeping evergreen with long trailing branches, flowers pale mauve with reddish purple palate. Prefer partial shade. May to Sept.
Plants, each 30c; doz. \$3.00.
*ALPINA. Compact tufted plants with spreading flower stems, flowing in short racemes or heads, violet or blue with orange colored palate. 4 to 6 in. June to Aug.
Plants, 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 in. June to Aug.
Plants, each 30c; doz. \$3.00.
*CYMBALARIA (Kenilworth Ivy or Mother of Thousands). Pretty trailing variety for rock or wall work or hanging baskets or brackets. Small lilac blue flower with yellowish throat. March to Aug.
Plants, each 20c; doz. \$2.00.
*MACEDONICA (Nymphae). Flowers cream colored with deeper color on palate in long wand-like terminal racemes. 2 ft. May-Aug.
Plants, each 25c; doz. \$2.50.

LINUM (Scarlet Flax)

*ALPINUM. One of the daintiest of the species, trailing, not over 4 in. high, with sky blue flowers.
Plants, each 30c; doz. \$3.00.
*HIRSUTUM. Distinct and rare. Color hard to describe, reddish purple coming very close. Branching, about 18 in. high. Long bloomer. July and August.
Plants, each 35c; doz. \$3.50.
†PERENNE. Elegant foliage, graceful arching stems, bearing many large circular flowers of an intense sky blue. 2 ft. May-Aug.
Seeds, pkt. 10c; ½ oz. 35c.
Plants, each 20c; doz. \$2.00.
†PERENNE ALBUM. Milk white flowers, of preceding form.
Seeds, pkt. 10c; ½ oz. 50c.

LIPIA

*REPENS. Excellent for rocks or steep banks or to hang over walls. Rapid spreader, soon making dense ground cover which may be mowed or left, as time allows. Clover-like heads of delicate rose colored flowers on stems 2 to 3 in. high. Will thrive in any soil, and after first year does not require water during summer. Does not tend to spread and become a nuisance.
Plants, each 20c; doz. \$2.00.

Seed prices are postpaid
Plant prices are f.o.b. Portland

Dozen price applies to a dozen of one variety, not to mixed lots

Perennial ALPINE & BORDER PLANTS & SEEDS—Alphabetically Listed

ALPINE OR ROCKERY PLANTS MARKED WITH A STAR (*); BORDER PLANTS WITH A DAGGER (†)

LOBELIA (Indian Paintbrush)
 †**CARDINALIS**. Rich cardinal red flowers on stems 3 ft. high, often producing 12 to 15 spikes. Prefer moist deep loam and sunny position. July to Sept.
 Plants, each **20c**; doz. **\$2.00**.

†**CAVANILLESII**. Scarlet with orange lip flowers, opening from below upward along the tall spike, thus bearing flowers for several weeks. Prefer moist deep loam in partially shaded, or if given more water, sunny position. 2 to 3 ft. high. July and August.
 Plants, each **25c**; doz. **\$2.50**.

†**QUEEN VICTORIA**. This variety has crimson foliage which with the scarlet flowers is very effective. Plants, each **40c**; doz. **\$4.00**.

LUPINUS (Lupines)

†**HARKNESS' HYBRIDS**. Wonderful mixture containing many beautiful arc shades. Mixture of colors. Plants, each **30c**; doz. **\$3.00**.

†**HARKNESS' REGAL HYBRIDS**. This new race of herbaceous Lupins is quite distinct from any other race of Lupins and embraces colors never before seen or ever dreamed of. These plants, being seedlings of hybrids, are not guaranteed to be 100% true to color, about 50% being the average. 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.
 Seeds, pkt. **15c**; ¼ oz. **60c**.
 Plants, each **50c**; doz. **\$5.00**.

†**POLYPHYLLUS MOERHEIMII**. A new named hybrid, rose pink. Plants, each **30c**; doz. **\$3.00**.

†**MIXED LUPINUS**. Colors white and pink, occasionally blue.
 Seeds, pkt. **10c**; oz. **50c**.

LYCHNIS (Campion)

***ALPINA**. Close tufts of olive green foliage, long spikes of deep rose colored flowers. One of the best for the rockery. 4 to 6 in. high. June to Sept.
 Plants, each **25c**; doz. **\$2.50**.

***ARKWRIGHTII**. Magnificent novelty in lovely shades of color. 15 in. high. June to August.
 Plants, each **30c**; doz. **\$3.00**.

†**CHALCEDONICA** (Jerusalem Cross). Heads of brilliant orange scarlet on stems 2 to 3 ft. high. Will thrive in any soil. One of the brightest plants in the hardy border, blooming all summer.
 Plants, each **20c**; doz. **\$2.00**.

***FLOS CUCULI** (Ragged Robin). The red or pink flowers are in loose paniculate clusters. 12 to 18 in. high. June to Aug.
 Plants, each **25c**; doz. **\$2.50**.

***HAAGEANA HYBRIDS**. Very effective when planted in clumps. Neat bushes with large flowers of brilliant crimson, nearly 2 inches across. 12 to 18 in. June-Aug.
 Seeds, mixed, orange, scarlet and crimson, pkt. **15c**.
 Plants, each **25c**; doz. **\$2.50**.

VISCARIA SPLENDENS. Neat tufts of dark green foliage with reddish flowers on stems 12 to 13 in. high. Excellent for hot sunny position. June to July.
 Plants, each **20c**; doz. **\$2.00**.

LYSIMACHIA (Loosestrife)
 ***NUMMULARIA** (Creeping Jenny or Moneywort). Very useful for rustic baskets and vases, also for carpeting shady places. Yellow flowers. June and July.
 Plants, each **20c**; doz. **\$2.00**.

LYTHRUM

†**SALICARIA**. A strong growing plant thriving in any soil or position, producing large spikes of rose colored flowers from July to Sept. 4 to 6 ft. high.
 Seeds, pkt. **15c**.
 Plants, each **20c**; doz. **\$2.00**.

MERTENSIA (Blue Bells)
 ***VIRGINICA** (Virginian Cowslip). Bluish gray foliage, long arching racemes of flowers. Demand moist shady spot. 12-18 in. April-June.
 Plants, each **30c**; doz. **\$3.00**.

MONARDA (Oswego Tea)
 †**DIDYMA CAMBRIDGE SCARLET**. The best of the various forms of this aromatic plant. Stout leafy stems, crowded heads of brilliant scarlet flowers. 2 to 3 ft. high. June to Sept.
 Plants, each **20c**; doz. **\$2.00**.

MYOSOTIS (Forget-me-nots)
 ***ALPESTRIS** (Indigo Blue). Intense rich dark blue with long stems. 4 to 8 in. high.
 Seeds, pkt. **10c**; ¼ oz. **65c**.
 Plants, each **20c**; doz. **\$2.00**.

***DISSITIFLORA** (Grandiflora Perfection). Taller growing than preceding, with large sky blue flowers. 8 to 10 in. high.
 Plants, each **30c**; doz. **\$3.00**.

***PLAUSTRIS** (Grandiflora). The best of the water Forget-me-nots. New. Large flowered, bright blue "Pixies" eyes. 4 to 6 in. high.
 Plants, each **25c**; doz. **\$2.50**.

***SEMPERFLORENS**. Dwarf, continuous bloomer; blue.
 Seeds, pkt. **15c**; ¼ oz. **70c**.

***VICTORIA**. Flowers large, bright azure blue; fine for borders.
 Seeds, pkt. **10c**; ¼ oz. **70c**.

NEPETA

(Ground Ivy; Catnip; Catmint)
 †**GLECHOMA**. A most useful and dainty mint. The leaves are cre-nated and pretty, the stems run on the ground and root, making solid carpets. No better cover for shaded beds or steep banks.
 Plants, each **20c**; doz. **\$2.00**.

***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 in. high. June to September.
 Plants, each **20c**; doz. **\$2.00**.

***NUDA**. Beautiful gray foliage and lavender blue flowers, continuous bloomer from May to Sept.
 Plants, each **25c**; doz. **\$2.50**.

OENOTHERA
 (Evening Primrose)

***FRUTICOSA**. Makes a bush-like growth 1 to 2 ft. high and bearing for a long time a profusion of yellow flowers. June to Sept.
 Plants, each **20c**; doz. **\$2.00**.

***PUSILLA**. Dwarf with small yellow flowers, excellent for very dry situations. June to July.
 Plants, each **20c**; doz. **\$2.00**.

ORNITHOGALUM (Star of Bethlehem)

***UMBELLATUM**. Flower heads of 12 to 20 white flowers on stems 6 to 8 in. long. May and June.
 Bulbs, each **10c**; doz. **\$1.00**.

PACHYSANDRA (Japanese Spurge)

***TERMINALIS**. A trailing plant 6 to 8 in. 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. Use it under all evergreen and shrub plantings, steep terraces, walk borders, etc.
 Plants, each **30c**; doz. **\$3.00**.

PAPAVER (Poppies)

***ALPINUS**. 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. 6 in. high.
 Seeds, pkt. **25c**.
 1 yr. plants, ea. **25c**; doz. **\$2.50**.
 2 yr. plants, ea. **35c**; doz. **\$3.50**.

†**BRACATEATUM**. Red flowers.
 Seeds, pkt. **10c**; ¼ oz. **40c**.

†**MAHONY**. Maroon shaded crimson, the darkest Papaver yet introduced. True to name and color. Plants, each **30c**; doz. **\$3.00**.

†**MRS. BAKER**. A rich wine red. Plants, each **20c**; doz. **\$2.00**.

†**MRS. FISHER** (New). Large dark crimson flowers borne on stout stems, 2 to 3 ft. high.
 Plants, each **30c**; doz. **\$3.00**.

***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; very fine for cutting. 18 in. Early spring to late summer.
 Seeds, pkt. **10c**; ¼ oz. **65c**.
 Plants, each **20c**; doz. **\$2.00**.

***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.
 Plants, each **30c**; doz. **\$3.00**.

†**ORIENTALIS FL. PL. OLYMPIA**. The double flowering Oriental Poppy. Rich flame scarlet overlaid with iridescent glistening golden salmon.
 Plants, each **50c**; doz. **\$5.00**.

ORIENTALIS LACHS KOENIG-IN. Large salmon pink flowers.
 Seeds, pkt. **10c**; ¼ oz. **60c**.
 Plants, each **20c**; doz. **\$2.00**.

†**PERRY'S WHITE**. Fine satiny white with crimson blotch at base of petal. Guaranteed true to name. Plants, each **30c**; doz. **\$3.00**.

†**PRINCESS VICTORIA LOUISE**. A delicate shade of salmon pink. Plants, each **20c**; doz. **\$2.00**.

†**REMBRANDT**. Magnificent orange scarlet; the most gorgeous of all the Papaver.
 Plants, each **30c**; doz. **\$3.00**.

Seed prices are postpaid
 Plant prices are f.o.b. Portland

Dozen price applies to a dozen of one variety, not to mixed lots

Perennial ALPINE & BORDER PLANTS & SEEDS—Alphabetically Listed

ALPINE OR ROCKERY PLANTS MARKED WITH A STAR (*); BORDER PLANTS WITH A DAGGER (†)

PASSIFLORA (Passion Flower)

Most interesting and well known climber, bearing singularly beautiful blue flowers. 10 to 12 ft. high. Seeds, pkt. 10c; ¼ oz. 65c.

PEAS—PERENNIAL

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 or 3 feet apart. 4 to 6 ft. high. Seeds, pkt. 15c; ½ oz. 95c.

PENTSTEMON (Beard Tongue)

†**BARBATUS TORREYI.** Spikes of bright scarlet flowers on stems 2 to 3 ft. high. June to Sept. Plants, each 20c; doz. \$2.00.

***CARDWELLII.** Native evergreen, covered several times each season with short spikes of bright purple flowers on 8 to 12 in. stems. Plants, each 50c; doz. \$5.00.

***GLABER.** Of prostrate habit; flowers are a bright blue, seldom pink, on stems about 1 ft. high. May to June. Plants, each 25c; doz. \$2.50.

***GLABER GORDONII.** Native of Oregon; 3 to 4 ft. tall, large bright blue flowers. May to June. Plants, each 20c; doz. \$2.00.

***HETEROPHYLLUS.** Make compact bushes 12 to 18 in. high. Flowers about 1 in. long, pink or rose purple, slender at base but full or inflated above, lips well marked. May to July, second cutting in September. Plants, 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 in. high, the flowers usually exceeding in size all the remainder of the plants above ground. Flowers 1 in. long, lilac purple. June to August. Plants, each 50c; doz. \$5.00.

***NEWBERRY.** An alpine dwarf 6 to 8 in. high, with pink or rose purple flowers. Drought resistant. June to September. Plants, each 50c; doz. \$5.00.

***PUBESCENS PYGMAEUS.** Very dwarf; blue flowers with white lip. 6 in. high. June to Aug. Plants, each 30c; doz. \$3.00.

†**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*. Seeds, pkt. 15c; ¼ oz. 90c.

†**SHIRLEY GIANT.** Gloxinea-like flowers in varieties of color, including rose, cherry, crimson and purple. Can supply in mixture of colors only. Plants, each 25c; doz. \$2.50.

†**MIXED.** Brilliant bell shaped flowers borne on long spikes abundantly all summer. Colors range thru red, rose, cherry, carmine, pink and purple. Should be sown indoors. Cover lightly and press down firmly. Transplant to open. Mixed. Seeds, pkt. 10c; ¼ oz. 50c.

PHLOX (Alpine Varieties)

***ADSURGENS.** The finest of Oregon's native flowers. Dense mats of bright green evergreen foliage, from which ascend stems 6 to 10 in. long with large clusters of rose or pink colored flowers during June and July. Prefer a woodland soil of light sandy position. Plants, each 50c; doz. \$5.00.

***AMOENA.** This is one of the best varieties for the rockery or for carpeting the ground. Grows but 4 in. high and in the spring is a sheet of rich bright pink flowers. Plants, each 25c; doz. \$2.50.

***CANADENSIS DIVARICATA.** One of the prettiest hardy plants in cultivation. Neat tufted habit, slender stems terminating with corymbose heads of lovely fragrant lavender blue flowers. 10 to 12 in. high. April to June. Plants, each 20c; doz. \$2.00.

***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 and blooming again in Sept. and Oct. Invaluable for carpeting the ground in rockeries or in cemetery plots as well as for beds or borders. Separate colors, white, lavender or rose pink. 4 to 6 in. Plants, each 20c; doz. \$2.00.

PHLOX DECUSSATA (Hardy Phlox)

Perennial Phlox succeed in almost any kind of soil enriched with manure in spring and allowed an occasional soaking of water during hot weather.

†**BARON VON DEDEM.** Brilliant scarlet suffused with orange. 30 in. Plants, each 25c; doz. \$2.50.

†**BARON VON HEECKERN.** One of the finest salmon pink, large flowering varieties. 24 in. high. Plants, each 35c; doz. \$3.50.

†**DEUTSCHLAND.** Oriental red with orange suffusion and crimson eye. 24 in. high. Plants, each 35c; doz. \$3.50.

†**ELIZABETH CAMPBELL.** Salmon pink with lighter shadings and dark red eye; one of the most attractive of all Phlox. 24 in. Plants, each 25c; doz. \$2.50.

†**EUGENE DANZANVILLIERS.** Rosy lilac with large white eye. 30 in. high. Plants, each 35c; doz. \$3.50.

†**EUROPA.** White with large crimson eye, large flowers; very effective for massing. Plants, each 20c; doz. \$2.00.

†**FEUERBRANDT.** A new European introduction in a color heretofore unknown in Phlox. The bright vermilion scarlet with deeper center places it at the head of all Phlox. Plants, each 40c; doz. \$4.00.

†**FRAU ANTON BUCHNER.** A Beautiful pure white and very early. 30 in. high. Plants, each 25c; doz. \$2.50.

†**LAVENDER QUEEN.** Large spikes of purplish lavender flowers; will not sunburn. 30 in. Plants, each 20c; doz. \$2.00.

PHLOX—Continued

†**MISS LINGARD (Suffruticosa).** A shrubby variety, the earliest flowering of the Phloxes, having immense heads of exquisite white flowers in June and again in September, October. Bright, glossy green foliage. 30 in. high. Plants, each 25c; doz. \$2.50.

†**MRS. JENKINS.** Immense panicles of white flowers, free bloomer. Plants, each 20c; doz. \$2.00.

†**MRS. MILLY VON HOBOKEN.** Extra large rich salmon rose. Plants, each 35c; doz. \$3.50.

†**PROF. SCHLIEEMANN.** Bright lilac rose; one of the best for late flowering. 36 in. high. Plants, each 25c; doz. \$2.50.

†**PROF. VERSCHOUW.** Bright carmine overlaid with rose and scarlet. 30 in. high. Plants, each 25c; doz. \$2.50.

†**RHEINLANDER.** Salmon pink with carmine, cherry red eye, immense flower trusses. 24 in. high. Plants, each 25c; doz. \$2.50.

†**RJNSTROEM.** Bright rose pink, large trusses of flowers. 24 in. Plants, each 25c; doz. \$2.50.

†**R. P. STRUTHERS.** Lovely rose carmine with claret eye. 30 in. Plants, each 20c; doz. \$2.00.

†**THOR.** Salmon pink suffused with orange scarlet. A light halo surrounds the aniline red eye. Plants, each 25c; doz. \$2.50.

†**VALD JENSEN.** One of the newest varieties, a salmon red with small white eye; does not bleach in the sun. Very fine. Plants, each 35c; doz. \$3.50.

†**MIXED SEED.** Our seed mixture of Hardy Phlox contains a wide range of colors, producing the finest quality flowers from midsummer to fall and will usually bloom the first season. Sow seeds early in boxes and transplant once before placing in permanent location. Seeds, mxid., pkt. 10c; ¼ oz. 60c.

PHYSALIS

(Chinese Lantern Plant)

†**FRANCHETTI.** An ornamental variety of the Winter Cherry. Forms dense bushes about 2 feet high, producing freely its bright orange scarlet lantern-like fruits. When cut, will last all winter. Plants, each 30c; doz. \$3.00.

PHYSOSTEGIA

(False Dragonhead)

†**ALBA.** A beautiful midsummer flowering plant, not unlike a gigantic *Heather*, with delicate white tubular flowers. Will thrive in any soil and under any conditions. 3 to 5 ft. July to Aug. Plants, each 20c; doz. \$2.00.

†**VIRGINICA.** Soft pink flowering form of the preceding. Seeds, pkt. 15c.

Plants, each 20c; doz. \$2.00.

PHYTEUMA

(Horned Rampion)

***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 in. high. Bracts about 18 in. long. Deep violet blue flowers in rounded heads. May and June. Plants, each 30c; doz. \$3.00.

Seed prices are postpaid
Plant prices are f.o.b. Portland

Dozen price applies to a dozen of one variety, not to mixed lots

Perennial ALPINE & BORDER PLANTS & SEEDS—Alphabetically Listed

ALPINE OR ROCKERY PLANTS MARKED WITH A STAR (*); BORDER PLANTS WITH A DAGGER (†)

PLATYCODON (Balloon Flower)

*GRANDIFLORA (Chinese Balloon Flower). Large deep blue or white flowers, stems 18 to 24 in. long. June to October.

Plants, each **20c**; doz. **\$2.00**.

*JAPONICUM FLORE PLENA. Is of stronger and bushier growth and freer flowering. The flowers average 2½ in. 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. Seeds, pkt. **25c**.

Plants, each **40c**; doz. **\$4.00**.

PLUMBAGO (Leadwort)

*LARPENTAE. Dwarf, spreading habit, 6 to 8 in. high, covered with deep cobalt blue flowers, late summer and fall. One of the most desirable for rockeries.

Plants, each **20c**; doz. **\$2.00**.

POLEMONIUM

(St. Jacob's Ladder)

†COERULEUM. Useful border plants, succeeding best in partial shade. Deep green, finely cut foliage, spikes of showy blue flowers in May and June. 2 to 3 ft. high. Plants, each **20c**; doz. **\$2.00**.

*REPTANS. Dwarf bushy plant with showy blue flowers, the best of the genus for rock gardens and a fine border plant. 8 to 12 in. high. May to July.

Plants, each **30c**; doz. **\$3.00**.

POTENTILLA (Cinquefoil)

*DOUBLE FLOWERING HYBRIDS. Neat low growing tufts of strawberry-like foliage with brilliant red and yellow flowers on stems 12 to 18 in. high; succeeds in any soil. June to August.

Plants, each **20c**; doz. **\$2.00**.

*NEPALENSIS WILLMOTAE. Strawberry-like foliage with bright cerise flowers on stems 6 to 10 in. high, blooming all summer. A valuable acquisition to the rockery.

Plants, each **30c**; doz. **\$3.00**.

PRIMULA (Hardy Primrose)

One of the most interesting and pleasing hardy plants we have and as varied as they are beautiful.

*BEESIANA. Whorls of rich velvety purple flowers with a distinct yellow eye, on 2 ft. spikes. Plants, each **50c**; doz. **\$5.00**.

*BULLEYANA. Striking Chinese species bearing several whorls of rich orange colored flowers. Fond of a damp spot.

Plants, each **50c**; doz. **\$5.00**.

*CASHMERIANA. Large globular heads of purplish blue flowers. Prefers a moist, shaded situation. 12 in. high. March to May.

Plants, each **50c**; doz. **\$5.00**.

*JAPONICA PURPUREA. A bog primula with crimson purple flowers on 18 in. stems. June to July.

Plants, each **50c**; doz. **\$5.00**.

*VERIS TRIUMPH. The finest strain of P. Veris in cultivation. Many new colors, flowers extra large, long stems. Mixture only. Seeds, pkt. **15c**.

Plants, each **30c**; doz. **\$3.00**.

*VERIS QUEEN OF HEAVEN. Flowers of a beautiful shade of blue, very rare and well worthy of a place in any garden.

Plants, each **60c**; doz. **\$6.00**.

PRUNELLA (Heal-All)

*INCISA RUBRA. Close tufts of dark green foliage, stout well furnished spikes of brilliant crimson flowers, 8 to 10 in. Partial shade preferred. Succeeds in any soil not too dry. All summer.

Plants, each **25c**; doz. **\$2.50**.

PYRETHRUM

(Painted or Persian Daisy)

†HYBRIDUM. Perfectly hardy and invaluable as a cut flower, lasting longer in water than most any other flower, and with their long stems they are ideal for decorative uses. Nothing can surpass the Pyrethrum profusion of flowers throughout the entire summer, from May to August. 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% double the second season. Mixture of colors only.

Seeds, pkt. **15c**.

Plants, each **30c**; doz. **\$3.00**.

†PARTHENIOLIA AUREUM (Golden Feather). Gold leaved; when flower is formed foliage changes to green. White flower. Sow seeds early in boxes, cover very lightly with sifted soil and press firmly, transplant as soon as large enough to handle, 1-2 ft.

Seeds, pkt. **10c**; ¼ oz. **25c**.

RANUNCULUS (Buttercups)

*GRAMINEUS. Neat dwarf species, grass-like foliage, many bright yellow flowers on 8 to 10 in. stems. April to June. Very choice.

Plants, each **30c**; doz. **\$3.00**.

ROSMARINUS (Rosemary)

*OFFICINALIS. Dainty evergreen bushes with spikes of leafy grey and green aromatic foliage and clusters of pretty lilac flowers. 12 to 18 in. high. April and May.

Plants, each **30c**; doz. **\$3.00**.

RUDBECKIA (Coneflower)

†BLACK EYED SUSAN. The perennial form of this favorite flower. Deep orange yellow flowers with dark purple cone on long wiry stems. 12-15 in. June-Aug.

Plants, each **20c**; doz. **\$2.00**.

†FULGIDA VARIABILIS. Somewhat like a Black Eyed Susan; taller and stiffer stems. Flowers remain in good condition for from 4 to 6 weeks on plants. 18 to 24 in. August to October.

Seeds, pkt. **15c**; ¼ oz. **65c**.

Plants, each **30c**; doz. **\$3.00**.

†GOLDEN GLOW. One of the most popular hardy plants, growing 6 to 7 ft. high, producing masses of large double yellow flowers, shaped like a Cactus Dahlia.

Seeds, pkt. **15c**.

Plants, each **20c**; doz. **\$2.00**.

†GRANDIFLORA HYBRIDS. Dark orange yellow flowers with purplish black cones.

Plants, each **20c**; doz. **\$2.00**.

†NEWMANNI. Orange yellow petals around a dark center.

Seeds, pkt. **15c**; ¼ oz. **85c**.

*PURPUREA (Purple Cone Flower). Peculiar reddish purple flowers with a very large brown cone-shaped center. 2-3 ft. July-Oct.

Seeds, pkt. **15c**.

Plants, each **25c**; doz. **\$2.50**.

SAGINA (Pearlwort)

*SUBULATA. Mossy green cushions, studded with tiny white flowers during May and June. Excellent for stepping stones.

Plants, each **20c**; doz. **\$2.00**.

SALVIA (Meadow Sage)

†AZUREA GRANDIFLORA (Rocky Mountain Sage). Grows 3 to 4 ft. high, producing masses of sky blue flowers from August to October. Thrives in any soil in sunny position.

Plants, each **20c**; doz. **\$2.00**.

*GREGGII. A native of Texas and Mexico. A shapely, bushy plant 2 ft. high. From July to September it bears masses of rich luminous carmine flowers. Needs protection during severe cold.

Plants, each **50c**; doz. **\$5.00**.

*NUTANS. Hardy perennial, 2 to 3 ft. high, violet flowers borne in whorls at top of flower stem, 6 to 8 whorls being average.

Plants, each **30c**; doz. **\$3.00**.

†OFFICINALIS (Giant Sage). The well known herb.

Plants, each **20c**; doz. **\$2.00**.

*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. 24 in. high.

Plants, each **25c**; doz. **\$2.50**.

†SCLAREA (Clary). Large woolly leaves, often 8 to 10 in. long and 4 to 6 in. broad. The bluish white flowers come in whorls on spikes 24 to 30 in. high.

Plants, each **30c**; doz. **\$3.00**.

†VIRGATA NEMOROSA. A most effective plant for the border, growing from 2 to 3 ft. high and producing its dark purplish blue flowers from May to Sept. Excellent for cutting.

Plants, each **30c**; doz. **\$3.00**.

SAPONARIA

(Soapwort or Bouncing Bet)

*OCEYMOIDES. A very showy little rock plant, producing masses of small bright rose flowers in the spring and summer. An excellent creeper for dry banks or poor soil.

Seeds, pkt. **10c**; ¼ oz. **45c**.

Plants, each **20c**; doz. **\$2.00**.

*OCEYMOIDES SPLENDENS. A high colored form of preceding. Trailing and larger flowers.

Plants, 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 some varieties that require shade or moist soil as noted in description.

*AIZOON. A very valuable alpine plant, much tufted and forming dense small rosettes. White flowers on stems 6 to 10 in. high. May and June.

Plants, 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 in. high. May and June.

Plants, each **30c**; doz. **\$3.00**.

*AIZOON ROSEA. A bright pink flowering form of the preceding.

Plants, each **30c**; doz. **\$3.00**.

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ALPINE OR ROCKERY PLANTS MARKED WITH A STAR (*); BORDER PLANTS WITH A DAGGER (†)

SAXIFRAGA—Continued

- *BATHONIENSIS. A rapid grower, 10 to 12 inches high, with stout branching stems, bearing large pink white flowers. April-May. Plants, each 30c; doz. \$3.00.
- *BURSERIANA. Fresh grey green foliage turning to light brown as they grow older. Flowers white, veins often colored. 2 to 4 in. high. February to April. Plants, each 50c; doz. \$5.00.
- *DECIPIENS (Grandiflora). Very charming hybrids, countless flowers in many shades from white to rose and crimson. Can supply in mixture of colors only. 10 to 12 in. high. April and May. Plants, each 40c; doz. \$4.00.
- *DECIPIENS ROSEA. Neat tufts with bright pink flowers. A recent introduction. 4 to 6 in. high. Plants, 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 in. high. March to May. Plants, each 50c; doz. \$5.00.
- *FERDINAND COBURGI. A very choice Kabschia, close grey green foliage with small bright yellow flowers. April and May. Plants, each 60c; doz. \$6.00.
- *GUILDFORD'S SEEDLING. A mossy Saxifraga with bright crimson flowers; very beautiful. 10 to 12 in. high. April and May. Plants, each 40c; doz. \$4.00.
- *H. S. STOKES. One of the most satisfactory of the mossy Saxifraga. Very compact tufts of evergreen foliage with bright carmine flowers. 6 in. high. April-May. Plants, each 40c; doz. \$4.00.
- *LAGAVEANA. A miniature plant with tiny silvery rosettes and ruddy stems, 6 to 8 in. high, bearing 4 to 6 creamy white flowers to each stem. May and June. Plants, each 40c; doz. \$4.00.
- *LANTOSCANA. One of the best and most distinct. Leaves short and blunt, white flowers on stems 10 to 12 in. high. Prefers a little lime and good drainage. June. Plants, each 40c; doz. \$4.00.
- *MacNABIANA. Seldom more than a foot high, more or less branched above. Flowers white, numerous, heavily speckled with pink to purple dots, dots being large. June and July. Plants, each 30c; doz. \$3.00.
- *MEGASEA CORDIFOLIA. Broad deep green foliage which alone renders them useful, while the pretty rose pink flowers, which appear early in spring, make them doubly effective. 10 to 15 in. high. March and April. Plants, each 25c; doz. \$2.50.
- *PRIMULOIDES. A tiny compact "London Pride" with pretty rose colored flowers on stems 4 to 6 in. high. Shady position preferred. June to August. Plants, each 35c; doz. \$3.50.
- *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. Plants, each 25c; doz. \$2.50.

SAXIFRAGA—Continued

- *UMBROSA (London Pride). The leaves form a dense rosette, 8 to 12 inches across. Flowers white, speckled carmine, on stems 12 to 18 in. high. Requires a shady, moist position. May and June. Plants, each 25c; doz. \$2.50.

SCABIOSA

(Pin-cushion Flower)

- †CAUCASICA (Blue Bonnet). Soft charming shade of lavender, commencing to bloom in June, on stems 18 to 24 in. long, and continuing until frost cuts them down. Seeds, pkt. 25c.
- Plants, each 30c; doz. \$3.00.
- †JAPONICA. A variety from Japan, forming bushy plants 2 feet high, bearing on long wiry stems the most beautiful and artistic lavender blue flowers. Will thrive in any kind of soil and demand very little water during the summer. Plants, each 25c; doz. \$2.50.

SCUTELLARIA (Skull Cap)

- *ALPINA. Hardy spreading plant, about 10 in. high, with blue flowers in dense terminal racemes. May to September. Plants, each 20c; doz. \$2.00.
- *ORIENTALIS. A low growing species, never more than a foot high, with clear yellow flowers. May to September. Plants, each 25c; doz. \$2.50.

SEDUM (Stonecrop)

- A very interesting group of plants, easily grown, the larger proportion forming tufts, clasping the ground. For carpeting there is nothing to equal the Sedums. Sunny positions in the rockery are preferred for the more dwarf varieties, while the taller varieties are suitable for both borders and rock gardens. A rather poor soil is preferred and they form the principal genus for commencing the rockery.
- *ACRE (Golden Moss). Stems creeping, branched, flower stems 2 to 3 in. high. Foliage green, flowers yellow. Thrives best in poor soil. June and July. Plants, each 20c; doz. \$2.00.
- *ACRE ALBUM. White flowering form of preceding. Plants, each 20c; doz. \$2.00.
- *DASYPHYLLUM. One of the finest of all Sedums. Compact mats of pale blue pearly beads strung tightly together. White flowers. Plants, each 35c; doz. \$3.50.
- *EVERSII. Rose colored flowers and very pretty foliage. A sub-trailing plant, excellent for walls and dry rock work. Plants, each 25c; doz. \$2.50.
- *GLAUCUM. Forms rather mossy mats of beautiful blue green foliage with white flowers. Plants, each 25c; doz. \$2.50.
- *KAMTSCHATICUM GRANDIFLORUM. Trailing variety. Branches 6 to 10 in. long. Yellow flowers on stems 6 to 8 in. June-July. Plants, each 20c; doz. \$2.00.
- *MURALIS. Dark green leaves, turning red as they grow older. Flowers white with pink center or a clear red. One of the best. 4 to 6 in. high. June to August. Plants, each 30c; doz. \$3.00.

SEDUM—Continued

- *SIEBOLDII. Red edged green leaves, pink flowers in large umbellated cymes. Unexcelled for rock walls, hanging baskets, etc. Plants, each 35c; doz. \$3.50.
- *SPATHULIFOLIUM. A very pretty native plant, clusters of soft grey rosettes, bearing great heads of yellow flowers on red stems. A real rock plant in every sense of the word. 2 to 4 in. high. Plants, each 25c; doz. \$2.50.
- *SPURUM ROSEUM. Creeping branches with bright pink flowers on reddish stems. 6 in. July-Sept. Plants, each 20c; doz. \$2.00.
- *SPECTABILIS. One of the prettiest erect growing Sedums, 12 to 18 in. high, with broad light green foliage and immense flat heads of showy rose colored flowers. Aug. to Sept. Plants, each 30c; doz. \$3.00.

SEMPERVIVUM

(House Leek)

Also called Hen and Chickens

- Curious and interesting plants, forming rosettes of succulent leaves of varying colors. For carpeting, rockeries, dry banks or walls.
- *ARACHNOIDEUM (Cob-web 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 in. June to Sept. Plants, each 20c; doz. \$2.00.
- *BROWNII. Very distinct with dark green foliage, tipped brown. Flowers red. Seeds, pkt. 25c.
- Plants, each 20c; doz. \$2.00.
- *GLAUCUM. Rose colored flowers about 1 in. in diameter on stems 6 to 8 in. high, in a short compact panicle 2 to 3 in. across. Plants, each 20c; doz. \$2.00.
- *LAGGERII. Leaves grey green, flowers rose. One of the best. June to September. Plants, each 20c; doz. \$2.00.
- *MONTANUM. Flowers mauve red on stems 4 to 8 in. high in very dense panicles about 2 in. in diameter. June to September. Plants, each 20c; doz. \$2.00.
- *PALLIDUM. Light rose colored flowers on stems 10 to 12 in. high. Plants, each 20c; doz. \$2.00.
- *PYRANEICUM. Very dwarf, stems 3 to 4 in. high with light rose flowers. Plants, each 20c; doz. \$2.00.
- *TRISTE. Brown foliage, white flowers on 8 to 10 in. stems. Very novel. Plants, each 20c; doz. \$2.00.

SENECIO (Groundsel)

- *TYROLENSIS. Finely cut foliage and dainty bright orange flowers. June and July. 8 to 10 in. high. Plants, each 25c; doz. \$2.50.

SHASTA DAISY—ALASKA

- †SIEGER. The largest flowering daisy yet introduced; immense fluffy white flowers with yellow centers, measuring 4-6 in. across. Seeds, pkt. 15c.
- Plants, each 25c; doz. \$2.50.

Seed prices are postpaid
Plant prices are f.o.b. Portland

Dozen price applies to a dozen of one variety, not to mixed lots

Perennial ALPINE & BORDER PLANTS & SEEDS—Alphabetically Listed

ALPINE OR ROCKERY PLANTS MARKED WITH A STAR (*); BORDER PLANTS WITH A DAGGER (†)

SIDALCEA (Greek Mallow)
 †**ROSE QUEEN**. Erect growing, more or less branching plants, producing their rose pink flowers during June to August, succeeding in any ordinary garden soil. 2-4 ft. Seeds, pkt. 15c.
 Plants, each 30c; doz. \$3.00.

SILENE (Catchfly)
 This delightful group of plants are very desirable for the rock garden. They are allied to the pinks, blooming nearly all summer and giving great pleasure.
 ***ACAULIS**. Dense tufts of spiny foliage covered with tiny pink flowers. 1 to 2 in. high. May to July. Very choice.
 Plants, each 40c; doz. \$4.00.
 ***MARITIMA**. Glaucous blue foliage of a pleasing tint, makes a very compact mass, covered with white flowers June to August. Very fine for hot dry spots, stems should hang over edge of rock wall to keep foliage and flowers clean.
 Plants, each 30c; doz. \$3.00.
 ***SAXIFRAGA**. Somewhat shrubby, bright green foliage, small white flowers in very great profusion. A choice alpine. 4 to 8 in. high. May to July.
 Plants, each 25c; doz. \$2.50.
 ***SCHAFTA**. A beautiful alpine species with large bright rose pink or carmine flowers. Probably the best known of all the Silenes. Trailing, 3 to 6 in. July to Sept.
 Plants, each 30c; doz. \$3.00.

SOLIDAGO (Golden Rod)
 †**CANADENSIS**. Well known hardy perennial, succeeding in any soil, in sunny position. Spikes of golden yellow flowers all summer. 3 ft. high.
 Plants, each 20c; doz. \$2.00.

STACHYS (Woolly Woundwort or Lamb's Ears)
 ***LANATA**. White woolly leaves. Flowers small, purple, in dense 30 or more flowered whorls. Very white herbage. 12 to 15 in. Fine for edging as well as rockeries.
 Plants, each 20c; doz. \$2.00.

STATICE (Sea Lavender)
 *†**LATIFOLIA**. A valuable plant for the border or rockery, tufts of leathery leaves and immense candleabra-like heads of purplish blue flowers. These, if cut and dried, will last for months. Flower heads 2 to 3 in. across. 12 to 18 in. high. June to August. Sow in flats and transplant when large enough to permanent position 12 to 18 in. apart.
 Seeds, pkt. 10c; ¼ oz. 35c.
 Plants, each 20c; doz. \$2.00.

STOKESIA (Cornflower Aster)
 *†**CYANEA**. A native plant, bearing freely from early June to late fall; handsome bright lavender blue or white flowers on 12 to 18 in. stems.
 Plants, each 20c; doz. \$2.00.
 *†**LLACINA**. A recent introduction from Europe. Flowers 3 to 4 in. across, on stems 15 to 18 in. long, 4 to 8 flowers on one stem. A pleasing lavender. June-Sept.
 Plants, each 30c; doz. \$3.00.

SYNTHIRIS
 ***ROTUNDIFOLIA**. A native plant for shady spots, one of Oregon's very finest natives. Large rounded leaves, spikes of lavender blue flowers 6 to 8 in. high.
 Plants, each 30c; doz. \$3.00.

THALICTRUM (Meadow Rue)
 †**ADIANTIFOLIUM**. A beautiful variety with foliage like a Maiden Hair Fern and minute yellow flowers. May to July.
 Plants, each 30c; doz. \$3.00.
 †**AQUILEGIFOLIUM**. Graceful foliage like Columbine and rose purple or white flowers from May to July. 2 to 3 ft. Can supply in mixture only.
 Plants, each 30c; doz. \$3.00.
 †**DIPTEROCARPUM**. Chinese species of great merit, from 4 to 7 ft. high, fern-like foliage, loose panicles of flowers of lilac mauve, brightened by lemon yellow stamens. July to Sept.
 Plants, each 30c; doz. \$3.00.
 †**GLAUCUM**. Soft yellow flowers and greyish foliage. 6 ft. high. July and August.
 Plants, each 20c; doz. \$2.00.

THYMUS (Thyme)
 These dwarf mountain thymes make the closest most perfect mats or carpeting and are especially valuable on hot sunny banks where it is hard to grow grass. Also very attractive for a carpet in the spring flowering bulb beds and for walk edgings. Their fragrance and the sheets of blossoms in summer are additional inducements.
 ***CITRIODORUS AUREA**. A golden yellow form of the well known Lemon Scented Thyme. 6 in.
 Plants, each 20c; doz. \$2.00.
 ***SERPYPHILLUM** (Creeping Thyme). Forms dense mats of dark green foliage and clouds of lilac flowers. Trailing. June and July.
 Plants, each 20c; doz. \$2.00.
 ***SERPYPHILLUM ALBUS**. The white flowering form of creeping thyme, excellent for ground cover.
 Plants, each 25c; doz. \$2.50.
 ***SERPYPHILLUM COCCINEUM**. A bright red flowering form of the preceding but has a longer season. June to September.
 Plants, each 25c; doz. \$2.50.
 ***SERPYPHILLUM LANUGINOSA**. Foliage woolly, gray; flowers pink. The best Thyme for the rockery, one plant often covering a rock 2 to 3 feet in diameter.
 Plants, each 25c; doz. \$2.50.

TIGRIDIA
 (Mexican Flame Flower)
 †**PAVONIANA**. A beautiful Mexican bulbous plant which should be planted in clumps in sunny locations and well drained soil. Treat the bulbs like gladiolus. Red and yellow shades in mixture only.
 Plants, each 25c; doz. \$2.50.

TRADESCANTIA (Spiderwort)
 ***VRGINEA**. Odd flowers on branching stems 12 to 15 in. high. Either in white or lavender blue. A sunny spot preferred but requires moisture. Blooms all summer.
 Plants, each 20c; doz. \$2.00.

TRITOMA (Red Hot Poker)
 Also called Flame Flower or Torch Lily

†**BORSCH'S HYBRIDS**. Early, perpetual flowering hybrids, colors ranging from pale yellow to scarlet. Supply in mixture only.
 Seeds, pkt. 25c.
 Plants, each 30c; doz. \$3.00.
 †**MIRABILIS**. Everblooming hybrids that bloom from early May until cut down by frost. Orange scarlet to canary yellow.
 Plants, each 25c; doz. \$2.50.
PFITZERII. Everblooming Flame Flower. The free and everblooming qualities of this variety have made it one of the greatest bedding perennials. From June to October, spikes 3 to 4 ft. high, heads of a rich orange scarlet, producing a grand effect planted singly or in masses.
 Seeds, pkt. 25c.
 Plants, each 30c; doz. \$3.00.
 †**UVARIA**. Dazzling orange red, large spikes 2 to 4 ft. high. Will bloom the first season from seeds sown indoors very early and planted out as soon as soil is warm.
 Seeds, pkt. 15c.

TROLLIUS (Globe Flower)
 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, altho doing well in a good garden soil, not lacking moisture.
 ***ASIATICUS**. Small bronze green leaves, flowers rich orange yellow. 18 to 24 in. Will do best if partially exposed to sun. May to July.
 Plants, each 50c; doz. \$5.00.
 ***GOLD QUELLS**. Golden yellow. Very showy. 2 ft. May to July.
 Plants, each 50c; doz. \$5.00.

VALERIANA
 (Garden Heliotrope)
 †**COCCINEUM**. Heads of old rose or pink, flowers sweet scented; fine for borders or against walls. 2 to 3 ft. June to October. (Sow seeds early in boxes and transplant as soon as large enough to handle.)
 Seeds, pkt. 10c; ¼ oz. 35c.
 Plants, each 20c; doz. \$2.00.
 †**COCCINEUM ALBA**. White flowering form of the preceding.
 Plants, each 20c; doz. \$2.00.
 †**OFFICINILIS**. Showy heads of rose tinted white flowers with a strong heliotrope odor. 4 to 5 ft. high. June and July.
 Plants, each 20c; doz. \$2.00.

VERBENA (Hardy)
 ***AUBLETIA** or **CANADENSIS**. Masses of pink or rosy purple flowers on stems 6 to 12 in. high, a native of this country but grown more extensively in English rock gardens. It has been a delightful acquisition to our rock gardens. July to October.
 Plants, each 30c; doz. \$3.00.
 ***VENOSA**. A showy species from Brazil and Argentine, tuberous rooted, flowers lavender blue and sky blue in great profusion. 8 to 10 in. Spreads by root growth.
 Plants, each 25c; doz. \$2.50.

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 Plant prices are f.o.b. Portland

Dozen price applies to a dozen of one variety, not to mixed lots

Perennial ALPINE & BORDER PLANTS & SEEDS—Alphabetically Listed

ALPINE OR ROCKERY PLANTS MARKED WITH A STAR (*); BORDER PLANTS WITH A DAGGER (†)

VERBASCUM

(Mullein or Aaron's Club)

†**GIGANTEUM.** Silvery white foliage with yellow flowers. Attains a height of 5 to 6 ft., with a brilliant showing.

Plants, each **20c**; doz. **\$2.00.**

VERONICA (Speedwell)

Some of the most charming forms for the rockery or hardy borders are found in this family. They thrive wonderfully and richly reward the grower.

***AMETHYSTINA.** A slender species with short stems of amethyst blue flowers. 6 to 10 in. May-June. Seeds, pkt. **15c**.

Plants, each **25c**; doz. **\$2.50.**

***CORYMBOSA.** A dwarf plant, 8 to 12 in. high, with a dense plume of azure blue flowers. July-Aug. Plants, each **30c**; doz. **\$3.00.**

***INCANA.** Silvery gray woolly foliage, violet blue flowers, 8 in. high. July and August. Seeds, pkt. **25c**.

Plants, each **25c**; doz. **\$2.50.**

†**LONGIFOLIA SUBSESSILIS.** One of the handsomest blue flowering plants. Hardy and increases in strength and beauty each year. Spikes 2 to 3 ft. high, completely studded with beautiful blue flowers from July to September. Excellent for cutting.

Plants, each **20c**; doz. **\$2.00.**

***PROSTRATA.** Carpets of olive green foliage smothered with dainty spikes of rich blue flowers. 4 to 5 in. high. May and June. Plants, each **25c**; doz. **\$2.50.**

***REPENS.** Prostrate, growing in dense masses, preferring moist corners but will thrive on a moderately dry soil and is excellent for covering ground where grass will not grow. Small white flowers in June and July. 1 to 2 in. Plants, each **25c**; doz. **\$2.50.**

***SAXATILIS.** One of the finest of all Veronicas for the rockery. Subshrubby 2 to 3 in. high with bright blue flowers. Wonderfully fine for carpeting.

Plants, each **40c**; doz. **\$4.00.**

†**SPICATA.** Dense tufts from which arise erect spikes of clear blue flowers on 12 to 18 in. stems. June and July.

Plants, each **20c**; doz. **\$2.00.**

†**SPICATA ALBA.** White flowering form of preceding.

Plants, each **20c**; doz. **\$2.00.**

VINCA (Oil Maid)

*Also called Periwinkle or Trailing Myrtle. A tender perennial, more particularly adapted for pot culture, but also for edgings and carpeting in rockeries. Flowers white and pink.

Seeds, pkt. **10c**; ¼ oz. **50c.**

(See plants on page 74.)

VIOLA ODORATA

(Sweet Violets)

No flower is a greater favorite. The violets we offer are hardy, and while they will do well in almost any position, they will do best in partial shade.

*†**GOV. HERRICK.** Rich deep purple flowers in early spring, sweet scented.

Plants, each **20c**; doz. **\$2.00.**

*†**PRINCESS OF WALES.** Rich violet flowers.

Plants, each **20c**; doz. **\$2.00.**

VIOLA (Sweet Violet, Heart's-ease or Tufted Pansies)

The Violas succeed best in partially shaded positions where the soil is kept moist and cultivated. When cared for they reward with flowers from May to October. They should be sheared several times during the season so they cannot go to seed.

***ALPINA.** Rather large flowers, violet or purplish violet in color, on stems 4 to 6 in. long. A good alpine.

Plants, each **30c**; doz. **\$3.00.**

***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.

Seeds, pkt. **25c**.

Plants, each **25c**; doz. **\$2.50.**

BOSNIACA. A fine new European everblooming introduction. Neat clumps covered with reddish violet flowers thruout the summer. A distinct species.

Seeds, pkt. **25c**.

Plants, each **30c**; doz. **\$3.00.**

***FLORARIENSIS.** The nearest to a winter flowering Viola that can be found. Bloomed practically all winter in the gardens. Small blossoms of a pleasing blue. Is the product of the well known M. Henri Correvon.

Plants, each **30c**; doz. **\$3.00.**

***G. WERMIG.** A Cornuta, variety of tufted pansy, forming clumps with small dark violet flowers on long stems, a veritable sheet of bloom the whole season.

Plants, each **25c**; doz. **\$2.50.**

***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 in. Will bloom 9 months of the year.

Plants, each **25c**; doz. **\$2.50.**

***LUTEA SPLENDENS.** Bright yellow flowers on long stems. Flowers all summer.

Plants, each **25c**; doz. **\$2.50.**

***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 in. high. A true alpine Viola.

Plants, each **25c**; doz. **\$2.50.**

WAHLENBERGIA (Edrianthus)

***DALMATICA.** Belongs to the Campanula family. A beautiful dwarf alpine, wonderfully fine for the rockery. Blue flowers in a terminal 6 to 10 flowered heads on stems 4 to 8 in. high. May-Aug.

Seeds, pkt. **50c**.

Plants, each **50c**; doz. **\$5.00.**

WALLFLOWERS

(Cheiranthus)

(See other varieties under heading of Cheiranthus)

We have the old favorite sweet scented Wallflowers. Although the greatest care is used it is not always possible to guarantee the color, the average running about 75% to 90%. Seeds should be sown in open and transplanted to permanent position in late summer and will bloom the second season.

†**BLOOD RED.** Very fragrant.

Seeds, pkt. **15c**.

Plants, each **20c**; doz. **\$2.00.**

†**CRANFORD BEAUTY.** Golden yellow and fragrant.

Plants, each **20c**; doz. **\$2.00.**

†**CRIMSON KING.** Purplish crimson, fragrant.

Plants, each **20c**; doz. **\$2.00.**

†**EARLY GIANT.** Brown and yellow, early flowering.

Plants, each **20c**; doz. **\$2.00.**

†**FIRE KING.** Vivid orange scarlet, fragrant.

Plants, each **20c**; doz. **\$2.00.**

†**GOLDEN KING.** Golden yellow, fragrant.

Plants, each **20c**; doz. **\$2.00.**

†**GOLDEN MONARCH.** Dwarf golden yellow.

Seeds, pkt. **15c**.

Plants, each **20c**; doz. **\$2.00.**

ORANGE BEDDER. Rich orange, shading to apricot.

Plants, each **30c**; doz. **\$3.00.**

†**QUEEN OF SHEBA.** New. Velvety dark ruby red, dwarf type.

Plants, each **25c**; doz. **\$2.50.**

†**VULCAN.** Large flowers of ruby crimson, dwarf variety.

Plants, each **20c**; doz. **\$2.00.**

SINGLE MIXED. Large flowering.

Seeds, pkt. **10c**; ¼ oz. **25c.**

TALL DOUBLE MIXED, FINEST. Branching habit.

Seeds, pkt. **15c**; ½ oz. **75c.**

YUCCA (Adam's Needle)

Also called Spanish Bayonet or Bear Grass

†**FILAMENTOSA.** 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 ft., render it a bold and handsome subject wherever placed. Should be planted in the spring. 3 year old plants.

Plants, each **35c**; doz. **\$3.50.**

ZAUSCHNERIA

(California Fuchsia)

Also called Humming Bird's Trumpet

***CALIFORNICA.** A low growing plant with scarlet or vermillion trumpet-shaped flowers, about 2 in. long. A flaming sheet during the month of August and September. It is remarkably resistant to drought, excellent for rock walls where they receive the full sun and where the foliage may hang over rocks or edge of wall.

Plants, each **40c**; doz. **\$4.00.**

Seed prices are postpaid
Plant prices are f.o.b. Portland

Dozen price applies to a dozen of one variety, not to mixed lots

PEONIES

Peonies make a gorgeous display whether in landscape, flower bed, border or garden, 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. Color schemes are not necessary for beautiful effects, any combination is delightful. They are nearly always free from disease, few insects bother them and they succeed in almost any soil or climate. 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.

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. 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.

PRICES F.O.B. PORTLAND; ADD POSTAGE FOR PARCEL POST SHIPMENTS

New and Rare Varieties

E. G. Hill—Rich Tyrian rose, bordered with silvery rose, semi-rose type, gigantic flat flower very full, immense clusters. A free bloomer even on plants one year from division. Fragrant; early. Each **\$1.50**.
Kelway's Media—A deep, clear pink of exceptional beauty of form. Highly recommended. **\$2**.
Octavie Demay—Pink and white; large flat crown, guards delicate flesh pink, narrow collar of white petals, center of deeper pink. Habit of plant low. Fragrant and very early. Ea. **\$1.00**.

Mons. Martin Cahuzac—Dark purple garnet with black reflex; mid-season; very large. Ea. **\$3**.
Reine Hortense—Hydrangea pink with flecks of crimson, semi-rose type, large, compact, tall growing. Each **\$2.50**.
Sarah Bernhardt—Flat compact semi-rose type; uniform mauve color; penetrating fragrance. Each **\$2.50**.

Therese—Very soft pink, lilac white center; with reflex; mid-season; strong stems, enormous flowers. Each **\$5.00**.

White Varieties

Albatre—Large compact, crown type, milk-white, shaded ivory; center petals tinged with lilac, edged with carmine. **\$1**.
Avalanche—A large milk-white flower of perfect form; the base is of soft yellow and a few petals are flecked with carmine. A strong grower, blooming profusely and fragrant. Ea. **\$1.00**.
Baroness Schroeder—Plume shaped flower with irregular and fringed petals; opens a blush, changing to milk white; delicate odor; very free bloomer; one of the best grown. Each **\$1.50**.
Festiva Maxima—Large rose type, white with crimson markings in the center; one of the best. Fragrant. Each **75c**.
LaTendresse—Early, rose type, with very full spreading flowers of immense size in clusters. Petals thick and wax-like. Color milk white, guards slightly splashed and center flecked with crimson. Each **\$1.00**.
Madame De Verneville—Very large anemone shaped flower, pure white with slight carmine touches, of pleasing fragrance; long strong stems; an ideal cut flower. Each **\$1.00**.
Mount Hood—Like the sunrise over the mountain; first a beautiful pink, soon changing to a brilliant white. Earliest of all. Each **\$1.50**.

See page 93 for Peony collection in colors

Pink Varieties

Charlemagne—Salmon pink, very double and full. **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. Each **60c**.
General Dodds—Uniform dark Tyrian rose, center touched with a few white dots; very desirable; late. Each **75c**.
Lady Bramwell—Beautiful pink of the finest form. Each **75c**.
Livingstone—Rose type, a pretty pink flecked with carmine; blooms in clusters; late. **\$1.00**.
Madame Breon—A light pink, of full compact form. Very attractive large flowers. **\$1.00**.
Madame Lemonier—Rose type, soft lilac pink, changing to lilac overcast with white. A large compact flower, mid-season, fragrant, vigorous grower. **\$1.00**.

Special

"Name Lost" PEONIES

Each year we have a quantity of peonies on which the names have become misplaced and we cannot identify them. Some are of the highest priced varieties. We offer these as long as they last at the following especially low price:

Each 35c
 Dozen \$3.50
 Postage Extra

Single Varieties

Albiflora—Large single paper white, long yellow stamens, blooming in clusters; tall, early and fragrant. Each **\$1.50**.
Apple Blossom—Delicate pink, shaded darker, resembling huge apple blossom. Each **\$3.00**.
Florestine—A beautiful dark red single type, large size, very special for this climate. **\$2.00**.
Some Ganoko—Very dark red, with satiny reflex petals, yellow center; the very finest. **\$5.00**.

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. Ea. **\$1.00**.
Felix Crousse—Bomb type; 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. **\$1.00**.
Karl Rosenfield—Semi-rose; velvety crimson, mid-season, no odor; strong and healthy, free bloomer in clusters; large and fine for cut flowers as well as landscapes. Each **\$1.50**.
Louis VanHoutte—Semi-rose; dark crimson tipped with silver, with fiery reflex, medium height. Fragrant. Each **\$1.00**.
L'Eclatante—Bomb type; velvety crimson; mid-season; flowers very double and full, each flower standing up straight and erect, well above the foliage. Ea. **90c**.
Officialis Rubra—Earliest of good reds, a large round bloom of vivid crimson, generally in bloom on Memorial Day. Each **75c**.
Rubra Superba—Rose type; a brilliant dark crimson; large full double; without stamens; fragrant. Each **75c**.

JAPANESE IRIS

(KAEMPFERI)

All the colors of the rainbow are gathered into their wonderful, vivid, yet harmonious shadings and silky texture. They average about 4 feet in height with flowers 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 requires 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 is a big help when planting. Plant about 3 inches deep and 12 inches apart, divide the clumps every other year. They bloom after the Hardy Iris. Doubles have six petals, singles have three petals.

Named Varieties

Each 40c; Dozen \$3.75

Not prepaid. Add postage for mail shipments

The finest varieties to be had in the Northwest and priced exceptionally low for high quality

DATE-DOGU—Single; rich claret red with orange blotches; very charming.

GOLD BOUND—Double; pure white, one of the best and most beautiful.

KUMO-NO-OBI—Double, dark lavender blue, especially fine. Six petals.

KURO-KOMO—Double; purple overlaid with dark blue; yellow blotches, stigmas dark blue bordered with purple.

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).

PYRAMID—Double; violet-purple, veined white in the center of each petal.

ROSE-ANNA—Double; ivory white, heavy ruby red veins, yellow blotch, stigmas dark plum.

SENJO-NO-HARA—Double, vinous purple speckled and splashed gray, primrose blotches radiating out into sky blue, petaloid stigmas purple stained gray.

TAIHERAKU (PEACE)—Double; rich purple with yellow blotches, tipped blue, purple veins radiating out; petaloid stigmas gray and lavender; gorgeous. Six petals.

JAPANESE IRIS MIXTURE—Double and single, no named varieties; all colors and shades. Special prices, each **20c**; doz. **\$2.00**; 100 **\$15.00**; f.o.b. Portland.

HARDY IRIS

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 big clumps which are easily divided and transplanted.

Cultivation is easy; sunny situation needed; soil dry and well drained (hardy 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. Water about one in two weeks until well established. Bone meal and ground limestone are good fertilizers.

Named Varieties, Strong Roots, Each 15c; Dozen \$1.50

MIXED VARIETIES, DOZ. \$1.00; prices are f.o.b. Portland, postage extra

(S indicates Standard or part of flower remaining upright; F is the Falls or drooping part of flower)

CAPRICE—S. soft rosy red; F. deep rosy red.

HER MAJESTY—S. rose pink; F. bright crimson tinged darker shade.

JUNIATA—S. and F. clear deep blue, tallest of bearded iris; fragrant.

HALFDAN—All yellow, wonderfully rich.

LOHENGGRIN—S. and F. uniform shade of Cattleeye rose. Large.

LADY JANE—S. coppery; F. red and white.

MA MIE—S. and F. pure white, with blue penciled border.

MONSIGNOR—S. crimson, inner petal ivory; F. crimson, edged lavender.

NIBELUNGEN—S. olive green; F. yellow; purple and white.

PALLIDA DALMATICA—S. and F. a light steel blue, best known of all irises.

PERFECTION—S. light blue; F. darker velvety violet and black, orange beard.

QUEEN-OF-MAY—Soft lilac pink.

WALHALLA—S. lavender; F. wine.

ZEPHYR—S. and F. clear blue lilac; fragrant.

Our Diamond 1929 Collection PEONIES

This collection is especially selected for those who are beginning their peony gardens, giving a most charming invitation to join the ranks of peony lovers. For complete descriptions see page 91.

Collection of 6

Value \$5.25 for.....

\$4.50

Here is the list, all the finest quality

1. Festiva Maxima, fragrant.....	\$.75
2. Mt. Hood, earliest of all.....	1.50
3. Duchess d'Orleans, for early cutting.....	.50
4. Madame Breon, large, compact.....	1.00
5. Felix Crousse, blooms in clusters.....	1.00
6. Edulis Superba, the Decoration Day
peony, extra large.....	.50

All for **\$4.50**; value.....**\$5.25**

Not prepaid. Add postage for mail shipments.

Hardy Iris Collection

One each (6 in all) for.....**\$5c**

Three each (18 in all) for.....**\$2.25**

Six each (36 in all) for.....**\$4.25**

Twelve each (72 in all) for.....**\$7.75**

F.O.B. Portland, postage extra

7. Ma-Mie, pure white, penciled border.
8. Queen-of-May, soft pinkish lilac.
9. Walhalla, lavender and wine red.
10. Monsignor, very rich coloring.
11. Perfection, truly named.
12. Her Majesty, beautiful.

See full descriptions on page 92

Portland Seed Co's Rose City Collection

12 Choice Roses Oregon Grown

\$8.10
Value for **\$6.50**

(Not prepaid)
(For shipment by parcel post add 50c
for postage and packing)

Here is one of the most attractive, best assorted collections we have offered. All our roses are large, sturdy, two-year-old bushes, field grown, budded on disbudded Manetta stock and will give you splendid flowers commencing with the very first season. True to name. See the list below.

	Regular price
1. Golden Emblem	\$.90
The peer of all yellow roses.	
2. White Maman Cochet	.60
Perfect blooms, strong stems.	
3. Wm. F. Dreer.....	.60
Noted for delicacy of coloring.	
4. Madame Butterfly	.65
Buds are lovely for corsages, wonderfully fragrant.	
5. Gen. McArthur	.60
Deliciously perfumed and a profuse bloomer.	
6. Chateau de Clos Vougeot	.60
Dark velvety crimson, a true everblooming variety	
7. Sunburst	.75
Beautiful color and shape, fragrant.	
8. K. Aug. Victoria.....	.60
Long pointed buds, fragrant.	
9. Mad. Caroline Testout "The Portland Rose."	.50
10. Los Angeles	.75
Long pointed buds, mammoth flowers, fragrant.	
11. Hadley	.75
Prolific during all seasons and delightfully fragrant.	
12. Independence Day	.80
One of the most beautiful roses grown.	
All for \$6.50 ; value.....	\$8.10

ROSES

Our roses are all large, sturdy, two-year-old bushes, Oregon field grown, budded on disbudded Manetta stock, and will give you splendid cut flowers the first season. They are true to name and include the best of the well known popular varieties.

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 in mid-winter so that shipment can be made at the most favorable time.

PLANTING—Deep preparation of soil is urged. Stir ground thoroughly to a depth of at least 18 inches and two feet or more 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. We have prepared especially for roses and the lawn a mixed fertilizer with a high percentage of nitrogen and phosphorus. For two-year-old bushes apply about a half pint (cupful), for larger bushes use a pint to a bush; cultivate into the soil around the bush early in the spring. When buds are formed use about a gallon of liquid manure to a bush once a week. Make it by mixing Lawn and Rose Fertilizer and water until it's the color of weak tea. If planting in the fall, prune tops 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. 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 5 cents postage for each bush when ordering by parcel post.

Selected List of Favorite Rose Bushes

Baby Cecil Brunner—Small exquisitely formed miniature buds and flowers of light pink with diffused yellow base, in graceful clusters, with waxy foliage. 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 **60c**.

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 everblooming variety. See picture page 94. Each **60c**.

Cheerful—Shining pink, orange and yellow shadings; truly "cheerful." Each **90c**.

Constance (H. T.)—Rich orange yellow, distinctly streaked and splashed with crimson, long pointed buds; free bloomer. Each **75c**.

Dorothy Page Roberts (H. T.)—Coppery pink, suffused with apricot yellow, free and perpetual, delightful garden rose. Each **75c**.

Duchess of Wellington (H. T.)—Intense saffron yellow stained with rich crimson which, as the flower develops, becomes deep coppery saffron yellow. Delightfully fragrant. **65c**.

Evening Star (Pern.)—A sport of Madam Edouard Herriott. Color much more brilliant. Deep coral, shaded yellow and red. Everblooming tendencies. Each **90c**.

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 **\$1.50**.

General Jacqueminot (H. P.)—Bright shining crimson; very rich and velvety, large and full, Rich fragrance. Each **60c**.

General McArthur (H. T.)—Dazzling crimson scarlet; delicious perfume and magnificent foliage. Blooms in great profusion. Not subject to mildew. See colored picture on page 94. Each **60c**.

Georg Arends—Long, delicately shaped buds and deep petaled, pointed blooms of soft pink in its most exquisite shade; delicately scented. Plant very vigorous, grows 5 to 6 feet tall; fine, wavy foliage. Each **60c**.

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. Each **60c**.

Golden Emblem (H. T.)—An 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. Won the sweepstakes prize at Portland Rose Festival in 1928. See colored picture page 94. Ea. **90c**.

Hadley (H. T.)—A fine American pedigreed rose producing flowers of elegant form and substance. Color rich crimson scarlet shaded maroon. Prolific throughout the season, wonderful fragrance. See colored picture on page 94. Each **75c**.

Hoosier Beauty (H. T.)—Crimson scarlet with darker shadings, velvety texture. Bud long and pointed, deliciously fragrant. Each **75c**.

Imperial Potentate (H. T.)—A rich rosy carmine flower, solid and lasting. Sweetly scented. Beautiful buds. A vigorous, strong and healthy grower. Each **\$1.25**.

Independence Day (Pern.)—Sunflower gold, flamed and stained coppery old gold and orange. One of the best. See colored picture on page 94. Each **80c**.

Irish Elegance (H. T.)—Bronzy pink buds, opening with shades of apricot and yellow. Very strong growth and continually in flower. Perhaps the best liked and most planted single rose. Each **65c**.

Irish Fireflame (H. T.)—Orange crimson blooms, shaded pink and gold, very large (5 inches across); pleasing fragrance. Strong growth and profuse bloom. A famous rose, excellent in bud and fine for buttonhole. Each **65c**.

(List continued on next page)

Rose Bushes—Continued

Joseph Hill (H. T.)—Coppery buds and salmon pink flowers of very fine form and fragrance. Plant very strong at times and quite free flowering. One of the most beautiful roses, but its growth is erratic and it needs attention to form a well balanced plant. Ea. **60c.**
Juliet (H. B.)—A wonderful combination of old gold on the outside of petals and a rich rosy red on the inside. Flowers large, full and delightfully scented. Each **60c.**

Kaiserin Aug. Victoria (H. T.)—Elegant, large pointed buds; full double flowers; color delicate creamy white; fragrant. See colored picture on page 94. Each **60c.**

Killarney Brilliant (H. T.)—Brilliant dark pink buds and flowers of Killarney type. Excellent in growth and bloom. Each **60c.**

K of K (H. T.)—Intense scarlet known. Semi-single, huge petals. Free bloomer, sweet scented. 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. **65c.**

Lady Inchiquin (H. T.)—Orange cerise. A distinct and novel color. Perfectly formed blooms. Each **90c.**

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. See colored picture on page 94. Each **75c.**

Mabel Morse (H. T.)—Clear, unstained yellow buds and well shaped, fragrant flowers. Spreading, bushy growth and liberal bloom. Foliage remarkable for its beauty and resistance to disease. Each **\$1.00.**

Mme. Abel Chatenay (H. T.)—Light pink blooms, shaded salmon and carmine, of charming form. Plant grows erratically and foliage is only fair. One of the most popular of all roses. Each **65c.**

Mme. Alexandre DreuX—Beautiful long buds golden coppery tangerine. Dainty, compact and a vigorous grower. Each **\$1.50.**

Mme. Butterfly (H. T.)—Sport of Ophelia, brilliant pink suffused apricot and gold; buds are lovely for corsages, wonderfully fragrant. See colored picture on page 94. Each **65c.**

Mad. Caroline Testout (H. T.)—A grand rose of the LaFrance type, but with flowers larger and finer. Color bright satiny pink; very fragrant and free in bloom. The official rose of Portland, the Rose City. See colored picture page 94. Each **50c.**

Mme. Edouard Herriot (H. T.)—Coral red, shaded yellow at base, passing to shrimp red, bronze and geranium; hardy, vigorous. **75c.**

Maman Cochet, White (T.)—A white form of Maman Cochet, sometimes flushed with pink on the outer petals. Foliage fine, hardy and free flowering. The blooms are seldom imperfect and the stems are strong for cutting. See colored picture on page 94. Each **60c.**

Margaret Dickson Hamill—Delicate straw color, its shell-pink petals flushed at the edges on the reverse side with delicate carmine-rose. Strong in growth, free blooming, exquisitely fragrant. Bronzy green foliage on deep crimson leaf-stalks. Very distinct and a gem among new roses. Each **60c.**

Are you planning a lily pool? If so write for our new book telling just how to prepare it and what to plant.

Surprise Collection \$4.75 10 Finest Roses

Named varieties of our choice, all different. As the season advances we usually find some roses overstocked as compared with others and to "even up" our stock we make this special offer. They are all named and tagged and well assorted in colors.

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 stems. 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 **60c.**

Padre (Pern.)—Coppery scarlet, flushed yellow at base, flowers semi-double with 15 to 20 petals, often curiously notched, exceptionally free bloomer. Each **90c.**

Paul Neyron (H. P.)—Deep, shining pink rose, blooms freely; the largest variety in existence; finely scented, blooms first season and all summer; grows to a great height first season, stems almost thornless. Each **60c.**

Shot Silk (New)—Coppery rose, overshot with apricot and yellow, beautiful. Each **\$1.25.**

Souvenir de Georges Pernet—Oriental red, tips of petals touched with cochineal. Entire flower faintly shaded with yellow. Very large and full on strong stout stems. Extremely hardy. One of Pernet Duchere's finest productions. Each **\$1.25.**

Sunburst (H. T.)—Fine yellow flowers, strongly suffused with orange at the center, fragrant and well shaped. Plant spreading. Very beautiful, but it takes time and patience to establish and grow it well. See colored picture on page 94. Each **75c.**

Sunstar—Deep orange yellow, edged, veined and splashed crimson. Each **\$1.00.**

The Queen Alexandra Rose (H. T.)—A most distinct rose by reason of the shading of its vermillion petals to old gold on the back and at base. Each **90c.**

Ulrich Brunner (H. P.)—Extra large, bold flowers, full and globular; color rich glowing crimson, elegantly flamed with scarlet, strong and disease resisting. Each **60c.**

Una Wallace (H. T.)—A beautifully formed rose of luminous old rose color, without markings of any kind; slightly fragrant. Profusely flowering plants with average foliage. Distinctly an "art" color different from any other. Each **\$1.00.**

William F. Dreer (H. T.)—Soft shell pink, base of petals rich golden yellow. For delicacy of coloring has few if any equals. See colored picture on page 94. Each **60c.**

USE MORE FERTILIZER ON SHADY SPOTS

The roots of trees draw moisture from a good deal of space surrounding the tree, and thus take much of the moisture and fertility under the tree which works more injury to lawns than the shade. For this reason it is advisable to use a fertilizer top dressing more frequently on shady lawns. A good method for assuring even distribution of fertilizer is to mix it thoroughly with three or four times the amount of sifted top soil, making it easier to distribute uniformly. Write for our book on fertilizing; it is free.

See the wonderful value in roses on page 94. Especially suited for those just commencing to grow roses.

Rambler and Climbing Roses

Two-year-old Oregon field grown, budded on disbudded Manetta stock; very strong and vigorous; will grow 10 to 12 feet a season. Prices are f.o.b. Portland; on parcel post shipments add 5 cents each for postage

(Roserie Rambler)

(Tree Druschki)

(Dorothy Perkins Rambler)

Cecil Brunner, Climber (C. P.)—Clusters of pretty pink flowers, especially beautiful in bud. **75c.**
Dorothy Perkins, Rambler (H. W.)—A beautiful bright pink; large double flowers. Very sweet scented, hardy. Pink, red or white. Each **45c.**
Emily Gray, Climber—Light orange yellow, buds long and pointed, on stiff stems of good length for cutting. Holly-like, glossy foliage. Each **75c.**
General McArthur, Climber (H. T.)—Dazzling crimson scarlet; delicious perfume and magnificent foliage. Blooms in great profusion. Each **75c.**
Lady Hillingdon, Climber—Coppery apricot yellow, long, well formed buds. Each **\$1.00.**
Mme. Butterfly, Climber—Bright pink, suffused with apricot, fragrant. Each **\$1.00.**

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.**
Lady Ashtown, Climber—Large rose colored flowers, blooming all season, in immense numbers. Each **75c.**

TREE ROSES

Grafted on hardy rose stalks about 4 feet high, they soon make good sized heads forming small trees. A fine selection of colors and varieties. State preference. Each **\$2.50**; f.o.b. Portland. Shipped by express only.

(American Pillar)

(Tausendschon Rambler)

(Silver Moon)

Mad. Caroline Testout, Climber (C. H. T.)—Immense globular flowers of the same beautiful shade of pink as seen in the bush sort, a rampant climber. 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.)—The most brilliant rose in any class because of its vivid, shining scarlet in large semi-double flowers which retain their intense color until petals fall. Each **75c.**

Roserie Rambler (Red Tausendschon)—Of the same habit of growth and flowering, but deep cerise or carmine color. Each **75c.**

Silver Moon, Climber—Similar in habit of growth to Dr. VanFleet, but with large saucer-like single flowers of silvery white color. Flowers of wonderful substance on long stems. Each **75c.**

Tausendschon Rambler—A lovely shade of soft pink, bright clusters of blossoms, almost covering foliage, very few thorns, free and vigorous; splendid foliage. Each **65c.**

DAHLIAS

(See page 151 for special collection in actual color)

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 greenhouse 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 sturdy, bushy growth. Water freely.

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.

Decorative Dahlias

Prices f.o.b. Portland; add postage for parcel post shipments

AL KORAN. Immense size and perfect formation. The giant flowers are held on long strong stems; color yellow suffused goldenrod amber. Each **50c.**

AMUN RA. A very large flower. Gorgeous shades of copper orange, gold and amber deepening in center to a reddish bronze. A gold medal Dahlia. (See colored picture page 151.) Each **75c.**

ANNA MAIER. A huge flower of dark pinkish red, like old velvet, shading to softer red towards center; fine stems. A unique novelty. Each **75c.**

BALLON. A very odd shade of bronze apricot suffused with gold, quite distinct. Each **35c.**

BERTHA STORY. Giant, deep rose pink; free flowering. Each **35c.**

BILLIE BURKE. Free flowering; soft yellow of extra large size. Flat petals narrow and very numerous. Each **35c.**

CARMENSYLVA. Exquisite shade of salmon pink. Fine for cut flowers. Each **35c.**

CHAMPAGNE. One of the largest Dahlias, delightful warm autumn shades, varying from copper to a dull golden and chamois. Produced freely on long hard stems. Each **75c.**

CHARM. Burnt orange shading to yellow; large, attractive blooms on good stems. Each **\$1.00.**

CHOWCHILLA. A bright, warm yellow; petals long, partly rolled; immense flowers. Each **35c.**

DOROTHY ROBBINS. Giant blooms of a distinct autumn shade, deep buff, suffused orange red, grand stems. Each **50c.**

EARLE WILLIAMS. Crimson scarlet, each petal tipped white. Immense blooms of perfect formation. Each **75c.**

EL DORADO. Giant flowering Dahlia, vivid gold shading to deeper tones at the base of petals. Blossoms are produced very freely on long strong stems. Extra fine for cut flowers and exhibition. One of the very best new Dahlias. Each **\$1.00.**

EMILY D. RENWICK. New. A fascinating iridescent rose color. Each **35c.**

FLORAL TREASURE. New hybrid decorative. A beautiful pale yellow, sometimes tipped white. Giant blooms with long wavy petals, fine stems. Each **\$1.00.**

GEN. CUSTER. Flowers often over 8 in. across; an interesting combination of yellow, white and coral red; no two blooms come alike; very free. Each **35c.**

GLORIEUX. Rich golden yellow, tinted bronze and usually tipped white. A free bloomer. Ea. **50c.**

GOLDEN EMBLEM. A clear golden yellow without shadings of any other color. The giant blooms, 8 to 10 in. across, are of the most perfect and artistic form with perfect, full, high centers and long, wavy, recurving petals. Blooms are held high above the foliage on long strong stems. Early and constant bloomer. A very choice variety. Each **\$3.00.**

HORTULANUS WITTE. Very long stemmed. Pure glistening white. Each **35c.**

INSULINDE. Holland variety; beautiful golden orange; very large flowers with broad wavy petals; strong, erect stems. **75c.**

JERSEY BEAUTY. Very large perfect blooms of a beautiful true pink; extra fine stems. A wonderfully fine Dahlia for any purpose. Has won more gold medals and first prizes at the leading shows than any other Dahlia. Each **75c.**

(See colored picture page 151.) **JONKHEER BOREEL.** An elegant large flower of brownish buff yellow, most beautiful shade. Each **35c.**

KING ALBERT. Pure violet purple; extra large full flowers; strong stems; early, free flowering. Each **50c.**

KITTY RODGERS. European importation of immense size, soft pink on a white ground. See picture in colors page 151. **\$2.00.**

LADY BETTY. Extra large. Blooms freely all season. Color a lovely creamy white suffused with pink. There are none like it. **\$1.00.**

LATONA. Fine large flower of pale yellow tinged buff and lavender. Freely produced on the stoutest, erect stems. Each **25c.**

LE GRAND MANITOU. Extra large variegated flowers; white, striped and spotted with violet purple. Each **25c.**

MADONNA. Flowers of hybrid cactus type. One of the most charming white Dahlias. The blooms are often 8 in. across, ivory white. Last for days when cut. Each **50c.**

MARCELLA. A delightful clear soft pink; a great favorite. **25c.**

MARMION. This new Dahlia is truly a giant for size. The flowers in our display garden this past season grew 12 to 14 inches across without disbudding and without receiving any other special attention, except good cultivation. Perfect formation, with long wavy petals. Pure golden yellow with bronze suffusion on reverse of petals. Extra strong, stiff stems. Each **\$3.50.**

MARY BURNS (California Decorative). A combination of red and old gold, outside of petals old gold, reverse a dull red. A wonderful exhibition variety. **50c.**

MEPHISTOPHELES. Deep ruby red, points of petals tipped with golden yellow which greatly enhance the beauty of these big attractive flowers. Blooms freely. Extra strong, long stems. **75c.**

MILLIONAIRE. One of the largest decorative Dahlias. Light lavender shading to white in center. Each **50c.**

MINNIE BIRGLE. Bright rich red. Each **25c.**

MRS. CARL SALBACH. Immense lavender-pink blooms on exceptionally long, strong stems. **50c.**

(Continued on next page)

Decorative Dahlias — Continued from page 98

MRS. GEO. W. ELKINS, JR. A wonderful Dahlia of the largest size, beautiful old gold suffused with salmon pink. Each **75c.**

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 **50c.**

OSAM SHUDOW. Beautiful old rose suffused with lilac, yellow base of petals. Blooms 9 to 11 in. across. Each **60c.**

PATRICK O'MARA. The flowers are 8 in. in diameter and borne on long, strong, erect stems, soft and pleasing shade of orange buff, slightly tinged with rose. One of the most lasting cut flowers. Each **50c.**

POLAR STAR. The purest white Dahlia of remarkable beauty. Flower is large and full and carried on 13 in. stems. Each **50c.**

PORTHOS. New Holland Dahlia. Large blooms of deep lavender mauve. Each **50c.**

PRINCE ALEXANDER. A large beautiful salmon rose, tinted mauve, deep cream center; very early and free bloomer; fine stems. Each **35c.**

PRIDE OF CALIFORNIA. Large red flowers, extra good stems, very prolific and good long keeper. (See picture in colors page 151. Each **50c.**

PURPLE MANITOU. A clear deep purple. The best of its color. Each **25c.**

ROOKWOOD. Immense giant blooms on excellent stems; color an entirely new shade of pink, being a pure bright cerise rose. A wonderful Dahlia. (See picture in colors on page 151.) Each **\$1.00.**

ROSA NELL. Clear bright rose color; immense flowers on excellent stems. A novelty of great merit. Each **50c.**

ROSEMAROR. Giant blooms 9 to 12 in., 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 in. in diameter; constant bloomer. Each **25c.**

Special Collection \$3.50

See page 151 **\$5.50 value**

SULPHURIA. An extra large, clear sulphur yellow, without shading. Early, constant bloomer. **50c.**

SUSAN G. TEVIS. Distinctive new color tone, a deep shade of lilac with a bluish sheen. One of the very largest Dahlias. Blooms of ten 10 to 12 in. across; extra fine stems. Each **\$1.00.**

SYNCOPATION. A big jazzy colored Dahlia that seems to always attract attention and appeals to everyone. Very distinct color combination of bright buff yellow with center of each petal a deep cherry red. Strong, vigorous grower, early and constant bloomer, fine stems. One of the finest new varieties. Each **\$2.50.**

THE CRITES. New giant Chrysanthemum flowered decorative Dahlia. Beautiful deep rose veined silver, silver reflex on reverse of petals; the long lacy petals droop down around the stems in such a way as to give the big blooms the appearance of huge Chrysanthemums. Fine exhibition Dahlia. Each **\$2.00.**

THE GRIZZLY. A rare novelty of deep, rich crimson maroon, on perfect stem. Of immense size and a prolific bloomer. Ea. **50c.**

Peony Flowered Dahlias

FANTASTIQUE. Distinct and decidedly different; large semi-double flowers irregularly curled and twisted petals, color deep wine crimson, tipped and edged pure white. Each **35c.**

GEISHA. Golden yellow, changing to red and again to yellow tips. A sure bloomer and most popular. 8 to 10 in. across. Ea. **50c.**

HELEN LADD CORBETT. A 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. Each **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.**

MEYERBEER. Of largest size; crimson suffused and lined purple; long strong stems. Ea. **50c.**

MRS. JACK GREEN. Very large full flower, a beautiful shade of rich scarlet. Each **35c.**

MRS. JESSIE SEAL. Beautiful salmon rose suffused with gold; large, full flowers, extra long stems. Each **50c.**

NAIAD. An exquisitely tinted cream pink, extra long stems and large flowers; very beautiful cut flower. Each **35c.**

OREGON BEAUTY. Bright fiery scarlet with golden sheen. Free blooming. Each **25c.**

OREGON SUNSET. Rich golden yellow, heavily suffused reddish brown. Free flowering, long stout stems. Each **35c.**

ORIENT. A beautiful combination of orange scarlet and bright yellow. Fine for cutting. Ea. **25c.**

OSAKA GEISHA. Huge flowers, often 10 in. across, long stiff stems, very odd color, face of petals sulphur yellow, back a dull red. Each **75c.**

PACIFIC GLOW. Giant blooms of a beautiful salmon pink. **\$1.00.**

PEARL DELGAR. Very large beautifully formed flowers, a new color, best described as a dull plum color. Each **35c.**

PRIDE OF PORTLAND. An immense flower, the color of Geisha but the yellow is brighter and also the red. Each **75c.**

PVT. BYRON STREETER. Lilac purple suffused dark lilac on outer petals; enormous very double flowers, strong stems. Ea. **50c.**

STEPHEN LOMA. Pleasing dark magenta color, with fine stems. Each **35c.**

WHITE FLAG. Pure snow white. Each **35c.**

Collarette Dahlias

KATCHEN VON SCHWARZATAL. The finest of all collarettes, color a vivid carmine rose, edged and tipped white, with white collar; blooms often 5 to 6 inches across. Each **35c.**

SCARLET QUEEN. New. Bright scarlet with yellow collar and long stems. Each **35c.**

BILLIONAIRE. One of the largest Peony Dahlias. Bright golden orange. Each **50c.**

BLACK BEAUTY. Dark velvety maroon, often shaded violet. **25c.**

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. Peony type. Each **75c.**

EDITH CAVELL. Enormous flowers on very long stout stems. Full petaled. Reddish bronze shaded with old gold. Each **50c.**

ELIZABETH BOSTON. Giant blooms of deep crimson, shading to old gold at tips. Extra long stout stems. One of the largest and best of recent introduction. Each **\$1.00.**

Finest Cactus Dahlias

From comparative tests in the field we have selected the following as being the best of their types and color. The 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

ESTHER. Soft silvery lilac rose. One of the best. **35c.**

ETERDNAND DE LYON (H.C.) Carmine rose, almost magenta; large full flowers and wavy petals. **50c.**

FRANCES GRAHAM. Giant salmon rose colored flower, on the hybrid cactus type. Each **50c.**

F. W. FELLOWS. One of the largest Cactus Dahlias, blooms freely, long stems, orange narrow straight petals. Each **50c.**

GEO. WALTERS (H. C.). 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. Each **50c.**

GUARDIAN. Giant flowering crimson flowers on long stems; best for cutting or exhibition. **75c.**

INDOMITABLE. Long narrow petals, incurved; color rosy mauve. Each **50c.**

KALIF (H. C.). A giant flower, brilliant pure scarlet. The immense blooms are freely borne on long strong stems; a wonderful display. See picture in actual colors on page 151. Each **50c.**

LA FAVORITA (Hybrid Cactus). This splendid variety is a brilliant salmon, shading from dark in center to pink at points. **50c.**

MACGREGOR. New H. C. Rare shade of soft red, base of petals lemon yellow; large full flowers; early, constant bloomer. **\$1.00.**

MAGNIFICENT. Of immense size, flowers often 8 in. across; beautiful oriental buff, overlaid rose salmon; fine stems, free bloomer. Each **50c.**

MELODY. Clear yellow, heavily tipped white; large incurved flower with good stems; free bloomer. 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 stems. Each **50c.**

MRS. EDNA SPENCER (Hybrid Cactus). A delicate shade of orchid pink. Beautiful form and stout stems, free bloomer, vigorous grower. Each **50c.**

RAPIER (H. C.). Pure gold shade, tinted salmon; very large attractive flowers. Each **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. Ea. **35c.**

SALMON ROSE. Petals broad and curled, light salmon rose, gold center. Each **35c.**

TAUNEY BOY. Giant hybrid cactus, one of the largest of this type. Huge blooms, often 10 to 12 in. across, beautiful tawny orange, sometimes tipped white; fine stems. Received special prize Oregon State Fair 1925 for largest bloom exhibited. Ea. **\$5.00.**

THE MARCHIONESS. A giant cactus often 10 in. or more across. Color phlox pink, center bluish lavender shading to white, base of petals lemon yellow; fine stems. Received certificate of merit A. D. S. 1921. Ea. **\$1.00.**

TUSTU. Velvety maroon, free flowering. Each **25c.**

U. S. A. (Hybrid Cactus). A mammoth flower of exquisite deep orange, very unusual in a Dahlia. Attracts attention everywhere. Ea. **50c.**

WASHINGTON CITY (H. C.). A giant star-like flower of purest white; long strong stems. **50c.**

BALLET GIRL. New. Very large, some white with orange base, others orange edged white, others pure orange, all on same bush. Each **50c.**

BORDER KING. Large incurved flower of deep glowing scarlet. Beautiful exhibition variety. **50c.**

CAPTAIN SCOTT (English Cactus). A free flowering white, long petals, good stems, constant bloomer throughout season. **50c.**

CARIBEE (H. C.). Peculiar blending of tyrian rose, veined and tipped with cream reverse, oddly rolled and twisted petals. **50c.**

CHAS. SHERBROOKE. Rich scarlet, reverse of petals old gold. Each **35c.**

CIGARETTE. New H. C. Very creamy white heavily tipped with orange, extra long stems. **75c.**

CONQUEST. Rich crimson of large size with narrow, incurved, slightly twisted petals; erect habit; long upright stems. Each **35c.**

EDITH CARTER. Yellow heavily tipped with carmine; erect habit and stems. Each **25c.**

Pom Pom Dahlias

Prices f.o.b. Portland; if mailed, postage extra

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. Ea. **25c.**

AMBER QUEEN. Rich clear amber, shaded apricot; free flowering. Each **25c.**

BELLE OF SPRINGFIELD. The smallest Dahlia grown, bright brick red, profuse bloomer. **25c.**

BOBBY. Deep plum color, very free bloomer. **25c.**

CATHERINE. Bright yellow. Each **25c.**

DARKEST OF ALL. Dark maroon. Each **15c.**

GEO. BRINKMAN. Pure white. Each **25c.**

GEO. IRELAND. A dainty mauve color. Each **25c.**

JEWEL. Soft light yellow. Each **25c.**

JOHNNY. Intense red. Each **25c.**

LITTLE BELLE. Clear mauve pink. Each **20c.**

LITTLE DAISY. White, suffused pink. Each **25c.**

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.**

See the special collection of Dahlias on page 151

Quality

1929

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. Each **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.**

Our "Diamond Special" DAHLIA COLLECTION

10 choice Dahlias \$1.50
\$4.50 value for

Each season we find that we have produced more of some varieties of Dahlias than others; however, we cannot tell what these varieties are until quite a while after the catalog is printed. To dispose of these extra lots we offer this collection of ten Dahlias, all different, in large flowering double varieties, of high quality, without name tags, but assorted to give you three times the usual value. While ordering your named varieties, add one or more of these collections for surprise results.

NOTICE See our collection of Named Dahlias shown in **FULL COLOR** on page 151.
\$5.50 value for **\$3.50.**

Giant Flowering Pansies

For years local experts have grown our Giant Pansies and cooperated in securing the finest strains from the world's most celebrated growers. These have been carefully reselected 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, POSTPAID

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

CORNFLOWER BLUE. Dainty blue, large, good substance. **Pkt. 15c.**

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

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

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

KING OF THE BLACKS (Giant). Immense velvety flowers of the finest quality, the largest and best black Pansy. **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, has the sweetest perfume. **Pkt. 15c.**

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

VIOLET BLUE. A new giant variety, brilliant dark indigo blue with violet luster, edges slightly ruffled. **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.**

One packet each of above Named Varieties. 10 in all, \$1.60 value for **\$1.25**, postpaid.

Oregon Giant Pansies Mixed SEEDS AND PLANTS

A selection of the finest strains and named varieties from American and foreign growers, grown separately and carefully blended. This seed is gathered by hand from selected plants grown here in Oregon and will produce plants and flowers of unsurpassed quality. **SEEDS, pkt. 25c; ¼ oz. \$1.25; oz. \$4.50; postpaid.**

PLANTS, in full bloom, in season from March to June, put up 1 dozen in a pkg., ship. wt. 4 lbs., doz. **\$1.00; f.o.b. Portland.**

TRIMARDEAU GIANT PANSIES. Remarkably large size, robust growth; very fine. **Pkt. 10c; ¼ oz. 85c; oz. \$3.00; postpaid.**

FINE MIXED PANSIES. Fine assorted colors. **Pkt. 10c; ¼ oz. 50c; postpaid.**

marked with silvery stripes. The flowers appear at the approach of cool weather and continue blooming thruout winter. Colors red, pink and white. **25c ea.** Larger plants **40c** and **60c** ea. ppd.

Persian Cyclamen Plants

GIANT FLOWERED. There is probably no more ornamental flowering plant for greenhouse or interior cultivation than the cyclamen. Circular, fleshy leaves of a rich metallic green variously

marked with silvery stripes. The flowers appear at the approach of cool weather and continue blooming thruout winter. Colors red, pink and white. **25c ea.** Larger plants **40c** and **60c** ea. ppd.

Imported Hardy Japanese Lilies

SPECIOSUM RUBRUM—White with dark rose spots. The most popular of the speciosum varieties. Hardy, free bloomer. Large bulbs, each **35c**; doz. **\$3.50**.
TIGRINUM SPLENDENS (Improved Single Tiger Lily)—Has very large flowers of excellent form, color orange-salmon with dark spots; hardy and a free bloomer. Large bulbs, each **20c**; doz. **\$2.00**.

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, beauty 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. Place bulbs on side on 2-inch layer of sand and cover with 4 to 6 inches of soil. Japanese Lily bulbs are f. o. b. Portland; if mailed add 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 at its edges into white; very fragrant. Bloom June to October. Large bulbs, each **35c**; doz. **\$3.25**.

AURATUM PLATYPHYLLUM—Similar in color to Auratum, heavily spotted, but much larger. Mammoth bulbs, each **50c**; doz. **\$4.50**.

HENRYI—Beautiful orange-yellow flowers with green band, very effective, hardy. Each **50c**; doz. **\$4.50**.

SPECIOSUM ALBUM—Pure white, flowers freely. Large bulbs, each **50c**; doz. **\$4.50**.

SPECIOSUM MAGNIFICUM—Similar to Melpomene but more vigorous and blooms earlier. Each **35c**; doz. **\$3.50**.

SPECIOSUM MELPOMENE—Has deep carmine flowers spotted blood red. Each **35c**; doz. **\$3.50**.

Mount Hood Lilies

This is an especially beautiful lily, a native of Oregon and an interesting lily to have in the garden. The flower is large open form, white tinted with lilac, and is very fragrant. Grows 3 to 5 feet high. Choice bulbs, each **25c**; doz. **\$2.50**; extra blooming size, each **35c**; doz. **\$3.50**; postpaid to fourth zone.

Calla Lilies

ELLIOTANA—Immense yellow trumpet shaped flowers, green leaves mottled with white. Each **35c**; doz. **\$3.75**.

ETHIOPA (Lily of the Nile)—White trumpet shaped flowers. Each **20c**; doz. **\$2.00**.

NEW GODFREY—Gives three flowers to one of the older variety. Perfect snow-white flowers. Blooms on very small plants. Each **30c**; doz. **\$3.00**.

Regal Lilies

See page

75

for description and picture in actual colors

Lilium Candidum

(Also known as Madonna Lily, or St. Joseph's Lily)

This is the ever popular, fragrant snow white, hardy garden lily. It grows four to five feet high and blooms in the open ground in June. The finest obtainable; should be planted early.

Mammoth bulbs, ea. **35c**; dz. **\$3.50**.
 Select bulbs, each **25c**; doz. **\$2.50**.

Postpaid to fourth zone.

Amaryllis Vittata Hybrids

Wonderfully beautiful lilies that can be grown easily, either as a pot plant or out-of-doors. The flower stalks are about 18 inches high and have two to six giant flowers of the most perfect form. They flourish in the sun but do even better in partial shade. Outdoors, plant in sandy soil about a foot apart, covering about 4 inches. Indoors, plant in small pots as they seem to flower better when root-bound. We do not know of any flower that will please you more than this and as a house plant it is unsurpassed. Not hardy. Named Varieties Mixed Colors only, each **75c**; doz. **\$7.50**; postpaid to fourth 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**—3 for **25c**; doz. **75c**; 100 **\$5.00**; postage extra.

Our book about **WATER LILIES** Mailed **FREE**

With the development of many new kinds of water lilies, and the increasing interest in beautiful gardens, lily pools are the newest and most interesting part of the garden. As it has been said, "Water is the life and soul of a garden," whether the garden be small or extensive, and forms not only a contrast but gives the pleasure of many varieties of flowers otherwise impossible to enjoy. Chief of all flowers in the water garden are the lilies, in wonderful colors of white, red, rose, pink, crimson, yellow, etc.

Lily ponds can be made in any size and as inexpensive or as elaborate as may be desired. We have prepared a separate booklet giving complete instructions for making pools of any size from sunken tubs to elaborate forms, together with complete descriptions of the finest water lilies as well as many other aquatic plants that are interesting and especially desirable when gold fish are to be placed in the pool. Lilies in actual colors are shown. We will gladly send this booklet to anyone free upon request.

Gladiolus—See pictures in colors on page 75

Exquisite coloring, vigor, ease of cultivation and freedom from insect pests and disease are making Gladiolus universal favorites that should have a place in every garden. If planted in June they come into bloom at a season when there are few other flowers. **CULTURE.** Gladiolus may be planted as early in the spring as ground can be worked or as late as June. A sunny situation preferred. Plant to a depth of 3 to 6 inches, depending on size of 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, they 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.

Prices are f.o.b. Portland; add postage for parcel post shipments

ALBANIA. Pure, glistening white. One of the very best. Three for 30c; doz. 95c.

ALICE TIPLADY. A large flowered primulinus type. Short and stocky of growth with a most beautiful orange saffron bloom. Three for 25c; doz. 60c.

ALTON. Extremely ruffled variety of soft orange with a deeper throat. Three for 25c; doz. 75c.

AMERICA. Exquisite shade of pink, tinted lavender. Three for 20c; doz. 50c.

A. W. HUNT. Bright red with small white markings on lower petals; large flowers; very showy. Three for 30c; doz. 95c.

BARON HULOT. A brilliant indigo blue, free flowering. Three for 25c; doz. 75c.

BUTTERFLY. Large salmon yellow, ruffled flowers, very vigorous. Three for 20c; doz. 50c.

BYRON L. SMITH. Lavender with sulphur blotch in throat; resembles color of a cattleya orchid. Three for 30c; doz. 95c.

CAPT. ASHUR C. BAKER. Rich velvety red with darker center; large flowers. Three for 30c; doz. 95c.

CRIMSON GLOW. Deep rich red; a good stalk and stands well, holding its flowers a long time. Three for 25c; doz. 60c.

DR. W. VAN FLEET. Extra early. A beautiful shade of delicate rose pink, deeper at edges of petals. Throat of cream, beautifully blended. Ruffled. Three for 30c; doz. 95c.

DOROTHY McKIBBIN. A wonderful pink, earliest of all to bloom. Three for 30c; doz. 95c.

DORRITT. Very popular lavender-pink flecked with rose. Many open at once. Good keeper. Three for 30c; doz. 85c.

HALLEY. Salmon pink with creamy white blotch. Large flower and early bloomer. Three for 20c; doz. 50c.

HERADA. To all who love a pure mauve this will prove a joy. Three for 25c; doz. 75c.

JACOB VON BEIJEREN. Tall soft purple with practically no markings. Many open. Very fine. Three for 30c; doz. 85c.

JENNY LIND. A lovely combination of pink, cream and yellow. Buds like a beautiful rose. Three for 30c; doz. 90c.

LE MARECHAL FOCH. Delicate pink, very large, many flowers open at a time. Three for 20c; doz. 50c.

MARJORIE GAGE. Pink with crimson throat, winning many awards. Three for 30c; doz. 95c.

MRS. F. C. PETERS. A splendid rose lavender with soft crimson bordered white on lower petals. Plant tall and vigorous. Three for 40c; doz. \$1.25.

MRS. FRANK PENDLETON. Has ground of purest white, rose pink covers its wide open petals. Lower petals have a dash of crimson. Three for 20c; doz. 50c.

MRS. NEWELL VANDERBILT. Salmon pink, heavily ruffled, throat sulphur yellow, mottled with crimson. Three for 40c; doz. \$1.25.

OPALESCE. Very delicate lavender rose. Odd charming shape. Three for 30c; doz. 95c.

ORANGE GLORY. A wonderful orange color with lighter throat. Three for 40c; doz. \$1.25.

PANAMA. A seedling of America, of much deeper pink. Three for 20c; doz. 50c.

PINK WONDER. Beautiful pink, vigorous grower. Three for 30c; doz. 95c.

POLA NEGRI. Apricot with yellow lip, shading to old rose and salmon on outer edges, ruffled flowers, very heavy propagator. Three for 30c; doz. 85c.

PRINCE OF WALES. Clear light salmon, very early variety. Three for 20c; doz. 50c.

ROSE GLORY. A strong, vigorous variety, pure rose pink, deeper in throat; petals stand wind and heat well; edges of petals delicately fluted. Three for 30c; doz. 95c.

SCHWABEN. Large flowers of canary yellow with magenta line in throat. Vigorous grower. Three for 20c; doz. 50c.

VIRGINIA. Large flame red, solid color, vigorous grower. Three for 30c; doz. 95c.

WHITE GLORY. Clear white with blue markings on lower petals. Iris-like in appearance. Three for 30c; doz. 85c.

FINE MIXED GLADIOLUS. Large variety of fine flowers unequalled for the price. Doz. 25c; 50 90c; 100 \$1.50.

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 these greatly improved varieties. In good soil they will easily grow three feet, their spikes are producers for months and always well branched. Splendid for cutting, being especially effective with autumn foliage.

Prices f.o.b. Portland

CALIFORNIA. Clear yellow. Three for 40c; doz. \$1.25.

FIRE KING. Scarlet red. Three for 40c; doz. \$1.25.

IMPROVED AURENTICA. Orange yellow. Three for 40c; doz. \$1.25.

LORD NELSON. Orange. Three for 40c; doz. \$1.25.

MESSIDOR. Cream white. Three for 40c; doz. \$1.25.

TALISMAN. Dark scarlet. Three for 40c; doz. \$1.25.

MIXED. 12 different colors. 75c.

CLEMATIS JACKMANII

Ornamental Climbing VINES

CINNAMON

The 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 ever troubles them, no winter harms. Once planted, they will grow a lifetime. Each **25c**; five for **\$1.00**; postpaid

KUDZU

AMPELOPSIS (IVY)

VEITCHI, "BOSTON IVY"—Leaves glossy green, coloring bronze in fall; flowers small; berries deep blue; clings firmly to smooth walls. Strong 2-year roots **50c**; postage extra.
QUINQUEFOLIA, "VIRGINIA CREEPER"—Common Ivy. Strong 2-year roots **50c**; postage extra.
ENGELMANNI—Similar to Quinquefolia, but leaves are slightly smaller; will cling to walls without any support. Very hardy. Strong 2-year roots **50c**; postage extra.

CLEMATIS

Beautiful and useful climbers. Their magnificent flowers, borne in great profusion in beautiful shades of soft lavenders, purples and white, make them especially attractive. Plant in light sandy soil, using slacked lime to keep slugs out of the roots. Manure should not touch the roots.

PANICULATA—A rapid and vigorous grower; it produces sheets of medium sized, pure white flowers of the most pleasing fragrance; is well adapted for covering trellises or fences. Choice plants, each **50c**; postage extra.

HENRYI—Fine, large, creamy white flowers; a strong grower and very hardy. Each **\$1.00**; postage extra.

JACKMANII—Intense violet purple with a rich velvety appearance; distinctly veined. Large plants, each **\$1.00**; postage extra.

RAMONA—Beautiful lavender. Each **\$1.00**; postage extra.

DUTCHMAN'S PIPE

ARISTOLOCHIA SIPHO—Bright green, luxuriant, having large foliage and brownish flowers. A strong rapid grower. Strong plants, each **75c**; postage extra.

SILVER LACE VINE

ENGLISH IVY

Large, thick, shining, leathery leaves; evergreen. Plant in sheltered position. Ea. **25c**; postage extra.

HONEYSUCKLE

HALL'S JAPANESE—Almost evergreen, very popular; white turning to yellow. Each **50c**; postage extra.

JASMINE

NUDIFLORUM—Drooping branches, enveloped with bright yellow flowers before leaves appear. Each **\$1.00**; postage extra.

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 in mid-summer. Ea. **50c**; postage extra.

WISTARIA

W. SINENSIS (Chinese Wistaria)—Grows 15 to 20 feet in a season; has long, pendulous clusters of pale blue or pink flowers in May and June and autumn. Choice 1-year plants **\$1.50 to 75c**. Grafted plants, pink, blue or white, each **\$1.50**; postage extra.

POLYGONUM AUBERTI

SILVER LACE VINE—One of the most desirable flowering climbers, of strong, vigorous growth, attaining a height of 25 feet or more, producing thru the summer and fall great foamy sprays of white flowers. A well established plant during its long flowering period is a mass of bloom. It adapts itself to the most varied climatic conditions. Each **85c**; postage extra.

FORSYTHIA HONEYSUCKLE

LILAC

SNOWBALL

SPIRAEA

MOCK ORANGE

Deciduous Shrubs

Deliveries 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. 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 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 causes 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 4 feet. Shipping size 24-36 inches. Each **\$1.25**.

ALTHAEA (ROSE OF SHARON)

Late summer blooming, continues into fall, bearing flowers that closely resemble Hollyhocks in color and size. Colors pink, white or red. Maturity height 10 feet. Shipping size 36 inches. Each **75c**.

AZALEA

A. MOLLIS—Tall 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. Shipping size 12-18 inches. Each **\$2.50**.

BERBERRY

B. THUNBERG (Japanese)—Low growing with clusters of white flowers in May. Foliage changes to a red in autumn. Maturity height 4 feet. Shipping size 18-24 inches. Each **75c**.

BOX LEAF ELDER

VARIEGATED—The finest variegated tree of the hardy kinds, leaves almost pure white. Nothing finer for specimen planting 4 to 6 feet. Also in silver and gold coloring. Maturity height 10 feet. Shipping size 5 feet. Each **\$3.00**.

BROOM (GENISTA)

ALBA (White)—A fine hardy variety, attaining good size. Blooms in spring. Maturity height 10 ft. Ship. size 3 ft. **75c**.

JUNCEA (Spanish Broom)—The most beautiful of all, stems of a vivid green. Blooms all summer when color is most desirable. Very fragrant. Height 10 ft. Ship. size 3 ft. **\$1.00**.

SCARAPIUS (Scotch)—Rapid growing, bearing clusters of bright yellow flowers in spring. Maturity height 10 ft. Shipping size 3 ft. Each **75c**.

DEUTZIA—PRIDE OF ROCHESTER

AZALEA—A. MOLLIS

Deciduous Shrubs—Continued

PRICES ON SHRUBS ARE F. O. B. PORTLAND

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 ft. Shipping size 24-30 in. 2-year plants, ea. **75c.**

CALYCANTHUS

FLORIDUS (Sweet Scented Shrub)—Double, dark crimson flowers, very fragrant and blooms all season. Maturity height 5 ft. Shipping size 24-30 in. Each **75c.**

CRAB

BECHTEL'S FLOWERING—Bears masses of double rose-like flowers of delicate pink color and delightful fragrance; tree shape. Maturity height 10 ft. Ship. size 3 ft. **\$1.50.**

DEUTZIA

Especially suited for shady positions

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. Shipping size 18-24 inches. Each **\$1.00.**

LEMOINE'S (D. Lemoinei)—One of the hardiest and most popular varieties, flowers in large clusters of pure white. Grows to 6 ft. high. Shipping size 24-30 in. Each **75c.**

PRIDE OF ROCHESTER (Deutzia Crenata)—Pure white, tinged with blush. Flowers very double, blooming May and June. Maturity height 6 ft. Shipping size 24-30 in. **75c.**

WATERI (D. Crenata Flora Rosa Plena)—Beautiful dainty double pink flowers. A fine lawn subject. Very showy. Grows to 6 ft. Shipping size 24-30 in. Each **\$1.00.**

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. Shipping size 1½ to 2 ft., each **\$1.00**; 2½ to 3 ft., each **\$2.50.**

FORSYTHIA (GOLDEN BELL)

F. FORTUNEI—Blossoms in dense masses of golden yellow flowers in early spring. Beautiful as a lawn specimen. Shipping size 3 ft. Each **75c.**

INTERMEDIA—One of the finest shrubs for early spring blooming. Yellow flowers appear before leaves. Height at maturity 4 ft. Shipping size 3 ft. Each **\$1.00.**

HONEYSUCKLE (BUSH)

WHITE TARTARIAN—Bushy upright growth, flowers freely. Red and orange berries stay on until fall. Maturity height 8 ft. Shipping size 18-24 in. Each **75c.**

HYDRANGEA

JAPANESE OTAKSA—One of the most popular lawn plants. The flowers run in shades of pink, blue and white, the minerals in soil often changing them to two or three shades in one. For shady places. Maturity height 4 ft. Shipping size 12 to 30 in. 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. Shipping size 3 ft. Each **\$1.00.**

KERRIA

A very graceful shrub that bears bright yellow rose-shaped flowers in early spring, vivid green branches, showy in winter. Maturity height 4 ft. Shipping size 24-30 in. **75c.**

LILAC (SYRINGA VULGARIS)

COMMON VARIETIES, NOT GRAFTED—Single, white or purple. Maturity height 15 ft. Shipping size 30 to 36 in. Each **75c.**

GRAFTED VARIETIES—We can furnish the grafted varieties in double or single blooms and in white or purple colors. Maturity height 15 ft. Shipping size 3 ft. Each **\$1.25.**

BECHTEL'S FLOWERING CRAB

JAPANESE FLOWERING QUINCE

MOCK ORANGES (SYRINGA)

Large hardy shrub with a profusion of white creamy flowers, very fragrant. Maturity height 12 ft. Shipping size 3 ft. Each **75c.**

Are You Planning a Lily Pool?

Write us for our new booklet of instructions for building and planting lily pools, with lily pictures in colors.

Deciduous Shrubs Continued

All Prices on Shrubs Are f.o.b.
Portland

PRUNUS (Flowering Prune)

P. BLIVANS—Same as Pissardi in growth but flowers double pink. Most beautiful of all and very rare. Maturity height 20 ft. Shipping size 3 ft. Each **\$2.00**.

P. PISSARDI—Foliage and fruit red, covered in spring with clouds of white flowers. Maturity height 20 ft. Shipping size 3-4 ft. 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 ft. Shipping size 3-4 ft. Each **\$1.50**.

PUNICA (Pomegranate)

The flowering pomegranates are of very rare value. They are most attractive, brilliant in color, bloom most of the summer; foliage glossy and handsome. Growth dwarf-tree-like, hgt. 3-4 ft. Shipping size 18 in. Ea. **\$1.50**.

QUINCE

JAPANESE FLOWERING — Covered with bright scarlet flowers very early in spring before leaves appear. Maturity height 4 ft. Shipping size 18-24 inches. 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. Shipping size 24-30 inches. Each **\$1.00**.

SPIRAEA

BILLARDI'S (S. Billardi)—Flowers red in dense spikes, blooms most of summer. Maturity height 4 ft. Shipping size 24-30 inches. Each **60c**.

BLUE SPIRAEA—Beautiful autumn blooming shrub. Flowers bright blue the entire length of stems. Maturity height 4 ft. Shipping size 18-24 in. Each **60c**.

CRIMSON (Anthony Waterei) (S. Bumalda)—A desirable variety, deep red flowers, blooming all summer; fine for foreground planting. Maturity height 4 ft. Shipping size 24-30 in. Ea. **60c**.

JAPANESE (S. Callosa)—Purplish foliage while young, flowers rosy pink in July. Maturity height 4 ft. Shipping size 18-24 inches. Each **60c**.

THUNBERGII—Charming spiraea with graceful form and abundant blooms. Maturity height 4 ft. Shipping size 24-30 inches. Each **60c**.

VAN HOUETTI'S BRIDAL WREATH (S. Vanhouetti)—Very graceful; flowers white in clusters. May. Maturity height 6 ft. Ship. size 24-30 in. **60c**.

SNOWBALL

COMMON—Flowers globular, pure white, in May. Maturity height 12 ft. Shipping size 24-30 in. Each **75c**.

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 hgt. 5 ft. Ship. size 24-30 in. Each **50c**.

S. VULGARIS, Indian Currant—Red fruited snowberry, habits similar to white, but loaded with dark red berries fall and winter. Maturity height 4 ft. Shipping size 24-30 in. Each **50c**.

TREE HYDRANGEA—PANICULATA GRANDIFLORA

SPIRAEA—VAN HOUETTI

WEIGELIA

TAMARIX

JUNIPERANA (Africana)—Ornamental tree with soft, juniper-like leaves, pink flowers. Maturity height 14 ft. Shipping size 24 in. **\$1.00**.

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 ft. Shipping size 24-30 in. Each **75c**.

CANDIDA—Flowers white, bush tall. ROSEA—Flowers pink, shrub compact. EVA RATHKE—Flowers red, very fine. VARIEGATED—Silvery leaves.

Evergreen 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. 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 ARE F. O. B. PORTLAND

ABELIA

GRANDIFLORA—Graceful evergreen shrub with small glossy leaves and tubular shaped flowers of a bluish pink color. Large ruddy sepals remain long after the flowers fall, having the appearance of blooms themselves. 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 5 ft. Shipping size 18-30 in. Each **\$1.50**.

AUCUBA (Japanese Laurel)

Gold Dust Laurel, moderate size, very beautiful and 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.

JAPONICA VARIEGATED—Yellow spotted leaves.

JAPONICA GREEN—Dark glossy green leaves. Shipping size 15-18 in., each **\$1.50**; 18-30 in., each **\$2.00**.

AZALEA (Asahi)

CRIMSON (A. Hinodagri)—Evergreen from Japan, bright minute, waxy foliage that turns gamete 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. Maturity height 3 ft. Choice plants, shipping size 10-12 in., each **\$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 ft. Shipping size 6-8 in., each **75c**; 12-18 in., each **\$1.25**.

B. VERICULOSIS—Resembles Darwini, but is low growing dwarf for rockeries and terrace work; more brilliant foliage. Maturity height 2 ft. Shipping size 12-15 in. Each **\$1.25**.

B. WILSONI (China)—One of the most attractive winter shrubs, being covered with clusters of cone-shaped red berries that completely cover it all winter. Do not plant too close to other shrubs, as it becomes bushy. Grows to 5 ft., long spikes. Shipping size 12-15 in., each **\$1.00**; 18-24 in., each **\$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., each **\$4.00**; 2½-3½ ft., each **\$5.00**.

Globe form, 12 to 15 in. spread, 15 to 18 in. high, each **\$2.00 to \$4.00**.

For hedges, write for prices on quantity desired.

CAMELLIA (China and Japan)

Small trees with shining waxy leaves and waxy flowers, resembling small roses. Thrive best in partial shade. 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 ft. In assorted colors only, mostly red and pink. Shipping size 1 to 1½ ft. high, each **\$2.50**.

COTONEASTER

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 6-8 ft. Shipping size 2-3 ft. Each **\$1.50**.

C. HORIZONTALIS (Trailing)—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. Ship. spread 18 in., ea. **\$1.00 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. Shipping spread 18 to 24 in. Each **75c to \$1.50**.

C. MICROPHYLLA THYMIFOLIA—Like above, but foliage is very dense; tiny leaves and berries; very dainty. Maturity height 1 ft. Each **75c to \$1.50**.

C. SIMONSII—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. Shipping size 18 to 24 in., each **75c**; 2 to 3 ft., each **\$1.50**.

EVERGREEN SHRUBS—Continued from page 109

All prices are f.o.b.
Portland

DAHPNE

(China and Japan)

D. O D O R A MARGI-
NATA (Pink Daphne)

A grand shrub, greatly
admired everywhere;
the flowers are in-
tensely fragrant, mass-
ed in dense clusters of
pink at ends of
branches; leaves are
edged white; blooms
very early in spring.
Of slow substantial
growth. Maturity hgt.
4 ft. Shipping size 24-
30 in., each **\$2.50** to
\$3.50.

DWARF JUNIPER

A low growing shrub of widespreading habit, beautiful green
coloring. Plants as delivered spread 12 to 18 inches and in-
crease to many feet; beautiful for parking strip, along walls,
etc. See photograph above. Each **\$2.50**.

ESCALLONIA (South America)

Dwarf growing evergreen with dark green foliage; spreading
branches covered throughout summer with tubular shaped pink
flowers of much beauty. Very handsome species; not very
hardy in cold climate. Maturity height 3 ft. Shipping size
1½ ft. Each **\$1.50**.

EUONYMOUS (Japan)

GREEN—A fine specimen evergreen plant with leathery green
leaves, one of the hardiest broad leaved evergreens. Very fine
for foundation planting. Maturity height 8 ft. Shipping size
12-18 in., each **\$1.00**; 18-30 in., each **\$1.50**.

VARIEGATED—Similar to above, but leaves are of a gorgeous
golden yellow edged with green; very greatly admired. Matur-
ity height 4 ft. Shipping size 15-18 in., each **\$2.00**.

HOLLY (Ilex)

ENGLISH (Aquifolia)—Prickly dark green foliage; grows mod-
erately fast; covered during the winter months with bright red
berries. We endeavor to furnish nothing but as-
sured berry bearing stock which has produced ber-
ries before being sent out. However, very often in trans-
planting 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 ber-
ries. Maturity hgt. 40 feet. Price **\$3.00** and up,
at rate of \$1.50 per ft. of height. Write for prices
on holly for hedges, stating length of hedge.

HOLLY

DWARF JUNIPER

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. Shipping size 18-
24 in., **75c** to **\$2.50**. Larger plants up
to 5 feet priced on request. Hedge plants
unballed from **\$15.00** to **\$40.00** 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 pyramidal shapes. Ma-
turity height 8 ft. Shipping size 12-15 in.,
each **\$1.50**; 2 ft., each **\$2.25**; 2½ ft.,
each **\$3.00**.

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 con-
siderable 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 ft. Ship-
ping size 10-18 in., each **75c**; 18-24 in.,
each **\$1.25**; 24-30 in., each **\$2.00**.

LONICERA

NITIDA EVERGREEN BUSH HONEY-
SUCKLE (China)—A fine variety for base
or foundation planting, as well as for
massing in large beds. Bright glossy foli-
age. Can be trimmed much the same as
boxwoods for tub or porch decoration. Ma-
turity height 5 ft. Shipping size 1 ft.,
each **50c**; 1½ ft., **75c**; 2½ ft., **\$1.25**.
Write for prices on hedge size.

OREGON GRAPE

MAHONIA AQUIFOLIA—The holly-leaved
maherry of Oregon, a native of this state,
but our plants are nursery grown and es-
pecially fine. Dark evergreen foliage in
summer, changing to purplish and vari-
egated reds in the fall. The official flower
for the state of Oregon. Shipping size 14
in., each **\$1.00**; 18 in. **\$1.25**; 24 in.
\$1.75.

PERNETTYA

P. ROSEA—A new evergreen novelty, of
dense compact habit; does well in any lo-
cation, but prefers a rich soil. The leaves
are small, dark, glossy green, with white
flowers in the spring and a profusion of
attractive pink berries in the fall and win-
ter. Can be trimmed. Shipping size 1½
ft., each **\$2.50**; 2½ ft., each **\$3.50**.

Privit

PRIVIT (*Ligustrum*)

CALIFORNIA PRIVIT (*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 PRIVIT (*L. Vulgare*)—A little hardier, for colder climate, leaves smaller. Maturity height 10 ft.

18-24 in., 10 plants **\$1.00**;
100 **\$7.50**.

24-30 in., 10 plants **\$1.25**;
100 **\$10.00**.

GOLDEN PRIVIT (*L. Lucidum Variegatum*)—A beautiful variegated shrub used to plant in among evergreens, giving a wonderful effect.

Maturity height 10 to 12 ft. Shipping size 2 ft., each **\$1.00**; 3 ft., each **\$1.50**.

Rhododendron

Grafted varieties are still very scarce and we are not always able to furnish. These plants are from 3 to 4 feet high and are fine specimens. No color guarantee. Each **\$10.00**. Seedling stock, not grafted, 1½ feet, each **\$3.00**.

All prices on shrubs are f.o.b. Portland

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. Shipping size 12-18 inches, each **\$1.25**; 18-24 inches, each **\$1.50**.

P. CRENULATA (China)—Red berries. Shipping size 18 to 24 in., each **\$1.50**.

For types and varieties of shrubs we do not list in this catalog, write for special quotations

Beautiful Evergreen Trees for the Lawn

ARBOR VITAE (*T. Occidentalis*)

ARBOR VITAE (*Thuya*)

AMERICAN (*T. Occidentalis*)—Native, known as cedar. Foliage bright green; yellow-green underneath; bronze in winter. Shipping size 24 to 30 inches, each **\$2.00** to **\$3.00**.

PYRAMID ARBORVITAE (*Thuya Lobbi*)—Bright green leaves above and dark glossy green leaves beneath. An excellent tree for pyramid forms. Shipping size 12-18 in., each **\$1.50** to **\$2.00**.

For
other
Coniferous
Evergreens
see
page
112

JUNIPERUS VIRGINIA (Red Cedar)

CEDAR

DEODAR or **INDIAN CEDAR** (*Cedrus Deodara*)—Very handsome; branches drooping; foliage silvery green. Very popular. Shipping size 18 to 24 inches, each **\$2.50**.

RED CEDAR (*Juniperus Virginiana*)—Native with striking form and color. See illustration above. Shipping size 18 to 24 inches, each **\$2.50**.

Coniferous Evergreen Trees

COLORADO BLUE SPRUCE

In handling and planting evergreens never allow the roots to become dry for an instant. Their juices are resinous, and when once dry, water has no power to restore them; dip the roots in "grout" or very thin mud, and plant quickly; cover the roots with fresh soil and with a heavy piece of wood beat the earth solid over them. Fill up and pound again, and finish by bringing fresh loose earth about the tree with a hoe. No wind can now bend the tree about so as to break the tender rootlets as fast as formed.

Sizes given are the approximate sizes when sold. Prices f. o. b. Portland. Sizes up to 4 feet can be mailed. Postage extra.

SPRUCE (Picea)

NORWAY (P. Excelsa)—A lofty, rapid grower; branches drooping. Fine for hedge or windbreak. 2 to 3 feet, each **\$3.00 to \$3.50**.

COLORADO BLUE SPRUCE—One of the hardiest evergreens of beautiful color and outline. Shipping size 2 ft., each **\$4.50**.

JUNIPER (Juniperus)

IRISH (J. Communis Hibernica)—Pyramidal in form; foliage silvery gray. Shipping size 2-3 ft., each **\$3.00**.

COMMON (J. Communis)—Branches spreading. Shipping size 2½ to 3 ft., each **\$3.00**.

JUNIPER CHINENSIS—Very compact growth, light green. Shipping size 1½ ft., each **\$2.00**; 2 ft., each **\$4.00**.

See
balance
of
ever-
greens
on
page
111

LAWSON CYPRESS

CRYPTOMERIA

ELEGANS (Japanese Cedar)—A very beautiful evergreen. Delicate green foliage and graceful habit. Color changing to reddish brown. Shipping size 18 to 24 in., each **\$2.00 to \$3.00**.

CRYPTOMERIA JAPONICA—The open branched tree type of Cryptomeria, resembling somewhat the Sequoia Gigantea, but of slower growth. Shipping size 18 to 24 in., each **\$2.50**.

CYPRESS (Cupressus)

ALUMII—Handsome pyramid shaped conifer. Foliage greenish-blue. Shipping size 1½ to 2 ft., **\$3.00**; 3 to 3½ ft., **\$5.00**; 4 ft., **\$7.00**.

LAWSON'S (Chamaecyparis Lawsoniana)—Graceful and conspicuous; branches horizontal, slightly pendulous, foliage dark green. Shipping size 1 to 3 feet, each **\$1.50 to \$5.00**.

LAWSON (Erecta Veridis)—Pyramid, green. Shipping size 12 to 18 in., **\$2.00 to \$2.50**; 2 to 3 ft., **\$5.00**; 4 ft., **\$6.00**.

ITALIAN—Bright green. Very compact in growth; nothing finer in the upright type. Shipping size 2 to 3 ft., each **\$2.50**; 3 to 4 ft., each **\$3.00**.

RETINOSPORA

PLUMOSA AUREA—Golden. 12 to 18 in., **\$2.25**; 18 to 24 in., **\$3.00**.

SQUARROSA—Dense, compact, foliage with feathery branches. Light bluish green. 12 to 18 in., **\$2.00**; 2 ft., **\$2.50**.

See page 111
for other
evergreens

Deciduous Trees

Shade and Ornamental

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 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. (The sizes given below are the approximate heights when shipped.)

ALL PRICES ON TREES F. O. B. PORTLAND
(Up to 4-foot sizes can be mailed; add postage)

ASH

AMERICAN WHITE—Broad, round head and dense foliage. Very fine. 5 to 6 ft. Each **\$1.50**.

BIRCH (Betula)

CUT LEAF (B. Alba)—Silvery white bark, slender drooping branches. 5 to 6 ft. Each **\$2.25**.

CATALPA

Splendid trees, white flowers, bright foliage.

CATALPA WESTERN (Speciosa)—Very rapid grower; a quick shade. 7 to 8 ft. Each **\$1.50**.

CATALPA BUNGEI—Dwarf dense round headed variety, much in outline like the popular Bay trees, but is hardy and better adapted for the garden. 6 to 8 ft. Each **\$3.00**.

DOGWOOD (Cornus Florida)

WHITE FLOWERING—Flowers white, 3 inches in diameter, blooming before leaves come in spring. 4 to 5 feet. Each **\$1.50**.

BOX LEAF ELDER

Variegated, hardy, leaves almost pure white. Nothing finer for specimen planting. 4 to 6 ft. **\$3.00**.

ELM

AMERICAN WHITE—A magnificent tree with drooping branches. 6 to 8 feet, each **\$1.50**.

ENGLISH—A rapid grower, erect and compact, dark green. 8 to 9 feet, each **\$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. 4 to 6 ft. **\$2.00**; 6 to 8 ft., **\$2.50**.

DOUBLE WHITE (C. Monogyna Alba Plena)—Flowers small. Leaves lustrous green. 6 ft. Ea. **\$2.00**.

HORSE CHESTNUT (Aesculus)

WHITE FLOWERING (Hippocastanum)—Foliage showy, flowers stand in upright panicles. 6 feet. Each **\$2.00**.

LABURNUM (Golden Chain)

L. VULGARIS—A beautiful small growing tree, with long, drooping racemes of fragrant yellow flowers. 6 to 8 feet. Each **\$1.75**.

LINDEN (Tilia)

AMERICAN (T. Americana)—Shapely and handsome, foliage large. 6 feet. Each **\$1.50**.

EUROPEAN (T. Europea)—Similar to American; leaf smaller. 6 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)—6 to 8 feet. Each **\$1.50**.

CATALPA BUNGEI

MAPLE (Acer)

OREGON SOFT (A. Macrophyllum)—A rapid grower, fine for avenues. 6 to 8 feet. Each **\$1.25**.

NORWAY (A. Platanoides)—Large, growth compact; foliage deep green; very handsome. 6-8 ft., **\$1.50**.

MAPLE (A. Platanoides Schwedleri)—Purple Leaf Maple. Variety Norway Maple. Young leaves are deep purple. As summer advances changes to green. 6 to 8 feet. Each **\$2.00**.

MOUNTAIN ASH (Sorbus)

EUROPEAN (S. Aucuparia)—White flowers, then beautiful red berries. 5-6 feet. Each **\$2.00**.

OAK (Quercus)

ENGLISH (Q. Robur)—Dark green leaves, very dense. 6 to 8 feet. Each **\$2.50**.

RED OAK (Q. Rubra)—Ideal for lawn or street. Dark red, shapely cut foliage. 6-8 ft. Each **\$2.50**.

POPLAR (Populus)

BOLLE'S SILVER (P. Alba Bolleana)—A compact upright grower, foliage glossy. 6 to 8 ft., **\$1.50**; 8 to 10 ft., **\$2.00**.

LOMBARDY (P. Nigra Fastigiata)—An erect rapid grower. 6 to 8 ft., **\$1.50**; 8 to 10 ft., **\$2.00**.

SYCAMORE or PLANE (Platanus)

Erect growing tree with mottled trunk. Foliage bright green. 6 to 8 ft., each **\$2.25**.

WEeping WILLOW (Salix)

WISCONSIN (S. Babylonica Dolorosa)—Large glossy leaves, pendulous habit. 5 to 6 feet, each **\$1.50**.

AMERICAN (S. Babylonica)—The well known common weeping willow. 5 to 6 feet, each **\$1.50**.

Nut trees make excellent shade trees. See page 116

Protect your trees by spraying with the proper fungicides and insecticides. See our spray department.

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 made from November until May; orders are accepted at any time for delivery in season

Apples

First Grade	Each	Per 10	Per 100
2 year	75c	\$6.00	\$50.00
1 year, 4 to 5 ft.	60c	\$5.00	\$40.00
1 year, 3 to 4 ft.	50c	\$4.50	\$35.00

F.O.B. Portland; if mailed, postage extra

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 February to June.

NORTHERN SPY—Large, round, greenish yellow, stripes of purplish-red; flesh white, juicy, brisk sub-acid; valuable for "top work." Requires good 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. October.

WINTER BANANA—Fancy market fruit; pale yellow with pink blush. November.

YELLOW BELLFLOWER—Large, oblong, yellow; flesh firm, crisp, juicy, sub-acid. October to January.

YELLOW NEWTOWN PIPPIN—Large; skin smooth, golden yellow; firm, juicy. December to May.

SUMMER VARIETIES OF APPLES

Prices the same for all apples

EARLY HARVEST—Medium size; bright straw color; tender and fine; for table and cooking. July.

GRAVENSTEIN—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. August.

YELLOW TRANSPARENT—Medium size, roundish, slightly conical; skin pale yellow; flesh tender, juicy, sub-acid; good; bears at an early age. July.

CRABAPPLE 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. September.

Apricots

	Each	Per 10	Per 100
2 year, 4 to 6 ft.	85c	\$7.00	\$50.00
1 year, 3 to 4 ft.	75c	\$6.00	\$40.00

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 to August.

ROYAL—Above medium size; sweet, rich, juicy; good dryer and canner. July.

THE LEWIS—Best flavored, perfectly hardy. Grown extensively in the Goodnoe Hills. July to August.

TILTON—Large; rich color, high flavor; very productive; similar to Royal but later. July.

FRUIT TREE LIST CONTINUED ON NEXT PAGE

FRUIT TREES—Continued from page 114

Cherries

	Each	Per 10	Per 100
2 year, 4 to 6 ft.....	\$1.25	\$10.00	\$75.00
1 year, 4 to 6 ft.....	\$1.00	\$8.50	\$65.00
1 year, 3 to 4 ft.....	\$0.75	\$6.50	\$55.00

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.

LAMBERT—Largest size; deep rich red; flesh firm; fine flavor. July.

LATE DUKE—Large, light red, excellent, sub-acid. Late July.

MAY DUKE—Large, rich, dark red; sub-acid. May.

ROYAL ANN (Napoleon Bigarreau)—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

	Each	Per 10	Per 100
1 year, 4 ft.....	\$1.00	\$9.00	\$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

	Each	Per 10	Per 100
First Grade			
4 to 6 ft.....	85c	\$7.00	\$50.00

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.

HALE'S EARLY—Early, free; extra quality.

LATE CRAWFORD—Large, yellow, dark red, juicy; freestone; canning, drying. September.

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 September.

TUSCAN CLING—Very large; yellow, blushed red. July to August.

Prunes

	Each	Per 10	Per 100
First Grade			
2 year, 4 to 6 ft.....	90c	\$8.00	\$60.00
1 year, 6 to 8 ft.....	75c	\$5.00	\$35.00
1 year, 4 to 6 ft.....	50c	\$4.00	\$30.00
1 year, 3 to 4 ft.....	40c	\$3.00	\$20.00

F.O.B. Portland; if mailed, postage extra

GIANT—Largest prune known, averaging 1½ to 2 oz. each.

HUNGARIAN—Very large; dark red, juicy, sweet; good shipper. August.

ITALIAN (Fellenberg)—Large, oval, tapering at both ends; dark purple, flesh greenish yellow; separates freely from stone; best for drying. August.

NEW STANDARD (Burbank Production)—Trees large; enormous yield; sweet, fine grained and delicious; perfect freestone; 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.

Pears

	Each	Per 10	Per 100
2 year, 4 to 6 ft.....	\$1.00	\$8.50	\$60.00
1 year, 4 to 6 ft.....	\$0.85	\$7.50	\$45.00
1 year, 3 to 4 ft.....	\$0.65	\$5.50	\$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 to 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. September to October.

WINTER VARIETIES

P. BARRY—Fine keeper. Large, yellow. Dec.-Mar.

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. December.

Plums

	Each	Per 10	Per 100
First Grade			
2 year, 4 to 6 ft.....	85c	\$7.50	\$55.00
1 year, 6 to 8 ft.....	70c	\$6.00	\$40.00
1 year, 4 to 6 ft.....	50c	\$4.00	\$30.00

F.O.B. Portland; if mailed, postage extra

BRADSHAW—Reddish purple; adheres partially to stone. July.

COE'S GOLDEN DROP—Large; light yellow. Late September.

COLUMBIA—Largest size, brownish purple; freestone. August.

DAMSON—Small, bluish purple; rather tart. Trees fruitful and hardy. August.

DAMSON SHROPSHIRE—Dark purple; very firm; flesh greenish. Late September.

GREEN GAGE—Freestone. Mid-July.

MAYNARD—Dull red, rich and sweet; sturdy, quick growing, heavy yielding; ripens in July.

PEACH—Very large; skin brownish red; freestone. July.

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.

YELLOW EGG—Very large; deep golden, rather acid; excellent for cooking; very showy. August.

Quince

	Each	Per 10
First Grade		
2 years	\$1.25	\$9.50

F.O.B. Portland; if mailed, postage extra

APPLE OR ORANGE—Well known standard variety; early; large, golden yellow; good for preserving or flavoring. September.

CHAMPION—Large, yellow; cooks very tender; delicious. October.

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.

NUT 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., ea. **\$1.00**; 10, **\$9.00**; 100, **\$65.00**
L. X. L.—A vigorous grower and sure cropper, producing nuts of large size and handsome appearance; shell thin; most popular commercial sort.

NONPAREIL—Tree slightly weeping; nut sweet and shell very thin. Best for the home.

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 ft., each **\$1.50**; 10, **\$12.50**.

FILBERTS

3 to 4 ft., ea. **\$1.25**; 10, **\$8.50**; 100, **\$55.00**

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 $\frac{3}{4}$ 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.

Get special quotations on large orders.

GRAFTED WALNUTS

FRANQUETTES, Soft Shelled—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 **\$1.50**; 4-5 ft., each **\$2.00**; 5-6 ft., each **\$2.50**; large tree, $1\frac{3}{4}$ inch diameter, each **\$3.50**; can be shipped by express or truck.

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., each **\$2.50**.

SEEDLING WALNUTS

FRANQUETTE and **MAYETTE**—Second generation, soft shell, selected stock. Trees hardy and prolific bearers. Nuts are rich and meaty. Each **\$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. 4-6 ft., each **\$1.00**; 6-7 ft., each **\$1.25**; 7-8 ft., each **\$1.50**.

Our Diamond Family Fruit & Berry Collection

As shown in full colors on page 39.

This particularly attractive and inviting collection is made up to meet a very considerable demand from our customers and is based on the greatest preferences. It makes an ideal assortment for the average family fruit and berry supply and is offered at a special discount. Here is the list—

10 Cuthbert Raspberries, the favorite redcap.....	\$0.75
3 Worden Grapes, the improved Concord.....	\$0.60
1 Bing Cherry, best two-year tree.....	\$1.25
1 Delicious Apple, best two-year tree.....	\$0.75
1 Bartlett Pear, best two-year tree.....	\$1.00
3 Cory Thornless Blackberries, mammoth berries, 1-year transplanted plants.....	\$0.75
100 New Oregon Strawberries, the finest.....	\$1.00

Total value..... **\$6.10**

**Special
Price Offer**

\$ 4.75

See page 39

3 Yr. Apple Trees

**Special Each \$1.50
10 for \$12.00**

f.o.b. Portland

We are prepared to furnish a limited quantity of very fine 3-year-old trees in the following varieties:

Baldwin **Jonathan** **Rome Beauty**
Gravenstein **Northern Spy** **Oldenburg**
King **Spitzenberg** **Yellow Bellflower**

They come into bearing a year sooner and are well worth the extra cost.

Order early to avoid possible disappointment

Currants

(Due to quarantine can be shipped only when dormant, usually from Nov. 1st to April 1st.)

Each **20c**; 10 **\$1.75**; 100 **\$12.50**; f. o. b. Portland.

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 kinds.

WHITE TRANSPARENT—The best white currant known; rich flavor; mild sub-acid.

Gooseberries

OREGON CHAMPION—Very large; pale green; sweet, fine, bush strong, prolific. Each **20c**; 10 **\$1.75**; 100 **\$12.50**; f.o.b. Portland, postage extra.

each. Grown from our select strains and 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

NEW OREGON. Best, most uniform and heaviest yielding main crop strawberry. Large, firm, of fine form, average 15 to the quart box; brilliant deep rich red, with glossy varnished appearance. Color extends through to very center and they are never hollow. Flavor is suggestive of the wild berry. Will remain on the vine for three days without injury, keep perfectly for many days after picking, stand long shipments and will hold 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.

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.

MARSHALL. One of the best all-round strawberries; very large; dark crimson throughout; fine flavor; a fine market and table berry. Our stock of Marshalls is absolutely true and a vigorous and prolific strain.

MAGOON. Originated near Portland; berry large, fine and of excellent sub-acid flavor; bears heavily throughout the season; especially adapted to Western Oregon and Washington.

PRICES—All varieties except Fall Bearing: Prepaid, 12, 30c; 25, 50c; 100, \$1.50. Not prepaid, 25, 40c; 100, \$1.00; 1000, \$8.00.

Lots of 5000 or more, \$6.00 per 1000. Not less than 500 of a kind at 1000 rate.

EVERBEARING

EVERBEARING, PROGRESSIVE. Fall bearing Strawberries. 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. The best of its class.

Postpaid, 12, 60c; 25, 75c; 100, \$2.00. Not prepaid, 12, 35c; 25, 55c; 100, \$1.75; 1000 plants, \$15.00; f.o.b. Portland.

MASTODON EVERBEARING

(See description at top of page)

MASTODON STRAWBERRIES

The largest everbearing berry grown. Mastodon is the most prolific, the firmest, the most beautiful berry with the real Strawberry flavor. Bears early and late. Can be picked all Spring and Summer. Many of the berries grow as large as a silver dollar, and are just as perfect. Mastodon is the real marvel in Strawberries; nothing like it has ever been known.

Big yields of big berries under all conditions—does not require special soil, petting or care.

Just plant them out this Spring in ordinary soil that will produce good garden or farm crops, give them only ordinary care, keep the blossoms cut off until July 1—that's all there is to it. In about three weeks you'll have berries—big, red, delicious berries—lots of them and you will continue having them until Winter.

Prepaid, 12 80c; 25 \$1.25; 100 \$3.00.

Not prepaid, 12 60c; 25 90c; 100 \$2.50; 1000 \$20.00

Grapes

PRICES F. O. B. PORTLAND

2-year plants.....each 20c, 10 \$1.75, 100 \$15.00

1-year plants.....each 15c, 10 \$1.25, 100 \$10.00

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. August.

DELAWARE. One of the finest grapes; grows freely; perfectly hardy; ripens early; berries small, bright red. August.

LUCCLE. 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. September.

WORDEN. Bunch large and compact; berry large, black; improved Concord. Late August.

Raspberries

PRICES F. O. B. PORTLAND

BLACK CAPS

2-year.....each 25c, 10 \$2.25, 100 \$20.00

1-year.....each 20c, 10 \$1.75, 100 \$15.00

GREGG. Good size, productive and hardy.

PLUM FARMER. Large, black, hardy and very productive.

RED CAPS

1-year.....each 10c, 10 75c, 100 \$3.00

CUTHBERT. Deep rich, red, large and firm; one of the best; ripens medium to late.

MARLBORO. Bright crimson. Ripens early; large, firm, good commercial variety.

ST. REGIS EVERBEARING RED CAPS. Each 20c, 10 \$1.75, 100 \$15.00.

Blackberries

PRICES F. O. B. PORTLAND

1-year.....each 15c, 10 \$1.25, 100 \$10.00

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.

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. F.o.b. Portland.

Tips—Spring delivery only.....each 20c, 100 \$12.00

1-year transplanted.....each 25c, 100 \$20.00

Loganberries

2-year plants.....each 20c, 10 \$1.75, 100 \$15.00

1-year plants.....each 15c, 10 \$1.25, 100 \$10.00

Dark red, immense clusters, June—

F. O. B. PORTLAND; POSTAGE EXTRA

This is what you have wanted!

A TEXTILE PRODUCT
PROMOTES GROWTH

For hotbeds and cold frames

FOR ENCLOSURES OF ALL KINDS, INCLUDING POULTRY HOUSES, HOT BEDS, COLD FRAMES, SCREENED PORCHES, LIVE STOCK SHEDS, ETC. Brings in the vital ultra violet rays so that poultry, live stock, plants and people are greatly benefited. Better than glass on this account, much cheaper, easy to cut with shears or scissors, apply with tacks; light in weight; no danger from broken glass. Promotes earlier maturity in plants, keeps poultry in good health, makes hens better layers, and all your chickens will put on more weight with the same rations. Replace all the glass in your chicken houses, laying houses and scratch sheds with "Suntex" and egg production will increase up to 50%.

Width inches	Per yard	50 yard bolt
30	33c	\$15.00
36	36c	\$16.50

Germâco Hotkaps

INDIVIDUAL HOUSES FOR EVERY PLANT

"HOTKAPS" FURNISH EACH YOUNG PLANT WITH COMPLETE PROTECTION FROM WIND, RAIN, FROST AND INSECTS. 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.

Quantity	Price per thousand
1M	\$11.50
5M	\$11.00
10M	\$10.75
25M	\$10.50

Aluminum 'Hotkap' Setters
Each \$2.50

All prices f.o.b. Portland

Special for Home Gardeners

For those who do not require so many we have made up a special offer of 250 "Hotkaps" complete with a pressboard garden setter for \$4.00, f.o.b. Portland.

Pressboard "Hotkap" Setters
Each 50c; f.o.b. Portland

Get Our FREE Fertilizer Book

Tells how to increase the results on your lands. Complete information about all varieties of crops.

Clipper Grain and Seed Cleaners

No. 1B

No. 1B—HAND. Capacity 20 bu. grain or 10 bu. seed per hour. Price **\$45.00.**

No. 2B—HAND. Capacity 25 bu. grain or 15 bu. seed per hour. Price **\$55.00.**

No. 6—POWER. Capacity 200 bu. grain or 35 bu. seed per hour. Price **\$150.00.**

No. 16—POWER. Three-step pulley air control. Capacity 200 bu. grain or 35 bu. seed per hour. Price **\$225.00.**

No. 16—POWER. 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.

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 re-cleaning 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, 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, a set of twelve 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

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.

Gopher & Mole Traps

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. Each **\$2.00**; postpaid.

Cinch Gopher Trap

Fits the hole, a sure killer and a most satisfactory trap. Wt. 1 lb. Price **75c**; postpaid **85c**.

Poison Cartridges

FOR GOPHERS, SQUIRRELS, MOLES, ETC.

For the extermination of moles, ground squirrels, gophers and prairie dogs. Safe, sure, economical. Will not explode. Do not deteriorate. No danger to live stock, domestic fowls or wild game. Hold in mouth of burrow, light fuse with match; after it is ignited and burning freely, place 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. Doz. **60c**; f.o.b. Portland.

OUT O'SIGHT MOLE TRAP

One of the best. Sure to "get them." Weight 2 lbs. Price **\$1.25**; postpaid **\$1.40**.

"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. **50c**. (Unmailable)

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 $11\frac{1}{4}$ in., width 4 in., wt. 3 lbs. Each **\$2.25**; postage extra.

Official Rat & Mouse Traps

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.

.. ACME BRAND .. Insecticides and Fungicides

WRITE FOR FREE SPRAYING GUIDE

ACME TWO-WAY SPRAY

A balanced insecticide and fungicide containing 14% arsenate of lead and 83% Bordeaux mixture. Two results with one application. Use wet or dry on apple, sour cherry, currant and gooseberry, grape, pear, plum, strawberry, pecan, bean, beet, cucumber, pepper, potato, tomato and many other fruits and vegetables.

1/2 lb. carton	25c
1 lb. carton	45c
4 lb. bag	\$1.25
f.o.b. Portland; not mailable	

ACME ALL-ROUND SPRAY

Flowers, vines, shrubs, roses, vegetables need protection same as commercial crops. All-Round Spray contains the three leading remedies used by all large growers, arsenate of lead, nicotine sulphate and Bordeaux mixture. Perfect protection for the small user is assured by complete directions in form of spraying guide attached to every package.

1/2 lb. carton	35c
1 lb. carton	85c

f.o.b. Portland; not mailable

ACME GARDEN GUARD

A garden insecticide and fungicide for use as a dust. No water, no mixing, no muffs. For use on cabbage, cauliflower, tomato plants, melon vines, currants and gooseberries and other vegetables, flowers and shrubs of many kinds.

1 lb. sifter carton	35c
5 lb. bag	\$1.25

f.o.b. Portland; not mailable

ACME BAIT-M

An effective insecticide bait which will throw a ring of protection around shrubs, flowers and plants in garden and lawn. For use against snails, cutworms, sow bugs, grasshoppers and many other insects which migrate along the ground.

1 lb.	30c
3 lbs.	60c
15 lbs.	\$2.75

f.o.b. Portland; not mailable

ACME ARSENATE OF LEAD

The most favored arsenical insecticide found on the American market. It is safest to use on tender foliage and sticks well on the leaves. Recommended for fruit trees, vegetables, bushes and tobacco. Can be used as dust or spray.

1/2 lb. carton	25c
1 lb. carton	45c
4 lb. bag	\$1.25

f.o.b. Portland; not mailable

ACME BORDEAUX MIXTURE

Prevents large losses caused by blight, rot, mildew, scab, anthracnose and certain other fungous diseases. It stimulates plant growth and greatly increases the harvests. Almost every kind of vegetable, fruit and shrub can be greatly improved by the early use of Bordeaux mixture.

1 lb. carton	45c
4 lb. bag	\$1.10
8 lb. bag	\$2.10
100 lb. drum	\$15.00

f.o.b. Portland; not mailable

ACME PARIS GREEN

A rich emerald color and of fine fluffy physical character. Containing 55% arsenious oxide, it will give quickest control where extreme measures are necessary. For use on potatoes, cotton, tobacco, also to mix with arsenate of lead for fruit tree spraying where quick results are necessary.

1/2 lb. carton	20c
1 lb. carton	50c
5 lb. carton	\$2.05
14 lb. kit	\$5.05
100 lb. keg	\$31.00

f.o.b. Portland; not mailable

ACME DRY LIME SULFUR

A standard 33° Baume lime and sulphur converted into a dry powder but having all the effectiveness of the liquid product when dissolved in water. For use on dormant spraying against scale, peach blight, leaf curl and twig borer. Summer spraying against scab, soot, blotch, red spider and mite.

1 lb.	35c	50 lb.	\$7.00
5 lb.	\$1.40	100 lb.	\$12.50
10 lb.	\$2.20	200 lb.	\$22.00
25 lb.	\$3.75		

f.o.b. Portland; not mailable

Patterson's Clensel

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 Aphid, 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. 1/2 pints 60c; pints \$1.00; quarts, \$1.75; gallons \$5.50. Postage extra.

Lime-Sulphur Solution

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; 10-gal. case \$4.50; 50-gal. bbl. \$11.00; f.o.b. Portland.

"EVER GREEN" Non-Poisonous Insecticide

Sure Death to Plant Insects—Harmless to Man, Birds and Animals

A sure killer of most plant insects—and yet offers no poison whatever to human beings, livestock or birds—it is positively not a poison. The active principle is Pyrethrum, or insect flowers, which has this valuable property of being deadly to nearly all insects. Especially recommended for killing CUT WORMS, CABBAGE WORMS, GREEN FLIES, WHITE FLIES, THRIPS, LEAF HOPPERS, CURRANT WORMS, APHIS, ROSE CHAFER, ROSE SLUGS, PEAR SLUGS, MEALY BUGS, MITES, RED SPIDERS, JAPANESE BEETLES, LEAF TIERS, POTATO BEETLES, SQUASH BEETLES (Stink Bugs), ASTER BEETLES, BEAN BEETLES, CUCUMBER BEETLES, ANTS, PLANT LICE, MELON BUGS.

PRICES NOT POSTPAID

1 oz. bottle	35c	6 oz. bottle	\$1.00
16 oz. bottle	\$2.00	32 oz. bottle	\$3.50
1 gal. bottle	\$13.00

Sprays • Insecticides • Fungicides

Arsenate of Lead

DRY POWDERED—LUCAS BRAND

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%—is always uniform and requires only 1 lb. to 50 gal. of water. Efficient, economical and convenient. Highest percentage of killing power. Prices, ½ lb. 20c; 1 lb. 35c; 4 lbs. 90c; 25 lbs. \$5.00; 1 case 12 4-lb. pkgs. \$9.50; f.o.b. Portland. Write for quantity prices. Poison—cannot be mailed.

Black Leaf 40

Destroys aphids, thrips, leaf hoppers on all tree, bush and vine fruits, vegetables, field crops, flowers, shrubs; also apple red bug, pear psylla and similar soft-shelled sucking insects—all without injury to foliage. It is also a control for poultry lice by painting the roosts with it. Combines readily with other sprays. 40% nicotine.

1 oz., 6 gal. spray.....35c
 ½ lb., 40 to 120 gal. spray.....\$1.25
 2 lbs., 160 to 500 gal. spray.....\$3.25
 10 lbs., 800 to 2500 gal. spray.....\$11.85
 f.o.b. Portland; not mailable

Corona Coppercarb

For 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 diseases, but does not in the slightest degree hurt germination. 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

We are northwest distributors for the well known D. & B. Solution Formaldehyde. An excellent preventive for smut on wheat, oats, barley and for potato scab. Also recommended for sterilizing bee combs infected with American foulbrood; for the prevention of hog cholera and as a general disinfectant for water closets, cesspools, drains, sinks, etc. D. & B. is a permanently fixed solution and does not grow milky or lose its strength by precipitation. Use 1 pint of formaldehyde in 40 gallons of water for wheat and barley. Dip oats with one pine 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.

IN GLASS

Pt. 60c; qt. \$1.00; gal. \$3.25; f.o.b. Portland.

IN TINS (It costs less in tins)

No. 2½ can (28 fluid oz. or ¾ qt. U. S. Std.) 75c.
 No. 10 can (112 fl. oz. or 7½ gal. U. S. Std.) \$2.00.
 Case of 6 No. 10 cans.....\$11.00
 f.o.b. Portland

"NICO-FUME" TOBACCO POWDER

For Fumigating Greenhouses

Tobacco powder impregnated with a high strength nicotine solution. Effective for fumigating in greenhouses to destroy aphids, 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; not mailable.

"NICO-FUME" LIQUID

For fumigating and spray for greenhouse work. Kills aphids, red spider, mealy bug, thrip, etc. 1 lb. can \$2.50; 4 lb. can \$8.00; 8 lb. can \$15.00; f.o.b. Portland; not mailable.

GOLD LEAF TOBACCO POWDER

2 lb. pkg., each 30c; doz. \$3.00. 10 lb. pkg., each \$1.00; case of 6 \$5.50; 100 lbs. \$9.00; f.o.b. Portland.

BLUE STONE (Blue Vitriol)

Per lb. 20c; per 100 lbs., market price; f.o.b. Portland; not mailable.

HAMMOND'S SLUG SHOT

For destroying slugs, cabbage and turnip flea, currant worms, etc. 5 lb. pkg. 85c; f.o.b. Portland.

HAMMOND'S GRAPE DUST

To prevent mildew on roses, grapes and gooseberries. 5 lb. pkg. \$1.25; f.o.b. Portland.

BUHACH

1½ oz. 25c; 3 oz. 50c; 6 oz. 75c; 12 oz. \$1.25; 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. \$2.50; 10 lbs. \$4.75; 25 lbs. \$10.50; f.o.b. Portland.

Napthalene

For 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. 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.

Redoilo

AS A SUMMER SPRAY—Very efficient for young San Jose scale and certain aphids, 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 aphid use 1 gallon of oil to 15 or 16 gallons of water.

Price, qt. 40c; gal. 95c; 5 gal. \$3.50; 10 gal. \$6.50; bbl. \$22.00; f.o.b. Portland.

Whale Oil Soap

For aphids, plant lice, etc. Per bar 20c; f.o.b. Portland.

Diamond Earwig Bait

Especially prepared by us to meet the requirements of the city and state. Requires very much less bait than the ordinary baits on the market and we recommend it for real results. 10 lbs. \$1.00; f.o.b. Portland.

For rodent killers see page 119. For dairy and poultry insecticides or disinfectants see pages 133 to 137

With Reserve Air Pressure Tank

\$36.90

Without

\$25.00

Ideal Spraying Outfit

Especially for small growers, city and suburban homes, poultrymen and for use with whitewash, cold water paint, insecticides, stock dips, etc. Heavy galvanized tank holds 15 gallons. Pump has large air chamber, bronze ball valves and is easily removable. Tested to a pressure of 275 lbs. Mechanical agitator and strainer. Complete with 6 ft. of $\frac{3}{8}$ -in. hose, 4-ft. jointed extension, T-handle shutoff, "Ideal" non-corroding nozzle; 18-in. wheel, $2\frac{1}{2}$ -in. tire. Heavy steel tubing frame. Easy to wheel about.

No. 33. Complete with reserve air pressure tank and 200-lb. pressure gauge, maintaining an even pressure for a considerable time on one pumping. Ship. wt. 105 lbs. Price **\$36.90**.

No. 32. Without reserve air tank, equally efficient, but more frequent pumping is necessary. Ship. wt. 75 lbs. **\$25.00**.

Compressed Air Sprayers

High pressure sprayers for use spraying disinfectants, insecticides, whitewash, cold water paints, washing windows, fire fighting, etc. Strong practical sprayers of the best make, pumps and working parts of brass, handles and fittings are malleable iron and will not break. Shutoff valve is automatic, operates under all pressures and is all brass. Extension rods are brass, tanks are tested to heavy pressures.

No. 130. FAVORITE, 4 gallon size Tank $20 \times 7\frac{1}{2}$ in., approximately 4 gal., complete as illustrated. Ship. wt. 11 lbs. Price with galvanized tank **\$6.00**; with brass tank **\$9.20**; f.o.b. Portland.

No. 140. JUNIOR, $2\frac{1}{2}$ gallon size Smaller and easier to carry on account of its lighter weight. Plenty large enough to hold sufficient spray for general home work. Price with galvanized tank **\$5.50**; with brass tank **\$8.25**; f.o.b. Portland.

No. 118G. PILOT, one gallon size This is the handiest flower garden size made; it is carried and operated with one hand, leaving the other hand free to work around on bushes and plants. Light and easy to carry, the weight filled being only 10 to 11 lbs. Size of tank $6\frac{1}{2} \times 8\frac{1}{2}$ in., automatic shutoff valve of brass, pump is brass, tank galvanized, will handle any solution. Ship. wt. $4\frac{1}{2}$ lbs. Price **\$4.25**, f.o.b. Portland.

No. 118

No. 130-140

No. 452. MISTY SPRAYER. Extra sturdy in construction, point of pump passing through tank, with spray and siphon tubes in perfect alignment. Has drip cup to absorb seepage. Length 21 inches. Heavy tin tank, 1 full quart cap. Ship. wt. $1\frac{1}{4}$ lbs. Price **40c**; postpaid **50c**.

No. 430. GLASS JAR SPRAYER. Has quart Mason jar for tank. Easy to change from one spray to another by simply changing jars, eliminating cleaning tank to change sprays. Has wide fan-shape spray. Wt. 3 lbs. Price **65c**; postpaid **75c**.

No. 202. MIDGET SPRAYER. Small size, especially for home use, extra sturdy, 10 in. long, tin tank $\frac{3}{4}$ pint capacity. Ship. wt. $1\frac{1}{2}$ lbs. Price **30c**; postpaid **35c**.

No. 427. CONTINUOUS SPRAYER. Has detachable can with wide mouth for filling, continuous spray, all brass working parts, nozzle adjustable from finest to coarse spray, 1 qt. capacity. With tin tank **\$1.00**; with brass tank **\$1.50**; postage 10c extra.

No. 426. COMET CONTINUOUS SPRAYER. Variable nozzle, any spray from fog to solid stream, instantly adjusted, all working parts brass, valve easily accessible. Handles all types of oil and water sprays, 1 qt. size. Heavy tin tank **75c**; brass tank **\$1.25**; postage 10c extra.

No. 30. ASPINWALL SPRAYER. Strong tin tank, 1 quart. Weight $1\frac{1}{2}$ lbs. Price **40c**; postpaid **50c**.

No. 303. FOG SPRAYER. For vaporizing fly oils and insecticides so fine as to remain suspended in air. Tin, 1 pt. **40c**; postpaid **50c**.

DUSTERS

MAJOR DUSTER—Large powerful dust sprayer with extension nozzle, easy to reach into inaccessible corners, $2\frac{3}{4}$ x 9-inch pump. Each \$1.00; postpaid \$1.10.

CADET DUSTER—Covers every surface with a cloud of dust, hunts every crack, nothing escapes treatment. Each 50c; postpaid 60c.

BUCKET SPRAY PUMPS

SINGLE CYLINDER

No. 122. Double acting, high pressure, large capacity. Discharges on both up and down strokes. Solid bronze ball valves, brass working parts. Complete with hose, nozzle, discs for fine or coarse spray and solid stream cap. Wt. 6 $\frac{1}{2}$ lbs. Each \$4.40; f.o.b. Portland.

DOUBLE CYLINDER

No. 128. All operation is on the down stroke. Continuous spray. Solid bronze ball valves, all working parts brass, non-corroding. With hose, extension rod, nozzle, discs for fine or coarse spray and solid stream. Wt. 7 $\frac{1}{2}$ lbs. Each \$4.75; f.o.b. Portland.

LEVER HANDLE

No. 126. Lever handle, large air chamber, the most powerful and easiest to operate. All working parts solid brass, brass ball valves, patent agitator. Graduating nozzle, fine or coarse spray or a solid stream. With 3 ft. hose and extension. Weight 8 lbs. Each \$6.00; f.o.b. Portland.

TROMBONE SPRAYER

No. 123. High pressure, for orchards, shrubbery, shade trees, field crops, whitewashing, etc. Double acting, continuous, all working parts brass, bronze ball valves. Easy to clean. With 3 ft. hose, intake pipe and strainer, fog nozzle with adjustable discs. Ship. wt. 3 $\frac{1}{2}$ lbs. Each \$4.40; f.o.b. Portland.

"GRUN" SULPHUR SPRAYER

For dry dusting. Grinds the cloddiest sulphur to the finest powder while operating sprayer, no stops, good steady flow. Grinding devices so arranged they can be easily removed through side opening for cleaning. Easy to operate, simple construction, no useless screws, strong and durable.

No. 1. Capacity 22 lbs., net wt. 15 lbs. \$18.00; f.o.b. Portland.

No. 2. Capacity 13 $\frac{1}{2}$ lbs., net wt. 13 lbs. \$18.00; f.o.b. Portland.

Spray Hose

Spray hose can be cut 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; we strongly recommend it to orchardists. $\frac{1}{2}$ -inch size, per foot 24c; f.o.b. Portland.

AJAX SPRAY HOSE—Splendid moulded hose, stands high pressure. $\frac{3}{8}$ -inch size, per foot 16c; f.o.b. Portland.

Garden Hose

CORRUGATED NON-KINKABLE CRACK-PROOF GARDEN HOSE—Especially recommended for florists and gardeners for hard service. 50-foot lengths, coupled ready for use. $\frac{5}{8}$ -inch, per foot 14c; f.o.b. Portland.

Spray Nozzles, Extensions and Fittings

Prices below are all f.o.b. Portland

SENECA NOZZLE—Gives a very wide spray, discharge easily graduated. Also excellent for whitewashing. Wt. 5 oz. Price \$1.25.

NON-CLOG NOZZLE—The best hop nozzle, perfect spray, produces a fog in great volume at a light pressure. Wt. 5 oz. Price 75c.

VERMOREL NOZZLE—With degorger; gives a conical discharge. Wt. 4 oz. \$1.00.

NOZZLE ELL—Wt. 2 oz. Price 25c.

NON-CLOG ANGLE—Wt. 9 oz. 85c.

BRASS Y— $\frac{1}{4}$ -in., for nozzle only. 50c.

HOSE REDUCER—For nozzle or extension. Wt. 3 oz. Price 45c.

HOSE CONNECTION—For nozzle or extension. Wt. $\frac{1}{4}$ lb. Price 35c.

STOPCOCK—Wt. $\frac{1}{2}$ lb. \$1.00.

DOUBLE CUTOFF—Wt. 2 lbs. Price \$2.50.

HOSE WASHERS— $\frac{1}{2}$ in., rubber. Doz. 10c.

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.

HOSE COUPLINGS—For garden hose, $\frac{1}{2}$ or $\frac{3}{4}$ inch, complete. Pair 40c.

BRASS YERDON'S BANDS— $\frac{1}{2}$ in. Each 10c; doz. 75c.

CALDWELL BANDS— $\frac{1}{2}$ or $\frac{3}{4}$ inch. Doz. 35c.

BAMBOO EXTENSION—Has iron pipe inside of bamboo, threaded for nozzles and cock. 2 to 4 ft. \$1.15; 6 ft. \$1.45; 8 ft. \$1.75; 10 ft. \$2.00; 12 ft. \$2.25. With stopcock, add \$1.00.

Planet Jr. Garden Tools

All prices on this page are
f.o.b. Portland

PLANET JR. COMBINED HILL and DRILL SEEDER, WHEEL HOE, CULTIVATOR and PLOW

Soon pays for itself in the family garden as well as in larger acreage. Sows all garden seeds, in drills or in hills; plows, opens furrows and covers them, hoes and cultivates; all quickly and easily.

No. 25. With all parts as illustrated. Seeder holds 2 qts. Weight 60 lbs. Price **\$22.50**.

No. 4. Complete as shown in cut except the double wheel is omitted. Holds 2 quarts. Weight 50 lbs. Price **\$19.00**.

No. 4. Seeder only, without hoes, cultivators and plows. Holds 2 qts. Weight 35 lbs. Price **\$15.25**.

No. 3. Hill and Drill Seeder only, without other attachments. A favorite with onion growers and market gardeners. Holds 3 quarts. Weight 43 lbs. Price **\$18.50**.

PLANET JR. STAR PULVERIZER, LEV- ELER AND WEED- ER

—For preparing seed bed.

After crops are started, use between rows as a weeder or as a crust breaker. Width 7½ in. Wt. 5 lbs. Price **\$3.50**.

PLANET JR. DOUBLE WHEEL HOE, CULTIVATOR AND PLOWS

A single and double wheel hoe in one. Straddles crops till 20 inches high and then works between. Strong steel frame, 14-inch steel wheel.

No. 12. Complete hoe, cultivator and plow as shown. Wt. 33 lbs. Price **\$11.50**.

No. 13. With hoes only (omitting cultivator and plow). Wt. 25 lbs. Price **\$8.75**.

PLANET JR. SINGLE WHEEL HOE, CULTIVATOR, RAKE AND PLOW

Used mostly between the rows, yet by mounting the wheel on the other side of arm it can be used to hoe both sides at once while plants are small.

No. 16. Complete with hoe, cultivators, rakes and plows as shown. Wt. 26 lbs. Price **\$9.50**.

No. 17. Same as above, less the rakes. Price **\$8.25**.

No. 17½. Has hoes and cultivator teeth only. Price **\$7.25**.

No. 18. Has hoes only. Price **\$6.25**.

ATTACHMENTS AND RENEWAL PARTS FOR PLANET JR. GARDEN TOOLS

Plow for Single Wheel Hoes. Each **\$1.50**.

Plows for Double wheel Hoes. Pair **\$1.50**.

Double Mouldboard Plow for Single Wheel Hoe. Each **\$3.00**.

Disc hoes with dirt shield. Set **\$3.50**.

Hoes
S100 and S101
Size Pair
4½ in. **\$1.20**
6 in. **\$1.30**
7½ in. **\$1.50**
9 in. **\$1.65**

Cultivator Teeth. Each **40c.**

Three Prong Cultivator Teeth. Pair **\$2.25**.

RAKES
3-tooth, pair **\$1.50**
5-tooth, pair **\$2.00**
7-tooth, pair **\$3.00**

Peat Land Hoes, 6 in. Pair **\$2.60**.

PLANET JR. GARDEN PLOW

No. 119. Large 24-in. wheel, 1½-in. rim, strong frame, complete with plow, wide and narrow cultivator teeth, reversible scuffle blade and wrench. Wt. 18½ lbs. Price, f. o. b. Portland, **\$4.50**.

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. Also for

lettuce, spinach, beet, cabbage and will sow anything from turnips to peas. Ship. wt. 45 lbs. Price **\$15.00**; f.o.b. Portland.

BROADCAST SEED SOWERS

CYCLONE SEEDER

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 pounds. Price **\$2.50**; f.o.b. Portland.

CAHOON SEEDER

Made of steel, iron and brass; the most popular and best; force feed; does excellent work. Sows all grains and grass seeds. Wt. 9 pounds. Instructions included. Price **\$5.00**; f.o.b. Portland.

HORN SEED SOWER

A good serviceable seeder, practical, easy to handle and supplies a big demand. Nozzle is adjustable. Heavy tin. Weight 1 lb. Price **\$1.00**; f.o.b. Portland.

Potato Planters

No. 301 No. 302

No. 301. POTATO PLANTER. An inexpensive, simple metal planter preferred by many. You lift the planter to drop in the potato. Ship. wt. 4 lbs. Price, f.o.b. Portland, **\$1.35**.

No. 302. TUBULAR POTATO PLANTER. 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. Wt. packed 5 lbs. Price, f.o.b. Portland, **\$1.95**.

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. Ship. wt. 5 lbs. Price, f.o.b. Portland, **\$6.00**.

Corn Planters

No. 306

No. 309

No. 306. CORN PLANTER. A two-handed planter. Light, well made and especially adapted to heavy, cloddy or stony soils. Adjustable—from popcorn to large kidney beans. Ship. wt. 4 lbs. Price, f.o.b. Portland, **\$1.35**.

No. 309. AUTOMATIC CORN PLANTER. Puts the right number of kernels just where you want them and at the proper depth, requiring only one hand, either right or left. Ship. wt. 6 lbs. Price, f.o.b. Portland, **\$2.50**.

MAYNARD GARDEN TROWEL, steel socket shank, extra heavy, wt. 1 lb. Price, not prepaid, **\$1.00**.

No. T15. GARDEN TROWEL, one piece blade and socket, wt. 1 lb. Price, not prepaid, **50c**.

No. T25. TRANSPLANTING TROWEL, wt. 1 lb. Price, not prepaid, **20c**.

No. 30. SPADING FORK, forged steel, 3 tines, wt. 1 lb. Each, not prepaid, **50c**.

No. 39. ALL STEEL TROWEL, one-piece, unbreakable, blue lacquered, sharpened, wt. 1 lb. Price, not prepaid, **25c**.

No. 40. TRANSPLANTING TROWEL, 1 1/2 x 6 1/4" blade, all steel, blue lacquered, wt. 1 lb. Price, not prepaid, **25c**.

SPECIAL
No. 38.
GALVANIZED
STEEL TROWEL,
one-piece blade
and handle,
wt. 1 lb.
Price
10c

Cultivating Tools

**NORCROSS
CULTIVATOR HOES**

Keeps down weeds, saves moisture, leaves the ground level. 4-ft. handle. Prices f.o.b. Portland.

FIVE PRONG for regular garden work; wt. 4 lbs. Price **\$1.00**.

THREE PRONG for narrower rows and close work; weight 3 lbs. Price **75c**.

No. 330. WEEDER, Village Blacksmith brand, weight 1 lb. Price, not prepaid, **50c**.

No. 82. WEEDER, 1-piece* pressed steel, easy to handle., unbreakable; length 9½ in., blue enameled, wt. 1 lb. Price, not pd., **20c**.

MAGIC WEEDER, spring steel, 3 tines, wt. 1 lb. Price, not prepaid, **15c**.

HAZELTINE'S WEEDER, spring steel blade, wt. 1 lb. Price, not prepaid, **30c**.

ALL PURPOSE RAKE—Unequaled for removing dandelions. Cleans the grass of acorns, twigs, dead leaves and trash better than any other. Teeth are self-cleaning by a backward stroke. Price, f.o.b. Portland, **95c**.

PLANET JR. GRASS EDGER—You can edge either straight or curved walks of cement, stone or brick, rapidly and easily. Weight 4 lbs. Price, not prepaid, **\$1.75**.

No. 3. VILLAGE BLACKSMITH GRASS HOOK, with offset handle. Forged cutlery steel, tempered, ground sharp and whetted, wt. 1 lb. Price, not prepaid, **65c**.

GOODWIN Grass Shears

Made to cut fast and clip close without barking knuckles or making blisters. Easy to get into corners, or cut edges at walks, around shrubs and flowers, etc. Every inch of blade lies flat on ground, will cut the toughest grass from tip to hilt. Hand is in comfortable position. Ship. wt. 1 lb. Prices not prepaid. Ball Bearing Model, **\$1.75**; Bronze Bearing Model, **\$1.25**.

PRUNING TOOLS

Nos. 41 and 31

No. 40

No. 40. PRUNING SHEARS, 9-in., 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. 31, with ratchet, same as No. 41, but unpolished finish. Wt. 1 lb. Price **\$1.25**.

Prices above are not prepaid

LETTUCE OR VEGETABLE KNIFE, 3-in. blade, riveted into ferruled wood handle. Postpaid **35c**.

No. 2. PRUNING KNIFE, wood handle, stationary blade, high grade tempered steel. Postpaid **\$1.10**.

No. 4. PRUNING KNIFE, polished wood handle, highest quality blade, strong spring. Postpaid **\$1.50**.

No. 6. GRAFTING KNIFE, wood handle, stationary blade of highest grade steel. Postpaid **85c**.

No. 8. BUDDING KNIFE, ebony handle, ivory opener, best quality steel blade. Postpaid **\$1.75**.

No. 13. BUDDING KNIFE, wood handle, stationary blade. Postpaid **50c**.

NEW BASTIAN TREE 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. Light, strong and durable.

Size	Price
6 ft.	\$1.75
8 ft.	\$2.00
10 ft.	\$2.25
12 ft.	\$2.50
14 ft.	\$2.75
16 ft.	\$3.00
F. o. b. Portland	

GRAFTING WAX

P. S. Co. Brand	
¼ lb.	20c
½ lb.	35c
1 lb.	60c
Not prepaid

No. 3

Pruning Saw

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 not prepaid.

No. 1

Pruning Saw

No. 1. REGULAR PRUNING SAW, best silver tool steel, regular tooth. Ship. wt. 1 lb. 16 in. **\$1.35**; 18 in. **\$1.50**. Prices not prepaid.

No. 13. CALIFORNIA PRUNING SAW, crescent shape, best silver steel, regular tooth. Ship. wt. 1 lb. 14 in. **\$1.75**, not prepaid.

CORN OR SLASHING KNIFE, 22½ in. long, strong heavy blade, wt. 2 lbs. Price **85c**, not prepaid.

ASPARAGUS KNIFE, has long shank and blade for cutting the tips below the surface. Each **50c**; postpaid **60c**.

Mann's Green Bone Cutters

THE ONLY MACHINES THAT WILL CUT GREEN BONES AND NOT CLOG

Especially for Poultry Ranches and Fox Farms

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 patent automatic self-governing feed, producing uniform pressure against knife, whether the bone be hard or soft.

No. 5B. Has four knives, large solid cylinder, with balance wheel for bench use. Ship. wt. 55 lbs. Price **\$18.50**.

No. 7. Mounted on a strong iron stand. Large open-hinged cylinder, instant access to all working parts, six knives, gear guard, anti-clog device, heavy balance wheel. Ship wt. 107 lbs. **\$27.50**.

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 as easily as the No. 7. Ship. wt. 150 lbs. Price **\$42.00**.

No. 9. Intended for flocks of 100 to 300 hens. Similar to No. 7 but has larger cylinder, greater holding capacity, larger table, etc. Hand only. Ship. wt. 170 lbs. Price **\$44.00**.

No. 12 POWER. Capacity 120 to 150 pounds per hour. Horse-power required, one to two. Ship. wt. 260 lbs. Price **\$70.00**.

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. Ship. wt. 420 lbs. **\$136.00**.

All prices f.o.b. Portland

FINE
FOR
FOX
FARMS

WILSON'S DRY BONE MILL No. 1

This is a practical mill, grinding all kinds of shell, cockery, grit, burnt dry bone, feed, etc., coarse or fine. Weight 33 lbs. Price **\$6.25**, f.o.b. Portland.

"NEW MODEL" CLOVER CUTTER

Cuts either green or dry, such growths as clover, alfalfa, vegetable tops, etc., into ½ in. lengths. The cutting mechanism is the most 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 28¾ inches. Weight 70 lbs. Price **\$18.00**, f.o.b. Portland.

Barrel Spray Pumps

No. 1183. 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. Price **\$12.75**.

OUTFIT B. Pump with 15 ft. of spray hose and Vermorel nozzle. **\$16.95**.

OUTFIT C. Pump mounted in barrel, 15 ft. hose, 8 ft. bamboo extension and Vermorel nozzle and cut-off complete. Price **\$21.75**.

All prices f.o.b. Portland

For larger spray pumps write for prices

QUEEN INCUBATORS

Famous for BIG HATCHES of STRONG HEALTHY CHICKS THAT LIVE and GROW 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.

ALL COPPER TANKS, COILS AND HEATERS

No. 21—130-egg Capacity

No. 35—800-egg Capacity

QUEEN STANDARD STYLE—NUMBERS 1, 2, 4, 25 AND 35

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 insulations. Inner doors have glass panels full length and height of egg chamber.

EGG TRAYS are self supporting—no danger of dropping and breaking eggs. Nursery trays included.

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 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.

No.	1	2	4	25	35
Egg Capacity.....	85	135	275	600	800
Floor Space.....	23x28	18½x32	34½x45½	34½x81	34x120
Egg Trays, size.....	16½x18½	21x24	16½x30	16½x30	16½x30
No. of Egg Trays.....	1	1	2	4	6
Shipping Weight.....	80 lbs.	95 lbs.	145 lbs.	250 lbs.	410 lbs.
Price, f.o.b. Portland.....	\$27.50	\$33.00	\$51.00	\$97.50	\$121.50

Queen "Style K" Incubators

See illustration of No. 21 at top of page

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, 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.	Capacity	Floor Space	Ship. Weight	Price, f.o.b. Portland
20	70-egg	23 x28 in.	75 lbs.	\$18.00
21	130-egg	28½x32 in.	90 lbs.	\$25.50

If further information is desired write for complete QUEEN catalog

QUEEN EXTRA PARTS

Full line of extra parts for Queen Incubators.

THERMOMETERS

Queen Incubator Thermometer.....	\$1.25
Queen Brooder Thermometer.....	\$1.00
Household Thermometer	50c

Add 10c for postage when mailing

BUCKEYE EXTRA PARTS

We also carry a complete stock of parts for the Buckeye Brand Incubators we formerly sold. Write for price list or send us your orders for quick service.

Special close-out prices on a few No. 5 Buckeye Incubators, 600-egg capacity. Send for information.

This damper regulates your check draft and the direct draft to your fire.

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
Chick size.....	400	800	1200
Height, inches.....	18	23	26
Diam. of grates, in.....	9	9	10 3/4
Diam. of pipe collar, in.....	4	4	4
Diam. of hover, in.....	42	48	56
Ship. wt. with hover, lbs.....	76	81	108
Price f.o.b. Portland.....	\$16.50	\$20.50	\$24.75

Queen Mammoth Brooder Stove

This brooder stove operates the same as those above, but has considerably greater capacity and will prove very popular. Here are the dimensions: No. 4M. Chick size 1600, height 37 inches, diameter of grates 13 1/2 inches, depth of fire box 14 inches, depth of magazine 14 inches, pipe opening 5 inches, diameter of hover 60 inches, coal capacity 75 lbs., ship. wt. 165 lbs. Price, f.o.b. Portland, **\$32.50**.

Queen Oil Burning Brooder

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. Prices f.o.b. Portland.

300 chick size, 32-inch Hover.....	\$18.00
600 chick size, 42-inch Hover.....	\$18.75

No. 4M

Buckeye Portable Brooders

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

	Diam.	Capacity	Special
No. 20—19 in.,	60 chicks.....	\$7.50	
No. 21—22 in.,	100 chicks.....	\$11.50	
No. 22—30 in.,	160 chicks.....	\$13.50	

We are closing out these Portable Brooders as the present demand is chiefly for the larger sizes. Just a few left and prices are far below cost while 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**.

Can be operated

or out of doors.

Directions for making

brooder enclosed.

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**.

Fountains • Feeders

HAWES AUTOMATIC WATER VALVE

For watering poultry and small stock. The float rests on the water and as it rises and falls the valve closes or opens. Float turns up to clean bowl. Easy to install on water line or tank.

Ea., f.o.b. **\$1.00**
Portland Postpaid **\$1.10.**

"GUARANTEED" AUTOMATIC WATER FOUNTAIN

Especially designed for poultry, can be attached to any water line, tank or barrel. Operates by gravity pressure of drinking pan, supplies fresh water to fowls automatically. Ea. **\$1.50**; postpaid **\$1.60.**

CIRCULAR CHICK FEEDER—Heavy galvanized iron, chicks cannot climb in.

8 holes, each.....**15c**
12 holes, each.....**25c**
Not prepaid

SANITARY STONE FOUNTAIN—Strong, well finished; made in two pieces. They keep the water cool.

1/2 gallon**65c**
1 gallon**75c**
2 gallon**\$1.25**
f.o.b. Portland

STAR FOUNT AND FEEDER—One piece of metal, holds a Mason quart jar. Without jar, each **10c**; postpaid **20c.**

McCANDLISH CHICK FEEDER

—Revolving rod prevents chicks perching on it, making feeder sanitary; adjustable partitions for feed, ideal for drinking. Galvanized iron, no rough edges, cannot capsize.

20 inch, wt. 3 lbs.....**50c**
30 inch, wt. 4 lbs.....**75c**
Prices f.o.b. Portland

McCANDLISH IMPROVED TIN BUTTERMILK FEEDER—With new style hood. 20 inch, each **65c**; 30 inch, each **90c**; f.o.b. Portland.

Egg Scales

BREEDER'S MAGIC EGG TESTER

No light.
No electricity.
No expense and lasts a lifetime.
Shows the hatchable eggs before incubation.
Special at **75c**;
postpaid **85c.**

Leg Bands

FOR POULTRY AND PIGEONS—Neat, compact and smooth fastening, with no catching points; easily attached and absolutely secure. Prices, postpaid, 12 for **65c**; 25 for **25c**; 50 for **40c**; 100 for **65c.**

GILT EDGE EGG SCALE—Simple in construction, easy to operate, graduating by the ounce per dozen. Price **\$1.25**; postpaid **\$1.35.**

CHINA NEST EGGS

Best grade
Opal eggs.
Wt. doz. 3/4 lb.
Three for **15c**;
12 for **35c**;
postage extra.

LIME NEST EGGS

Superior to China, not so cold, and are indestructible.
Wt. doz. 2 lbs.
Three for **15c**;
doz. **40c**;
postage extra.

SPIRAL COLORED LEG BANDS

Made like a key ring—easy to put on, nothing to catch or tear off. All sizes. 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.**

CHAMPION EGG GRADING SCALE—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.**

PETTEY'S POULTRY PUNCH

Can be put on a key ring or used for a watch charm. Will not clog. **25c**; ppd.

SCISSOR POULTRY PUNCH

Strong and durable. Cuts clean. Price **15c**; postpaid **20c.**

RABBIT DISHES

Earthenware, incurved edges prevent rooting out the food. 6-in. **20c**; 8-in. **25c** each. Not mailable.

THE LINCOLN EGG SCALE—No adjusting; simple, durable, accurate. Price **50c**; postpaid **60c.**

Illustration shows small base and large base, also each base with an extra section added

If an additional quantity of sprouted grain is needed, owing to an increase in size of flock, one or more additional sections may be added, greatly increasing the capacity without enlarging space occupied.

Prices are f.o.b. Portland

SMALL BASE—Holds $\frac{1}{4}$ bushel, 2 trays, 25 to 35 hens, size 18x14 in., 28 in. high, wt. 30 lbs. **\$9.00.**
SMALL SECTION—Holds $\frac{1}{4}$ bushel, 2 trays, wt. 18 lbs. Price for extra section **\$3.50.**

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 extra section **\$7.50.**

Handy Egg Crates

The strongest, lightest egg carrier made. You can mail eggs in this crate for 150 miles and have crate returned for $3\frac{1}{4}$ c a dozen. 12 dozen capacity.

Without fillersEach **65c**; doz. **\$7.20**
 With fillersEach **75c**; doz. **\$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. 3, 15-egg size, wt. 1 lb., doz.**\$3.00**
 No. 4, 30-egg size, wt. $1\frac{1}{2}$ lb., doz.**\$3.75**
 No. 5, 50-egg size, wt. 2 lb., doz.**\$5.00**

Prices f.o.b. Portland

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, doz. **55c.**

IDEAL PAPER EGG BOXES

For delivering eggs to private families. Nicely printed with a blank space for your name and address. One dozen size. Wt. 12 lbs. per 100. **20c** doz.; **\$1.10** per 100; **\$10.00** per 1000; f.o.b. Portland.

WIRE HENS' NESTS

Strongly made; very durable; faster to the wall; no harbor for vermin. Wt. 10 oz. ea.

Each **20c**;
 doz. **\$1.50**;
 f.o.b. Portland

Grain Sprouters

ALL METAL—SECTIONAL

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 advantage of the Metal Sprouter is the very small floor space occupied.

Markers for Cattle Sheep and Hogs

Metal Band
 Ear Marker
 and Aluminum
 Ear Button

Oval Ear
 Punch
 Also used
 to attach
 Ear
 Markers

Punch
 for
 Ear
 Buttons

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 other.

METAL EAR LABELS

Not more than ten large letters can be used on the hog and sheep size; 15 large or 22 small letters on cattle size.

Prices—two sizes

	Sheep and 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.....	\$0.85	\$0.90
100 with name only or number only.....	\$1.25	\$1.75
50 with name only or number only.....	\$1.00	\$1.25
25 with name only or number only.....	\$0.75	\$0.85

Weight for mailing: cattle size, $2\frac{1}{2}$ lbs. per 100; sheep size, 1 lb. per 100. If mailed, postage extra.
OVAL EAR PUNCHES—Cattle size, **\$1.75**; sheep and hog size, **\$1.40**; postage 10c each.

IDEAL EAR BUTTONS

Pure aluminum hardened, medium size, suits all animals, clinches tight, cannot come out. Name and address on top side; number on 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. If mailed, postage extra.

25—Mailing wt. 3 oz.	\$1.35
50—Mailing wt. 4 oz.	\$2.00
100—Mailing wt. 12 oz.	\$3.75
500—Mailing wt. 4 lbs.	\$16.50
1000—Mailing wt. 6 lbs.	\$30.00

Punch and Pliers, ea. **\$1.50**; postage 10c.

Diamond CHICK FOOD

MADE ONLY BY

PORTLAND SEED CO.
PORTLAND, OREGON

Diamond Pigeon Food

A complete feed for pigeons; especially prepared to meet the requirements of the pigeon clubs. Select grains cut by a special process and screened to eliminate any dust or dirt. Composed of corn, peas, kaffir corn, milo, hemp, wheat and vetch seeds.

25 lbs. **\$1.25**; 50 lbs. **\$2.00**; 100 lbs. **\$3.50**; f.o.b. Portland.

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 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 to buy. 25 lbs. **\$1.25**; 50 lbs. **\$2.00**; 100 lbs. **\$3.45**; f.o.b. Portland. Subject to change without notice.

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. 25 lbs. **\$1.00**; 50 lbs. **\$1.75**; 100 lbs. **\$2.75**; f.o.b. Portland. Subject to market changes.

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. 25 lbs. **\$1.00**; 50 lbs. **\$1.75**; 100 lbs. **\$2.75**; f.o.b. Portland. Subject to market changes.

Super-Solid Buttermilk for Poultry

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 gal. keg **\$5.25**; half barrel, 30 gals., **\$14.85**; barrel, 52 gals., **\$21.50**; f.o.b. Portland.

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.

MEAT SCRAPS

Perfectly prepared, fine ground and clean. Write for prices.

MEAT MEAL

Should be mixed with the soft food. No hides or tankage 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.

LINSEED MEAL

Old process. Write for prices.

CHARCOAL

Prepared especially for poultry; no dust; a good thing for bowel trouble, sour crop and indigestion. 50 lbs. **\$2.00**; f.o.b. Portland.

DIAMOND OYSTER SHELL

Clean stock, free from dust and waste. Crushed in two sizes, coarse and fine. 6 lbs. **25c**; 100 lbs. **\$1.50**; f.o.b. Portland.

DIAMOND CRYSTAL GRIT

Two sizes, chick and hen size. We send hen size unless otherwise ordered. 100 lbs. **\$1.00**; f.o.b. Portland.

POULTRY PEPPER COM- POUND

A tonic and invigorator; ground. 1 lb. **25c**; postage extra.

EPSOM SALTS

For poultry. 5 lbs. **35c**; 10 lbs. **60c**; 25 lbs. **\$1.25**; 100 lbs. **\$4.50**.

Conkey's Poultry Remedies

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 over twenty-five years Conkey has been the poultry doctor. Take his advice. Conkey's Poultry Book mailed for 6 cents in stamps.

CONKEY'S WHITE DIARRHEA TABLETS

A preventive of bowel troubles, white diarrhea and other digestive complaints. Also a preventive measure in treatment of coccidiosis, a diarrhetic condition which attacks chicks similarly to white diarrhea, but differs in that a principal symptom is bloody droppings rather than white. Pkgs. 30c, 60c; or 35c, 65c, postpaid.

principal symptom is bloody droppings rather than white. Pkgs. 30c, 60c; or 35c, 65c, postpaid.

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 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; postpaid 35c.

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; f.o.b. Portland.

CONKEY'S BLACKHEAD REMEDY

Turkey breeders should have package on hand as blackhead is deadly in advanced stages. Pkg. 60c; ppd. 65c.

CONKEY'S LICE POWDER (Contains Sodium Fluoride)

For dusting hens, nests, growing chicks—wherever body lice must be overcome. Pkgs. 25c, 45c; f.o.b. Portland.

CONKEY'S POULTRY WORM REMEDY

This prescription rids birds of many troublesome worms, thus promoting a return to healthy condition. Pkgs. 30c, 60c; or 35c, 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 livestock. 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. 75c; 2 lbs. \$1.35; 5 lbs. \$2.75; or 85c. \$1.45 and \$2.95 postpaid. The following larger sizes: f.o.b. Portland, 25 lb. drum \$12.50; 50 lb. drum \$22.50; 100 lbs. \$36.00.

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 lb. 30c; 3¼ lbs. 60c; or 40c, 75c, postpaid.

Conkey's NOX-I-CIDE Dip and Disinfectant

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, cesspools, garbage containers, etc., sanitary and safe. Prices, pt. 60c; qt. 90c; ½ gal. \$1.50; gal. \$2.25; f.o.b. Portland.

CONKEY'S FLY KNOCKER

For cows and horses. Cans, qt. 80c; ½ gal. \$1.35; gal. \$2.00; 5 gal. \$9.00; f.o.b. Portland

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. \$1.00; gal. \$3.00; 5 gal. \$12.50; 30 gal. \$60.00; f.o.b. Portland.

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 \$5.00 per case of 6; 100 lbs. \$9.00; f.o.b. Portland.

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 60c; per 1000 \$5.00; f.o.b. Portland.

Use Black Leaf 40

For Controlling Poultry Lice

Especially recommended for controlling poultry lice, by simply painting or spraying the roosts with it. 1 oz. bottle 35c; ½ lb. \$1.25; 2 lbs. \$3.25; f.o.b. Portland. Not mailable.

Books on Poultry

See page 141 for complete list.

McCLELLAN'S Remedies for Poultry, Stock, Rabbits and Pets

PREPARED BY C. U. McCLELLAN & CO., INC., MANUFACTURING CHEMISTS

For Poultry

McCLELLAN'S POULTRY PRESCRIPTION 999

Poultry Tonic and Worm Powder, a scientific compound which runs high in vitamins; also certain necessary minerals and several very expensive and well known worm expellants, which are non-poisonous and harmless to fowls but sure death to all forms of worms such as tapeworm, round worms and other forms of intestinal parasites. This preparation does not contain harmful poisons such as nicotine, etc. McClellan's Prescription 999 will not retard egg production, but has a tendency to increase egg production as it is also a body, blood and vitality builder. It can easily be mixed with the feed or given in individual treatments if so desired. 4 oz. pkg. **75c**; 12 oz. **\$1.75**; 1½ lb. **\$3.00**; 3 lb. **\$5.50**; 5 lb. **\$7.50**; 10 lb. **\$14.50**; f.o.b. Portland.

McCLELLAN'S BRONKI-OL INHALANT

Poultrymen will find McClellan's Bronki-ol Inhalant a splendid preparation as an aid to assist nature in treating chickens, turkeys, geese and pigeons affected with colds and many other forms of bronchial troubles. Rabbit breeders will find McClellan's Bronki-ol Inhalant an aid in assisting nature to combat cold and snuffles in rabbits. 8 oz. bottle **50c**; pint can **75c**; quart **\$1.10**; ½ gallon **\$1.75**; gallon **\$3.00**; 5 gallons **\$12.50**; f.o.b. Portland.

McCLELLAN'S CREXAFOWL POULTRY POWDER

For chickenpox, roup, white diarrhoea and coccidiosis. 1½ lb. **30c**; 5 lb. **85c**; 12 lb. **\$1.80**; 26 lb. galv. pail **\$3.75**; 30 lb. galv. pail **\$4.25**; 100 lb. barrel **\$12.00**; f.o.b. Portland.

Disinfectant & Dip

McCLELLAN'S DISINFECTANT DIP (2 to 3 Co-Efficient)

An efficient disinfectant, germicide, insecticide and antiseptic, recommended as a disinfectant for poultry houses, kennels, barns, pet stock quarters and for household uses. Can be diluted with water or oil. 8 oz. bottle **35c**; pint bottle **45c**; cans, quart **65c**; half gal. **\$1.00**; gal. **\$1.75**; f.o.b. Portland.

Pet Stock and Rabbit Remedies, Tonic & Washes

McCLELLAN'S STOCK TONIC

A general conditioner for livestock. An aid to digestion, invigorating, helping to secure more value from the food rations. 3½ lb. pkg. **65c**; 10 lb. **\$1.50**; 30 lb. **\$4.25**; f.o.b. Portland.

McCLELLAN'S DOG AND CAT SHAMPOO
A high grade finely scented liquid soap especially for shampooing dogs and cats. 8 oz. bottle **50c**; postage extra.

McCLELLAN'S "SEPTO" ANTISEPTIC DOG WASH

Aids in repelling fleas, an antiseptic wash. 8 oz. bottle **50c**; postage extra.

McClellan's Rat Ruin

C-A WOOD PRESERVER

(Carbolineum America)

A pure unadulterated high-boiling anthracene oil, used for 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

McCLELLAN'S CREXAFOWL POULTRY TONIC

A scientific preparation manufactured for poultry in the treatment of chickenpox, roup, white diarrhoea, coccidiosis and limberneck. It is a lifesaver for baby chicks. Also an excellent fattener for feeding stations. A splendid conditioner for molting hens. Makes hens lay and pay. In bottles, 8 oz. **50c**; 16 oz. **75c**; quart **\$1.00**; half gal. **\$1.75**; gallon **\$3.00**; 5 gal. **\$10.50**; 10 gal. keg **\$17.50**; f.o.b. Portland.

McCLELLAN'S COMPOUND SODIUM FLUORIDE LICE POWDER

McClellan's Compound Sodium Fluoride Lice Powder is a very high grade preparation made for dusting fowls. Unequaled insofar as efficiency in killing and eradicating lice on poultry is concerned. 15 oz. pkg. **30c**; 2½ lb. **70c**; 15 lb. pail **\$3.70**; f.o.b. Portland.

McCLELLAN'S SODIUM FLUORIDE PLAIN

Recommended to be used as a lice powder or for dipping. 1 lb. can **45c**; 5 lb. can **\$1.75**; f.o.b. Portland.

McCLELLAN'S LICE LICE AND MITE KILLER

To be used on the fowls or in the poultry houses to aid in killing lice and mites. Kills by contact. Quart can **60c**; half gal. **90c**; gal. **\$1.75**; f.o.b. Portland.

McCLELLAN'S TOE PICK REMEDY

For controlling and overcoming the vicious habit of toe, wing and vent picking of chicks. It is also soothing and healing. 7 oz. can **45c**; 15 oz. can **80c**; f.o.b. Portland.

McCLELLAN'S SHEEP DIP (2 to 3 Co-Efficient)

An efficient disinfectant, germicide, insecticide and antiseptic recommended for poultry houses, kennels, barns, pet stock quarters and for household uses. Can be diluted with water or oil. Bottles, 8 oz. **35c**; pint **45c**; cans, quart **65c**; half gal. **\$1.00**; gal. **\$1.75**; 5 gal. **\$7.50**; drums, 15 gal. **\$18.75**; 30 gal. **\$34.50**; 55 gal. **\$57.75**; f.o.b. Portland.

McCLELLAN'S PINEOOL

To meet the demand for a medium priced soluble pine oil deodorant. 1 gal. can **\$2.75**; f.o.b. Portland.

McCLELLAN'S RABBIT EAR CANKER REMEDY

2 oz. bottle **50c**; 4 oz. **75c**; postage extra

McCLELLAN'S RABBIT DIARRHOEA REMEDY

2 oz. bottle **50c**; 4 oz. **75c**; postage extra

McCLELLAN'S RABBIT SPOTTED LIVER REMEDY

2 oz. bottle **50c**; 4 oz. **75c**; postage extra

McCLELLAN'S RABBIT WORM EMUL- SION AND CONDITIONER

2 oz. bottle **50c**; 4 oz. **75c**; postage extra

An effective and economical poison for rats and mice. 3 oz. can **25c**; postage extra.

Quarts **75c**; gal. **\$1.75**; 5. gal. **\$7.50**; f.o.b. Portland

We are distributors for Northern California, Oregon, Washington and Idaho for C-A Wood Preserver

Bird Foods and Remedies

In this list you will find our own special bird foods as well as foods and remedies of several widely advertised lines. Descriptions are limited in this space but booklets with complete descriptions will be sent upon request.

P. S. CO. ROLLER SPECIAL BIRD SEED MIXTURE, the very finest, put up especially for singers. 1 lb. sealed pkg. **35c**; 5 pkgs. **\$1.25**; postpaid.

DIAMOND QUALITY BIRD SEED with cuttlebone, next to our Roller Special the best to be secured. 1 lb. pkg. **25c**; 10 lbs. **\$1.35**; postpaid.

CANARY SEED, re-cleaned, lb. **20c**; 10 lbs. **\$1.75**; postpaid.

HEMP SEED, re-cleaned, lb. **20c**; 10 lbs. **\$1.10**; postpaid.

RAPE, sweet summer, lb. **20c**; 10 lbs. **\$1.45**; postpaid.

MILLET, re-cleaned, lb. **20c**; 10 lbs. **\$1.45**; postpaid.

CUTTLE BONE, each **10c**; doz. **75c**; postpaid.

BIRD GRAVEL, pkg. **25c**; ppd.

BIRD MANNA, pkg. **25c**; ppd.

NESTING HAIR, pkg. **25c**; ppd.

BIRD NESTS, ea. **20c**; postpaid.

BIRDOLINE, Kaempfer's, pkg. **20c**; postpaid.

CANARY HIGHBALL, two for **30c**; postpaid.

Justrite Bird Foods and Remedies

A 48-page booklet of instructions for the care of birds and gold fish together with complete list of Justrite foods and remedies will be sent free on request.

JUSTRITE HONEY ROLL. A toasted food tonic for canaries, a real treat. Each **15c**; 2 for **25c**; postpaid **30c**.

JUSTRITE MIXED BIRD SEED in self closing spout can, clean, convenient. With cuttle bone. Each **20c**; postpaid **30c**.

JUSTRITE "LOVE BIRD" SEED. Relished by love birds, parakeets, finches, etc. Pkg. **25c**; ppd; **35c**.

JUSTRITE SONG RESTORER, large can **25c**; postpaid **30c**; small box **15c**; postpaid **20c**.

JUSTRITE VITAMINE HEALTH FOOD, 6 oz. bottle **25c**; postpaid **35c**.

JUSTRITE MOLTING FOOD, **20c**; postpaid **25c**.

JUSTRITE COLOR AND PEPPER FOOD, can **20c**; postpaid **30c**.

JUSTRITE EGG AND NESTLING FOOD, with cod liver oil, **20c**; postpaid **25c**.

JUSTRITE BIRD TONIC, with medicine dropper, **35c**; postpaid **40c**.

JUSTRITE BIRD BITTERS, with medicine dropper, **25c**; postpaid **30c**.

JUSTRITE IRON TONIC, with medicine dropper, **25c**; postpaid **30c**.

JUSTRITE LICE POWDER, shaker top can, **15c**; postpaid **20c**.

JUSTRITE BIRD WASH, **25c**; postpaid **30c**.

JUSTRITE CAGE CLEANER, and lice destroyer, for thoroughly ridding cage, **35c**; postpaid **45c**.

JUSTRITE LICE DESTROYER KIT, **65c**; postpaid **75c**.

JUSTRITE BALM FOR BALDNESS, with brush, **35c**; postpaid **45c**.

JUSTRITE BIRD JELLY, instant relief for birds suffering from asthma, colds or hard breathing, **25c**; postpaid **30c**.

JUSTRITE BIRD SALVE, for sore feet and legs, **15c**; postpaid **20c**.

JUSTRITE FEATHER PULLING REMEDIES, stops all feather pulling, **25c**; postpaid **30c**.

JUSTRITE BIRD NESTING, brown or white, **10c**; postpaid **15c**.

JUSTRITE FLAKE CHARCOAL, in friction top can, **10c**; postpaid **15c**.

JUSTRITE OYSTER SHELLS, in shaker top can, **10c**; postpaid **15c**.

JUSTRITE GRAVEL PAPER, in 9, 10, 11 or 12 in. circles or 7x9, 7½x10, 9x11, 8½x11½ or 10x10 in. sizes. **25c**; postpaid **30c**.

Haller Bird Foods and Remedies

CANARY PIE, **15c**; postpaid **20c**.

BIRD HEALTH FOOD, **25c**; postpaid **30c**.

BIRD CAGE AND BATH WASH, **25c**; ppd. **30c**.

BIRD TONIC, **25c**; postpaid **30c**.

FEATHER RESTORER, **25c**; postpaid **30c**.

SORE AND SCALY LEG OIL REMEDY, **25c**; postpaid **30c**.

BIRD BITTERS, **25c**; postpaid **30c**.

THISTLE OR NAGER SEED, **25c**; postpaid **30c**.

BIRD HEMP AND PEPPERS, **25c**; postpaid **30c**.

LICE POWDER, **25c**; postpaid **30c**.

MAW OR POPPY SEED, **25c**; postpaid **30c**.

COD LIVER OIL NESTLING FOOD, **15c**; postpaid **20c**.

Spratt's Bird Foods and Remedies

SONG RESTORER, **30c**; postpaid.

NESTLING FOOD, **30c**; postpaid.

RED MITE LIQUID, **30c**; postpaid.

BIRD TONIC, small **20c**; large **35c**; postpaid.

SING SONG, **20c**; postpaid.

ANT'S EGGS, **30c**; postpaid.

COLOR FOOD, **30c**; postpaid.

Parrot Foods and Remedies

DIAMOND PARROT MIXTURE, 1 lb. **25c**; 2 lbs. **45c**; 5 lbs. **\$1.00**; postage extra.

PARROT SUNFLOWER SEED, 1 lb. **20c**; 5 lbs. **75c**; postage extra.

HALLER'S PARROT TONIC, **25c**; postpaid **30c**.

JUSTRITE PARROT TONIC, with medicine dropper, **35c**; postpaid **40c**.

JUSTRITE FEATHER PULLING REMEDY, **25c**; postpaid **30c**.

JUSTRITE LOVE BIRD OR PARRAKEET SEED, **25c**; postpaid **35c**.

Fish Foods and Remedies

JUSTRITE NATURAL FISH FOOD with shrimp, 2 oz. tin **10c**; postpaid **15c**; 3 for **30c**.

JUSTRITE TROPICAL FISH FOOD, 2 oz. tin **15c**; postpaid **20c**; 3 for **45c**.

JUSTRITE IMPORTED PURE SHRIMP, to be fed as a treat, 2 oz. tin **15c**; postpaid **20c**.

JUSTRITE WAFER FISH FOOD, **10c**; postpaid **15c**; 3 for **30c**.

FOR DOG AND FOX FOODS

See page 137

FOR CAT REMEDIES

See page 137

Get more milk from the cows you have

Use "KOW KARE"

**MAKES POOR COWS GOOD—GOOD COWS BETTER
AND MAKES MORE MONEY FOR COW OWNERS**

Kow Kare, as a highly efficient and dependable tonic, conditioner and regulator of dairy cows, enjoys an enviable national reputation of more than thirty years' standing. Kow Kare provides an inexpensive and conveniently used home preparation that gives decided results in improved milk yield and in avoiding many of the ills of cows that sap the milk profits. Kow Kare is highly concentrated and, because of the small dosage required for average needs, is very inexpensive to use. In this sense Kow Kare is not to be confused with stock foods or the many so-called stock tonics which are marketed with more regard for bulk than for potency of the formula. Kow Kare 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 afterbirth. 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.

Write for the New Book "More Milk From the Cows You Have"

Full of helpful suggestions on dairy management. A handbook for cow owners, describing diseases that affect a cow's productivity and telling how to prevent and cure them in a single cow or a whole herd. 32 pages. Free on request.

MEDIUM CANS

Mailing wt. 2 lbs.

Price f.o.b. Portland, ea.

65¢

LARGE CANS

Mailing wt. 4 lbs.

Price f.o.b. Portland, ea.

\$1.25

Six for **\$6.25**
12 for **\$12.50**

BAG BALM

Made by the
Kow Kare people

For troubles of udder and teats, such as caked bag, sore teats, bunches, chapping cuts or inflamed parts, you can use this soothing ointment with perfect safety. There is nothing better for keeping all the parts healthy and in the pink of condition—sanitary and clean. Bag Balm gives unusual results because of its remarkable penetration. By our own exclusive process we have combined a vigorously penetrating antiseptic oil with the medicated Bag Balm ointment. By striking into the tissues and promoting unusually quick healing this ointment has won an enviable reputation among cow owners. Clean, pleasant to use; cannot taint the milk. The use of Bag Balm will make decidedly easier milkers of your herd. Try Bag Balm and your shelf will always be stocked with it. It has a variety of uses. Price, 10 oz. pkg. **60c**; postage extra.

GRANGE POKE ROOT COMPOUND

"Made by the Kow Kare people" for the serious disorder peculiar to cows—garget—our Grange Poke Root Compound is favorably known to every dairyman. It is well to be prepared for the unexpected by keeping a can on hand always. Has been used for more than 25 years. Price, can **65c**; postage extra.

A cleaner especially prepared for creamery, cheese factory and dairy purposes. It contains no grease. It makes no suds. It has no soapy smell. It is pure and purifying. It cuts the butterfats and milk solids quickly and thoroughly, making everything sweet, clean and sanitary. 5 lbs. **50c**; 80 lb. keg **\$6.50**; f.o.b. Portland.

TARX DISINFECTANT

Soluble disinfectant for spraying hog and poultry houses, barns, etc., and for dipping. Handy, convenient to use. Never loses strength; can be used in spray pumps. 50 lbs. (makes 150 gallons of dip) for only **\$1.85**; f.o.b. Portland.

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. Pint **60c**; quart **90c**; gallon **\$2.25**; f.o.b. Portland.

DISINFECTANT, DEODORANT ANTISEPTIC, NOT A POISON

By government test B-K has over ten times greater germ-killing strength than carbolic acid. Much stronger than coal tar disinfectants. Colorless, leaves no stain on floors or walls. Destroys foul odors—leaves no odor of itself. Contains no poison, acid nor oil. So much stronger than other disinfectants that more water is used. It goes farther. 4 oz. **35c**; 10 oz. **60c**; 32 oz. **\$1.25**; 1 gal. **\$3.00**; 5 gal. **\$12.50**; 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 cooked and prepared for easy digestion. 100 lbs. makes 100 gallons of Complete Milk Equal. 25 lbs. **\$2.00**; 50 lbs. **\$3.50**; 100 lbs. **\$6.50**; f.o.b. Portland. Subject to market changes.

Leslie Salt

In prepared bricks or half ground.
Prices f.o.b. Portland

Half Ground
50 lbs. **50c**; 100 lbs. **90c**.

Bricks
5 lb. bricks, ea. **15c**;
10 lb. bricks, ea. **20c**.
Pet Licks for Rabbits
Each **10c**; 10 **90c**.

CONKEY'S FLY KNOCKER

For Cows and Horses
Dairymen, horsemen, cattlemen and sheep raisers declare this to be the best investment they make—animals free from insects do better in milk and butterfat production, while growing stock unquestionably fattens faster when relieved from disease spreading insects. Very economical because of its superior lasting qualities. Qt. **80c**; ½ gal. **\$1.35**; gal. **\$2.00**; 5 gal. **\$9.00**; f.o.b. Portland.

Lee's Flyo-curo

We sell quantities of this old and well known brand each season. Qt. **60c**; ½ gal. **90c**; gal. **\$1.50**; 5 gal. **\$7.00**; f.o.b. Portland.

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.

CAT REMEDIES

SPRATT'S CAT WORM CAPSULES, **60c**, postpaid.
CAT DIARRHOEA REMEDY, **60c**, ppd.
CATNIP, package **15c**; postpaid **20c**.
CATNIP MICE, each **15c**; postpaid **20c**

SPRATT'S DOG FOODS AND REMEDIES

These famous preparations have the endorsement of the big breeders and fanciers—and are the standard in their line. We can only list 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 FLEA DOG SOAP, **30c**, postpaid.

SPRATT'S PUPPY WORM CAPSULES, **30c**, ppd.

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**, ppd.

SPRATT'S EYE LOTION TABLETS, **60c**, postpaid.

SPRATT'S FLEA POWDER, **40c**, postpaid.

SPRATT'S MANGE MEDICINE, **60c**, postpaid.

SPRATT'S PUPPY AND TOY DOG TONIC AND CONDITION TABLETS, **60c**, postpaid.

SPRATT'S DOG CONDITION TABLETS, **60c**, ppd.

SPRATT'S DIGESTIVE TABLETS, **60c**, postpaid.

SPRATT'S CHOREA TABLETS, **60c**, postpaid.

SPRATT'S COUGH TABLETS, **60c**, postpaid.

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 LAXATIVE PILLS.....**60c**
CLAYTON'S WORM PILLS.....**60c**
CLAYTON'S PUPPY TONIC.....**60c**
CLAYTON'S KILFLEA SOAP.....**35c**
CLAYTON'S KILFLEA POWDER.....**35c**
CLAYTON'S DIARRHOEA TABLETS.....**60c**
CLAYTON'S DISTEMPERINE TABLETS.....**60c**
CLAYTON'S DIGESTIVE TABLETS.....**60c**
CLAYTON'S FIT REMEDY.....**60c**
CLAYTON'S TAPE WORM EXPELLER.....**60c**
CLAYTON'S CONDITION PILLS.....**60c**
CLAYTON'S VERMIFUGE FOR WORMS.....**60c**

GLOVER'S DOG REMEDIES

DISTEMPER REMEDY, **\$1.25**, postage extra

CADIFORNIA BRAND DOG FOODS

PRICES F. O. B. PORTLAND

MEAT BONE BISCUITS, for grown dogs. 10 lbs. **\$1.50**; 20 lbs. **\$2.65**; 50 lbs. **\$6.50**; 100 lbs. **\$12.50**.

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**.

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**.

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**.

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**.

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**.

McCLELLAN'S REMEDIES

SEE PAGE 134

BEEKEEPER'S SUPPLIES

All prices on this page are f.o.b. Portland

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 5 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

Prices are f.o.b. Portland

	Each Nailed	Five Weight K. D. 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	\$11.75 128
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.....	\$0.70	\$2.75
8 Frame—Bottom Boards.....	\$0.50	\$2.00
10 Frame—Covers.....	\$0.75	\$3.25
10 Frame—Bottom Boards.....	\$0.60	\$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 section.

Prices f.o.b. Portland Pine or Cedar	Each Nailed	5 Weight K. D. of 5
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.....	\$0.55	\$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.....	\$0.90	\$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 beveled strip which holds foundation in place, perfectly straight and exactly in center of top bar. Wt. per 10 $2\frac{1}{2}$ lbs.

Improved F. F. Western.....	\$0.60	\$5.60
Half Hoffman Western.....	\$0.60	\$5.60

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— $1\frac{1}{2} \times 18\frac{1}{8}$ inches, slotted. Wt. 20 lbs. per 100. Each **5c**; per 100 **\$4.50**.

BLOCKS— $1\frac{1}{2}$ Western. Per 100 **\$1.25**.

BOTTOMS ONLY— $1\frac{1}{2}$ 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 **80c**.

DIVISION BOARDS

Wt. 5 oz. Each **20c**; 10 for **\$1.50**.

FOLLOWERS

Each **6c**; 10 for **50c**.

TIGHTENING SPRINGS

12 for **15c**; 100 for **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.....	20c
$\frac{1}{2}$ -lb. spools, each.....	30c
1-lb. spools, each.....	50c
5-lb. coils, each.....	\$2.20

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

Section Honey Boxes

Our No. 1 Sections are made of choicest white bass-wood, perfect in finish and free from defects. They vary from snow-white to a light cream color. $4\frac{1}{4} \times 1\frac{1}{2}$ sent unless otherwise ordered.
P. S. Co's No. 1, 100 **\$1.50**; 500 **\$6.50**; f.o.b. Portland.

HONEY SHIPPING CASES

With glass front, designed for marketing honey. For best market price put your honey in nice cases.
24-lb., $4\frac{1}{4} \times 1\frac{1}{2}$ section, nailed, each **55c**.
24-lb. for $3\frac{3}{8} \times 5$ Ideal sections, nailed, each **30c**; f.o.b. Portland.

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 thru 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., each...**\$0.45**
No. 1, 10-frame, unbound, $14 \times 19\frac{1}{2}$ in., each...**\$0.50**
No. 8, 8-frame, wood, wire, $13\frac{3}{8} \times 20$ in., ea...**\$0.90**
No. 7, 10-frame, wood, wire, 16×20 in., ea...**\$1.00**
8-frame, 7-wire, each...**\$1.10**
10-frame, 7-wire, each...**\$1.10**
f.o.b. Portland

DRONE AND QUEEN BEE TRAP

Placed before entrance of hive, to catch and cage the drones. They can then be carried to another apiary or 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. Wt. 1 lb. Each, 8-frame **80c**; 10-frame **80c**; f.o.b. Portland.

BEE ENTRANCE GUARDS—ROOT'S OR TINKER'S

To admit workers and to exclude drones. After drones are out, fix guards over entrance; at night the drones can be destroyed. Price, zinc front, **20c**; f.o.b. Portland.

IMPROVED WIRE FRONT ENTRANCE GUARDS

Wt. 6 oz. 8-fr. **20c**; 10-fr. **25c**; f.o.b. Portland.

PORTER BEE ESCAPE—For use when taking off the honey. Does away with shaking supers and smoking the bees. Saves stings.

Price, postpaid **20c**; mounted on board, wt. $2\frac{1}{4}$ lbs., not postpaid **50c**.

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, September, price **\$1.50**. Tested Queen cannot be furnished before May. Price each **\$2.00**; postpaid.

Full Sheet, Triangular and Quarter Sheet
Comb 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.

	Size	No. per	In lots of
	of Sheets	lb.	1 lb. 10 lbs.
Medium Brood	$7\frac{3}{4} \times 16\frac{1}{2}$	7	75c \$7.00
Light Brood	$7\frac{3}{4} \times 16\frac{1}{2}$	9	80c \$7.50
Thin Super	$3\frac{3}{8} \times 15\frac{1}{2}$	28	85c \$8.00

DADANT WIRED COMB FOUNDATION

Per lb. **93c**; 10 lbs. for **\$9.00**.

Prices above f.o.b. Portland

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, **35c**; 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, requires only two common dry cells. Price, without batteries, **\$1.50**; postpaid **\$1.60**.

PARKER

ROOT'S

PARKER'S FOUNDATION FASTENER—Wt. 1 lb. Price **45c**.

ROOT'S FOUNDATION FASTENER—Complete with lamp, weight 8 oz. Price **65c**; without lamp **55c**.

DAISY FOUNDATION FASTENER—One of the best for putting starters into sections. With lamp, wt. $6\frac{1}{4}$ lbs., **\$3.00**. Owing to danger of breakage, no chimney is sent with lamp.

VAN DEUSEN WAX TUBE FASTENER—For fastening foundation sheets to thin top-bars. A tapered tube $\frac{1}{2} \times 6$ in. Fill with hot wax, draw point along edge of foundation in contact with top-bar, leaving hot wax to cement in. Price **40c** each.

All prices above f.o.b. Portland

BEE FEEDERS

ALEXANDER

ALEXANDER FEEDER. Bottom board slides forward, feeder is back under hive. Bees go into feeder from brood chamber. Wt. 1¼ lbs. Price 75c, not postpaid.

BOARDMAN'S FEEDER. Wt. ½ lb. Price, without jar, 25c, not postpaid.

DIVISION BOARD FEEDER. Made to hang in brood chambers to one side or between the frames. Wt. 1¼ lbs. Price 55c, not postpaid.

BEE SMOKERS

Root's Improved Cornell. Burns anything, preferably greasy rags for their dense smoke.

Small, 3x5½ in., each \$1. Medium, 3½x7 in., each \$1.55.

Large, 4x7 in., ea. \$1.80. Wt. 2 lbs. Postage extra.

ROOT'S

Clark's Cold Blast Smoker. Best low priced smoker. Wt. 1¼ lbs. Price \$1.10, postage extra.

CLARK'S

HAT BEE VEILS. Rubber band around top, to fit hat snugly.

No. 1. Silk tulle, postpaid \$1.40.

No. 2. Cotton tulle, with silk tulle face, \$1.20.

No. 3. Cotton tulle, postpaid, \$1.00.

GLOBE BEE VEIL. No trouble to put on or take off. Protection against mosquitoes, flies, bees, gnats, etc. Weighs only 5 oz. Price \$1.50, postpaid.

ALEXANDER. Fine bronze wire cloth. Stands clear of face; muslin top and bottom. Wt. 1 lb. Price \$1.25, postpaid.

BEEKEEPERS' GLOVES

CANVAS. Long sleeve, oiled, ladies' or men's. Price \$1.00; postpaid \$1.10.

ROOT NICKELED STEEL HIVE TOOL. Spring steel; will stand any strain as a pry or scraper; the best tool made. Wt. 4 oz. Each 60c; postpaid 65c.

COGSHALL'S BEE BRUSH. For brushing bees off combs when extracting. Each 30c; postpaid 35c.

HANDY BEE BRUSH

Horse hair. One of the best, most lasting brushes. Price 30c; postpaid 35c.

HONEY EXTRACTOR

P. S. CO'S TWO-FRAME EXTRACTOR. Now takes the lead over all others in use, as it is easily reversed. The best machine when rapid work is required. Write for complete description. \$45.00, f.o.b. Portland.

D & B FORMALDEHYDE

For American Foulbrood

When mixed according to directions (1 part solution to 4 parts pure water) 1 No. 10 can makes 4¼ gallons of disinfectant ready for use, sufficient to sterilize 250 to 300 combs.

For prices on formaldehyde solution see page 121.

ROOT STEAM HEATED UNCAPPING KNIFE

The best tool ever devised. Knife is kept constantly hot, cappings slide off from it without sticking. The copper boiler is equipped with safety valve. 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, with 3-ft. tubing. Wt. 2 lbs. Price \$5.00. Steam boiler with safety valve for use with above, Wt. 3 lbs. Price \$3.00. Prices f.o.b. Portland.

BINGHAM HONEY KNIFE. Price \$1.45; postpaid \$1.50.

Books on Bees

A. B. C. AND X. Y. Z. OF BEE CULTURE. A. I. and E. R. Root. New and revised edition, the best, most complete book ever issued; equally valuable to advanced beekeeper or beginner. Wt. 4 lbs. Price \$3.50. Postage extra.

EXTRACTED HONEY, HOW TO PRODUCE. Root. 40 pages. 25c postpaid.

FEEDS AND FEEDING. Root. 10c, postpaid.

FIRST LESSONS IN BEEKEEPING. Dadant. 150 pages. \$1.15, postpaid.

HABITS OF THE HONEY BEE. 10c, postpaid.

WINTERING BEES. Root. 10c, postpaid.

MONTHLY BEE PAPERS

AMERICAN BEE JOURNAL. Illinois. Per year, \$1.50.

GLEANINGS IN BEE CULTURE. Ohio. Per year, \$1.00.

Special Prices on BOOKS

We are closing out our book department except for a few poultry, bee and gardening books, and are offering the following list of books at cost and less. On some titles there are only two or three in stock and we suggest early purchase of the titles you desire.

Draining for Profit

Why land should be drained, best methods and systems, reclaiming marshes, also how to make tile, etc. By Waring. 250 pages, cloth bound. Reg. \$1.10; special **50c** postpaid.

Soiling Crops and the Silo

How to build and fill the silo, how to use silage, types of crops. By Thomas Shaw, professor of Animal Husbandry, University of Minnesota. 360 pages, cloth bound. Regular \$1.85; special **90c** postpaid.

Forage Crops

Also by Thomas Shaw. Complete list of forage crops, how to cultivate, harvest and use them. 230 pages, cloth bound. Regular \$2.50; special **90c** postpaid.

SEE THIS LIST

Garden & Farm Topics.....\$1.50
The Hop, by Merrick..... 1.25
New American Farm
Book..... 2.75
Milk, Its Nature and
Composition, Aikman..... 1.25

\$6.75

All for **\$2.25** postpaid.
Just a few. Order early.

A list of well known books on Fruit

The Small Fruit Culturist

By Fuller, 293 pages, cloth bound. Reg. \$1.70; special **75c** postpaid.

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By Bailey. Presenting the most approved methods of American growers. Cloth. Regular \$2.25; special **\$1.25** postpaid.

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Complete from planting to marketing. 204 pages, cloth bound. Regular \$1.10; special **60c** postpaid.

Fruit Harvesting, Storing and Marketing

By Waugh. 224 pages, cloth bound. Regular \$1.10; special **60c** postpaid.

How to Choose a Farm

By Hunt. 412 pages, cloth bound. Written many years ago; founded on definite facts and information. Only a few left. Regular \$1.85; special **65c**, ppd.

Fences, Gates and Bridges

A practical manual by Martin. 192 pages, cloth bound. Postpaid **50c**.

Fungi and Fungicides

By Weed. 228 pages, cloth bound. Regular \$1.10; special **50c** postpaid.

The Farmstead

By Roberts

350 pages, cloth bound

Regular \$3.00

Special **\$1.00**, postpaid

Practical Forestry

By Fuller

300 pages, cloth covered

Regular \$2.50

Special **\$1.00**, postpaid

Celery Culture

Complete in every detail, from sowing the seed for new plants to handling carload lots. By Beattie. 150 pages, cloth. Special **50c** postpaid.

Onion Culture

By Greiner, 115 pages, cloth bound. Special **50c** postpaid.

Strawberry Culture

By Andrew S. Fuller

\$1.25

Strawberry in North America

By Fletcher. 234 pages, cloth bound. \$2.25.

Special both books for

\$1.50, postpaid

POULTRY BOOKS

Profitable Culling and Selective Stock Breeding

By Homer Jackson and Grant Curtis. Complete details regarding the latest methods, with many illustrations and practical instructions. 320 pages. Issued in 1923 and is up-to-date. Regular price \$2.00 special **\$1.20**, postpaid.

Poultry Houses and Fixtures

By Homer Jackson. Complete details, how to locate and lay out, plans for all types of poultry buildings and fixtures. 320 pages; issued in 1926; up-to-the-minute. Regular price \$2.00; special **\$1.20** postpaid.

Growing Ducks and Geese for Profit

By John H. Robinson. A complete account of the origin and development of all breeds and varieties of domesticated water fowl, with instructions for caring for them from 10 to a 100,000. Copyrighted 1924. 447 pages. Regular \$2.50; special **\$1.35** postpaid.

Capons for Money

By A. L. King. Copyrighted 1924. A practical book of 40 pages. Regular price \$1.00. Special **50c** postpaid.

Poultry Diseases

By Wertley. Regular \$1.00; special **50c** postpaid.

GARDEN GUIDE

Amateur Gardener's Hand Book

380 pages of the best information available, with planting charts, profusely illustrated, 5x7½ in., paper covers.

Postpaid **\$1.00**

POULTRY BOOKS

The Leghorns

Valuable information for breeders, including methods of feeding, management for commercial producers, with colored plates. 144 pages 9x12 in. Paper covered. Regular \$1.10; special **60c** postpaid.

The Asiatics

Brahmas, Cochins, Langshans; origin, breeding, care, judging, etc. 96 pages. Many illustrations and colored plates. 9x12 in. Regular 55c; special **30c** ppd.

The Orpingtons

Fully illustrated. 80 pages with color plate. Regular 75c; special **40c** ppd.

The Plymouth Rocks

144 pages, 3 color plates. Regular \$1.10; special **70c** postpaid.

Successful Backyard Poultry Raising

104 pages, many illustrations. Regular \$1.00; special **60c** postpaid.

Indian Runner Ducks

92 pages, well illustrated. Reg. price 75c; special **40c** postpaid.

High Egg Production

144 pages. Special **\$1.00** postpaid.

Use of Artificial Light

To increase winter egg production. Regular \$1.60; special **75c** postpaid.

The Wyandotte

160 pages, many illustrations, some in color. Regular \$1.00; special **60c** ppd.

Champion BALL BEARING Cream SEPARATORS

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. Each size separator will skim to its full rated capacity and will produce a fine smooth quality cream of any density required.

THE CHAMPION PERFORATED DISTRIBUTING AND EQUALIZING SLEEVE is the most valuable improvement ever placed in Cream Separators and, when combined with a disk skimming bowl, puts the Champion far in the lead.

THE CHAMPION "PATENTED" CENTRIFUGAL FEATURES assure 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.

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.

CHAMPION SPEED INDICATOR. Aids the operator without special attention to keep speed regular, which is essential for close separation.

GEARS AND AUTOMATIC CLUTCH, all in one unit, is in an oil-tight, dust-proof gear case.

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.

Floor Type Full Ball Bearing Four Sizes

375 lb. Capacity

For one to five cows. Skims three quarts of milk per minute. Ball bearing. No. 30B. Ship. wt. 170 lbs. Price f.o.b. Portland.

\$43⁸⁵

600 lb. Capacity

For one to ten cows. Ball bearing. No. 50B. Ship. wt. 180 lbs. Price f.o.b. Portland.

\$54⁷⁵

800 lb. Capacity

For one to fourteen cows. Ball bearing. No. 70B. Ship. wt. 225 lbs. Price f.o.b. Portland.

\$66⁵⁰

1000 lb. Capacity

For one to twenty cows. Ball bearing. No. 90B. Ship. wt. 245 lbs. Price f.o.b. Portland.

\$73⁵⁰

WITH ELECTRIC MOTOR

We also have the 800-lb. equipped with electric motors, 110-volt A.C., for those who wish to use power direct from house current. No. 700EM, 800-lb. size, each **\$97.50.**

Bench Type

These separators have all the superior features of the floor machines except that being smaller, plain bearing can be used. Priced exceptionally low so that everyone can afford a high grade separator.

150 LB. CAPACITY
No. 1½, for one to three cows. Ship. wt. 55 lbs.

\$18⁵⁰

300 LB. CAPACITY
No. 3, for one to five cows. Ship. wt. 65 lbs.

\$24⁷⁵

Prices f.o.b. Portland

USE THIS ORDER BLANK AND ASK FOR MORE

Warehouse	Seeds	Bee	Nursery
Store	General	Potatoes	Florist

Order No.

**Card
Made**

Do not write above this line

O. K.

Zone

Do not write above this line

To PORTLAND SEED CO., Portland, Oregon

Send to

Name..... Date.....

Write Name and Address Plainly

Post Office.

R. F. D. No. or Street.

Station..

County.....State.

Be Sure to Give Name of County

Ship by.

State if Wanted by Mail, Express or Steamer

Date_____

AMOUNT PURCHASED

\$.....cts.

Parcel Post, Express and Freight Station without an Agent must be prepaid. To cover charges if prepaid, add:

\$ _____ cts.

TOTAL AMOUNT ENCLOSED

\$ _____ cts.

NOTE—We use every precaution in procuring fresh, pure and reliable seeds, etc., but we in common with other responsible seed houses, sell our goods subject to the following disclaimer, it being that adopted by the American Seed Trade Association, i. e., We give no warranty, 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. If the purchaser does not accept the goods on these terms, they are to be returned at once.—Portland Seed Co.

[illegible]

Over

Forward

CONTINUE ORDER ON OTHER SIDE

We have the only exclusive Seed Laboratory in the state

A corner in our Seed Laboratory

To protect the interests of our customers and maintain our standards 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 seeds 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 this means to you as a grower

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.

Seed Germinating Tray just out of Germinator.

Our SEEDS are acclimated to this territory

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—on selected acreage under contract to us each 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.

BULBS, ROSES, SHRUBS, ETC.

We publish our Bulb Book each Fall. Write for it about Aug. 15 to Sept. 15.

BOOK ON FERTILIZERS

A vitally important part of growing is proper fertilizing. Write for our book on fertilizers.

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Use "Old Hickory"

Smoked Salt
For Better Home Curing

Salts and Smokes at the Same Time

It saves you work; no smokehouse needed.
It saves shrinkage due to smokehouse heat.
It minimizes loss from spoilage.
It flavors clear to the bone.
It keeps your meat better.
It saves worry, expense, insurance, and fire dangers of the smokehouse.
Used also on the table instead of ordinary to give a special piquancy to any food.

Price, 1-lb. can 20c;
10-lb. can \$1.25
F. O. B. PORTLAND

Try "Egg-O- Hatch"

A dry powder, to be mixed with water and the resulting liquid is applied to eggs two or three times during the 21 days of incubation. 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.

Flower Pots

Bird's Neponset Waterproof Paper Flower Pots

These pots can be used over and over for transplanting and similar use. In fact, the pots can be used in every way that earthen pots can. Ideal for transplanting and shipping potted plants. Cost less. No breakage. Hold moisture better.

Size—	100	500	1000
2¼"	\$.55	\$ 2.45	\$ 4.30
2½"	.65	2.80	4.95
3"	.85	4.35	6.80
3½"	1.15	5.10	9.00
4"	1.40	6.20	11.00
5"	2.20	9.90	17.50
6"	3.00	13.50	24.00

Bird's Neponset Earth Bands

Size—	100	500	1000
1¼x1¾x2½	\$.35	\$ 1.65	\$ 3.00
2x2x2½	.45	1.75	3.10
3x3x3	.55	2.20	4.00
4x4x3	.65	2.45	4.40

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Special Seed Cleaning Service

The state law requires that seed must be cleaned before it is offered for sale. We have the most complete seed-cleaning equipment in the state, having over \$60,000 invested in this department of our business for the purpose of being able to furnish our trade with the purest, cleanest, seeds possible to secure anywhere and can handle a wider range of seeds than any place in the Pacific Northwest.

We Will Clean Your Seed for You

We are putting all this equipment at the service of our grower friends in this territory and will be pleased to clean your seeds at a nominal charge, providing quantities of each are 100 lbs. or more. Our charge for putting it through the Clipper cleaner is \$1.00 per 100 lbs. To process (taking buckhorn out of clover), the charge is \$1.50 per 100 lbs.

Wide Range of Seeds

This service covers alfalfa, vetch, red clover, alsike and all clovers, rye grass and all other grasses; in fact, all types of seeds where quantities are sufficient. Tell us what you have.

Our Diamond Dahlia Collection

Here are six of our most attractive dahlias offered at a wonderfully low price. For full descriptions see pages 98 to 101.

No. 1—KITTY ROGERS, decorative, each.....	\$2.00
No. 2—PRIDE OF CALIFORNIA, decorative, ea....	.50
No. 3—JERSEY BEAUTY, decorative, each.....	.75
No. 4—AMUN RA, decorative, each.....	.75
No. 5—KALIF, cactus, each.....	.50
No. 6—ROOKWOOD, decorative, each.....	1.00

Regular value.....\$5.50

Special at **\$3.50** f.o.b. Portland
postage extra

**Diamond
Quality
Certified**

SEED POTATOES

**Vine
Tested
in the
Field**

BURBANK

**EARLIEST
OF ALL**

NETTED GEM

The Three Best for the Northwest

We are Specialists in Certified Seed Potatoes

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. We rogue our fields many times during the season, eliminating 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.

	10 lbs.	25 lbs.	50 lbs.
Burbanks	\$.75	\$1.25	\$2.25
P. S. Co. Earliest of All	1.10	1.50	2.45
Netted Gem	.85	1.35	2.35

Prices f.o.b. Portland; write for quantity prices
See pages 50-51 for all varieties