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Direct from Grower to Planter - NO AGENTS

HIGHEST QUALITY

1916
SEEDS

BULBS PLANTS ROSES

BIRDS POULTRY AND
GARDEN SUPPLIES

Routledge SEED & FLOP
169 171 2nd St Portland
READ ALL ON THIS PAGE CAREFULLY

It's New Copy and Means Much To Us and More To You

ON CASH ORDERS WE PREPAY CHARGES IN THE STATES WEST OF THE ROCKY MOUNTAINS ONLY, CANADA AND ALASKA EXCEPTED.

Note.—We RESERVE THE RIGHT to send part or all of any order, on which we PREPAY CHARGES, by mail, express or freight, i. e., whichever way we find is best and cheapest.

About Prepaying Charges

By Parcel Post or Mail Only

On cash orders only, WE WILL, at prices printed in this catalog, SEND BY PREPAID PARCEL POST right to your gate ALL SEEDS by the Packet, Oz., or single Pounds, ALL PLANTS (not potted), BULBS, ROOTS, ROSES (tree roses excepted), FRUIT BUSHES and VINES (fruit trees excepted), SMALL SHRUBS and VINES (baled Evergreens like Spruce, Holly, Rhododendrons, etc., excepted).

NOTE Plants in pots, large branching shrubs, Evergreens of all kinds, that must be balled in earth, Tree Roses, Fruit and Shade Trees, over one year old and taller than three feet can not be sent by Parcel Post.

ON ALL OTHER ITEMS, and SEEDS in 5 to 50 LB. LOTS. YOU MUST SEND POSTAGE EXTRA in addition to price IF WANTED BY PARCEL POST. We give the packed, parcel post weight for this purpose on all miscellaneous merchandise that is mailable. For parcel post rates see top of page 1.

By Express or Freight Prepaid

On cash orders only, we will, at prices printed in this catalog, send by express or freight, charges prepaid, ALL STOCKS designated under prepaid parcel post above and (note this carefully) if your order amounts to $5.00 OR OVER, WE WILL ALLOW YOU TO INCLUDE Ferns, Palms or Plants in pots, Evergreens and Nursery Stock of all kinds, any size or age.

Read This Sure

If your order contains mostly stocks on which we prepay charges, and you wish to include BULK SEEDS, FERTILIZERS, POULTRY SUPPLIES, FOODS or MISCELLANEOUS STOCKS, on which we DO NOT PREPAY, include in your remittance enough extra to cover charges on THOSE ITEMS and we will PREPAY CHARGES ON THE WHOLE SHIPMENT—should you send too much, we will return it.

ACKNOWLEDGEMENT AND NOTICES: We acknowledge all express or freight orders the day they are received and notify you by card or letter the day they are shipped so you will know just when to expect them. Orders by parcel post that go at once are not acknowledged.

REPORTS—GOOD OR BAD: Will you help us to attain greater success by writing us and telling us how our Seeds, Plants and Trees and how you grow and how you like them? We will certainly appreciate it. MISTAKES: These will happen occasionally, in spite of all care. Write us at once, with copy of original order, if possible, and mistakes will be promptly rectified.

LARGE ORDERS: Any Gardener, Institution, or Individual wishing seeds, plants, trees, or supplies in larger quantities than priced in this catalog, is requested to mail a list of what is wanted, stating grade and size, and we will promptly return it with our very lowest prices.

GUARANTEE: We guarantee all Seeds, Plants, Bulbs and Nursery Stock true to name and will replace free, (with stock of the original value only) any that may through some unavoidable error, prove otherwise.

We guarantee all stocks to reach our customer in firstclass, live, growing condition, but for this, we give no warranty, impress or implied, that it will grow and thrive. Any person knows that its success thereafter, is dependent on soil, weather, care conditions over which we have no control. All orders filled subject to above.

ROUTLEDGE SEED & FLORAL COMPANY.
In filling this order we will use the greatest care to have it true to name, and will replace any that may prove untrue. But no sale by us carries a warranty of quality, express or implied, and for any error we shall not be liable for more than the purchase price. Every purchase from us is made on these terms.

**ROUTLEDGE SEED & FLORAL CO.**

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**NOTE**—Before you send this order read carefully what we have to say about parcel post and transportation charges on inside of front and back cover.
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**Total Amount of Order**

**SPECIAL NOTICE.**—We shall esteem it a great favor if you will give us in the spaces below the names and addresses of some of your neighbors or any acquaintances in the West whom you think would be interested in this catalog. For your kindness, we will put in your order a premium plant, bulb, or seeds, free of charge.

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**NOTE**—Before you send this order read carefully what we have to say about parcel post and transportation charges on inside of front and back cover.
Greetings to Our Customers and Friends

When there are four brothers associated together in one business, and all taking an active part, it is difficult for customers to know "who's who." It is also confusing, especially when telephoning, to tell which Mr. Routledge they wish to talk to. The object of these pictures is to enlighten you.

The four Routledge brothers, individually and collectively, wish you a very happy and most prosperous 1916, and sincerely thank you for the many orders and favors shown us. We trust our high quality stocks and service warrant your further patronage.
U. S. Parcel Post

We are now permitted to send Shrubs, Plants, and Bulbs through the mail at the new parcel post rates, therefore, we have decided to do away with all agents and traveling salesmen and do a direct mail order business with our customers. This enables us to give you direct and personal attention, quick service and lower prices. You get the benefit of the agent's commission.

Size and Weight of Parcel Post Packages

Packages cannot be sent that measure over 84 inches in length and girth combined. The weight limit for the local, first and second zones is 50 lbs. The weight limit for the third to eighth zones is 20 lbs. except as follows:

ALASKA, MEXICO, CUBA, HAWAII, PANAMA and the PHILIPPINES take the 8th zone rate with a WEIGHT LIMIT OF 20 LBS.

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

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<td>Fourth zone</td>
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<td>600 to 1000 miles, first lb. 8c; each additional lb. or fraction 6c</td>
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<td>1000 to 1400 miles, first lb. 9c; each additional lb. or fraction 8c</td>
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When you order from Portland, look for the zone that corresponds to the number of miles you are away, add up total weight of your order, consult the table above and add postage.

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

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- Yucca 75
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<p>We catalog only the very best varieties of both the newer and the older strains, those that are especially adapted to the peculiar conditions on the Pacific Coast.</p>

**ARTICHOKE**

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

**COLUMBIAN MAMMOTH WHITE.**—Gives immense yield of large, clear, white shoots; very tender and of excellent flavor.<br>
White.—Grown for stock. See page 40.

**PALMETTO.**—Early, prolific and uniform medium size; dark green. <br>
**CONOVER'S COLOSSAL.**—A good, standard large sort of approved quality. Shoots bright green, very tender.<br>

**ASPARAGUS ROOTS**<br>You can save two years' time by buying Asparagus Roots.<br>For prices, see Vegetable Roots, page 98.

**BEANS**

**Dwarf or Bush—Yellow Podded**<br>Packet and single pound prices are prepaid. Add postage to 10 lbs. prices if wanted by mail.

**Davis Kidney Wax (See Cut)**<br>The most hardy and productive wax bean. The pods are long, white, straight, crisp and tender. The vine is rustless and very vigorous, bearing the pods in clusters. For canning this is unexcelled on account of purity of the pod and bean. It is a remarkably good variety for shipping; seed white, and on this account is desirable for a shelled bean in winter. Large pkt. 10c; lb. 30c; 10 lbs. $2.50

**Wardwell's Kidney Wax**<br>A hardy, strong-growing vine; handsome, long podded variety. A few days later than Golden Wax; pods long, golden-yellow, brittle and entirely stringless; seed white, with dark markings about the eye. Market gardeners find this bean one of the most profitable. Large pkt. 10c; lb. 35c; 10 lbs. $2.75

**Improved Golden Wax**<br>Medium early, heavy cropper, vine vigorous. May be sown early or late with the assurance of a good crop. Pods are golden yellow, fleshy and solid, brittle, waxy texture and have an exceptionally rich buttery flavor. Excellent for home or market garden. Large(pkt. 10c; lb. 35c; 10 lbs. $2.75

**Prolific Black Wax**<br>The earliest wax variety. Pods clear, light yellow, round, fleshy, tender, stringless and remain in fit condition for some time. A heavy yellder that we can recommend. See cut page 5. Large pkt. 10c; lb. 30c; 10 lbs. $2.50

**NOTE.**—Seed Beans are high in price again this year. Seed crops were almost a failure in many sections.
BEANS—Continued

Dwarf or Bush—Green Podded Kinds

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

Stringless Green-Pod

The most popular and best liked green snap bean.

This famous bean is unequaled as a first-early!

It combines unusual hardiness, extreme earliness, and wonderful productiveness with handsome appearance and finest quality of pods. Extra early plantings may be made to produce the earliest crop, and even with later plantings this bean is the quickest to produce pods.

By repeated plantings pods may be had in constant succession from spring until cut off by heavy frosts in the fall. Combined with the extra hardiness and early maturity, the pods are the finest in quality, of a rich green, very round and almost straight, long, solidly meaty and plump—deeply saddle-backed, caused by the rounded swell of the fleshy sides. The pods are tender, brittle, and of finest flavor, always entirely stringless even when fully matured.

Large pkt. 10c; lb. 30c; 10 lbs. $2.35

DWARF HORTICULTURAL.—One of the best dwarf sorts for green shell beans for the home garden and market and can be used early as a green podded snap bean. The plants are very productive, compact and upright, with large leaves. The mature pods are about nine to fifteen and one-half inches in length, broad and thick, curved, with splashes of bright red on a yellowish ground. They become fit for use as green shelled beans early and in this condition the beans are very large, easily shelled and are about equal to the Lima in quality. Seed large, oval, plump, pale buff splashed with deep red.

Large pkt. 10c; lb. 30c; 10 lbs. $2.35

LONG YELLOW SIX WEEKS.—A very productive, extra early variety with long, straight, thick pods.

Large pkt. 10c; lb. 25c; 10 lbs. $2.00

Broad Windsor
An English variety; large, broad, flat beans of delicious flavor. Used as a shell bean.

Large pkt. 10c; lb. 25c; 10 lbs. $1.85

Lady Washington
For Dry Shelled Bean
A great improvement over the old “Navy,” being much earlier, a little larger, and a very heavy yielder, especially adapted to western conditions. The pods all ripen together and early enough to harvest before winter rains. Bean pure white.

Large pkt. 10c; lb. 25c; 10 lbs. $2.00

write for quantity prices.

CASTOR BEAN

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

Large pkt. 10c; lb. 40c

Prolific Black Wax (page 4)

Market and Truck Gardeners should write us for special prices and state quality and kinds wanted. We’ll save you money and you will get “Highest Quality” Seeds.
BEANS—Continued

Packet and Single Pounds ONLY are postpaid. Add postage if wanted in 10-lb. lots by mail.

Climbing or Pole Beans

Improved Kentucky Wonder (Asparagus)

A very popular variety; often sold as asparagus. By far the best green podded pole variety. Pods green, very long, round and perfectly stringless. Enormously productive and early, remaining in "fit" condition a long time. Unsurpassed for the table, being very tender and of delicious flavor.

Large pkt. 10c; lb. 30c; 10 lbs. $2.25

Worcester Pole

The finest Pole Shell Bean in cultivation and on account of its wonderful productiveness and superior quality takes first rank as a Pole Shell Bean. The strain we offer is an especially fine one. The long, thick pods are brilliantly colored with crimson carmine and are borne in clusters. Unequaled for tenderness and delicious flavor.

Large pkt. 10c; lb. 30c; 10 lbs. $2.25

EARLY GOLDEN CLUSTER WAX.—A very popular early and fine variety; pods golden yellow, long, wide and flat, borne in clusters, of fine quality and remain in condition to use for a long time; seed flat and dull white.

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

LAZY WIFE.—(Dutch Case Knife). Produces heavy crops of broad, flat, fleshy, tender, stringless green pods. Fine snap beans or shelled for winter use; rich buttery flavor.

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

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

Pole Lima Beans

Early Leviathan

One of the newer varieties and the very best pole variety in cultivation; pods long and borne in clusters; beans large and white; is early, strong-growing and prolific.

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

KING OF THE GARDEN LIMA.—The largest podded variety and very productive vines; very vigorous, often producing pods six to seven inches long. Beans large and of fine flavor.

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

Dwarf or Bush Lima

HENDERSON'S BUSH LIMA.—Fully two weeks earlier than any other variety. Plant grows about 16 inches high, and very prolific; beans are small; especially recommended where the season is short.

Large pkt. 10c; lb. 25c; 10 lbs. $2.00

Use

Nitro-Germ

on your bean seed before planting. See page 36.

BURPEE'S BUSH LIMA.—The best late dwarf variety; plants grow 18 to 24 inches high; very prolific; pods large, and the beans also large and heavily ribbed; will bear until stopped by frost.

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

Henderson's Bush Lima Beans.

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

Forms a head like cauliflower, but is much harder and gives excellent results. For fall use sow in April and May, for winter and spring cutting, June and July.

Very extensively planted by our local market gardeners for use in the late fall, winter and spring when cauliflower is out of season. Besides the White French, our old popular variety, we have procured from England three later varieties of real merit and great value.

WHITE FRENCH.—A valuable fall variety, large white heads of good quality.

Pkt. 5c; oz. 25c; 1 oz. $1.25

St. Valentine

An excellent variety, heads large, solid and white; remains in good condition a long time. We import our seed direct from the originator. This strain has given excellent satisfaction to our large growers. Ready to cut in February.

Pkt. 10c; 1/4 oz. 25c; 1 oz. $1.00

Sutton's Winter Mammoth

Immense white heads, superb in texture and quality, coming into use in midwinter, when the late autumn cauliflowers and broccoli are over. Vigorous in habit and self-protecting.

Pkt. 10c; 1/4 oz. 25c; 1 oz. 75c

Sutton's Late Queen

Quite distinct from all other broccoli, dwarf and compact in growth, rarely affected by frost, and produces splendid heads in May and June. Sutton's Late Queen has successfully passed through most severe winters. The heads are well protected, large, handsome and greatly appreciated at table.

Pkt. 10c; 1/4 oz. 30c; 1 oz. $1.00

Sutton's Late Queen.

TABLE BEETS

OUR MOTTO is

"Highest Quality"

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

Routledge Favorite

A select strain, very early. Perfectly globe shaped, with a single tap root, and of the richest color of any of the beets. It is a splendid keeper, is not excelled in yielding qualities by any other sort, is exceedingly tender, fine and sweet and is unequaled for table use. Market gardeners will find our Favorite a very profitable variety to grow, as no other sort approaches it in attractiveness or quality.

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

Crosby's Egyptian

Very popular early beet, as it reaches the desired size quickly. The beets are of good size, rather flat than round, and flesh dark.

Pkt. 5c; oz. 15c; 4 oz. 40c; lb. $1.25

Detroit Dark Red

Excellent variety, nearly globular, dark skin and dark flesh, zoned lighter; maturing early and keeping crisp and tender for a long time.

Pkt. 5c; oz. 15c; 4 oz. 40c; lb. $1.25

E. Z. GARDEN CULTIVATORS are priced very low and will save you much work in the garden. See page 109.
## TABLE BEETS—Continued

### EDMAND'S BLOOD TURNIP
Unsurpassed for late planting; deep blood-red flesh, very tender and juicy, runs very evenly in size and quite round; grows a small top.

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

**HALF LONG BLOOD.**—Becoming more and more popular. Excellent in shape and quality; yields well.  
Pkt. 5c; oz. 10c; 4-oz. 30c; lb. $1.00

**LONG BLOOD.**—The root is smooth and handsome, flesh brilliant in color and excellent quality. Good keeper.

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

### Swiss Chard

“Spinach Beet” or Sea Kale.  
This does not make edible roots like the regular garden beets, but is grown for the broad white leaf-stalks, which are bunched and cooked in the same manner as asparagus. The young leaves may be gathered also and cooked like spinach. Makes a delicious summer vegetable.

Pkt. 5c; oz. 15c; 4-oz. 40c; lb. $1.00

### Stock Beets or Mangels

Price of all the following varieties: Pkt. 5c; oz. 10c; 4-oz. 20c; lb. 50c; 10 lbs, and upward, not prepaid, 40c lb.

**GIANT YELLOW ECKENDORF**  
A new mangel of great merit. The roots are smooth, long and cylindrical in shape, very heavy, weighing up to 15 and 20 pounds each; grow two-thirds above ground. The flesh is firm, crisp and solid, white in color and of high feeding value. (See cut.)

**Giant Half Sugar Mangel**  
A new variety, very much more valuable for feeding purposes than the old sorts, it being very much richer. Yields as much per acre as the best Mangels, and twice as much per acre (bulk of roots) as the rich sugar beet. Roots grow very large and smooth, creamy white in color. (See cut.)

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

### DANISH SLUDSTRUP
An improved variety, considered one of the best. Awarded first class certificate. Color, reddish yellow, and of a distinct type. It is very hardy, grows well above ground; is easily pulled and very nutritious. (See cut.)

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

### Sugar Beets

**FRENCH WHITE SUGAR.**—The sugar beet most generally grown for stock, as it combines, with heavy yield, from 10 to 13 per cent of sugar.

**KLEIN WANZLEBEN.**—This is the variety which is considered best in Germany for producing sugar, and is now taking the lead in this country for this purpose.

Pkt. 5c; oz. 10c; 4 oz. 20c; lb. 60c

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(1) Giant Half Sugar.  
(2) Danish Sludstrup.  
(3) Giant Yellow Eckendorf.
BRUSSELS SPROUTS
PERFECTION OR DALKETH.—Plants are of dwarf growth, and stems are thickly set with large, solid sprouts. This variety is very hardy and even during quite severe weather, the plants maintain their sprouts; in fact, the flavor and quality is much improved by frost. Pkt. 5c; oz. 25c; 4 oz. 75c

CHICORY
Chicory is grown quite largely for the large thick roots, which are sliced, dried, roasted, and ground as a substitute or adulteration for coffee. The leaves are also used as a salad during the early spring months. To secure large smooth roots the soil should be light, rich, and deeply worked, and the plants should be thinned out to stand four to six inches apart. One ounce to 100 feet of row.

LARGE-ROOTED OR COFFEE.—Pkt. 5c; oz. 15c; 4 oz. 40c; Ibd. $1.25.

CRESS
CULLED OR PEPPER GRASS.—Used as a salad and fine for garnishing.

TRUE WATER.—This is quite distinct from the former and only thrives when its roots and stems are submerged in water. It is one of the most delicious of small salads.

CHIVES.—See Vegetable Roots, page 33.

CHERVIL
One ounce sufficient for 100 feet of drill.

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

CRESS

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

CAULIFLOWER
Plants Page 33

"Highest Quality"

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

EARLY SNOWBALL
This variety is much in demand by market gardeners. Its earliness, compact habit, large-sized heads and snow-white color commend it to every grower as a variety of especial merit. We have an extra selected stock of this sort, and recommend it with the greatest confidence.

NEW CALIFORNIA WONDER.—A late variety, forming good, large, solid heads during the winter. This variety has given great satisfaction in Oregon and California, wherever tried. Pkt. 10c; ¼-oz. 50c; oz. $1.00; ¼-lb. $3.00

ALGIDE.—A very strong growing late variety, with large leaves of a bluish cast. In cool locations and rich soil it produces very large, solid, white heads late in the fall.

BUG DEATH kills all leaf-eating insects; excellent for using on cabbage, cauliflower, etc. Can be used either dry or in water. See description, page 103; also dusters and blowers, page 101.
"Highest Quality"  CABBAGE  True and Pure

Our Cabbage Seeds come from the world’s best growers—pure, true strains, of highest quality. One ounce will produce over 3000 plants. One-quarter pound of seed will produce plants sufficient for one acre, therefore, don’t practice false economy by buying low-priced, low-quality seed.

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

Pkt. 5c; oz. 30c; 4 oz. 90c; lb. $2.75

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

Pkt. 10c; oz. 30c; 4 oz. 90c; lb. $3.00

**EARLY YORK.**—A small, early, conical heading cabbage. Has been very popular. Plant close.

Pkt. 5c; oz. 25c; 4 oz. 75c; lb. $2.25

**Danish Round Head.**

Use a teaspoonful of "Wonder" to each cabbage plant, and you will have the best cabbage you ever raised. It’s the richest, greatest fertilizer ever prepared for vegetable and flower gardens. Only 25c a package. See page 34.

**Earliest Spring.**—It is the first early round-head cabbage, maturing about the same time as Jersey Wakefield. One of its chief claims to superiority is the remarkable uniformity of the heads. They are also very solid, even when young, and with very small outside leaves.

Pkt. 5c; oz. 25c; 4 oz. 75c; lb. $2.50

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

Pkt. 5c; oz. 25c; 4 oz. 75c; lb. $2.25

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

Pkt. 10c; ½ oz. 25c; oz. 40c; 4 oz. $1.25

**CABBAGE PLANTS.**—During planting season we aim to have on hand large quantities of Cabbage and Vegetable Plants. (See page 33.)
Danish
Round Head
An earlier short-stemmed strain of the famous Danish Ball Head.
Large and very solid, round head on short stems, having the same keeping quality as the original strain of Danish Ball Head, so widely known. It is 10 days to 2 weeks earlier and produces larger yields. It is especially valuable for high, dry land, producing good sized heads where other strains would be too small. For shipping in the late fall or winter there is no finer cabbage. Our seed of Danish Round Head comes direct from the originator in Denmark and is of the Highest Quality. See cut, page 10.

Pkt. 10c; oz. 30c; 4 oz. 90c; lb. $3.00.

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

Pkt. 5c; oz. 25c; 4 oz. 75c; lb. $2.75

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

Pkt. 5c; oz. 25c; 4 oz. 75c; lb. $2.50

PERFECTION
DRUMHEAD SAVOY.—A variety that is much prized by those who are familiar with it. It is very sweet and crisp, and always tender. Heads medium size and compact, with densely and uniformly crimped or savoy leaves.

Pkt. 5c; oz. 30c; 4 oz. 90c; lb. $3.00

MAMMOTH ROCK BED.—Best hard-headed, red variety; large heads, globular, and very deep red on top. Very tender and excellent quality; fine for cold salads on account of its attractive color.

Pkt. 5c; oz. 35c; 4 oz. $1.00

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

FRENCH FORCING
Extremely early, sweet and mild, very popular. Roots small, globe-shaped, reddish orange, fine for early table.

Pkt. 5c; oz. 15c; 4-oz. 40c; lb. $1.25

EARLY SCARLET HORN
May be planted very early in spring, and is an excellent summer variety. Tops small and roots grow about 3 inches long; reddish-orange and good flavor.

Pkt. 5c; oz. 20c; 4 oz. 50c; lb. $1.50

Routledge Model—Coreless
The finest early table variety grown. Handsome, meltingly tender and sweet.

This new carrot will no doubt prove to be one of the most popular varieties. You will be delighted with the melting tenderness and sweet, mild flavor of Routledge Model.

It is a half-long cylindrical carrot, blunt pointed, with a small tap root and small top. They run very uniform in shape and grow just the right size for table use. The flesh is of fine texture, entirely devoid of stringyness, coarseness and woody heart; color bright orange; very attractive when served.

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

Chantenay
The Market Gardener’s Favorite.—Tops medium sized, necks small, roots tapering slightly, but uniformly stump-rooted and smooth; color deep orange-red; flesh very crisp and tender; medium early; a heavy cropper.

Pkt. 5c; oz. 15c; 4 oz. 40c; lb. $1.25

DANVER’S HALF-LONG
A great favorite; big cropper; the roots are smooth and handsome, medium size, tapering uniformly to a blunt point and of a rich, dark orange; fine for table or stock feeding.

Pkt. 5c; oz. 15c; 4 oz. 50c; lb. $1.50

STOCK CARROTS
LONG ORANGE IMPROVED
The best of the long carrots, especially for stock; color bright orange, with long, tapering roots, requiring a deep soil.

Pkt. 5c; oz. 10c; 4 oz. 30c; lb. $0.50

GUERANDE, OR OXHEART.—Bright orange, broad at the top and terminates abruptly in a small tap root. Length about 5 to 6 inches; very fine grained and sweet. Excellent for shallow soils.

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

LARGE WHITE BELGIAN.—Extensively grown for stock feeding; roots pure white, green above ground and growing to a large size; flesh rather coarse.

Pkt. 5c; oz. 10c; 4 oz. 30c; lb. $0.50

See description ROUTLEDGE MAMMOTH Carrots next page.

Chehalis, Wn., Feb. 12, 1915.
Routledge Seed & Floral Co.

Gentlemen: Your Mammoth Carrots are the best stock carrots I ever raised or saw.

Yours truly,

W. A. TOWNER.

PREMIUMS.—No matter what you are buying, the only premium worth your consideration is QUALITY. “OUR MOTTO” is “HIGHEST QUALITY,” first, last and all the time, “price” as low as possible.
Routledge Mammoth (The Best Carrot for Stock)

The heaviest cropping carrot grown, yielding more tons to the acre than any other sort. The flesh is yellowish-white, crisp and solid, and very sweet in flavor. It is a vast improvement on the Belgian sorts, which have been favorites in the past, as it is not only much more productive, but vastly easier to handle. The roots are short and very heavy at the shoulder, rendering them easily harvested. Too much can scarcely be said of their size and great productiveness. The roots frequently measure 15 to 20 inches in circumference, and 15 to 40 tons to the acre is not an extravagant statement as to yield.

Large pkt. 10c; oz. 15c; 4 oz. 40c; lb. $1.25; 2 lbs., enough for 1 acre, $2.25

R. R.’S WHITE PLUME

Our Leading Early White Celery.

A handsome, crisp sort, of very easy cultivation. Naturally its stalks and portions of inner leaves and heart are white, so that by closing the stalks, either tying or by simply drawing the soil up against the plant and pressing it together, the work of blanching is completed without the troublesome process of “banking” or “earthing up.” It is the earliest celery known, delicious and fine flavored.

Pkt. 10c; oz. 30c; 4 oz. $1.00; lb. $3.50

PARIS, GOLDEN SELF-BLANCHING

The finest strain of French grown seed. This splendid variety is without doubt the most popular celery grown. It is a self-blanching sort, for with a little banking or covering, even the outer ribs assume a beautiful golden yellow, while the heart or vine stalks are deliciously tender, brittle and sweet. This variety is being very extensively grown both for market and private use, not only on account of its ease of cultivation, but for its superior quality. It is not quite so early as the White Plume, but is of heavier and more compact growth, the stalks being thick, crisp and brittle. The hearts are large and solid, blanching a beautiful waxen yellow. It is tender and sweet and free from stringiness. Its flavor is rich and delightful. Our Private Stock Seed is procured from a noted celery grower in France, and is very superior.

Select quality: Pkt. 10c; 1/4 oz. 35c; oz. $1.25; 4 oz. $4.50.

GOLDEN YELLOW SELF-BLANCHING.

Same variety of celery as above, but is American grown. It is equal to most seeds offered, but not as true, dependable or of such high quality as the French grown stock.

Pkt. 5c; oz. 75c; 4 oz. $2.50
CUCUMBERS

Routledge Highest Quality
A quick grower and always commands "fancy prices" on account of its fine form and superb quality.

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

One of the greatest producers and at all stages of growth is the handsomest and most attractive of all American sorts.

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

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

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

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

Pkt. 5c; oz. 15c; 4 oz. 40c; lb. $1.00

Improved 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 ripe they are the best for sweet pickles. We offer "Highest Quality" seed that will grow long and uniform fruit.

Pkt. 5c; oz. 15c; 4 oz. 40c; lb. $1.25

Davis' Perfect
As now selected, the long, even fruits are of fine form, with an intensely dark rich green skin. The solid white flesh is of superb quality for slicing. So handsome and regular are the fruits, even when grown outside, that they bring an extra price on the market, often being taken for "hot-house grown." The vines are of strong growth and quite prolific.

For pkt. 5c; oz. 15c; 4 oz. 45c; lb. $1.50

EARLY SHORT GREEN.—A very early and productive variety, bright green, rather short, straight and a little smaller at the ends. Crisp and tender. Good for pickling or slicing.

Pkt. 5c; oz. 10c; 4 oz. 35c; lb. 85c

Lemon Cucumber
New. Highly recommended by those who have tried it for slicing and salads. Resembles a lemon both in size, form and color. Has a distinctive flavor superior to and not found in any other cucumber. Very prolific—try it.

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

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

Pkt. 5c; oz. 10c; 4 oz. 30c; lb. 85c

JAPANESE CLIMBING.—A vigorous grower, can be trained on a trellis or the garden fence, thereby saving ground space. Fruit from 12 to 16 inches long, dark green and smooth. Flesh pure white, crisp and tender.

Pkt. 5c; oz. 15c; 4 oz. 40c; lb. $1.25

USE WONDER.—So many of our customers tell us of the wonderful results, the increased yield and quick growth obtained by using our Odorless "Wonder" Fertilizer, that we again call YOUR attention to it. CHEAPEST BECAUSE IT'S THE BEST. See page 34.
Selected CORN—SWEET OR SUGAR Northern Grown

Packet and single pound prices only prepaid. Add postage to 10 lb. prices if wanted by mail. Write for quantity price.

Routledge's Selected Golden Bantam

Flavor.—Without exception, Golden Bantam Corn is the richest in flavor of all varieties; a sweet corn of which one will never tire. The first trial of this delicious Sweet Corn creates a taste "like more."

Earliness.—Golden Bantam Sweet Corn is one of the earliest sweet corns. It matures quickly and is suitable not only for early planting (on account of its hardiness), but a succession of sowings may be made which will give continuous supply until fall.

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

Growth.—Being dwarf in its growth, with stalks small in size, it can be planted quite close, and a large crop may be obtained on a small area. The ears are 8 to 10-rowed, and 6 to 7 inches in length—just the right size to handle at the table.

The Best Ever.—We have yet to hear of one who has grown Golden Bantam Sweet Corn and was not well pleased with it. From all points come letters from pleased customers. Remember our selected strain is northern grown, better flavored and truer than local or southern seed.

Price: Large pkt. 10c; lb. 25c; 10 lbs. $1.65.

Early Minnesota

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

Large pkt. 10c; lb. 20c; 10 lbs. $1.25

Early Mammoth

Medium early, one of the very best varieties to plant for home garden or market. Ears large and well filled, sweet and of good quality. Planted early it will produce a large, profitable crop.

Large pkt. 10c; lb. 20c; 10 lbs. $1.25

Black Mexican

An extra fine variety, unsurpassed for sweetness. Seed bluish-black when ripe. Highly praised.

Large pkt. 10c; lb. 25c; 10 lbs. $1.50

Stowell's Evergreen

A good main crop or late sort. Remaining longer in green state than any other. Very large ears, with deep grains, and remarkably sweet. Locality it must be planted early to mature. Planted extensively for green feed for stock.

Large pkt. 10c; lb. 20c; 10 lbs. $1.25

POP CORN

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

Large pkt. 10c; lb. 20c; 10 lbs. $1.25

FIELD CORN—Don't overlook what we have to offer in OREGON-GROWN FIELD CORN; "the best ever." See page 41. CORN PLANTERS, page 53.
CORN SALAD
Petitou or Lamb's Lettuce.—This is a hardy winter salad, the small leaves being served like lettuce during the cool fall and early winter months. It does not succeed during warm weather, and the seed should be sown thinly in drills during August, September, and October to supply fresh leaves during the cool fall and winter months. It is quite hardy, and after cold weather sets in can be protected by a thin mulch of soft hay or straw.

Pkt. 5c; oz. 10c; 4 oz. 30c; lb. 75c

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

LARGE ERBUPT.—An improved form, producing large, smooth roots, which are nearly round.

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

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

NEW YORK IMPORTED SPINELESS.—Considered the best variety. Oval shaped, deep purple, large size and fine flavor.

Pkt. 10c; 1/2 oz. 25c; oz. 40c; 4 oz. $1.25

ENDIVE
This plant furnishes an attractive and appetizing salad for the fall and winter months or by repeated sowings a supply may be had nearly all the year round. Useful in flavoring soups, stews, etc. Makes delicious greens if cooked like spinach. Cultivation same as for lettuce. The bleaching of Endive is brought about by drawing the leaves together into a head and tying them and this should be done a month before it is wanted for table use.

BROAD LEAVED BATAVIAN.—Leaves are broad, thick, green, more or less twisted and waved with white mid-ribs. It forms large hearts, which when blanched, form one of the best winter salads. Crisp, tender and fine flavor.

Pkt. 5c; oz. 15c; 4 oz. 45c

GREEN CURLED.—The hardiest of all, with beautifully curled dark green leaves, tender and crisp.

Pkt. 5c; oz. 15c; 4 oz. 40c

WHITE CURLED.—Very tender and light green, blanches easily, very ornamental.

Pkt. 5c; oz. 15c; 4 oz. 50c

HORSE-RADISH ROOTS
Will form radishes of large size in one season's growth. For prices, see Vegetable Plants and Roots, page 38.

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

DWARF GREEN CURLED.—Beautifully curled, bright green leaves, tender and of fine flavor.

Pkt. 5c; oz. 10c; 4 oz. 25c; lb. 85c

TALL GREEN CURLED.—Grows about 2 feet high; leaves dark green; curled and wrinkled; very hardy.

Pkt. 5c; oz. 10c; 4 oz. 25c; lb. 85c

THOUSAND-HAEDED.—For stock feeding. See Field Seeds, page 34.

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

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

Pkt. 5c; oz. 25c; 4 oz. 70c

LEEK
Belongs to the onion family and culture is about the same. Hardy, and freezing improves the flavor. Fill up to whiten.

CARSENTAN.—Mild and sweet; largest variety; hardy and of the finest quality.

Pkt. 5c; oz. 20c; 4 oz. 50c

AMERICAN FLAG.—Very broad, thick stems of good flavor.

Pkt. 5c; oz. 20c; 4 oz. 50c

On Cucumber and Garden Plants use "Bug Death" for Insects (see page 103), and "WONDER FERTILIZER," (see page 34), and you will be more than pleased with results.
LETTUCE

Grand Rapids

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

Pkt. 5c; oz. 15c; 4 oz. 40c; lb. $1.25

SIMPSON'S EARLY CURLED.—A very extensively used early loose-leaved, or clustering variety. Leaves light green, slightly frilled, crisp, sweet and tender.

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

EARLY PRISE HEAD.—A large, clustering, non-heading lettuce, most excellent for the home garden and undoubtedly the most easily grown variety in cultivation. It is too tender, however, to stand shipping or handling on the market. Leaves finely curled and crumpled, bright green tinged with brownish red, very crisp, tender and sweet.

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

Trianon Cos or Romaine

EARLY WHITE COS—Self Folding.—Distinct in having long, narrow, spoon-shaped leaves, folding into loose, sugar-loaf-shaped heads which blanch better by having the outer leaves drawn about them and tied. Leaves yellowish white, crisp, tender and of a distinct and pleasing flavor.

Pkt. 5c; oz. 15c; 4 oz. 40c; lb. $1.50

Big Boston—Improved

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

Pkt. 5c; oz. 20c; 4 oz. 50c; lb. $1.75

OUR MOTTO:
Quality first, price as low as we can make it.

HANSON

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

Pkt. 5c; oz. 15c; 4 oz. 40c; lb. $1.25

Uncas, Wn., May 18, 1915.
Routledge Seed & Floral Co.

Gentlemen: I planted twelve varieties of Lettuce this spring and the R. R.'s Wonderful is worth more than all the other eleven varieties put together. Be sure not to substitute, as I want only that kind.

Yours truly,
J. A. SHADE.

R. R.'s Wonderful

A reselected, hand-picked strain of the original New York or Wonderful. Our grower has given this stock special attention and it is a wonderful strain. It produces immense heads of closely folding ruffled leaves. The heart blanches beautifully and is crisp, tender and delicious. A robust variety, rooting deeply and thus able to resist hot, dry weather; slow to seed and a sure header. The outer color is of a distinct apple-green. A rapid grower and unsurpassed as a home or market lettuce.

Pkt. 10c; ½ oz. 20c; oz. 30c; 4 oz. 75c; lb. $2.50.

READ REPORT ABOVE.

A NEW STRAWBERRY—Read about the wonderful "Marvel," a new variety of sterling merit, most delicious of all—page 96.
LETTUCE—Continued

R. R.'s Tender Crisp
A distinct and extra choice variety for those who like curly, crisp, tender lettuce of the finest quality.

Grows to a large size, makes most desirable heads of pleasing appearance, and retains its crispness and mild flavor to a greater degree during the hot summer months than any other crisp-head variety. While especially adapted for midsummer, it is most desirable also for spring and fall. The plants are of quick, strong growth; the leaves are of a soft, bright green, growing closely around the head, which are tightly folded and blanched to a silver white, and crisp and brittle as could be desired.

Pkt. 10c; ½ oz. 15c; oz. 25c; 4 oz. 65c; lb. $2.00.

NEW YORK (Los Angeles)
A large, crisp, tight-heading lettuce which is a great favorite in the markets of Los Angeles and San Francisco. Carloads of this variety are shipped by California growers and it brings the highest prices. The quality is the finest, and is an excellent lettuce in every respect.

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

Early May King
The plants are of quick growth, practically all head and extremely handsome. From early spring plantings in the open ground they grow quickly to a diameter of 6 to 7 inches with the broad, light-green outer leaves folding closely about the round solid head; in cool weather the edges of these outer leaves are lightly tinged with brown. The inner leaves (practically the entire heart) are blanched to a rich golden yellow and have a specially fine, rich, buttery flavor. You can plant very early in the spring, and again during August and September.

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

CALIFORNIA CREAM BUTTER
A very popular variety for autumn and winter use. Forms a very large head, which is very buttery and of a rich golden yellow inside. The leaves are thick and of bright green, slightly tinged with brown on top of head.

Pkt. 5c; oz. 10c; 4 oz. 30c; lb. $1.25.

IMMENSITY
A very large-heading variety, one of the largest of the cabbage sorts; larger than California Cream Butter, which it resembles in color and shape. It is especially adapted for planting in the fall and winter, and makes a fine, tender, buttery head.

Pkt. 10c; oz. 15c; 4 oz. 40c; lb. $1.50.

Way-a-head
Extra Early
A new lettuce showing a remarkable combination of earliness, firm heading character, handsome appearance and fine quality. Both in cold-frames early in the spring and in the open ground—in spring, summer and early fall months—it has proved to be not only the earliest and one of the surest heading of all early lettuce, but also of the very finest quality. It is not only earlier than May King and other fine early varieties, but the tightly folded heads are generally larger in size. The outer leaves are a light green, while the inner head finely blanched to a rich buttery yellow. We urge you to try this new variety (see cut).

Pkt. 10c; ½ oz. 20c; oz. 35c; 4 oz. 75c.

PLANT SMALL FRUITS around your garden. What's nicer than delicious fresh fruit, fresh from your garden? See Fruit Department, pages 93 to 97.
MUSKMELON

NETTED ROCK OR ROCKY FORD
The most popular and best seller among Muskmelons.

The fruit is oval and completely covered with a beautiful lace-like netting. Flesh very thick; green, very sweet, luscious, melting and superb flavor. The fruit is wonderfully uniform in size and quality. The favorite everywhere.

Pkt. 5c; oz. 15c; 4 oz. 40c; lb. $1.25.

BURRELL'S GEM — Select Strain. — A new, medium-sized, oval variety, well ribbed and covered with a fine grayish netting and having reddish orange flesh of fine, spicy flavor and a distinct flavor. There is a growing demand here for the fine-grained, smooth, salmon, red-fleshed Muskmelons.

Pkt. 5c; oz. 15c; 4 oz. 40c; lb. $1.25.

THE HOODOO. — One of the best of recent introductions. It is early and prolific. The fruit is of medium size, the seed cavity very small, the rind very thin indeed, and the edible fleshy part thick and meaty. It is of orange or salmon color, the type much preferred now; but its great charm is its flavor, which is par excellence. Test it.

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

MONTREAL IMPROVED NUTMEG. — Valued for its size and delicious flavor. Round in shape, with remarkably thick green flesh. One of our handsomest varieties.

Pkt. 5c; oz. 15c; 4 oz. 40c; lb. $1.25

OSAGE, OR MILLER'S CREAM. — Medium to large, flesh thick, deep salmon, of excellent quality, rich and sweet; skin dark green, slightly netted and ribbed. A favorite variety for the later markets.

Pkt. 5c; oz. 15c; 4 oz. 40c; lb. $1.25

WATERMELON

ROUTLEDGE'S OREGON PRIZE
We offer this new Melon with the assurance that it is not only remarkably early, but as sweet, delicate and melting in flavor as any variety grown.

The flesh is of a deep scarlet; rind thin, and on this account is not a particularly good shipping sort, but is emphatically the variety for home use and sale. It will ripen in altitudes where it has not been thought possible to mature a good watermelon.

Pkt. 5c; oz. 15c; ¼ lb. 40c; lb. $1.25

Cole's Early. — One of the best early sorts; medium size, green skin and red flesh.

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

KLECKLEY'S SWEET
Unsurpassed for home use or near markets. Vine vigorous and productive; fruit of medium size, oval; color dark green; flesh very bright, rich red and exceedingly sweet.

Pkt. 5c; oz. 10c; 4 oz. 30c; lb. 85c

Cuban Queen. — A very vigorous grower; early, very solid and heavy; of most delicious flavor.

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

Netted Rock—Rocky Ford.

LARGE YELLOW CANTALOUPE. — A distinct type and very popular with all who have tried it. The fruit is large, oblong, slightly ribbed and coarsely netted. The flesh is light yellowish green, very sweet, crisp and delicious.

Pkt. 5c; oz. 15c; 4 oz. 35c; lb. $1.25

Golden Beauty Cassaba

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

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

Citron, Red Seeded. — Flesh white and solid, used exclusively for pickles and preserves.

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

Seed and Reference Tables, Amount to Plant, etc., see complete reference tables inside back cover. Always refer to "Index," pages 2-3, for anything wanted.
MUSHROOM SPAWN

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

DIRECT SPAWN.—Latest and best. Mammoth White, Cream White or Bohemian Brown.
Price, per brick, not prepaid, 25c; 10 bricks, $2.25; add postage at rate of 1½ lbs. per brick. Write for quantity price.

MUSHROOM CULTURE.—We have a 32-page booklet on Mushroom Culture, nicely illustrated, for 25c, postpaid. Free with an order for 10 bricks.

MUSTARD

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

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

White English.—Light green variety; tender leaves; seed light yellow.

Pkt. 5c; oz. 10c; 4 oz. 30c; lb. 75c

OKRA

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

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

ONION

A magnificient variety of recent English introduction. Unsurpassed for exhibition purposes.

AILSA CRAIG

Highest Quality—True Seed

Very large, oval shaped, with straw-colored skin. When grown to perfection will weigh from 2½ to 3 pounds. Has attained great popularity among private gardeners for its all-around superiority and as an exhibition variety.

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

Oregon Yellow Danvers

This is the variety planted almost entirely in the Northwest, particularly in Oregon. The largest crops of onions and the best keepers, bringing the highest prices in the Pacific Coast and Middle Western markets, are the Oregon Yellow Danvers. The bulbs are uniformly large, of a half-globe shape, with small necks. It is the earliest, largest in size, most perfect in shape, the largest cropper and the best keeper, and as a market or table onion cannot be excelled. Our seed is grown specially for us by the best onion seed growers in Oregon. No onion grower can afford to plant anything inferior when such seeds can be obtained at the following prices:

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

NOTE—NEW CROP ONION SEED is very short and 1916 prices are much higher. Beware of LOW PRICED SEED this year, for it will necessarily mean OLD SEED.
ONION—Continued

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

Pkt. 10c; oz. 40c; 4 oz. $1.00; 1 lb. $4.00

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

Pkt. 5c; oz. 25c; 4 oz. 65c; 1 lb. $2.25

Routledge Prize Taker
This onion has become a great favorite on account of its large size and great solidity. It is perfectly globe-shaped, with straw-colored skin; the necks are very small and the onions always ripen up hard. An excellent keeper, exceedingly fine flavor, grows to an enormous size, onions weighing 5 pounds having been grown from seed the first year.

Pkt. 10c; oz. 25c; 4 oz. 65c; 1 lb. $2.25

Yellow Globe Danvers
One of the most extensively used yellow onions. Bulbs of good size, uniformly globe-shaped, with small neck, and ripen very evenly. Flesh white, crisp, and of mild and excellent flavor. An enormous yielder and a fine keeper. We offer a select strain, unsurpassed.

Pkt. 5c; oz. 25c; 4 oz. 65c; 1 lb. $2.25

YELLOW DANVERS.—A popular and well-known variety. Earlier and flatter than above. Excellent for bunching green.

Pkt. 5c; oz. 20c; 4 oz. 50c; 1 lb. $1.75

WHITE BARLETTA (Queen).—An early white variety; prized for early gardens and pickling on account of its small size, pure white skin and remarkable keeping qualities. Of very quick growth, flat shaped and fine, mild flavor.

Pkt. 10c; oz. 25c; 4 oz. 65c; 1 lb. $2.25

Large Red Wethersfield
The Standard variety of the red onions. Of large size, half globe, a heavy yielder, and one of the best for keeping. Skin a deep purplish red, smooth and glossy; will do better on fair upland soil than most varieties; flesh white, rather strong.

Pkt. 5c; oz. 25c; 4 oz. 75c; 1 lb. $2.50

Australian Brown
Its remarkable keeping qualities and handsome appearance makes it very desirable. Resembles the Yellow Danvers in general appearance, but has a clear, amber-brown skin. It matures early, ripens uniformly and is a good long keeper.

Pkt. 5c; oz. 25c; 4 oz. 65c; 1 lb. $2.25

Southport White Globe
An enormous yielder and superb keeper; perfect globe-shaped, very large, clear white skin and considered one of the handsomest varieties grown. We offer the very finest stock obtainable.

Pkt. 10c; oz. 25c; 4 oz. 65c; 1 lb. $2.25

WHITE PORTUGAL or Silverskin
The finest flavored of all the white-skinned onions. Quite early, flat shaped and a fine cropper. Planted thickly in broad drills make fine pickling onions.

Pkt. 5c; oz. 25c; 4 oz. 65c; 1 lb. $2.00

ONION SETS

BOTTOM ONION SETS.—These small onions are grown from seed that have been sown too thick to attain a large size. The small onions (about ¼-inch in diameter) thus obtained are planted out and are ready in a short time to pull as green onions for the table.

Per lb. 15c; prepaid 20c, or 5 lbs. $1.00.

WRITE for low prices by the 100 lbs.

TOP SETS.—Lb. 25c, postpaid.

SHALLOTS.—Valuable for bunching or for an early crop. Each bulb makes several small onions, which are to be pulled off when large enough.

Per lb. 25c; 5 lbs. $1.00, prepaid

DON'T Practice false economy by buying low-priced seeds. Our motto—"HIGHEST QUALITY." price as low as we can make it.
"Highest Quality" GARDEN PEAS Hand Picked

There is a vast difference in "strains" of garden peas. You will find our stock "very superior," healthy, vigorous and true, much better than the average seed sold by wholesale seed dealers and jobbers. This year we offer some new English introductions that we have imported for our private trade—try them if you want "Highest Quality."

Packet and single pound prices only are prepaid—add postage to 10 lb. prices if wanted by mail. WRITE FOR QUANTITY PRICES.

ALASKA.—An extra early, exceedingly hardy pea. Pods of perfect shape, well filled with smooth peas of unrivaled quality. Height 2½ feet. Can be planted much earlier than the wrinkled peas.

**Large pkt. 10c; lb. 20c; 10 lbs. $1.25**

FIRST AND BEST.—Pods well filled with round, smooth peas of excellent flavor. Extremely early, productive and hardy. Height 2½ feet. Can be planted much earlier than the wrinkled peas.

**Large pkt. 10c; lb. 20c; 10 lbs. $1.25**

American Wonder

Of extremely dwarf growth, only 8 to 10 inches high, this is nearly as early as Alaska. The pods, while of small size, are filled with luscious, large, wrinkled peas of first-class quality.

**Large pkt. 10c; lb. 25c; 10 lbs. $1.50**

PREMIUM GEM.—Grows about 15 inches high, and is among the earliest dwarf, green, wrinkled sorts. The quality is unsurpassed; an abundant bearer.

**Large pkt. 10c; lb. 20c; 10 lbs. $1.50**

Little Marvel

An extremely valuable variety, especially suited to small home gardens, and early market. It matures very early and produces large crops. Vines 15 to 18 inches high. The pods are dark green, fair sized, produced in pairs and are closely filled with 6 to 7 peas of extra fine flavor.

**Large pkt. 10c; lb. 25c; 10 lbs. $1.85**

Richard Seddon

The pods are deep green, crowded with from 7 to 9 large peas of very fine color and flavor. Grows from 16 to 30 inches in height. An extremely early type, maturing only a week later than the Alaska, when sown at the same time. A splendid all-around early variety. On account of its immense productivity, evenness of maturity, compact well filled pods and excellent color and quality, it is especially desirable for canning purposes.

**Large pkt. 10c; lb. 25c; 10 lbs. $2.00**

Gradus

Extra early. This popular large-podded wrinkled pea of finest quality matures pods only two or three days later than the small-podded round-seeded extra earlies. Vines four feet high. It produces uniformly large pods, measuring from four to four and a half inches in length, nearly round, and well filled with very large handsome peas of the finest flavor.

**Large pkt. 10c; lb. 25c; 10 lbs. $1.50; 25 lbs. $3.50**

BURPEE'S "BLUE-BANTAM."—Unequaled for extreme earliness, superb quality, and unusual productiveness. The dwarf vigorous vines average 15 inches in height and carry really enormous crops of large, deep bluish-green pods. The handsome pelleted pods average 4 inches long and are tightly packed with 7 to 8 extra large, deep bluish-green peas. These peas are not only large in size, but of most luscious flavor. The pods are ready to pick as early as American Wonder, while double the size—in fact, they average almost as large as Gradus. If sown thinly—say 4 inches between the seeds in the row—the produce will astound even experienced gardeners.

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

Sherwood (King Edward)

A splendid new pea, produces in greatest profusion the largest pods of any early dwarf variety and the pods are filled with 8 to 10 large deep-colored peas of the most delicious flavor and quality. Very hardy. Height 15 to 18 inches.

**Large pkt. 15c; lb. 30c; 10 lbs. $2.25**

Richard Seddon.

Market Gardeners who buy Peas in quantity should write us for prices, stating variety and amount wanted. Single pound prices only are prepaid. See notes top of this page.
Highest Quality Garden Peas—Continued

R. R.'s Prosperity
The Earliest Large Podded, Sweet Garden Pea to date.
A reselected New Zealand grown strain of Gradus. Healthier and stronger.
The best brand, large podded, extremely early, prolific variety, is vigorous and robust, growing to a height of 4 feet. It is exceedingly early for a wrinkled variety, being only a few days later than the earliest smooth sorts.
The pods are very large, and are invariably well filled with from 8 to 10 sweet, luscious, tender wrinkled peas of large size and delicious flavor.
The peas remain tender and sweet for some time after they are large enough to use.
Large pkt. 15c; lb. 30c; 10 lbs. $2.25; 25 lbs. $4.00.

Routledge Prize
Largest pods, sweetest peas, most productive main crop variety. See next page.

DWARF TELEPHONE—Daisy
The vines, though growing only about 18 inches in height, are very stout, and generally bear a good crop of large well filled pods.
The pods average 5 inches in length, containing 7 to 8 large peas of a light green color, which are tender and sweet.
Large pkt. 10c; lb. 25c; 10 lbs. $1.75

Gladstone
A grand new second-early, productive of large, luscious, wrinkled peas.
A new English variety of "highest quality." Aside from Routledge Prize it cannot be excelled for a main crop variety. The strong, sturdy vines grow about 3½ feet and are simply covered with extra large long, pointed and curved pods, that are always full to the end, of large, rich, luscious peas, the like of which the average gardener has never tasted. Try it; you will be delighted.
pkt. 15c; lb. 30c; 10 lbs. $2.25; 25 lbs. $4.50

IMPROVED STRATEGEM
A very productive semi-stratagem variety with large leaves and large pods. The peas are dark green, wrinkled, and large. It is planted in large quantities by gardeners for market.
In quality it is unsurpassed, the peas when cooked being of the most delicious sweetness. Vines grow 1½ feet to 2 feet high, and very stocky.
Large pkt. 10c; lb. 20c; 10 lbs. $1.50; 25 lbs. $3.25.

Special Pea Offer
To give you a continuous supply of delicious peas at a special price, we offer 1 large packet of Special Garden Peas, DUKES'S DELIGHT, SHREWBOY, GOOD LUCK, (all dwarf kinds) for only 40c, postpaid; or R. R.'S PROSPERITY, GLADSTONE and ROUTLEDGE PRIZE, (all tall kinds) for only 30c, postpaid. YOUR SELECTION of these seven kinds, any 4 pkts. 45c, or 4 1-lb. pkws. $1.00, postpaid.

Be sure you read about Mulford's Culture for inoculating pea seed. Increases the yield and improves the soil. (See page 36.)
Peas—Continued—Large Podded, Late or Main Crop
Packet and single pound prices only, postpaid. Special quantity price on request.

Routledge Prize

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

This reselected, new strain, grown especially for us in New Zealand, will be found true to name. A sturdy, healthy grower. Vines and pods are a deep, rich green. A bushel of Routledge Prize pods will shell out nearly twice as many peas as a bushel of Telephone. The vines are enormously productive, being completely covered with immense long pods, well filled with from 8 to 11 large peas of the richest flavor. This variety grows about 4 feet high and, as an abundant cropper is superior to all other sorts.

Nothing in the line of peas excels the Routledge Prize in richness, sweetness and flavor. We are sure our customers will agree with us after testing this new pea. Try them and report results if you will.

Large pkt. 10c; lb. 25c; 10 lbs. $1.75; 25 lbs. $4.00.

REPORTS

Chewelah, Wn., July 20, 1915.
Routledge Seed & Floral Co.
Gentlemen: The Peas you sent me have just come into maturity and they are large, fine and sweet; never saw anything to equal them.

Yours truly,

MRS. J. C. ACHIN.

Albany, Ore.

Dear Sirs: All your seeds did well, especially Routledge Prize Peas; they were so strong and prolific.

Yours truly,

MRS. FRANK LINES.

Telephone

One of the most popular and largest peas we have. Vines attain a height of 4½ feet, bearing profusely the extra long, handsome pods; tender, sweet and superb flavor. We offer a very carefully rogued, select strain of unusual merit.

Large pkt. 10c; lb. 25c; 10 lbs. $1.50; 25 lbs. $3.25.

PARSLEY

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

Pkt. 5c; oz. 15c; 4 oz. 30c; lb. 50c

ARLINGTON EXTRA CURRED.—Very choice strain, having the greatest possible curl to the leaves and the darkest green color; a very vigorous grower; will stand heat and drought better than any other.

Pkt. 5c; oz. 15c; 4 oz. 40c; lb. $1.25

PLAIN LEAF.—Single-leaved variety, very fine and excellent flavor.

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

TREAT your PEAS, BEANS and SWEET PEAS with Mulford's Nitrogerm Cultures. Makes them healthy and vigorous, insures a full crop. See page 36.
PARSNIP

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

Culture.—Sow as early in the spring as the weather will admit in drills 1-½ inches apart and ½-inch deep. In a rich, deep soil; thin out 3 to 6 inches apart in the rows. The quality of the roots is improved by leaving them in the ground over winter for spring use.

Sweet Marrow

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

Pkt. 5c; oz. 10c; 4 oz. 30c; lb. 75c

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

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

**Ever Use a Lantern?**

If you do, investigate DAD'S ELECTRIC—always ready—no danger from fire, makes "night time a light time." See page 110.

Eddyville, Ore., March 1, 1915.

Roulledge Seed & Floral Co.

Gentlemen: I bought about $1.20 worth of garden seeds of you last year, and I am well pleased with the results. Especially the Carrots and Turnips. I grew three crops of Turnips on the same ground and had some as large as 18 pounds.

I am enclosing order for one pound of same, and will order more seeds soon.

Yours respectfully,

G. G. DONN.

Ruby King Pepper.
PUMPKIN

Winter Luxury
An enormously productive variety of medium size and superior keeping qualities. Of rounding shape, about 16 inches in diameter; golden russet color, finely netted, rich deep golden flesh; sweet and tender. By far the best for pies; try it.

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

SMALL SUGAR.—Fine grained, very sweet and excellent keeper. Skin deep orange yellow.

Pkt. 5c; oz. 15c; 4 oz. 30c; lb. 80c

King of Mammoths
The largest of all the pumpkins; grow this variety to win the prizes at the fair.

Pkt. 10c; oz. 15c; 4 oz. 50c; lb. $1.50

CONNECTICUT FIELD.—The best for field culture and excellent for stock. Pkt. 5c; oz. 10c; 4 oz. 20c; lb. 50c

LARGE SWEET CHEESE.—A popular variety; fruit flattened; skin mottled light green and yellow; flesh yellow, thick and tender; very nutritious and of excellent quality; a most productive variety.

Pkt. 5c; oz. 10c; 4 oz. 20c; lb. 60c

DOUBLE THE YIELD AND SIZE OF YOUR PUMPKINS by using a handful of “WONDER” Fertilizer to each hill and be sure you mix it well in the top soil. (See page 34.)

PURE SEED POTATOES

We offer a few varieties of special merit that we recommend to our friends and customers. We think it is folly to plant ordinary or common stock. Many gardeners insist on the best vegetable seeds, but plant any old kind of potatoes, not knowing whether they are early or late. Get a start of some of our select seed stock and you will be more than pleased with the results.

ABOUT PRICES—Prices are subject to important market changes. Ask for quotations on larger lots. Good, true, healthy stock of the best named Seed Potatoes are never plentiful and are always in demand. Order early, before stocks advance.

Extra Early Irish Cobbler

(Earliest of all)
The most reliable extra early white-skinned potato; so uniform in growth that every hill seems to ripen all at one time. Form oval and round; skin lightly netted, creamy white, and having few eyes, which are quite shallow; flesh pure white and of the finest quality; not excelled by any variety; its earliness, uniformity, large yield, fine quality and very handsome appearance make the Extra Early Cobbler a popular and profitable variety for market or home garden use; compact grower and can be planted closer.

Price, not prepaid, add postage if wanted by mail, 1 lb. 10c; 4 lbs. 25c; 10 lbs. 50c; 50 lbs. $1.50; 100 lbs. $2.75.

EARLY ROSE
This variety has been a great favorite for many years. Our stock is as fine as can be obtained.

Price, not prepaid, add postage if wanted by parcel post, 5 lbs. 25c; 10 lbs. 40c; 50 lbs. $1.35; 100 lbs. $2.50.

NEW BOOK—“Practical Potato Culture.” This 128-page book by E. A. Rogers, an authority on the subject of Irish potatoes, is up-to-date and worth reading. Price postpaid 60c or Free with a cash order for Seed Potatoes amounting to $5.00 or over, or 25c on a $2.50 order.
Seed Potatoes—Continued—Main Crop Varieties

SUNFLOWER

SUNFLOWER

American Wonder

The American Wonder is one of the best all-around white potatoes in cultivation and very popular for early or main crop. It is practically blight-proof, a strong grower, a great producer; tubers white, uniform in size, elongated, of excellent quality. It is a potato sought after and desired by our commission men, potato buyers, shippers and dealers, therefore a most profitable sort to plant. If planted early will be ready to use as soon as Early Rose, and has the advantage of being white.

Price, not prepaid, add postage if wanted by parcel post, 5 lbs. 25c; 10 lbs. 40c; 50 lbs. $1.25; 100 lbs. $2.50.

POTATO FERTILIZER.—Have you ever tried using a good potato fertilizer, rich in phosphoric acid and potash, keeping account of the expense and the increased yield? Try it; you'll find it most profitable. The vines will be strong, healthy and productive, and the tubers even, smooth, solid and of better quality.

Use Beaver Brand "E" Potato Fertilizer, 500 lbs. or more per acre along the rows at planting time. See page 35.

RHUBARB OR PIE PLANT

BURBANK'S CRIMSON WINTER.—The new variety, which has become very popular and profitable to the grower, has a delicious fruity flavor, is extremely hardy, very prolific and very quick growing. Produces good stems all winter and spring.

Pkt. 10c; oz. 60c; 4 oz. $1.75

VICTORIA, OR MAMMOTH.—Very large; most popular variety.

Pkt. 5c; oz. 15c; 4 oz. 45c; lb. $1.50

RHUBARD ROOTS.—From October to June we can always supply one, two, and often larger clumps of Rhubarb Roots. Customers will save much valuable time by ordering roots instead of seed. For prices, etc., see page 98.

SUNFLOWER

This has very large single heads borne at the top of a single unbranched stalk usually, and with much more and larger seed than the common sorts. It is used extensively for feeding poultry. The plant often grows 10 feet high. Sow seed as soon as ground is fit for planting corn, in rows 3 to 4 feet apart and 10 inches apart in row. Cultivate same as corn. When the seed is ripe and hard, cut off the heads and pile loosely in an airy dry place where they will soon cure so as to be threshed out and cleaned. This variety will yield 1000 pounds or more of seed per acre. Some species are planted largely in the flower garden for ornament. (See Flower Seeds under Helianthus.) Pkt. 5c; 4 oz. 10c; lb. 25c, postpaid; for larger quantities inquire for prices.

We sell POTATO PLANTERS, FORKS, GARDEN and FARM TOOLS. Every gardener needs up-to-date tools and supplies. See pages 33 and 101 to 110.
**RADISH**

"Highest Quality"

**REMEMBER**—For a continuous supply of crisp, tender Radishes, sow seed every week, as they remain in "prime" condition only a few days after attaining full size. For very early or late fall planting, raise the seed bed so it will drain and be warmer.

R. R.’s Scarlet Gem

This splendid radish is the very finest early strain of the round, bright red radishes. No other can surpass its table excellence or its beauty. The skin is bright scarlet, flesh pure white, crisp, tender and of delicious quality.

Pkt. 5c; oz. 10c; 4 oz. 25c; lb. 90c

Scarlet Turnip, White Tipped (No. 5)

A beautiful variety, deep scarlet with white tip. Very early, crisp and delicious. It is most attractive in appearance and cannot fail to give satisfaction; very popular as a market sort; very select strain.

Pkt. 5c; oz. 10c; 4 oz. 25c; lb. 90c

Early Scarlet Turnip

Small top; of quick growth; mild and crisp. Very popular.

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

French Breakfast (No. 7)

Very popular, crisp, tender and mild; grows about 2 inches long, stump rooted, tipped white.

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

Long Scarlet (No. 2)

Grows perfectly straight and smooth, 6 to 7 inches in length. Skin scarlet, very thin; the flesh crisp, brittle and of delightful flavor; the finest long red radish.

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

WHITE ICICLE (No. 3)

This superb radish is pure white and most attractive. It is not only crisp and tender when young, but retains these qualities until the roots attain large size. It is ready for use almost as quickly as the early turnip-shaped sorts.

Pkt. 5c; oz. 10c; 4 oz. 25c; lb. 85c

WHITE STRASBURG—Even when comparatively small this variety is in good condition for use, and continues crisp and tender until matured, when the roots are 4 to 5 inches long and about 2 inches in diameter. This is considered one of the best large summer sorts.

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

SCARLET GIANT (No. 6)—The largest early scarlet turnip-shaped radish. The flesh is a sparkling white, solid, crisp, juicy and of the mildest flavor. The bright, deep crimson color of the skin remains quite constant.

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

EARDLY SNOWBALL (No. 4).—A grand improvement on the White Box or White Turnip Radish; very early, of a clear white color, solid, juicy, crisp, tender and unsurpassed in flavor.

Pkt. 5c; oz. 10c; 4 oz. 20c; lb. 65c

LONG BRIGHTEST SCARLET, WHITE TIPPED (No. 1).—The brightest and handsomest long scarlet radish known. Roots mature quickly and continue in good condition until full grown. Of excellent quality.

Pkt. 5c; oz. 10c; 4 oz. 20c; lb. 75c

WINTER RADISHES

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

SAKURAJIMA—Japanese variety; grows very long and 2 to 3 inches in diameter. The skin is smooth and white, and the flesh is always mild, crisp and tender.

Pkt. 10c; oz. 20c; 4 oz. 60c

California Mammoth White.—Pure white. The flesh is tender and crisp, keeping well through the winter.

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

CHINA ROSE—Bright rose color, flesh firm and piquant; largest at the bottom. One of the best.

Pkt. 5c; oz. 10c; 4 oz. 25c; lb. $1.00

LONG BLACK SPANISH.—Very popular; latest, as well as the hardest. Roots of medium size, oblong, black.

Pkt. 5c; oz. 15c; 4 oz. 25c; lb. 85c

ROUND BLACK SPANISH.—Three or four inches in diameter; flesh white; good keeper.

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

Market Gardeners should write for our low prices in 10, 20 and 50-lb. lots.
SALSIFY

Vegetable Oyster

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

Mammoth Sandwich Island

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

Pkt. 5c; oz. 15c; 4 oz. 40c; 1 lb. $1.25

SPINACH

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

IMPROVED THICK-LEAVED.—A variety which grows very rapidly, forming a cluster of large, very thick, slightly wrinkled leaves of fine color and quality when cooked; best for market gardeners.

Pkt. 5c; oz. 10c; 4 oz. 15c; 1 lb. 50c

LONG STANDING.—An improved variety of excellent quality for general use; slow going to seed. Remains in good condition longer than most. Dark rich green.

Pkt. 5c; oz. 10c; 4 oz. 15c; 1 lb. 50c

BLOOMSDALE SAVOY LEAVED.—Very early; of upright growth; leaves broad and pointed, dark green, fine quality; grows quickly.

Pkt. 5c; oz. 10c; 4 oz. 15c; 1 lb. 50c

PRICKLY WINTER.—Very desirable; very hardy and easily grown; bears large, smooth broad pointed leaves. Color, bright green. A fine winter and spring variety.

Pkt. 5c; oz. 10c; 4 oz. 15c; 1 lb. 50c

SQUASH

Delicata

A perfect all-season squash. Summer and winter crop on one plant. Produces 15 to 20 fruits to a vine. Delicious chestnut flavor.

Delicata grows in vine form and ripens an enormous number of fruits of excellent quality, and of such convenient size that the entire fruit can be used at one time.

There is no sort in existence that may be used for so long a season as Delicata. It is ready almost as soon as the early summer sorts, is better flavored than the best of them, and remains in perfect condition as long as any of the keeping varieties.

Its flavor when cooked has been compared to the Sweet Potato, others liken it to roasted chestnuts, but all agree that it is delicious. The fruits are about 9 inches long, and as shown in the cut, slightly ribbed. When ripe, the ground color is deep yellow, irregularly striped and marbled with dark olive-green.

The flesh is thick, of fine texture, and pale-yellow in color. It is unexcelled for baking—the shape and size make it perfect for this purpose. When boiled it turns out dry, granular and mealy, and none is better for pies.

Its firm, substantial flesh, and abundant, satisfying flavor are unexcelled by any. (See cut.)

Pkt. 10c; oz. 20c; 4 oz. 50c; 1 lb. $1.50
SQUASH—Continued

Mammoth White Bush Scallop
The fruit is a beautiful, clear, waxy white; superior in size and beauty, and is quite uniformly warded. The handsomest of the scalloped squashes. The stock we offer is exceptionally true to type. Pkt. 5c; oz. 15c; 4 oz. 30c; lb. 85c

Golden Summer Crookneck
Early and prolific. The fruits are of the true crookneck type, heavily warded and of light golden color. One of the most popular sorts for home and market. Pkt. 5c; oz. 15c; 4 oz. 35c; lb. 90c

VEGETABLE MARROW.—Very early, oblong variety; fruit dark green at first, becoming marbled and striped with yellow and lighter green as they mature. Very fine flavor fried in oil, or stewed; use while small. Pkt. 5c; oz. 10c; 4 oz. 30c; lb. 75c

YELLOW BUSH SCALLOP.—A very early, flat, scallop variety of large size; color yellow; flesh pale yellow and well flavored. Pkt. 5c; oz. 10c; 4 oz. 25c; lb. 75c

Fall and Winter Varieties

BOSTON MARROW.—A popular variety for canning; large oval fruit; skin bright reddish orange, with light cream netting; flesh rich orange, fine grained and of excellent quality. Pkt. 5c; oz. 10c; 4 oz. 30c; lb. 70c

Mammoth Chili
The largest of all squashes, growing to an enormous size, often weighing over 200 pounds, while its rich, fine flavored flesh insures its value for all purposes. Its size makes it valuable for stock feeding. Pkt. 5c; oz. 15c; 4 oz. 40c; lb. $1.50

Golden Hubbard
The same in size, shape and quality as the well-known Hubbard Squash, except that it is a bright red or golden color and somewhat earlier. It is also a long keeper; considered by expert judges to be one of the very best fall and winter sorts yet introduced. Matures before the frosts; is vigorous and wonderfully productive. In flavor it has no equal. Pkt. 5c; oz. 15c; 4 oz. 40c; lb. $1.25

TRUE HUBBARD
One of the best of the winter squashes. Vines vigorous and very productive. Fruit large, heavy, moderately warded, with very hard shell. Skin uniformly dark bronze green. Flesh bright orange yellow, fine grained, thick, dry and richly flavored. Can be kept in good condition until spring. Our seed is carefully selected and is much superior to most offered. Pkt. 5c; oz. 15c; 4 oz. 40c; lb. $1.25

Don’t Overlook
"DELICATA
SQUASH"
on page 29

DOUBLE the yield
of your squash by
using a handful of
"WONDER" Fertilizer
to each hill. (See page 34.) You know
the richer your
ground, the larger
the yield, and Wonder Fertilizer
certainly contains more
plant food than any
other brand.

Goldson, Ore., Dec. 13, 1913.
Routledge Seed & Floral Co.
Dear Sirs: The sample packet of seeds you sent me done fine for me. The Golden Hubbard Squash was a very good success. Although I planted them late, they fully ripened before the frost caught them. They are very delicious.
Respectfully,
MISS AGNES KRUEGER.

NEW DELICIOUS.—This winter squash resembles the Hubbard; flesh exceedingly thick, compact, fine grained; color golden orange; tender, cooking sweet and rich. Whether it is steamed, baked, boiled or made into pies.

Pkt. 5c; oz. 15c; 4 oz. 40c; lb. $1.25

Hubbard Squash.
TOMATO

Bonny Best

Highly prized by many Oregon growers. Tomatoes large, smooth and of a rich scarlet red, the color that sells quickly. Fruit thick with a small core, a profitable tomato for any purpose. Slices exceptionally well. Flesh and flavor excellent. Nearly globe shaped, slightly flattened at stem. Borne in clusters of 5 or 6 fruits all ripening evenly together. Very productive and one of the very earliest.

Pkt. 10c; ½ oz. 25c; oz. 45c; 4 oz. $1.35

DWARF CHAMPION.—Forms a strong, erect, bushy plant 2 feet high; often sold as Tree Tomato. Fruit smooth, medium sized, solid and of good flavor.

Pkt. 5c; oz. 30c; 4 oz. $1.00

TOBACCO

Culture practically same as cabbage.

Havana or Connecticut Seed Leaf.—Both good, hardy varieties for general planting here.

Pkt. 10c; oz. 40c

Chalk’s Early Jewel

The largest, smoothest and finest flavored, extra early bright red tomato, about 10 days later than Spark’s Earliana. It is a heavy cropper with tomatoes of larger size, sweeter flavor, produced throughout the season. The plants are of bushy, compact growth, heavily loaded with fruit. The tomatoes are just right for market; very solid and deep through, being almost round; ripening to the stem without cracks or green core. The flesh is thick, solid, of fine flavor, with few seeds.

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

Routledge’s Early Oregon

Very hardy and succeeds everywhere. The Early Michigan, Fordhook and Atlantic Prize were good sorts “in their day,” but the Early Oregon is superior to these in shapeliness, color, size, smoothness, solidity and flavor, as well as being earlier. Those wishing to have the earliest “GOOD” tomato should raise our Early Oregon. Highly recommended for the home or market gardener. Try it; you will not be disappointed.

Pkt. 10c; ½ oz. 20c; oz. 30c; 4 oz. $1.00

Spark’s Earliana

The earliest tall variety, forming ripe fruit much earlier than most early varieties. The fruit is large, smooth, of a bright scarlet color and of fine quality. Very valuable for early market use.

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

STONE

Grown very extensively for a main crop by market gardeners; very large, smooth and solid, of a bright red color and a heavy yielder; of excellent quality and not subject to rot.

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

YELLOW HUSK OR GROUND CHERRY.—used for preserves and eating from the hand. The seed we offer is that of the true Yellow Ground Cherry, not the purple-fruited sort, which is scarcely edible.

Pkt. 5c; oz. 30c

YELLOW OR RED PEAR.—Used for preserves and to make “tomato ells.” Fruit distinctly pear shaped and of excellent flavor.

Pkt. 5c; oz. 30c

RED OR YELLOW CHERRY.—Fruit small, about ¼-inch in diameter; perfectly round and smooth; fine for pickles and preserves.

Pkt. 5c; oz. 30c

Increase the yield and quality of your Tomatoes by using a good plant food. See page 34. WONDER ODORLESS FERTILIZER will do it; a spoonful to a plant.
TURNIPS OF "Highest Quality"

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

EXTRA EARLY PURPLE TOP MILAN.—
This variety is ready for the table sooner after planting than any other; flesh white, firm and delicate.

Pkt. 5c; oz. 15c; 4 oz. 45c; lb. $1.25

WHITE MILAN.—Same as above, but pure white; sweet and tender.

Pkt. 5c; oz. 15c; 4 oz. 45c; lb. $1.25

EARLY PURPLE TOP (Strap Leaved).—
One of the best and universally grown; flesh firm, but very tender and sweet; of quick growth; attains large size, profitable for stock, keeps well.

Pkt. 5c; oz. 10c; 2 oz. 15c; 4 oz. 20c; lb. 60c

Early White Flat Dutch

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

Pkt. 5c; oz. 10c; 2 oz. 15c; 4 oz. 20c; lb. 60c

Early Snowball

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

Pkt. 5c; oz. 10c; 2 oz. 15c; 4 oz. 25c; lb. 75c

White Egg

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

Pkt. 5c; oz. 10c; 2 oz. 15c; 4 oz. 20c; lb. 75c

ORANGE JELLY, OR GOLDEN BALL.—
Delicate and sweet, yellow flesh, medium in size, firm, crisp and most excellent flavor; keeps well and is superior as a table variety.

Pkt. 5c; oz. 10c; 2 oz. 15c; 4 oz. 20c; lb. 60c

Purple Top Strap Leaf.

AMBER, OR YELLOW GLOBE.—One of the best yellow-fleshed varieties; skin clear yellow; is of good size and fine flavor.

Pkt. 5c; oz. 10c; 2 oz. 15c; 4 oz. 20c; lb. 60c

PURPLE TOP WHITE GLOBE.—A very heavy cropping, globe-shaped variety, with white skin and flesh; excellent flavor and much in favor with the market gardeners.

Pkt. 5c; oz. 10c; 2 oz. 15c; 4 oz. 20c; lb. 60c

YELLOW ABERDEEN.—Round, medium size; light yellow; produces a large crop; is hardy and keeps well; flesh very firm, but tender and sweet; a great favorite with the dairymen.

Pkt. 5c; oz. 10c; 2 oz. 15c; 4 oz. 20c; lb. 60c

Cowhorn (Long White)

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

Pkt. 5c; oz. 10c; 2 oz. 15c; 4 oz. 25c; lb. 75c

RUTABAGA OR SWEDES

IMPROVED AMERICAN PURPLE TOP.—
The leading and most popular variety, being very distinct in type, attaining a wonderfully large size; immense yielder; the flesh is very firm, superior in every way; valuable alike for all purposes.

Pkt. 5c; oz. 10c; 2 oz. 15c; 4 oz. 20c; lb. 60c

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

Pkt. 5c; oz. 10c; 2 oz. 15c; 4 oz. 20c; lb. 60c

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

Yours truly,

MRS. J. C. ACHIN.
### HERB SEEDS

**Pot, Sweet and Medicinal**

Herbs in general delight in rich, mellow soil. Those marked with a (*) are perennial. We offer some of the most useful and popular. They should be cut on a dry day, just before they come into full bloom, and tied in bunches and hung up or spread thinly on a floor where they can dry quickly.

All the Following Herbs, 5c per Packet.

<table>
<thead>
<tr>
<th>Herb</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anise</td>
<td>Seeds aromatic; used medically</td>
<td>25c</td>
</tr>
<tr>
<td><em>Balm</em></td>
<td>For culinary purposes</td>
<td>25c</td>
</tr>
<tr>
<td><em>Basil</em></td>
<td>Sweet; for flavoring soups</td>
<td>20c</td>
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<tr>
<td><em>Borage</em></td>
<td>For flavoring; also bee pasture</td>
<td>15c</td>
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<tr>
<td>Caraway</td>
<td>For flavoring</td>
<td>15c</td>
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<tr>
<td><em>Catnip</em></td>
<td>(Cat Mint).—Mild nervine</td>
<td>40c</td>
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<tr>
<td>Coriander</td>
<td>Used for flavoring</td>
<td>10c</td>
</tr>
<tr>
<td><em>Dill</em></td>
<td>Used medicinally and for pickles</td>
<td>1.25</td>
</tr>
<tr>
<td>Dandelion</td>
<td>— Fkt. 10c; 75c</td>
<td></td>
</tr>
<tr>
<td><em>Fennel</em></td>
<td>Flavor of celery</td>
<td>10c</td>
</tr>
<tr>
<td><em>Horsemound</em></td>
<td>— Bitter; for tonic</td>
<td>30c</td>
</tr>
<tr>
<td><em>Hysop</em></td>
<td></td>
<td>20c</td>
</tr>
<tr>
<td><em>Lavender</em></td>
<td>— For fragrance</td>
<td>25c</td>
</tr>
<tr>
<td><em>Marjoram</em></td>
<td>— Sweet; for flavoring</td>
<td>35c</td>
</tr>
<tr>
<td><em>Rosemary</em></td>
<td>— Aromatic oil</td>
<td></td>
</tr>
<tr>
<td><em>Summer Savory</em></td>
<td>— For flavoring</td>
<td>15c</td>
</tr>
<tr>
<td><em>Sage</em></td>
<td>— For tea flavoring and dressings</td>
<td>20c</td>
</tr>
<tr>
<td><em>Saffron</em></td>
<td>— For dyeing and powder</td>
<td>20c</td>
</tr>
<tr>
<td><em>Thyme</em></td>
<td>(Broad-Leaved).—For soup</td>
<td>45c</td>
</tr>
<tr>
<td><em>Wormwood</em></td>
<td>— Medicinal use</td>
<td>25c</td>
</tr>
</tbody>
</table>

### SEEDS FOR

<table>
<thead>
<tr>
<th>Herb</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anise</td>
<td>For flavoring</td>
<td></td>
</tr>
<tr>
<td><em>Caraway</em></td>
<td>— For bakers’ use</td>
<td></td>
</tr>
<tr>
<td><em>Celery</em></td>
<td>— For flavoring and soups</td>
<td></td>
</tr>
<tr>
<td><em>Coriander</em></td>
<td>— For flavoring</td>
<td></td>
</tr>
</tbody>
</table>

### CORN PLANTERS

<table>
<thead>
<tr>
<th>Kind</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACM®</td>
<td>Two-hand type; length 35 inches;</td>
<td>$1.00</td>
</tr>
<tr>
<td>Acme</td>
<td>a popular and successful planter;</td>
<td></td>
</tr>
<tr>
<td>Eureka</td>
<td>sure in its work. Will plant corn,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>peas and beans. (See cut.) (P. F.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6 lbs.)</td>
<td></td>
</tr>
<tr>
<td><em>SEGMENT AUTOMATIC</em></td>
<td>One-handed type;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>length 34 in. Can be adjusted for corn,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>beans or peas. You plant accurately and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>evenly as fast as you walk. (See cut.)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(P. F. 7 lbs.)</td>
<td>$1.50</td>
</tr>
</tbody>
</table>

### POTATO PLANTERS

<table>
<thead>
<tr>
<th>Kind</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eureka Tubular</td>
<td>Length 36 inches. This is the lightest and best tubular planter made; opens automatically at the top of it is moved forward in walking. (See cut.) (P. F. 5 lbs.)</td>
<td>$1.50</td>
</tr>
<tr>
<td>Pingree</td>
<td>Same as Eureka, without the tube down the handle. It is light and a very satisfactory planter. (P. F. 5 lbs.)</td>
<td>$1.25</td>
</tr>
</tbody>
</table>

### VEGETABLE PLANTS

We grow large quantities of choice vegetable plants, and can supply all of the varieties listed below, in their proper season, in most any quantity. We can supply all vegetable plants in two grades—plants direct from the seed beds and those that have been transplanted into shallow boxes. Transplanted plants are much stronger and better rooted, and are well worth the price, especially in the early part of the season. We can supply most any of the leading sorts. Tell us your choice of varieties, and we will send it or give good substitute. **NO PLANTS SENT C. O. D.**

**By Express**

Postpaid Not Prepaid

<table>
<thead>
<tr>
<th>Vegetable</th>
<th>Early kinds, transplanted</th>
<th>Late, not transplanted</th>
<th>Add 20c per 100 for Cabbage Plants by mail,</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cabbage</td>
<td>$0.20</td>
<td>$1.00</td>
<td>$7.50</td>
</tr>
<tr>
<td></td>
<td>$0.15</td>
<td>$0.60</td>
<td>$5.00</td>
</tr>
</tbody>
</table>

**CAULIFLOWER**

Early Snowball, transplanted...
Early Snowball, not transplanted...
Early kinds, transplanted...
Late kinds, transplanted...
Late kinds, not transplanted...
Add 20c per 100 for Cauliflower Plants by mail.

**CELERY**

Leading kinds, transplanted...
Not transplanted...
Add 20c per 100 for Celery Plants by mail.

**SWEET POTATO PLANTS**

Sweet Potato Plants...

**PEPPER**

Pepper Plants...

**TOMATOES**

Leading kinds, transplanted...
Not transplanted...
Add 25c per 100 for above plants by mail.

**CHIVES**

Chives (Schmittluch).—Per bunch, post-paid...

**NOTE**—Special Low Prices on Vegetable Plants in 5, 10 or 20 thousand lots—Write.
‘WONDER ODORLESS FERTILIZER’

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

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

The small amount of ‘WONDER’ required reduces the expense of fertilizing to about one-half the cost of manure or the average commercial fertilizers on the market.

The ‘WONDER’ Fertilizer is sold only in 25-lb. white, clean canvas bags and 2-lb. odorless cartons.

PRICE OF ‘WONDER’—2-lb. cans, 25c; add postage if wanted by mail. 25-lb. white canvas bag, f.o.b. cars or boat. Portland or delivered free anywhere in this city or on any rural route within the first or second parcel post zone, $2.00. STORE PRICE, $1.75 per 25-lb. bag.

General Directions for Using Wonder

Remember a 25-lb. bag of ‘WONDER’ is equal, in plant food, to 100 lbs. of most any other commercial fertilizer on the market.

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

For Vegetables: A teaspoonful to a Cabbage, Tomato, Cucumber, Pumpkin or Melon Vine. Sprinkle lightly, in the row, when planting Radish, Lettuce, Peas, etc., or hoe in the top soil after they are up. For Flowers outside: A very little to each plant, or dig into the top soil before or after planting.

For the Lawn: One 25-lb. bag of ‘WONDER’ will go over a space of your lawn 50x50 or 2500 square feet, and is sufficient for small, applied once yearly. In dry weather always water after applying.

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

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

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

We sell more bags of WONDER than all other fertilizers combined. WHY?

Sheep Guano—Pulverized

For Lawns and Garden Work.

This year for the first time we are able to offer a really first class Sheep Manure that is pure and free from straw and dirt because it has been properly dried, then ground and sacked. You will find it pulverized, dry, almost odorless and very superior to most stocks.

Immediate and quite lasting in effect. Excellent for mixing with the soil for pot plants, flower boxes and beds. In the vegetable garden it promotes a rapid, steady growth until maturity. In making new lawns, make a liberal amount into the top soil, especially if the soil is heavy or full of clay. Scatter broadcast or own each fall about one-half pound per square yard.

Prices: 10 lbs. 25c; 50 lbs. $1.25; 100-lb. bag, $3.75; low price per ton.

HIGH-GRADE BONE MEAL. This is finely ground and of best quality. Used for Lawns, Roses, Shrubs and Trees. Not very quick in action and should be applied in the fall or very early spring. From 1000 to 2000 lbs. per acre.

Price: 5 lbs. 30c; 10 lbs. 50c; 50 lbs. $1.50; 100 lbs. $8.00.

LAND PLASTER.—Used largely on grass and clover crops. Not sold in less than 100-lb. sacks. City delivering extra.

Price: 100 lbs. $1.00; 500 lbs. $4.00; 1000 lbs. $7.50; ton $14.00.

POTASH.—Most of the Muriate and Sulphate of Potash comes from Germany and, on account of war, price is too high and supply short.

NITRATE OF SODA.—It is very quick in action, and hastens maturity of crops. Being phosphoric acid, it should not be applied until the plants are above ground. Be careful or it will burn tender foliage.

Price: Lb. 10c; 5 lbs. 40c; 25 lbs. $1.25; 100 lbs. $4.00.

SUPERPHOSPHATE.—This is a concentrated form of phosphoric acid, and it is actually the cheapest form in which to buy phosphoric acid.

Price: Lb. 10c; 5 lbs. 40c; 40 lbs. $1.25; 100 lbs. $2.00.

LIME ROCK.—Lime is an indirect soil improver and very valuable conditioner. Looses the soil, releases plant food. Few people realize its value; try it. Lime Rock is the most convenient form to apply it.

Price: 10 lbs. 50c; 50 lbs. $1.25; 100 lbs. $1.50.
“BEAVER BRAND” Animal Fertilizer

Properly prepared and carefully mixed and put up under the new state fertilizer law with guaranteed analysis. Best and cheapest commercial fertilizer on the market, quality and price considered. Low prices by the ton.

ROSE LAWNS—Prepared especially for use on lawns, also excellent for rose bushes and home gardens. A quick acting yet lasting fertilizer; high grade, properly prepared, ground fine and should be scattered broadcast on the lawn at the rate of 100 lbs. to the average city lot, when making a new lawn or about half the amount and top dressing in the spring, using the balance for bushes and garden. Put up in 50 and 100-lb. sacks, also in 10-lb. patent cover air-tight cans that can be carried home on a street car.

Prices: 10-lb. bags, 50c; 50-lb. sacks $1.75; 100-lb. sacks $3.00.

GENERAL GARDEN FERTILIZER—“D.”—Practically all garden truck requires a good percentage of phosphoric acid and potash. “BEAVER BRAND D” Animal Fertilizer is especially prepared for gardens and the following formulae developed after much investigation. In comparing prices, note carefully the very high Guaranteed Analysis: Ammonia, 4.4 per cent; phosphoric acid, 9.29 per cent; potash, 6 per cent.

Prices: 50-lb. sacks $1.50; 100-lb. sacks $2.55; 500 lbs. $11.50.

POTATOES AND ROOTS—“E.”—These products require a good percentage of phosphoric acid and potash, with a much less percentage of nitrogen. Therefore use BEAVER BRAND “E” Fertilizer. Guaranteed analysis: Ammonia, 2.94 per cent; phosphoric acid, 11.05 per cent; potash, 12 per cent.

Prices: 50-lb. sacks $1.50; 100-lb. sacks $2.65; 500 lbs. $11.00. Low price by the ton.

VINES AND BUSHES—“A.”—To produce a good, healthy body and both quality and quantity in fruit, all vines and bushes should be well fertilized. They draw phosphoric acid very heavily from the soil. We recommend BEAVER BRAND “A” Fertilizer. Guaranteed analysis: Ammonia, 3 per cent; phosphoric acid, 12.70 per cent; potash, 3 per cent.

Prices: 50-lb. sacks $1.50; 100-lb. sacks $2.50; 500 lbs. $11.00.

FRUITS AND BERRIES—“B” or “C.”—Fruits and berries must have a good supply of phosphoric acid and potash, particularly phosphoric acid, to insure the best results both as to quality and quantity. If you cannot fertilize all of your land, at least make a small trial. On the above crops which are doing fairly well, we recommend BEAVER BRAND “B” Fertilizer, to maintain the fertility and increase quality and quantity. Where the crops have been very poor, use BEAVER BRAND “C” Fertilizer, to recover fertility.


Prices: 50-lb. sacks $1.35; 100-lb. sacks $2.45; 500 lbs. $15.50. NOTE: “C” is 10c per 100 higher.

SPECIAL FERTILIZER FOR HOPS—“A” or “E.”—We furnish two brands of Fertilizer for Hops, one with a very high percentage of potash and the other with a very small percentage of potash, phosphoric acid being the same in both. Hops are known to be great feeders on phosphoric acid from the land. The average hop crop removes seventy-five pounds per acre from the soil. This has to be replaced. For hops on clay soil and soil containing considerable potash, we recommend BEAVER BRAND “A” Special Hop Fertilizer, but for hops on all other lands we recommend BEAVER BRAND “E” Fertilizer.

Guaranteed Analysis: Ammonia, 4.04 per cent; phosphoric acid, 9.29 per cent; potash, 6 per cent.

Prices, “A” Special: 50-lb. sacks $1.35; 100-lb. sacks $2.45; 500 lbs. $10.00. Price of “E”: 25c per 100 more. Low prices by the ton.

SPECIAL ONION FERTILIZER—“E.”—Onions are great users of phosphoric acid and potash, using more potash per acre than the average hop crop and as much as a potato crop. On account of intensive farming of onions, the supply of phosphoric acid and potash is very quickly decreased. To hold up your quantity and quality of crops you must fertilize them more plant food. We recommend BEAVER BRAND “E” Fertilizer. Guaranteed analysis: Ammonia, 3.04 per cent; phosphoric acid, 10.05 per cent; potash, 12 per cent.

Prices: 50-lb. sacks $1.50; 100-lb. sacks $2.65; 500 lbs. $11.00. Low price by the ton.

TANKAGE.—“Beaver Brand” Dried and Ground.—This is a very highly concentrated tankage, analyzing 10 per cent ammonia and around 20 per cent calcium phosphate. Low price by the ton.

Prices, No. 1 Grade: 100-lb. sacks $2.50; 500 lbs. $12.00. Lower grades as cheap as $37.50 ton.

DRIED GROUND BLOOD—“Beaver Brand.”—This is an A No. 1 product and contains a very low percentage of impurities and highest possible percentage of nitrogenous material. Guaranteed analysis, ammonia 16½ per cent.

Prices Db. 10c: 5 lbs. 35c; 10-lb. sacks 60c; 50-lb. sacks $2.20; 100-lb. sacks $5.75

Most of the above fertilizers should be used at the rate of 300 to 500 lbs. or more per acre. It will pay, and pay well.
We Recommend and Sell

**Mulford Cultures**

**FOR LEGUMES**

(Note—This culture was cataloged last year as NITRO-GERM.)

Always inoculate seed (or soil) with the MULFORD NITRO-GERM CULTURE before planting Garden or Field Beans and Peas, Sweet Peas, Alfalfa, Clovers, Vetch and other field or garden legumes.

It means great increased crops and improved soil.

The MULFORD CULTURES contain nitrogen-fixing bacteria, which form nodules on the roots of field and garden legumes that act by collecting nitrogen from the air and converting it into nitrates—food for soil and plants. It puts more into the soil than the growing crops need and it won't leach out; enriches the soil for succeeding crops of all kinds. Government tests have proved this scientific method of immense value to farmers and truckers.

Failure to produce satisfactory crops of Clover, Alfalfa, Vetch, Peas, Beans, and other legumes, is more often attributable to lack of the necessary bacteria in the soil than merely to poor soil.

When these germs are present in sufficient numbers, small nodules form on the roots of leguminous plants, as shown in accompanying cut, and the nodules store up the nitrogen which is drawn from the air by the plant.

Without these germs a good crop is impossible. Therefore always inoculate the seeds mentioned at planting time with the MULFORD CULTURES, which contain active nitrogen-fixing bacteria. The bacteria in this product have all been proved by actual test to be active and vigorous. It is easily and quickly used by mixing with water and applying to the seed or soil; the directions which accompany each package are so complete and explicit that anyone can use it.

MULFORD CULTURES are "DIFFERENT" and should not be confused with other brands.

The color is different (they are dark, almost black, due to a special ingredient added to increase the growth and activity of the bacteria).

The count is different (bacterial counts show fully twice as many bacteria as in the old-form cultures).

The bottle is different (being sealed—an important feature which prevents all possibility of contamination from the outside air).

**Increase Your Crops—Improve Your Soil**

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

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

MULFORD CULTURES are scientifically prepared and tested by experts, in the biological laboratories of H. K. Mulford Co., Philadelphia, with the same degree of care as Mulford Antitoxins, Serums, Vaccines, etc., which are standard all over the world.

**CAUTION**—Be sure to specify the particular legume on which you desire to use the MULFORD CULTURES otherwise we will not know how to fill your order. We have it for Alfalfa, Red Clover, White Clover, Sweet Clover (Bokhara), Alsike Clover, Field Peas, Vetch, Garden Peas, Garden Beans, and Sweet Peas.

**PRICES**—Garden size (¼ acre), 50c; 1 acre size, $1.50; 5 acres size, $5.00; postpaid.

The 5-acre size is not carried in stock, and orders for that size should reach us at least ten days before it will be required for use.

**Why buy expensive commercial nitrates when you can grow legume crops and thus increase your yield and at the same time increase the nitrates and enrich and renovate your soil by Nature's own method?**

**MULFORD'S FREE DESCRIPTIVE LITERATURE SENT UPON REQUEST.**
The above illustration is from a photograph of our Exhibit at Portland’s Rose Festival Center last year. It was a “miniature” of a Country Home, Garden, Nursery and Lawn. The lawn was planted just three weeks before the exhibit, to show what quick and beautiful results our Evergreen Lawn Seeds give. Thousands of people crowded around our exhibit each day and were much impressed.

LAWN GRASS SEED

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

NOTE.—We will prepare special mixtures for shady places, low, wet soils, very dry soils and terraces. Just mention it when ordering.

R. R.'s Evergreen Lawn Grass

To obtain a good Lawn Grass Mixture, it is necessary that the best possible seed of fine grasses be used in the combination, embracing such varieties as are of near, close growth, extreme hardiness, and adapted to produce a quick, permanent sod. Judicious selection of seed, knowledge of the habits, vigor, quality and hardiness of varieties used in the mixture can only be gained by thorough and practical tests under different climatic and soil conditions. After more than 15 years’ experience, we offer our Evergreen Lawn Grass Seed Mixture, composed of a thoroughly balanced combination of various native and foreign fine-leaved, deep-rooting grasses of interweaving habit, that will flourish under varied soil and climatic conditions, and which may be depended upon to produce a beautiful, compact evergreen sod that will resist tramping and hard usage, and at the same time present that handsome, velvety appearance so much desired.

NOTE.—You better spend a few cents or a dollar extra on the seed you buy and have a fine lawn that you’ll be proud of. Sow 1 pound seed to 15 feet square for best results.

FAIR GREEN LAWN GRASS

For those that are not so particular, or for ordinary purposes, this mixture will give satisfaction. It is not a cheap mixture; far from it. We know it is equal to most fancy or special mixtures being offered.

Per lb. 25c; postage extra; 10 lbs. or more, not prepaid, at 25c lb.


White Clover (Trifolium Repens)

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

Choice Seed, 10 lbs. $6.00. Per lb., postpaid, 70c.

Extra Fancy Seed.—Per lb., postpaid, 75c

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

It Pays Well to inoculate Alalfa and Clover Seeds with Mulfords Cultures. See page 38.

Alfalfa, or Lucerne Clover

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

Price: 10 lbs. $2.50; 100 lbs. $22.00. Per lb., postpaid, 85c.

Dry Land Alfalfa

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

Price: 10 lbs. $2.50; 100 lbs. $23.00. Per lb., postpaid, 85c.

PLEASE NOTE.—Above prices subject to market changes. See Note “about prices” on page 39. Write for net prices when ready to buy, or order at above prices and we will send you full value, whether MORE or LESS.
SWEET CLOVER—MELilotUS

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

It's Value. Sweet clover is used as either a feed crop or as a fertilizer to plow under to improve the soil and increase the crop to follow. Experiments show that where sweet clover was grown and turned under it has increased grain and root crops from 25 to 60 and even 100 per cent. Grows fast and is easy to start.

What Soil to Sow It On. It will thrive on almost any kind of soil. It will grow luxuriously on any soil that will grow clover or alfalfa and also on soils that will not grow either. It will grow and thrive on thin, sandy soil, hardpan, gumbo, rocky upland, clay and silty land—Melilotus.

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

Variety to use. We recommend the big, white biennial variety, Melilotus Alba. We do not advise the yellow, but if you want it we can supply it at a much less cost per pound.

When to Sow. It seems to do best sown very early in the spring. It does well sown either alone or with a nurse crop of small grain. Use 15 to 20 pounds of seed per acre. It can also be sown on pasture or rough land right on top of the ground without breaking up. It seems to do better on a firm seed bed, as long as the seed is lightly covered with soil, not necessary to plow. Harrow or disk it into the top soil. There is no danger of its becoming a pest. It dies at the end of the second year and unless allowed to re-seed cannot spread.

Good Feed. It can be pastured at any age, except when quite small, and stock soon learn to like it. It is claimed that it does not bloat stock at all. The hay is said to be equal to alfalfa, especially if cut before it gets old and woody. White Sweet Clover should be cut high to avoid killing and make quick second growth.

Sweet Clover makes excellent pasture for horses, cattle, sheep, hogs or chickens. A very early and continuous cropper. One acre is claimed to support 20 sheep, but early in the first season they are liable to root it out unless nose ringed, the second season they cannot. Pasture it close so as to produce young, tender shoots, or if it gets ahead of the stock, cut high for hay.

Price per lb., 55c postpaid; 10 lbs., $3.25; trial pkg. 10c. Write for quantity price.

For Best Results Treat All Clover Seeds with Mulfords Cultures (See Page 36)

SUDAN GRASS

A New Forage and Hay Crop for Dry Regions.

This grass was introduced in the States by the Department of Agriculture and has proved a great success especially for dry land conditions, but from recent reports we have read and samples of the grass shown it appears to do equally well in the Willamette Valley.

Sudan Grass is strictly an annual and dies each year like Millet and must be seeded again each spring. This makes it fit admirably into any system of rotation, and while it does not benefit the soil like legumes, it does afford a change in crop and this is a good thing for the soil. Sudan Grass is tall, reaching a height of from seven to nine feet. The plant stools wonderfully and produces under favorable conditions as many as 100 stalks from a single root.

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

Seeding. Do not plant until the soil has become warm in the spring or any time during the summer as a catch crop so long as 70 to 80 days intervene before frosts. Sudan Grass can be sown in rows 18 to 42 inches apart, drilled in with a grain drill or sown broadcast. In the semi-arid sections it is much more profitable to seed it in rows and cultivate, and even in the humid regions a small amount of cultivation appears to give added vigor to the plants. Seeded in rows 36 inches apart, 3 pounds per acre, drilled or broadcast 16 to 24 pounds per acre.

Harvesting. Sudan Grass is easy to cut with a mower and cures readily. When cut for hay it is best to allow it to dry as much as time as possible for a second growth. After cutting it renews its growth promptly when moisture conditions are favorable. The grass stalls abundantly after first cutting and the second and third cuttings are very fine stemmed. Each year for a 3-year forage or hay crop should try at least an acre or two.

PRICE—Last year it sold at $1.00 per lb., but we are fortunate in securing a fair supply which we offer at 50c lb. postpaid; 10 lbs. not postpaid for $4.50. Trial packet 10c.

OTHER GRASSES—Write for prices (stating quantity wanted) on any Grass, Clover or Field Seeds wanted. OUR CATALOG GIVES GENERAL INFORMATION, FREE ON REQUEST.
Clove Seeds—Continued from page 37

Red Clover (Trifolium Pratense)
Hardy, and succeeds well on any good soil. 10 lbs. $2.50; 100 lbs. $25.00. Per lb., postpaid, 35c.

Alsike Clover (Trifolium Hybridum)
Valued highly for sowing with other grasses. Excellent for hay and pasture; valuable for bees; resists both drought and excessive moisture.
10 lbs. $2.25; 100 lbs. $20.00. Per lb., postpaid, 30c.

ABOUT PRICES
Only one grade priced, the best, choice, clean seed. Write for prices in quantity.

Single pound prices on Grass and Clover Seeds are prepaid. Prices per ton, fifty and one hundred pounds are not prepaid and are subject to market changes. Reference tables inside back cover.

YOU WILL ALWAYS GET YOUR MONEY'S WORTH.

Prices on Grass and Field Seeds change occasionally, therefore we cannot print prices good for any length of time. When ready to buy, write us for special prices, stating quantity wanted, or order what you want at catalog prices, and we guarantee that we will give you full value for the money sent, whether the price at the time you order be higher or lower.

In other words, we will always ship seed to cover the full amount of money sent to us.

FOR AMOUNT TO SOW PER ACRE, SEE TABLE INSIDE BACK COVER.

Kentucky Blue (Poa Pratensis)
Remarkable for its ability to adapt itself to a great variety of soils, succeeding on an average dry soil as well as on a moist meadow. An abundant yielder and presents a handsome green appearance early in the spring, thus making it of great value for lawn mixtures. Our extra fancy grade for lawns is unequalled.

Extra fancy, 10 lbs. $3.00. Per lb., postpaid, 35c.

Fancy, 10 lbs. $2.00. Per lb., postpaid, 30c.

Orchard (Dactylis Glomerata)
Of the greatest value in permanent pasture mixtures; thrives best in moist, shady places, but will withstand drought exceedingly well. Valued for hay crop, as it is very nutritious if cut early. Its inclination to grow in tufts necessitates other grasses being sown with it.
10 lbs. $2.25; 100 lbs. $21.00. Per lb., postpaid, 30c.

Timothy, (Phileum Pratense)
As a hay crop, timothy is unsurpassed by any other grass. Thrives on ordinary soil, but succeeds best in a moist loam. Best to cut it when in blossom or soon after flowering. Beneficial to sow Timothy with red top and red clover, as they produce more of a bottom growth.
10 lbs. $1.25; 100 lbs. $11.00. Per lb., postpaid, 20c.

NOTE.—We know you can buy cheaper Grass Seeds from other dealers. We offer only the BEST RECLAIMED HEAVY CLEAN SEEDS—really cheapest to buy.

Double Your Clover Crop
By treating all clover seeds you plant with Mulford's Culture. B E S T B Y T E S T. See page 36.

Crimson Clover (Trifolium Incarnatum)
A thrifty annual. It germinates quickly, grows rapidly and stools abundantly.
10 lbs. $2.25. Per lb., postpaid, 30c.
Grass Seeds—Continued

Red Top (Agrostis Vulgaria)
Of great value for mixing with hay or permanent pasture grasses; will succeed in nearly any soil, but thrives best in a rich, moist soil; makes a fine bottom growth, rendering it invaluable to be sown with grasses, such as timothy and orchard.
Choice Seed, not hulled, 10 lbs. $2.00; 100 lbs. $18.00. Per lb., postpaid, 25c. Hulled Seed, 10 lbs. $3.50. Per lb., postpaid, 40c.

Crested Dog’s Tail (Cynosurus Cristatus)
A perennial grass, forming a smooth and lasting turf, excellent in mixtures for lawns, putting-grounds, and pastures. It thrives best on rich, moist land, but can accommodate itself almost any soil, and, as the roots penetrate deeply into the ground, it can stand severe drought.
10 lbs. $3.50. Per lb., postpaid, 45c.

Creeping Bent (Agrostis Stolonifera)
Perennial. A grass desirable for either lawns or permanent pastures on account of the fine, firm and enduring turf it produces; especially adapted to moist situations.
Per lb., postpaid, 60c.

FRIENDLY AND MISCELLANEOUS FARM SEEDS

Single pound prices are prepaid. Ten, fifty and one hundred pound prices are NOT prepaid and subject to market changes. Seed to cover amount remitted always sent unless otherwise ordered. See notes page 39. Write for prices on larger quantities when ready to buy.

Artichokes
Planted and cultivated as potatoes. Of great value for feeding stock. They are the best hog feed known. They are remarkable for their fattening properties, great productivity, over 1000 bushels having been raised on 1 acre. Easier to grow than potatoes. To be dug, if hogs are turned in on them they can easily root the tubers out. One acre will keep from twenty to thirty hogs in fine condition for several months. Said to be a preventive of cholera and other hog diseases. Plant 400 lbs. per acre early in the spring.

WHITE FRENCH, most profitable variety. B. freight or express, 10 lbs. 40c; 50 lbs. $1.50; 100 lbs. $2.50. Per lb., prepaid, 15c; 4 lbs. 50c.

Barley
BEARDLESS.—The earliest barley known. The straw is about the height of the common barley, but better, and will stand up on any land; with good season, land has produced 80 bushels per acre. Sow as early as you can; frost does not hurt it. This, as its name implies, is beardless, and as easy to grow and handle as oats. It is becoming more popular each season.
10 lbs. 40c; 100 lbs. $3.00. Per lb., postpaid, 15c.

WHITE HULLESS (Bald Barley).—A grand barley for stock feeding. Grain plump, heavy, and when threshed is hulless like wheat; a heavy cropper. When grown and cut for hay it produces a large crop, which is very rich and almost equal to a grain feed. Much relished by horses and stock of all kinds. An excellent hog feed. Culture same as common barley.
10 lbs. 50c; 100 lbs. $3.50. Per lb., postpaid, 20c.

COMMON BARLEY.—We always aim to have a nice, clean stock of good Seed Barley on hand at all times.
10 lbs. 35c; 100 lbs. $2.25. Per lb., postpaid, 15c.

Buckwheat
SILVER HULL.—A very good and popular variety; grain is of a light gray color; has a thin husk; matures early, and yields heavily; a good milling variety.
10 lbs. 75c; 100 lbs. $5.50. Per lb., postpaid, 20c.

JAPANESE.—Good yielder, ripens early; excellent for bee pasture.
10 lbs. 75c; 100 lbs. $5.00. Per lb., postpaid, 20c.

THOUSAND-HEADED KALE.—Recommended by agricultural colleges, grangers and dairymen who have tested it as one of the most valuable forage plants for this Coast. It grows rapidly and produces a mass of thick, curly green leaves, rich and succulent, which are eagerly eaten by sheep, cattle and horses. Especially recommended for green feed during the dry summer months. Sow thinly in drills two to three feet apart, four pounds to the acre, and thin out as needed, or raise plants and set out. Makes the most rapid growth if sown in the early spring, but can be sown in summer and fall for winter feed. Will stand light freezing. Stalks can be cut off, or the larger lower leaves broken off, leaving the tops to grow.
Fkt. 5c; oz. 10c; 1/4 lb. 20c; lb., postpaid, 35c.

Rhode Island Bent (Agrostis Canina)
Forms a very fine turf even on light soils; desirable for lawns, as it forms a very close sward.
Per lb., postpaid, 55c.

Single pound prices on Grass Seed are prepaid. Ten, fifty and one hundred pound prices are NOT prepaid and subject to change. See notes page 39. For amount of seed to sow per acre see table inside back cover.
Routledge Pride of the West.

FIELD CORN FOR OREGON

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

Routledge

Pride of the West

(Sample Ears on Display at Our Store.)

Oregon grown; acclimated. A grand success In Oregon. We have been raising this variety for years, and by selecting the earliest ripening and best select ears, now have a strain that is a revelation to many people who have thought Oregon and Washington could not raise profitable field corn.

Routledge Pride of the West Field Corn is an early maturing variety, producing stalks from 6 to 8 and 10 feet high, and large ears, 8 and 9 inches long. Cobs covered with 14 to 16 rows of deep, yellow kernels. It is a heavy yielder. Many growers report having harvested over 85 bushels per acre. Plant some of this corn this season; you will be pleased with results, we are sure.

Stock limited, so order early. Large pkt. 10c; lb. 20c, postpaid. Not prepaid, 10 lbs. $5.50; 100 lbs. $7.50.

A FEW REPORTS ON OUR "PRIDE OF THE WEST"

From GLADSTONE, Ore.

Routledge Seed and Floral Co.

Gentlemen: Last year I tried your "Pride of the West." I got a yield of 85 bushels per acre of fine mature Corn. I intend to plant a larger acreage this season.

With proper cultivation and care, I see no reason why Pride of the West cannot be raised and cured in any section of the country.

From LONE ROCK, Ore.

Gentlemen: I bought some of your Pride of the West Field Corn Seed, and was much pleased with results. I am going to plant more this year.

From CLACKAMAS, Ore.

"My neighbors, when they saw me planting your Pride of the West Corn, said that it was no use; it wouldn't mature; but last week (September 10) I began harvesting my crop, and am glad to write that it produced a good crop of handsome, ripe ears of good size and quality. You will get many orders from this section next season."

From HALSEY, Ore.

Dear Sirs:

The sample of corn I am sending you is a part of 3000 lbs. just harvested. This was raised on river bottom and is certainly fine.

Minnesota No. 13—Yellow Dent

A variety of great promise, being the earliest of the early yellow dent corns and reported to be the heaviest yielding. Producing splendid large ears, closely filled from end to end with bright yellow kernels. Grows about 7 feet high and being a rapid, vigorous grower, with heavy foliage, makes a fine fodder corn. Will mature in 90 days under favorable conditions.

Large pkt. 10c; lb. 20c, postpaid. Not prepaid, 10 lbs. 75c; 100 lbs., write.

Pride of the North—Dent

A quick growing yellow dent variety thriving well where the summers are not very long. Bright golden color. Not Oregon, but Eastern grown.

1 lb. postpaid, 20c. Not prepaid, 10 lbs. 75c; 100 lbs., write.

Cheat Seed

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

10 lbs. 50c; 100 lbs. $2.75. Per lb., postpaid, 15c.

Cow Peas

Are really small beans of vigorous habit and heavy foliage of great nutritious value, yielding five to nine tons of green feed per acre, or can be cut and cured like clover. They are great nitrogen gatherers and one of the best fertilizers when turned under. Sow two bushels per acre.

WHIP-POOR-WILL. Upright, or bush growth, earliest maturing, easily harvested.

CLAY.—Of vigorous growth. Excellent for ensilage; can be planted in hills with corn.

10 lbs. $1.00; 100 lbs. $8.00. Per lb., postpaid, 25c.

For HAND CORN PLANTERS see page 33. THEY SAVE SEED and put it where you want it.
Field Peas

Field Peas are a very profitable crop and are grown here very extensively. They can be grown alone or with oats. When planted with grain and cut green they make a large amount of very rich feed; also very valuable for enriching the soil if plowed under. The dry peas make excellent hog feed and are quite fattening. Sow, if alone, 100 pounds to the acre; if with other grain, 60 pounds.

**WHITE CANADIAN.**—The leading and most popular kind; seed creamy white; a heavy cropper.

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

**BLUE PRUSSIAN.**—Valuable variety, seed green. Used extensively as a dry soup pea.

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

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**Insure Your Pea Crop**

Why not be sure of a large heavy crop of peas by inoculating the seed with "Mulford's Cultures?" (See page 36.)

A United States Department of Agriculture Bulletin says:

"It is worse than useless to attempt to grow any leguminous crop without being certain of the presence of the bacteria, which enable the plants to fix free nitrogen. Certain regions are practically devoid of the right kind of bacteria, and unless some artificial means of inoculating with the germ is resorted to, the crop will be a failure." Use Mulford's Culture, page 36.

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Money Making

**OATS**

_of Real Merit_

**ROUTLEDGE PRIZE OATS**

This wonderful new Oat, introduced by us in 1903, has proved in growing contests all we claimed for it. Routledge Prize certainly is a prize oat, and a real prize-winner at the county fairs wherever it has been shown. This grand oat belongs to the tree or branching class, and is a vigorous, healthy grower of strong staking qualities and need not be seeded as heavily as most oats (1 1/2 to 2 bushels per acre is ample). This is the heaviest yielding oat introduced to date. From several hundred samples we sent out, spring of 1908, the lightest yield reported was over 100 bushels per acre, and from that up to 200 and 300 bushels—simply enormous.

Routledge Prize Oat is a very early, dought-resisting variety. Grain of good size, plump and heavy. White seeded variety. Really a spring oat, but some customers report excellent results from fall sowing in the valley here.

Prices: 1 lb. 20c; 3 lbs. 50c, postpaid; not prepaid, peck, 60c; 1/2-bushel, $1.00; 1 bushel, $1.60; 100 lbs., $4.00.

**SHADELAND CHALLENGE**

The best white side oat we know of. Hardy, vigorous, early maturing, and still maintains its supremacy as the best, heaviest yielding, general purpose oat in existence.

"Shadeland Challenge" is a heavy, plump, thin-hulled Oat whose immense heads often measure 18 inches in length, bearing from 260 to 300 kernels. Shadeland Challenge ripens in about 100 days from planting if spring sown, and 100 bu. per acre is not uncommon on ordinary soil. Can be planted in the fall or early as possible in the spring.

Price: 1 lb. 20c; 3 lbs. 50c, postpaid; not prepaid, peck, 50c; bushel $1.50; 100 lbs. $3.50.

Don't practice false economy by buying low-priced grains. It don't pay. Our motto—

**Quality First, Price as Low as we can make it.**
Kaffir Corn
An excellent fodder plant. Seed small and almost round, valuable poultry and pigeon food. It does best sown thinly in drills three feet apart. 10 lbs. 75c; per lb. postpaid, 20c

Lentils
Succeed best in dry, sandy soil. A leguminous annual, the seeds of which are valuable for pigeons and are used largely for soups. The leafy stalks make good forage. Per lb. postpaid, 20c

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

EARLY FORTUNE.—This variety seems to do extra well here; try it. Heads large and loose, and seed is amber red and three times as large as the German. 10 lbs. 75c; 100 lbs. write; per lb., postpaid, 20c

GERMAN.—An improved variety, yielding a larger crop of seed than the common millet. It is also taller than the common, and yields a heavier crop of hay. 10 lbs. 75c; 100 lbs. write; per lb., postpaid, 20c

HUNGARIAN.—A dwarf millet; superior for hay. 10 lbs. 75c; 100 lbs. write; per lb., postpaid, 20c

For price on Millet for feed, see Poultry Foods.

Potatoes for Seed—See pages 26-27

Rape, Dwarf Essex
We offer you true, pure seed. One of the best forage plants, on account of the large amount of green feed it will produce at a season of the year when everything else is dried up. It has yielded ten tons of green forage per acre, and twice the feeding value of green clover. Sheep, swine, cattle and poultry eat it readily. Rape will do well on almost any soil. Prepare the ground as for turnips, and sow any time from May till September; or plant it with grain. Sow, per acre three pounds, in drills; or, if broadcast, five pounds. 10 lbs., $1.75; write for quantity prices; per lb., postpaid, 25c.

Seed Wheat or Rye
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 market price.

Speltz—Emmer
Sow in the spring, the same as wheat, at the rate of two bushels per acre. Cut when the grain is past the middle stage of milk, when it will make splendid grain and lots of rich straw hay. Thresh like wheat, only not so closely. Can be fed whole, rolled like barley, or ground. 10 lbs. 75c; 100 lbs. write; per lb., postpaid, 20c

Sugar Cane or Sorghum
A valuable crop to grow for fodder or ensilage, as it furnishes an immense tonnage to the acre. 10 lbs. 75c; 100 lbs., write; per lb., postpaid, 20c

Vetches
OREGON VETCH (Vicia Sativa).—Oregon's greatest forage plant. Often called Fall Vetch. Grown very extensively in Western Oregon and Washington, especially in the Willamette Valley and on the Oregon coast. It furnishes an abundance of excellent feed, either green or dried. The seed is generally mixed with wheat, oats or rye having a stiff straw to hold it up. Sown alone 85 pounds or 60 pounds with a bushel of grain per acre. Sow in the fall or early spring. 10 lbs. 70c; 100 lbs., write; per lb. postpaid, 20c

HAIRY SAND OR WINTER (Vicia Vilose).—This variety thrives on poor arid, sandy soils. It is sown in the fall or spring, mixed with rye, which serves to support the plants. Sow 20 pounds per acre. Seed very scarce. Write for price.

THE WISE ONES
Will use Mulford's Vetch Culture to inoculate their seed before sowing. There is no question about its VALUE. "Evidence," a new booklet, will prove it. (See page 36.)

Single pound prices are prepaid, but ten, fifty and one hundred pound prices are NOT prepaid and subject to market changes. See notes page 28. For amount of seed to sow per acre see table inside back cover.
Flower Seed Collections.

Could You Succeed? Certainly—Why Not?

There is no reason why every lover of flowers should not have a bountiful supply. With a little intelligent work, the careful preparations of the seed bed, proper planting and cultivation, any one can succeed.

GENERAL CULTURAL DIRECTIONS are printed on the back of most all our seed packets (some times this information is printed on little slips and put inside), however, to help you further we will put in each of the following collections our new two-page leaflet giving special instructions.

THE FOLLOWING COLLECTIONS contain our regular full-size packets of "Highest Quality" seeds as described under their respective headings, on the following pages.

We can afford to sell these collections at reduced prices as they are put up in advance of the "rush season"—No change in varieties can be made.

It is a well-known fact that many of our most beautiful flowers are raised from seeds, and when we consider the comparatively low cost of same, the ease with which most varieties may be grown, and the gorgeous effects they produce, we are convinced that they should be grown more extensively than they are.

TO AID OUR FRIENDS AND CUSTOMERS to have gardens that will produce an abundance of bloom for cut flowers as well as for bedding effects, we have prepared the following collections, and offer them at special prices. These collections are composed of only choice varieties that will furnish a varied, profuse and continuous display of flowers throughout the entire season.

"Popular" Collection Hardy Annuals

$1.00 worth at catalog prices, for only 65c

One packet of each of the following 14 kinds—Alyssum, Aster-Crego's, Cosmos, Marigold Mignonette, Nasturtium (tall and dwarf), Paney), Petuna, Phlox, Poppy, Stocks, Sweet Peas (½ oz. Spencers), and Zinnia.

"Home Beautiful" Collection of Annuals

$2.00 worth at catalog prices for only $1.50

One packet of each of the following 27 kinds—Ageratum, Alyssum, Aster (Early and Late), Calliopsis, Candytuft, Centaurea, Cosmos, Dianthus, Dahlia, Gypsophila (Baby Breath), Helianthus-New, Lobelia, Marigold, Nasturtium (tall and dwarf), Phlox, Poppy, Ricinus, Salvia, Stocks, Sweet Peas (1 oz.), Giant Spencer, Verbena and Zinnia.

"Ideal" Collection Hardy Perennials

$1.35 worth at catalog prices for only $1.00

One packet of each of the following 24 kinds—Arabis, Aquilegia (Columbine), Coreopsis, Campanula (Bell Flower), Delphinium (Hardy Larkspur), Digitalis (Fox Glove), English Daisy, Galliardia, Gypsophila (Baby Breath), Hollyhock, Phlox, Poppy, Sweet William, Shasta Daisy and Wallflower.

LOOK UP OUR SPECIAL SWEET PEA COLLECTIONS PAGES 62 TO 75.

Can you think of anything nicer than an abundance of flowers for yourself and your friends who have no grounds?
CULTURAL DIRECTIONS.—Cultural directions are printed on the back of nearly all packets. Flowers usually succeed best in a sandy loam, made rich with well-rotted manure, which should be made fine and thoroughly mixed with the soil. A soil thus prepared will remain moist and loose, so that flower seeds, which are generally small and delicate, will germinate and grow with vigor.

ANNUALS grow from seed, flower, mature their seed, and die in one year, or, in other words, the same season.

HALF-HARDY ANNUALS are those which should be started early in the house, conservatory or hotbed, and transplanted to the garden in settled warm weather.

HARDY ANNUALS are those which can be sown in the open ground.

NOTE.—Half Hardy ANNUALS and H. H. ETTE VALLEY.

BIENNIALS grow from seed, sown from June to August, flower, ripen their seed and die the next year, though some varieties bloom the same season if sown early in gentle heat.

HARDY BIENNIALS will winter in the open ground without protection.

HALF-HARDY BIENNIALS require the protection of a cold-frame or cool-house during winter.

PERENNIALS grow from seed, and continue flowering annually for many years after the first season. Some varieties flower the first season if planted early in gentle heat.

HARDY PERENNIALS can remain in the open ground during winter without protection.

HALF-HARDY PERENNIALS require the protection of a cold-frame or cool-house during winter.

**Ageratum**

Half-hardy annuals, especially well adapted to edge large beds of geraniums, salvia, coleus or cannas; flower continuously throughout the summer.

**Mексicanum.**—Dwarf, blue. Pkt. 5c; ½ oz. 25c

**Album.**—Pure white, dwarf. Pkt. 5c

**Finest Mixed.**—All colors. Pkt. 5c

**Dwarf Little Blue Star.**—New; one of the handsomest blue-flowered dwarf edging plants; grows 6 inches high, and is just covered with small, bright blue flowers. Pkt. 10c

**AGROSTEMMA—Rose of Heaven**

**Coeli-Rosa.**—Superb free-flowering, hardy annual, rose-colored flowers; fine for cutting; height 1½ feet; July to September. Pkt. 5c

**ALOYSIA—Lemon Verbena**

**Citrodora.**—A greenhouse shrub, valuable for the fragrance of the foliage; 2 feet. Pkt. 10c

**Alyssum**

One of the most popular hardy annuals, used especially for edging and also valuable for cutting and on account of the fragrance of flowers.

**Sweet.**—Pure white; 6 inches; June to November. Pkt. 5c; oz. 35c

**Little Gem.**—The dwarfest and best for design bedding; plants very compact and bushy, and grow only 3 inches high. Pkt. 10c; oz. 50c

**Saxatile Compactum (Gold Dust).**—Hardy perennial; yellow flowers; April to June; height 9 inches. Pkt. 10c; ½ oz. 20c

Have you a beautiful lawn? If not, see pg. 37 for seed, pg. 34 for Lawn Fertilizer.
AMARANTHUS
Caesius (Love-Lies-Bleeding).—Hardy annual; ornamental foliage plant; fine for bedding; green foliage with long, drooping crimson racemes; 2 feet. Pkt. 5c

Crumenlace (Prince's Feather).—Dark red foliage and feathery flowers; 2 feet. Pkt. 5c

Tricolor (Joseph's Coat).—Ornamental; for foliage only; red, yellow and green. Pkt. 25c

ANTIRRHINUM—Snapdragon.
Half-hardy perennial and annual; blooms in July if sown early in the house; one of our finest cut flowers; 1½ to 2 feet.

Queen Victoria.—New, tall; very large; pure white; superb. Pkt. 10c

Daphne.—Soft blush pink. Pkt. 10c

Golden Queen.—Rich, pure yellow. Pkt. 10c

Defiance.—Rich orange shade. Pkt. 10c

Tall Giant, Finest Mixed.—Our seed of this is exceptionally fine. Pkt. 5c; ½-oz. 25c

Dwarf (Semi), Finest Mixed. Pkt. 5c; ½-oz. 25c

AQUILEGIA—Columbine
Hardy perennials; are most elegant plants and invaluable for cutting or as hardy border flowers; beautiful and graceful; June to September. 2 to 3 feet.

Benary's Long Spurred.—Superb mixture of all the most desirable shades. Pkt. 15c; 1½-oz. 50c

Single, Finest Mixed. Pkt. 50c; ½-oz. 20c

Double, Finest Mixed. Pkt. 50c; ½-oz. 20c

ARABIS—Rock Cress
Alpina.—Hardy perennial; pure white flowers in close head; excellent for edging, rockwork or dry situations; 6 inches; April to June. Pkt. 5c; ½-oz. 25c

ASTERS
Plumosus Namus.—A graceful pot plant for either house or conservatory (see illustration under Fern Plants); very finely cut, delicate lace-like foliage. Pkt. 25c; 100 seeds $1.00

Sprengeri.—Drooping foliage; adapted for hanging baskets or cutting. Pkt. 10c; 100 seeds 50c

Astris
One of the easiest and most satisfactory summer and fall flowers to grow. We take the utmost pains to select seeds from the most perfect flowers only, and wish to assure our patrons that our strains are the superiority of perfection.

Improved Giant Crego
The most beautiful and desirable aster we have ever seen; very hardy, free-flowering and one of the best for general planting; the plant is a strong, healthy grower, and will produce 12 to 15 long-stemmed flowers of the most graceful and pleasing style (see cut). With ordinary care you can grow flowers measuring 5 to 6 inches across. Most of the handsome large aster blooms you see in the Portland flower stores are of this kind.

Pure White, Shell Pink, Rose Pink, Lavender or Mixed. Pkt. 10c; ½-oz. 75c

SPECIAL.—One packet each of the four colors only 30c.
White Fleece
One of the largest and most perfect of the early flowering (Comet type), bearing flowers 5 inches and over across, formed into a plummy globe of glistening white; blooms at the same time as Lavender Gem, making a splendid companion.

Pkt. 15c; 2 for 25c; ½-oz. 75c

Mikado
Very similar to the Crego’s Giant, but more dwarf in growth and comes into bloom fully two weeks earlier. The plants attain a height of about 18 inches, of branching habit, and the flowers, borne on long, strong stems, are of colossal size, five and six inches across. We offer two colors, viz.:

Mikado Pink (or Rochester). A charming shade of pink suffused with lavender.
Pkt. 15c; 2 for 25c; ½-oz. 75c

Mikado White. Of purest glistening white; a magnificent and artistic flower.
Pkt. 15c; 2 for 25c; ½-oz. 75c

New Giant Comet
Considered by many to be the most beautiful of all the Asters (see cut). It is an ideal cutting variety, as each plant bears freely formed large flowers on long stiff stems.

Pure White, Pink, Crimson, Violet or Finest Mixed.
Pkt. 10c; ¼-oz. 50c

Lavender Gem.—One of the best; comet type; early and a charming shade of lavender; excellent in every way.
Pkt. 15c; 2 for 25c; ½-oz. 75c

New Crimson Giant
A late-branching variety of upright growth with extra large, densely double flowers of rich blood-crimson; makes a brilliant bed or border and is splendid for cutting. The form of the flower is nicely shown in plate above.
Pkt. 15c; 2 for 25c

SUPERB LATE BRANCHING.—The most popular late-flowering aster. Flowers are very full large in size and borne on long stiff stems 2 to 3½ feet high. A very desirable, beautiful and satisfactory variety.

Deep Rose, Dark Blue, Light Blue, Shell Pink, White or Finest Mixed.
Pkt. 10c; ¼-oz. 60c

LADY ROOSEVELT.—A new giant late-flowering, long-stemmed chrysanthemum aster. It has heavy incurving petals; flowers very large and gorgeous lavender pink. Excellent seller as a cut flower; good until frosts.
Pkt. 10c; ½-oz. 60c

QUEEN OF THE MARKET.—Most valuable for early cutting; the plants branch freely and produce a great many well-formed flowers nearly a month in advance of the later sorts.

White, Pink, Lavender or Finest Mixed.
Pkt. 10c; ¼-oz. 40c

BABY’S BREATH.—See Gypsophila, page 54.

BALSAM—Lady Slipper
Hardy annual, succeeding best in sunny situations, rich loam and moisture; very showy and of easy culture; 1½ feet; July to September.

Prize Mixture.—This strain will produce the most perfectly formed double flowers in the greatest variety of colors.
Pkt. 10c; ¼-oz. 35c

Improved Camelia-Flowered Finest Mixed.—Large, extra double flowers.
Pkt. 5c; ¼ oz. 25c

USE “WONDER.”—The best Fertilizer and plant food known. A teaspoonful to a plant does wonders. See page 34.

Aster—New Giant Comet
Routledge Seed & Floral Co.

Gentlemen: My Crego Asters were indeed beautiful, admired by all; the Cannas were also grand. My Porch Box flowers were grand and Sweet Peas were twelve feet tall and the largest flowers I ever had.

I am indeed pleased with all my flowers that I got from you, and certainly will tell everyone where I get them. Thank you for all.

Respectfully,

MRS. OTTILIE McDONALD.
Balloons. Giant Double Balloons. These plants in their large, pocket-like flowers, are very beautiful and of great interest to children; 8 to 10 feet (see cut). Pkt. 10c; ¼-lb. 15c

BEAN
Scarlet Runner. The well-known, rapidly growing annual climber, with bright red flowers, from July to September; height 8 feet. Large pkt. 10c; ¼-lb. 15c

BELLIS—Double English Daisy
Popular spring and summer flowering perennial; fine for borders; height 4 inches. Easily raised from seed sown from early spring to September; April to September. Double Mixed. Pkt. 10c
Longfellow.—Double pink flowers. Pkt. 10c
Snowball.—Free flowering; pure white. Pkt. 10c
Giant Red or Giant White.—Mammoth in size; very rare. Give them rich ground. Pkt. 25c

BROWALLIA—Amethyst
A very profuse blooming, half-hardy annual bedding plant, bearing during summer and autumn handsome winged flowers of different shades of blue; 1½ feet. Finest Mixed. Pkt. 5c; ¼-oz. 25c

Calliopsis
Showy and beautiful free-flowering annuals, of the easiest culture, doing well in any sunny position, blooming all summer and excellent for cutting and massing. Don't confine this with the perennial Coreopsis, page 51.

Calliopsis—Double Mixed. Pkt. 15c; 2 for 25c

BROWALLIA—Amethyst
A very profuse blooming, half-hardy annual bedding plant, bearing during summer and autumn handsome winged flowers of different shades of blue; 1½ feet. Finest Mixed. Pkt. 5c; ¼-oz. 25c

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CALCEOLARIA
An ornamental plant, and a universal favorite; produces a mass of beautiful puffed, pocket-like flowers of brilliant, self-colors and spotted. Our strains of Calceolaria are very fine.
Hybrida. Grandiflora.—Flowers of immense size; seeds saved from finest specimens. Pkt. 35c

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An ornamental plant, and a universal favorite; produces a mass of beautiful puffed, pocket-like flowers of brilliant, self-colors and spotted. Our strains of Calceolaria are very fine.
Hybrida. Grandiflora.—Flowers of immense size; seeds saved from finest specimens. Pkt. 35c

Calceolaria—Grandiflora. Pkt. 35c; ¼-oz. 20c

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Calceolaria—Grandiflora. Pkt. 35c; ¼-oz. 20c

Callirhoe—Pot Marigold
Hardy annual; one of the most universal garden flowers. The flowers appear in solitary heads on stout stalks; large, with flat, spreading rays; very showy; flowers the entire season; 1 foot. Double Finest Mixed. Pkt. 5c; ¼-oz. 20c

CALLIRHOE—Poppy Mallow
Hardy perennial; beautiful trailing plant, with palmate foliage; flowers large, crimson, with white center; fine for rockwork; 1 foot; June to October. Involucrata. Pkt. 5c; ¼-oz. 25c

Perennial Flowers are rapidly gaining in favor. MORE should be planted; they are beautiful in borders, beds or among shrubbery, and flower each year. You gain 1 year by buying our field grown plants. See pages 71 to 76.
Campanula—Bellflower

Well-known, beautiful, hardy herbaceous perennials, bearing a great profusion of attractive bellflowers; thrives best in light, rich soil; some of the varieties flower the first season if sown early.

**PERSICODONIA GRANDIFLORA (Peach Bells).**—Undoubtedly one of the finest of the hardy Bellflowers; grows 2 to 3 feet high, with large single flowers.

Blue, White or Mixed. Pkt. 10c; % oz. 50c

**CARPATTICA (Carpathian Hare-Bell).**—Free-flowering, hardy perennial, continuing in bloom the whole season; color clear blue or white; grows 6 inches high; especially good for edging.

Blue or White. Pkt. 5c; % oz. 25c

**CANTERBURY BELLS** (Campanula Medium)

Very ornamental garden plants of easiest culture; excellent for cutting; hardy biennial; 2½ feet high, producing large, bell-shaped flowers of exquisite colors. Hardy biennials. (See plants page 72.)

Single, Finest Mixed, all colors. Pkt. 5c; % oz. 15c

Single White, Blue or Rose. Pkt. 5c; % oz. 20c

Double Mixed, all colors. Pkt. 10c; % oz. 25c

R. E.’s PRIZE MIXTURE. — A mixture which contains every color and kind of both single and double biennial and perennials.

Pkt. 5c; % oz. 25c

**CALYCANTHHEMA** (Cup and Sancer Canterbury Bells).—This is unquestionably one of the finest types; they have an extra large calyx, which is of the same color as the flower, giving the appearance of a cup and saucer.

Pink, Lilac, Rose, White or Mixed.

Pkt. 15c; 2 for 25c; % oz. 50c


Routledge Seed & Floral Co.

Gentlemen: The Sweet Peas started blooming the Fourth of July and are still at it. Have found quite a few of the White Spencers with six blooms, and five is not at all uncommon. The Cannas and Palms are more than holding their own and I have had hundreds of inquiries as to where I got them.

Yours very truly,

F. A. CRANE.

Codleytuft—Iberis

Very popular free flowering annual, fine for beds or cutting; 1 foot. June to frost if sown early and late.

**Empress.**—A large flowered variety of pur- est white; grown extensively for cut flowers; very desirable.

Pkt. 5c; % oz. 20c

**Pink Beauty (Novelty).**—Fine, true pink; an exquisite flower.

Pkt. 10c

**Dwarf White Little Prince.**—Grows but six inches high and throws up strong trusses of pure white flowers; excellent for edging or bordering.

Pkt. 10c; % oz. 50c

**Crimson.**—Deep rich shade.

Pkt. 5c; % oz. 15c

**Finest Mixed, all colors.** Pkt. 5c; % oz. 20c

**SPIDERIPINS.**—Perennial; pure white flow- ers, evergreen foliage; blooms in June; fine for edging, borders and rockeries, 1 foot.

Pkt. 10c; 1-16 oz. 50c

Our Motto—“Highest Quality” Seeds, Bulbs, Plants and Supplies 49

BEAUTIFUL FLOWERING PLANTS.—We have thousands of hardy Flowering Annual and Perennial Plants and Bulbs during their proper seasons. See pages 66 to 69 and 71 to 81.
Carnation

Everyone loves Carnations. For started plants of the finest named varieties, see page 67.

MARGARET CARNATIONS.—The earliest to bloom, and producing large, double, sweet-scented flowers; being half-hardy perennials, if they are slightly protected during the winter they will survive and flower profusely the next spring.

Red, White or Yellow.—Large flowers.
Pkt. 10c; 1/2-oz. 50c
Choice Mixed.
Pkt. 5c; 1/2-oz. 35c
Benary’s Giant.—Extra large flowering and of the most beautiful colors.
Pkt. 15c; 1/2-oz. 65c

CELOSIA CRISTATA—Cockscomb

Showy annuals of easy cultivation; 1 foot; producing large, brilliant, comb-like flower heads.

Glasgow Prize.—Showy, dark crimson combs.
Pkt. 10c; 1/2-oz. 40c

CELOSIA PLUMOSA—Feathered Cockscomb

The plant grows 2 to 3 feet, is of handsome pyramidal form, and the numerous massive plumes, which resemble an ostrich feather waving gracefully above the foliage, make it one of the most effective; of easy culture.

Thompson Magnifica.—The most perfect in constant bloom from July to November;

Finest Mixture.
Pkt. 10c; 1/2-oz. 50c
Thompson Golden Yellow.
Pkt. 15c
Thompson Crimson.—True color.
Pkt. 15c

CENTAUREA—Dusty Miller

These are grown for foliage only; half hardy annuals; leaves are silver-coated.

Candidissima.—Thick, white, upright cut leaves; 1 foot.
Pkt. 10c
Gymnocarpa.—Fine, fern-like leaves, very graceful and showy; 1 1/2 feet.
Pkt. 10c; 1/2-oz. 25c

Centaura Cyanus

Bachelor’s Button, Cornflower.—Very popular annuals; will grow in the poorest of soil, either on seashore or mountains; seed can be sown either in fall or spring; sandy soil preferable; height, 21/2 feet.

Finest Single Mixed.
Pkt. 5c; 1/2-oz. 35c

CENTAUREA CYANUS fl. pl. (Double Bachelor’s Button).

Double Blue.—A beautiful large double flower.
Pkt. 10c; 1/2-oz. 25c
Double Mixed.
Pkt. 10c; 1/2-oz. 25c

Royal Sweet Sultans

CENTAUREA IMPERIALIS (Giant Cornflower).—The flowers are of enormous size, fragrant and of charming colors; in form they resemble the fuzzy part of the thistle bloom. In colors from white to red purple. Excellent for cutting.

Finest Mixed.
Pkt. 10c; 1/2-oz. 35c

ODORATA MARGUERITE.—Flowers 4 inches across; purest white; very fragrant; July to September; excellent for cutting; flowers full and double.
Pkt. 10c; 1/2-oz. 40c

Odorata Finest Mixed.—All colors.
Pkt. 5c; 1/2-oz. 25c

MOSCHATUS (Sweet Sultan).—Hardy annual, with very fragrant and showy flowers; 1 1/2 feet; June to September.

Finest Mixed.
Pkt. 5c; 1/2-oz. 25c

SUAREZENS (Yellow Sweet Sultan).—Very showy.
Pkt. 5c; 1/2-oz. 20c

Price List of Annual Bedding Plants for Spring planting on request.
Cosmos, Early Flowering.
"The most desirable fall flowers we have."

Cosmos
Beautiful autumn-blooming plants. They produce thousands of beautiful flowers in pure white, pink and crimson shades, furnishing an abundance of cut blooms for autumn decorations when other flowers are scarce. Can be sown in spring in the open ground, when danger of frost is past, or if wanted early the seed should be started under cover and afterwards transplanted. Set plants not less than 18 inches apart. When about a foot high the tops should be pinched out to induce a bushy growth. They do well almost anywhere.

Benary's Early Flowering.—If sown early, flowers can be picked in July. Grows 4 feet high; flowers large and beautiful.
White, Pink or Mixed. Pkt. 10c; 1/4-oz. 25c

Climoide.—Golden yellow, flowers large and borne on long stems; medium early.
Pkt. 10c

Mammoth Perfection.—Flowers often 4 inches across; plants 7 feet high; blooms do not appear until October. If topped when half grown plants will bloom earlier.
White, Pink, Red or Mixed. Pkt. 5c; 1/4-oz. 20c

Pink Lady Lenox
Gigantic flowers, with wide, overlapping petals of splendid substance, making a perfectly circular flower which is borne on very long stems, in color a beautiful deep rosy-pink.
Pkt. 10c; 1/4-oz. 40c

Cyclamen
Beautiful plants for the window or greenhouse, with mottled leaves and rich-colored flowers. The strain we offer below has gained a reputation for its large size, perfect form and brilliant colors.

Cypreanum.—Finest mixed.
Pkt. 35c

Cypress Vine
A fast-growing annual vine, with feathery, dark-green foliage and star-like flowers. July to October; 20 feet. Plant early, in light soil and warm location.
Finest Mixed. Pkt. 5c; 1/4-oz. 20c

Dahlias
This very popular flower can easily be raised from seed; started inside in March will produce flowers in August.

Cactus Mixed.—Double flowers with pointed petals (see cut).
Pkt. 20c

Double, Finest Mixed.—Produce flowers of the "Show" or "Decorative Class." Pkt. 10c

Single Giant Perfection.—Single flowers of great size and beauty.
Pkt. 10c

Dahlias Bulbs.—Latest and best. (See pages 83 to 87.)

Daisies—Shasta Daisy
Shasta.—Very popular and desirable perennial; the large single white flowers are freely produced on long stems. We offer you the best strain in plants or seed. (See cut in Plant Department, page 75.)
Pkt. 15c

Double Daisies.—(See Bellis, page 48.)

A HEDGE of Free Flowering Dahlias is AS BEAUTIFUL and more showy than a hedge of ROSES. They are in full bloom when other flowers ARE SCARCE. See pages 83 to 87.
Delphinum—Perennial Larkspur
(See cut, page 72.) Handsome, hardy perennial plants for the herbaceous border and shrubbery, producing a profusion of splendid spikes of flowers throughout the summer; will usually bloom the first season. (For large plants, see page 72.)

Cashmerianum.—18 inches high; large, dark blue flowers; spreading habit.
Pkt. 15c; ½-oz. $1.00

Chinese Azurum.—Branches very freely and produces its flowers in greatest abundance; clear, deep blue; height 3 feet.
Pkt. 5c; ¼-oz. 15c

Belladonna.—Very free and continuous bloomer; delicate and beautiful; clear turquoise blue.
Pkt. 25c; 5 pkts. $1.00

Formosum.—Long-spurred, brilliant blue flowers, with white center; 3 feet; July to October.
Pkt. 5c; ¼-oz. 25c

Elatum Hybridum.—Superb collection of finest double blue varieties; 3 to 5 feet.
Pkt. 15c; ¼-oz. 50c

Digitalis—Foxglove
Hardy perennials; very desirable for effective massing or grouping; invaluable either in the hardy border, between shrubs or in solid beds; 3 to 5 feet. For strong flowering plants, see page 73.

Beauty Mixture.—Comprising all the choicest colors.
Pkt. 5c; ¼-oz. 50c

Gloxinaeflora, Finest Mixed.—Flowers spotted similar to Gloxinias.
Pkt. 5c; ¼-oz. 25c

Gloxinaeflora Rossa.—Very desirable.
Pkt. 10c; ¼-oz. 30c

Montrosa (Mammoth Foxglove).—The tall spikes are surmounted by one monstrous flower; all colors mixed.
Pkt. 10c; ¼-oz. 50c

DIMORPHOTHECA AURANTIACA (African Golden Daisy). Hardy annual, a great favorite on account of its handsome golden-orange flowers, which are borne most profusely all summer; 15 inches. Does well in dry situations.
Pkt. 10c; ½-oz. 25c


Dianthus—Garden Pink
All the varieties listed below are very desirable, and will flower the first season, even sown out of doors in May; they flower early and continue throughout the entire summer; they are excellent for cutting, and bedding; 1 foot.

CINENSIS fl. pl. (Chinese Pink).—Large, double flowers in unlimited variety of bright colors.
Finest Mixed.
Pkt. 5c; ¼-oz. 20c

HEDDENWIGII fl. pl. (Double Japan Pink.) Beautiful rich colors.
Finest Mixed.
Pkt. 5c; ¼-oz. 25c

FIREBALL.—New, extra double, brilliant, dark scarlet; very beautiful.
Pkt. 10c; ¼-oz. 30c

SNOWDRIFT. (Laniceatus).—Extra large, pure white, double, fringed.
Pkt. 10c; ¼-oz. 35c

BENARY’S PRIZE MIXTURE.—Very rich.
Pkt. 5c; ¼-oz. 25c

SEMPEFLORENS (Perennial Hardy Ever-blooming Garden Pink).—Very beautiful, sweet-scented, double, semi-double and single flowers in great diversity of colors.
Pkt. 10c; ¼-oz. 25c

DOLICHOS—Hyacinth Bean
Annual climbers; beautiful foliage and clusters of hyacinth-like purple and white flowers, borne in clusters; 10 feet; July to September.

Daylight.—Snow-white flowers.
Pkt. 10c

Mixed.—White and purple.
Pkt. 5c; oz. 25c

Eschscholtzia—California Poppy
One of the most popular garden annuals; 1 foot. Sow the seed where plants are to remain in the fall or early spring. It stands considerable cold and blooms early profusely and continuously until July. Later sowings for late flowers. (See cut, opposite page).

Finest Mixed.—All shades.
Pkt. 5c; oz. 30c

California.—Bright yellow.
Pkt. 5c; oz. 30c

Alba.—Pure white.
Pkt. 5c; oz. 35c

Carmine.—A beautiful rose carmine.
Pkt. 10c; oz. 40c

Golden West.—Very large, bright yellow flowers with orange centers.
Pkt. 10c; oz. 35c

OUR 32-PAGE NURSERY CATALOG—For complete descriptions and illustrations of our full list of Fruit Trees, Berry Bushes, Roses, Flowering Shrubs and Vines, Shade Trees, Evergreens, etc., ask for our BULB AND NURSERY CATALOG, sent free on request. Remember, we have NO AGENTS and prepay freight or express charges.
ECHINOCYSTIS LOBATA—Wild Cucumber
The fastest-growing annual vine in existence; will grow 20 feet in six weeks; pretty foliage and inconspicuous white flowers; soak seed in water over night before planting in dry weather.
Fkt. 5c; ½-oz. 20c

Gaillardia—Blanket Flower
Splendid, showy plants for beds or borders; excellent for cutting; the hardy perennial varieties; if sown early will bloom the first season; July to frost; 1½ feet. (Field-grown plants, page 73.)
Grandiflora Superba.—Hardy perennial; splendid mixed varieties; in crimson and gold; 2 feet.
Pkt. 10c; ½-oz. 35c
Grandiflora Semi-plena.—A superb mixture of hardy, perennial, semi-double kinds.
Pkt. 15c; ½ oz. 25c
Picta Lorenziana.—Hardy annual; double mixed colors; 2 feet. Pkt. 5c; ½-oz. 25c

GERANIUM
Finest Mixed Hybrids.—Pkt. 25c. (Strong plants, page 66.)

GLOXINIA
Showy free-flowering greenhouse plants.
Hybrida Grandiflora.—The best strain in existence, embracing all the choicest self-colored, tigered and spotted flowers.
Pkt. 25c

GOMPHERENA—Globe Amaranth
A dwarf hardy annual, with pretty clover-like heads of purple, white and red flowers; 2 feet; flowers everlasting.
Finest Mixed. Pkt. 5c; ½-oz. 20c

Godetia—Satin Flower
This showy, hardy annual deserves greater popularity. Mallow-like flowers, varying from white to all shades of pink and crimson. They grow rapidly, and flower profusely; of easy cultivation, both at seashore or mountain resorts; 1½ feet; July to October.
Finest Mixed. Pkt. 5c; ½-oz. 20c

A HEDGE of Free Flowering Dahlias is AS BEAUTIFUL and more showy than a hedge of ROSES. They are in full bloom when other flowers ARE SCARCE. See pages 66 to 71.
Gypsophila—Baby's Breath
Pretty free flowering, elegant plants, succeeding in any garden soil. Their misty white panicles of bloom are largely used for mixing with other cut flowers. The annuals should be sown early in the spring and mid-summer for a continuous supply.

**Elegans Alba.**—Hardy annual, easily grown from seed; flowers pure white; 2 feet; June. Pkt. 10c; ½-oz. 25c

**Elegans Rosea.**—Hardy annual; flowers bright rose; very dainty; 2 feet. Pkt. 5c; ½-oz. 25c

**Muralis.**—Hardy annual; plants dwarf, about 6 inches; flowers shell pink; fine for borders or rock work. Pkt. 10c; ½ oz. 20c

**Paniculata.**—Hardy perennial; one of the finest for cutting; pure white flowers, very small, and borne in large, delicate sprays; June to September; 3 feet. Pkt. 10c; ¼-oz. 25c

(For strong roots of G. Paniculata for immediate effect, see page 73.)

**Paniculata Pl. Pl.**—New perennial; double-flowering; most desirable and valuable; pure white. Pkt. 25c; 2 for 35c

Helianthus—Sunflower
The single annual Sunflowers are indispensable for cutting and a bright display of yellow flowers in the garden, borders or among shrubs. Plant early in a sunny place and they will come into bloom early in the summer and keep up a constant supply of flowers until cut down by severe frosts in the fall. We offer some improved types or special merit.

**Cucumerifolius—Stella.** (Improved Miniature Sunflower.) Grows about 3 feet tall, covered with large single 5 to 6 inch flowers of the purest golden yellow, with black disc. Pkt. 5c

**Cactus.**—Artistic and effective new variety of "Stella." The petals are twisted like a Cactus Dahlia. Pkt. 10c

**New Miniature Mixed.** A multitude of new varieties have been raised from the popular Miniature Sunflower, which we offer in mixture. They all differ from the parent, most of them being larger, and many with curiously twisted petals. The prevailing colors are pale yellow, golden yellow and creamy white, some with black centers, and all beautiful; for cutting they are indispensable. (See cut.) Pkt. 10c

**Globosus Pistilosus** (Globe or Dahlia Sunflowers). Flowers large, double, very full in the center and of a rich saffron color; 6 feet. Pkt. 5c; ½-oz. 20c

**Perennial Mixed.**—A choice mixture of the best perennial varieties. Pkt. 10c; ¼-oz. 50c

**Heliotrope.** Delightfully fragrant, tender perennial; popular pot and garden bedding plant; also for cutting. Some of the best plants may be raised from seed very readily; 1½ feet; start inside or under glass.

**MIDNIGHT.**—New; handsome, large flowers, lively shade of purple; foliage beautiful dark green; stem black. Pkt. 15c

**Finest Mixed.**—All colors. Pkt. 5c; ½-oz. 35c

**Hollyhocks.** Very popular perennials. Easily grown.

**ALLEGHENY.**—Semi-double; mammoth flowers, having the edges of the petals finely fringed and lacinated; will bloom the first year if sown early. Choesest Mixed Colors. Pkt. 10c; ¼ oz. 50c

**DOUBLE GERMAN EVER-BLOOMING.**—Will bloom the first year from seed, if sown early. Pkt. 5c; ¼-oz. 40c

**NEW ANNUAL EVER-BLOOMING.**—This is one of the best introductions of late years. Seeds sown in the house in March will produce flowers in July on plants 4 feet high; the plants do not attain their perfection until their second year, when they grow 7 to 10 feet high, and flower continuously from June till frost. Pkt. 5c; ¼-oz. 30c

**Single Mixed.**

**Double Mixed.** Pkt. 10c

**CHATERS IMPROVED.**—Our strain of this is the best that can be produced; seeds saved from the most double flowers.

**White, Pink, Crimson, Yellow, Lilac or Mixed.** Pkt. 10c; ¼-oz. 50c
KOCHIA—Tricophylla
Summer Cypress or Burning Bush.—Annual; forms dense bushes of upright plumage-like foliage; during the summer they remain light green and in early fall they change to carmine and blood red; 2 feet; makes a dainty and showy hedge or nice single specimens.

Pkt. 5c; $\frac{1}{4}$ oz. 25c

LATHYRUS LATIFOLIUS
Perennial Sweet Pea.—Free flowering, hardy perennial climbers, bearing beautiful flowers all season. White or Pink. Mixed.

Pkt. 10c; $\frac{1}{4}$ oz. 25c
Pkt. 5c; oz. 35c

Humulus—Japanese Hop
Hardy annual climber; of rapid growth; attains a height of 12 feet; Japonica Variegata.—Foliage green and white; very pretty and effective; not affected with insects.

Pkt. 10c; $\frac{1}{4}$ oz. 25c

ENGLISH HOP ROOTS.
Each 10c

HUNNEMANNIA
Fumariaefolia (Giant Yellow Tulip Poppy.)—Hardy annual; foliage fern-like; flowers tulip-shaped, golden yellow; very showy; July to frost.

Pkt. 5c; $\frac{1}{4}$ oz. 25c

IPOMOEA—Moonflower
Grandiflora Alba.—Large, heart-shaped leaves, and large, pure white flowers, which open only late in the evening; 10 feet.

Pkt. 10c

Larkspur
These are splendid, hardy annuals, which, when grown in beds or borders, make a pleasing effect, and the slender flower stalks, when cut, are most desirable for vases; July to October.

Dwarf German Becket.—1 foot; compact growing bush; splendid spikes of double flowers in all colors.

Mixed.
Pkt. 5c; $\frac{1}{4}$ oz. 20c

Giant Hyacinth Flowered.—2 feet; fine, compact spikes of beautiful flowers.

Pkt. 5c; $\frac{1}{4}$ oz. 20c

Emperor.—Tall, slender spikes of exquisite double flowers in unlimited quantity; 3 feet.

Mixed.
Pkt. 5c; $\frac{1}{4}$ oz. 20c

PERENNIAL LARKSPUR.—(See Delphinium, page 52.)

KUDZU VINE
Pueraria Thunbergiana.—Tender perennial climber from Japan, growing 20 to 50 feet in a single season.

Pkt. 10c

LUPINUS
Ornamental, free-flowering, easily grown, with long, graceful, upright spikes of rich and variously colored pea-shaped flowers; valuable for mixed borders and beds.

Annual Dwarf Mixed.—1 foot.
Pkt. 5c; $\frac{1}{4}$ oz. 15c

Polyphyllus Mixed.—Showy perennials, growing stout and erect; good for cutting; flowers in great variety of colors; 3 to 4 feet; May and June.

Pkt. 15c; $\frac{1}{4}$ oz. 25c

MARVEL OF PERU—Four o’Clock
Hardy annual, flowering from July to October; brilliant colors; 3 feet.

Finest Mixed.
Pkt. 5c; oz. 25c

Marigold—Tagetes
Wide grown, hardy annuals; invaluable for bedding and producing an elegant display of yellow, orange and brown flowers from early summer till frost.

Mammoth African, Finest Mixed.—Very large and double, orange-yellow flowers; 2 to 3 feet.

Pkt. 5c; $\frac{1}{4}$ oz. 25c

Double French.—Flowers double, brown-red and golden-yellow; very rich and pretty; Tall or Dwarf Mixed.
Pkt. 5c; $\frac{1}{4}$ oz. 25c

MESEMBRYANTHEMUM
Dwarf trailing plants of great beauty, blooming the whole summer, thriving best in a dry, loamy or sandy soil; hardy annuals; 12 to 18 inches.

Tri-color.—Very dainty, pointed petaled, salmon-pink flowers.
Pkt. 10c

Crystallinum (Ice Plant).—Flowers white; prized for its singular icy foliage.
Pkt. 5c

*Pansy and all flowering plants by the thousands for April and May delivery. See Annual Plants list page 66. Complete annual price list on request.
Mignonette—Reseda
A universal favorite; very fragrant; no home garden is complete without Mignonette. It needs a cool soil only moderately rich; grows 6 to 12 inches high and is treated as a half-hardy annual; sown treated as a half-hardy annual. (See cut.)
Grandiflora.—Large-flowering, sweet, fragrant, spikes of greenish yellow color.
Pkt. 5c; oz. 15c
Defiance.—Giant spikes; flowers abundant and very fragrant. Pkt. 10c; ¼-oz. 25c
Machet Red.—Excellent for pots or garden; highly colored, fragrant flowers.
Pkt. 10c; ¼-oz. 25c
White Pearl.—New; the best white flower; very attractive.
Pkt. 10c; ¼-oz. 25c

MIMULUS—Muskplant
Moschatus.—A tender trailing plant with small yellow flowers, giving forth a musk-like fragrance; 6 inches. Pkt. 10c

MORNING GLORY—Ipomoea Purpurea
The tall varieties are popular, well known, rapid-growing climbers of the easiest cultivation; very fine for covering arbors, trellises, porches, etc.; the Minor or Dwarf varieties flower very freely and do not require support.

Convulvulus Major.—Tall, choice, single mixed; all colors.
Pkt. 5c; oz. 15c

Convulvulus Minor.—Dwarf mixed.
Pkt. 5c; oz. 15c

Imperial Japanese Fringed.—These have very large fringed flowers in a great variety of the most exquisite colorings; handsome foliage.
Pkt. 10c; oz. 25c

Japanese Double Mixed.
Pkt. 15c

Choice Prize Mixture.—This is a mixture of both American and Japanese varieties; very choice. Large Pkt. 10c; oz. 20c
(Note.—Soak the Japanese Morning Glory seed in warm water for 24 hours before planting.)

PERENNIAL FLOWERING PLANTS—By buying our strong field grown plants you save time and get a profusion of flowers the first season. See pages 71 to 76.
Nasturtium—Tall Climbing

The most popular and most beautiful annual climbing vines. We offer only the finest strains, producing the largest and richest flowers.

Asa Gray.—Yellowish white; very fine.
Black Prince.—New; very dark.
Crown Prince.—Rich blood red.
Golden Queen.—Very fine yellow.
Margaret.—Yellow, spotted red and yellow.
Primrose.—Cream, brown spots.
Regina.—New salmon shade.
Spitfire.—Bright fliry scarlet.

Pkt. 5c; full collection, 8 kinds, 30c; per oz., any kind, 20c.

TALL PRIZE MIXTURE.—This is undoubtedly the finest mixture of tall Nasturtiums offered anywhere; every shade is grown separately and then mixed.

Large Pkt. 10c; oz. 20c; ¼ lb. 50c; lb. $1.50

Tall Choice Mixed.—A very fine selection of beautiful varieties.

Large Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. 75c

IVY-LEAVED, FINEST MIXED.—The ivy leaves, borne on very slender stems, are of a dark metallic color, which forms a striking contrast to the crimson scarlet flowers; an excellent variety for vases, hanging baskets, etc.

Pkt. 10c; oz. 25c

VARIEGATED QUEENS.—A new strain of tall Nasturtiums having beautifully variegated leaves; green, white and yellow; flowers large and of many bright colors.

Superb Mixed.

Pkt. 10c; oz. 25c

DWARF NASTURTIUMS

Aurora.—Reddish orange, veined carmine.
Beauty.—Yellow and scarlet; very pretty.
Empress.—Deep crimson; extra dark leaved.
Golden King.—A rich golden yellow.
Regislanum.—Deep purplish crimson.
Vesuvius.—New salmon red; very beautiful.

Price, all above Dwarf varieties, Pkt. 5c; 6 for 25c; per oz. 20c.

PENTSTEMON—Beard Tongue

The handsome, brilliant flowers are borne on long terminal spikes, much resembling Gloxinias. Perennial; will bloom the first season if sown early; 3 feet. All colors from yellow to red and purple. See cut.)

Hybrida Mixed.

Pkt. 10c

For permanent and hardy climbing flowering vines and trailers, see pages 99 and 100.

GROW "PRISE FLOWERS" by using "WONDER ODORELESS FERTILIZER," but do not use TOO MUCH, it is very RICH. See page 34.
Giant Pansies
This popular flower thrives best on a cool, moist, but well-drained soil enriched with well-rotted barnyard manure or fine ground bones. Seeds sown early will produce fine plants for autumn blooming. The proper method, though, is to sow in July or August and protect the plants during the winter, when they will flower continuously early the following spring and summer.

EXHIBITION PRISE MIXTURE.—For variety of markings, beauty of form, large size, splendid texture this superb strain cannot be excelled. Pkt. 20c; ½-oz. $1.50

E. J. Steele's Mastodon.—Giant strain; Oregon grown seed.
Mixed, Pkt. 25c; ½-oz. $2.00

Bugnot's Large Blotched.—A magnificent strain; very large flowers; great diversity of colors. Pkt. 25c; ½-oz. $1.00

Cassier's Giant, Finest Mixed.—Strong-growing strain, producing rich and varied-colored flowers of large size.
Pkt. 15c; ½-oz. 75c

English Show Strain.—A splendid strain, valued for the texture and varied markings of the flowers.
Pkt. 10c; ½-oz. $1.00
Choice Mixed.—A fine bedding strain.
Pkt. 5c; ½-oz. 50c

GIANT TRIMARDEAU.—The most popular strain for this locality, and deservedly so, on account of the strong, sturdy plants and the enormous flowers of the greatest variety of colors.
Finest Mixed.
Pkt. 10c; ½-oz. 75c

Masterpiece.—Elegant ruffled petals; beautiful large flowers, mostly rich dark shades.
Pkt. 25c; ½-oz. 75c

GIANT NAMED PANIES
Adonis.—Light blue; beautiful. Pkt. 10c
Golden Queen.—Pure rich yellow. Pkt. 10c
King of Blacks.—Best velvety black.
Pkt. 10c
Lord Beaconsfield.—Very beautiful, violet purple, shading to white. Pkt. 10c
Madam Perret.—Fine wine red shades on white. Pkt. 10c
Snowflake (Candidissima).—Pure white.
Pkt. 10c
Sunlight.—New yellow, orchid flowered.
Pkt. 10c
Purple-Eyed White.—Very beautiful.
Pkt. 10c
Black-Eyed Yellow.—Very fine and effective.
Pkt. 10c

Portulaca
One of the freest flowering dwarf annuals, especially adapted for sunny locations; flowers of the most brilliant colors; 6 inches.
Single, Finest Mixed.
Pkt. 5c
Double, Finest Mixed.
Pkt. 10c

Petunia
One of our easiest cultivated and freest flowering annuals. Will succeed almost anywhere and give a continuity of the most brilliant bloom from June till killed by frost. The strains we offer are the very choicest obtainable.

SINGLE PETUNIAS
Prize Mixture.—Magnificent, large, exquisitely fringed and blotched flowers; vary in color from pure white to dark purple, and are often over 4 inches across.
Pkt. 35c; 1,000 seeds $3.00

Ruffled Giants.—Enormous flowers, having edges of petals beautifully ruffled and fringed; of great variety of colors, many being beautifully veined.
Pkt. 25c; 1,000 seeds $1.50

Dwarf, Large-Flowering, Fringed.—A new dwarf selection of the most beautiful ruffled and fringed type; compact, free-flowering plants; excellent for bedding or pots.
Pkt. 25c

Large-Flowered, Finest Mixed.—Fine, large flowers in superb mixture.
Pkt. 10c

Fine Mixed.—An assortment of medium-sized flowers; fine for bedding. Pkt. 5c; ½-oz. 25c

DOUBLE PETUNIAS
All of our Double Petunias are selected with greatest care, and contain as large a percentage of double flowers as it is possible to obtain.

Giant Double, Finest Mixed Hybrids.—An exceptionally fine strain; remarkable for the large, beautifully colored double flowers.
Pkt. 50c; 500 seeds $4

Giant Double Mixed.
Fringed, unsuspected. Pkt. 35c; 500 seeds $2.50

Choice Double Mixed.
Pkt. 25c; 500 seeds $1.50

This year we offer some special Flower Seed Collections of special merit. Look them up on page 44.
NICOTIANA
Affinis (Tuberous-flowered Tobacco).—Delightfully sweet-scented, pure white, tubular flowers, blooming continually; annuals; 2 to 3 feet. Pkt. 5c; ¼-oz. 25c

NIGELLA—Love in a Mist
Damascena—A compact, free flowering plant with finely cut foliage, curious looking flowers and seed pods; hardy annuals; blue and white; 1 foot. Mixed colors.

Pkt. 5c; ¼-oz. 15c
Miss Jekyll.—A lovely variety with cornflower blue blossoms; splendid for cutting. Pkt. 10c; ¼-oz. 25c

Phlox
Drummondii.—These varieties are the largest flowering of the annual phloxes. They are the very finest strains that can be selected, and should be grown in everyone's garden; 12 to 15 inches.

Alba—Pure white. Pkt. 10c; ¼-oz. 25c
Coccinea—Bright scarlet. Pkt. 10c; ¼-oz. 25c
Leopoldi—Rose, white eye. Pkt. 10c; ¼-oz. 25c
Grandiflora Mixed.—All colors. Pkt. 5c; ¼-oz. 35c

HARDY PERENNIAL PHLOX (Decusata).
These rank among the finest herbaceous perennials for beds and borders; mixture of the finest colors; 3 feet. (See plants, page 74.) Pkt. 10c; ½ oz. 35c
PINK.—(See Dianthus, page 52.)

Shirley (Annual).—Charming Poppies. Flowers single and semi-double, and range in color from the purest white through the delicate shades of pale pink, rose and carmine to the deepest crimson and blood-red, while many are daintily edged and shaded. The petals are like silk. Free blooming and fine for borders or beds: 1½ to 2 feet. Pkt. 5c; oz. 40c

Carnation Flowered (Annual).—Splendid double fringed flowers. Mixed Colors. Pkt. 5c; ¼-oz. 15c

Annual Superb Mixture.—A superior strain, containing the choicest of single and double varieties in all of the brightest colors. Pkt. 5c; oz. 50c

ICELAND, OR MUDICAULUS (Perennial).—These are of a very graceful, neat habit, with bright green, fern-like foliage, formed in tufts, from which issues slender stalks, about 12 inches in height, bearing beautiful brilliant single flowers in endless profusion, and most useful for cutting. (For plants, see page 78.)

Yellow, White, Scarlet or Mixed. Pkt. 10c; ¼-oz. 50c
Double Iceland Mixed.—Very choice. Pkt. 10c; ¼-oz. 50c

ORIENTALE BRILLIANT.—This is the most gorgeous perennial Poppy, flowering in June and July, with enormous vivid scarlet blossoms. Pkt. 10c; ¼-oz. 50c
Oriental Princess Victoria Louise.—Salmon pink; very silky and delicate. Pkt. 15c
Oriental Psyche.—Delicate rosy blush. Pkt. 15c

CALIFORNIA POPPY.—(See Eschscholtzia, page 62.)

PYRETHRUM—Golden Feather
Aureum.—Half-hardy perennials, grown as annuals; valuable for edging, as their yellow foliage makes a fine contrast with other bedding plants; 6 inches. Pkt. 5c

PERENNIAL FLOWERS are rapidly gaining in favor. MORE should be planted; they are beautiful in borders, beds or among shrubbery, and flower each year. See pgs. 71 to 80.
Primula—Primrose

The first two varieties named below are hardy, early-blooming, garden plants, and the others beautiful winter-blooming house plants. Their various forms and blending of colors are exceedingly pleasing and effective. They thrive best in a rich, loamy soil.

POLYANTHUS (Veris Mixed).—Early blooming, dwarf growing plants, valuable for outdoor bedding and edging. 8 inches, perennial. (See plants, page 74.)
Mixed. Pkt. 15c; ½-oz. 50c

VULGARIS (Veris Aurea).—Yellow, common, English Primrose; hardy garden variety; perennial; 8 inches.
Pkt. 10c; ½-oz. 35c
Obconica Grandiflora Hybrids.—A lovely, profuse bloomer, bearing beautiful clusters of single flowers; for pots only.
Pkt. 10c
Obconica G. Gigantia.—New giant, distinct, very beautiful.
Pkt. 25c
Sinensis or Chinese Primrose.—Beautiful, large, fringed flowers; especially fine for winter and spring flowers in the house; free bloomers.
Finest Mixed. Pkt. 25c

Ricinus—Castor Oil Bean

A magnificent and highly ornamental plant, with picturesque foliage and stately growth, combined with brilliant colored fruit of the giant varieties. Grown as single specimens on lawns and on pleasure grounds, they form a striking feature; hardy annuals.
Zanzibarensis, Mixed.—Very ornamental; dark bronzy green and red leaves; 8 to 10 feet high.
Pkt. 5c; oz. 25c
Sanguineus Tricolor.—Blood red stems, deep green leaves, with red veins; 6 feet.
Pkt. 5c; oz. 25c
Gibsoni.—New dark red foliage; 5 feet.
Pkt. 10c; oz. 25c
Finest Mixed.—All kinds. Pkt. 5c; oz. 15c

RUDBECKIA—Coneflower

Bicolor Superba.—Fine free-flowering annual variety; 2 feet; producing in great abundance on long stems its bright yellow double flowers.
Pkt. 10c
Pulgda.—Hardy perennial sort, producing in masses during August and September brilliant orange-yellow flowers; 3 feet.
Pkt. 10c
Newman.—Perennial; large, bright orange-yellow flowers.
Pkt. 15c

SALPIGLOSSIS

Produces very showy, funnel-shaped flowers of large size; fine for beds; half-hardy annuals.
Grandiflora Mixed.—Large-flowering. Pkt. 10c

Salvia—Scarlet Sage

This popular bedding plant produces a blaze of brilliant scarlet flowers in the garden during the late summer and fall. Seed should be started in the house during March. Height 1½ to 3 feet.
Splendens Compacta.—A splendid semi-dwarf variety, with large spikes of rich scarlet flowers.
Pkt. 10c; ½-oz. 50c
Zurich.—New dwarf, of special merit; fine flowers, and starts to bloom early.
Pkt. 25c; ½-oz. 75c
Fireball.—The earliest semi-dwarf salvia; extremely floriferous. Pkt. 10c; ½-oz. 75c

SCHIZANTHUS—Butterfly Flower

Beautiful garden annuals; flowers charmingly fringed and delicately colored; 1 to 2 feet. Blooms quickly from seed.
Grandiflora Mixed. Pkt. 10c

Stock—Gilliflower

By far one of the most popular annuals for garden or greenhouse culture. They are superb for cutting, and are of great value to florists for bouquet work. Flowers are of delicious fragrance, large, double, and borne on handsome spikes.
Large-flowered Ten Weeks.—A splendid double-flowered strain, especially adapted for bedding and pot culture; pyramidal spikes of brilliantly colored flowers; 1 foot.
Finest Mixed. Pkt. 10c; ½-oz. 50c

GIANT PERFECTION, OR CUT-AND-COME AGAIN.—Grown for us in Europe, where the greatest possible care is taken in the selection of good seed. Of branching habit, 1½ feet, and 85 to 90 per cent of large, double flowers; fine for cutting.
White, Light Blue, Crimson, Dark Blue, Pink, Yellow, or Finest Mixed. Pkt. 10c; ½-oz. 60c

BEAUTY OF NICE.—A handsome, new winter stock of quick growth; flowers of large size; 2 feet.
Mixed. Pkt. 10c; ¼-oz. 60c
Princess Alice.—Double white. Pkt. 15c
Queen Alexandra.—Soft rose lilac. Pkt. 15c
Beauty of Nice.—Delicate flesh pink. Pkt. 15c

SUNFLOWER.—(See Helianthus, page 54.)

Sweet William

Hardy biennial, widely grown for the handsome, showy heads of brilliant flowers from June to September; 1½ feet.
Double Finest Mixed. Pkt. 10c
Mammoth Single Mixed. Pkt. 5c
SCABIOSA—Morning Bride
Elegant, hardy annual; fine for cutting and bedding; flowers quite large and very showy, blooming freely during summer and autumn; 2½ feet. All colors.
Finest Mixed. Pkt. 5c; ¼-oz. 25c
White.—Large flowers. Pkt. 5c; ¼-oz. 25c

SHAMROCK—True Irish
This is the genuine Shamrock, and is gathered by a connoisseur on the native land.
Pkt. 25c

SNAPDRAGON.—(See Antirrhinum, pg. 46.)

SMILAX
One of the most graceful climbers for greenhouse or conservatory. Pkt. 10c

THUNBERGIA
Extremely pretty yellow flowers with dark eye; rapid-growing annual trailers; used largely for vases, window boxes, etc.; will flower all summer till frost; 5 feet.
Finest Mixed. Pkt. 5c; ¼-oz. 30c

TRITOMA—Red Hot Poker
Striking and exceedingly ornamental autumn flowering plant. Showy flower spikes, shaded red and yellow; 2 feet. (See cut and plants, page 75.) Pkt. 10c

VALERIANA—Garden Heliotrope
A fine old-fashioned hardy plant; flowers have a strong heliotrope odor; showy, red or white; fine for bouquets; 2 feet.
Mixed. Pkt. 5c

Verbena
One of the finest annual bedding plants and also suitable for borders, baskets and window boxes; its heads of brilliant-colored flowers produce one mass of bloom throughout the summer. (See cut.)

NEW GIANT.—The most beautiful and remarkable variety yet introduced.
Hybrida Mixed. Pkt. 20c

Violet
Viola Odorata is the well-known English Violet, a free-flowering, hardy perennial; easily grown from seed, though somewhat slow in germinating; succeeds best in partially shaded, moist places.
Odorata.—Blue or White. Pkt. 15c

WALLFLOWER
Very highly prized, old-fashioned plants, grown largely for their fragrance; half-hardy perennial varieties; 1½ feet.
Single Finest Mixed. Pkt. 5c
Double Tall Branching, Finest Mixed.—Fragrant; 3 feet. Pkt. 10c

WILD CUCUMBER.—(See Echinocystis, page 53.)

Zinnia—Youth and Old Age
The plants come quickly from seed and make a fine display in a bed or border. Each flower lasts for several weeks, and the plants bloom abundantly until destroyed by frost; 1½ and 2 feet; annual.

ROBUSTA GRANDIFLORA.—A very choice selection of the largest showy varieties.
Double Mixed. Pkt. 10c; ¼-oz. 40c

MAMMOTH.—White, Golden, Yellow, Scarlet or Flesh; 3 feet. Pkt. 15c; ¼-oz. 50c

Tall Giant, Double Mixed.—Elegant strain, comprising all colors; 3 feet. Pkt. 5c; ¼-oz. 25c

Dwarf Double Mixed. Pkt. 5c; ¼-oz. 25c

REMEMBER our DESCRIPTIVE CATALOG OF NURSERY STOCK gives full information and prices on the best FRUIT, SHADE AND ORNAMENTAL TREES, SHRUBS AND PLANTS. Free to all.
"Up to-Date" SWEET PEAS of "Highest Quality"

Treat your Sweet Peas with NITRO-GERM, makes stronger vines, more and larger flowers. (See page 36.)

No Seed Company in the world offers better sweet pea seed than we. By field trials of the improved varieties from American and European growers we are enabled to select the best under each color for our customers.

This year we have "new novelties" to offer of special merit. We have discarded the "Unwin" class and many "Spencers" and Grandiflora types, and we offer you only the Cream of all Sweet Peas. The Best by Test.

1916 Prize Collection

LATEST AND BEST

Novelties

OF GIANT SIZE

The following varieties are of REAL MERIT that have won prizes at the American or National Sweet Pea Shows.

Special—One packet each (9 kinds), value $1.40, only $1.00.

THE PRESIDENT — 1916 Noveltv

Flowers of beautiful wavy form on long stems usually carrying four giant blooms of a rich glowing scarlet—claimed to be the brightest color to date and does not burn. Equal to if not larger and better than "Fiery Cross."

Pkt. 15c; 1/2 oz. 50c

ILLUMINATOR

Very distinct and pronounced "the most glorious color ever seen"—rich glowing cerise-salmon, suffused bright orange, rich and glistening, large, perfect flowers in profusion on long stems.

Pkt. 15c; 1/2 oz. 35c

JESSIE CUTHBERTSON SPENCER

A good striped variety is desirable in every collection—this attractive and beautifully formed, large, vigorous flower is rich cream overlaid with stripes and marblings of bright rose-pink. Both standard and wings are colored alike and the whole effect is bold and pretty.

Pkt. 15c; 1/2 oz. 35c

GEORGE STARK

Awarded 5 prizes. Giant flowers of perfect form, waved and fluted. The wings are of the same intense bright pure scarlet as the standard, making a uniform self-color throughout and absolutely sunproof.

Pkt. 10c; 1/2 oz. 35c

MRS. CUTHBERTSON

An exquisitely beautiful bi-color of gigantic size and advanced Spencer type. The standard is a clear rose-pink, wings white, slightly flushed light rose. Flowers invariably produced four on a stem of great length. Extremely vigorous and free flowering.

Pkt. 15c; 1/2 oz. 25c

QUALITY and TRUENESS is what makes the price in Sweet Peas. Low prices never brought "HIGHEST QUALITY" Seeds. Use Nitro-Germ, see page 36.
Sweet Peas of Highest Quality

Some others may have as good, but none any finer Sweet Pea Seed than we. The new orchid-flowered or Spencer types are the latest, and well worth the higher price asked. Those who have tried the true "new Spencers" will never be satisfied again with the old types.

Use NITRO-GERM for Sweet Peas, 25c and 50c sizes. (See page 36.)

Our Special 1916 Collection of Giant Spencers
75c Worth for 50c

We have put up, in one large, beautifully lithographed envelope, seven distinct and new GIANT "SPENCERS," each kind in a separate packet and properly marked. The seed in each packet will plant a row 3 to 4 feet or a total of 20 to 30 feet. With good care and cultivation these will produce THOUSANDS OF BLOOMS which you can pick in separate shades; an ideal way for special effect. This collection contains our leaflet "HOW TO GROW PRIZE SWEET PEAS" and one full-sized packet of the 7 distinct and popular colors as described below—

ADD 15c EXTRA OR 65c in all and we will include a 25c packet (1 oz.) of R. R. SUPERB SPENCER MIXTURE. (Described below.)

WHITE SPENCER—A pure white, of enormous size and splendid substance; long, strong stems; very popular.
Pt. 10c; oz. 25c

MRS. HENRY BELL—Giant flowers of finest form. A most charming rich pink on cream. Magnificent in every respect.
Pt. 10c; oz. 25c

HELEN LEWIS SPENCER—Very popular with florists and large growers. A profuse bloomer. Flowers large, nicely waved and of an intense rich crimson-orange or salmon pink.
Pt. 10c; oz. 25c

PRIMROSE SPENCER—A pronounced primrose or creamy white; excellent flower.
Pt. 10c; oz. 25c

ASTA GHN SPENCER — Color a beautiful lavender; flowers large, wavy and generally come four blossoms to the stem. We offer a very select strain.
Pt. 10c; oz. 35c

MAUD HOLMES—An English introduction and superior to others in this color. Elegant form and type and a beautiful crimson scarlet, giant, wavy flowers, four to a stem.
Pt. 15c; oz. 40c

MRS. A. IBELEND—The form is most beautiful; petals waved and crinkled; distinct serrations on edges of standard. The extra large, long-stemmed flowers are most attractive; the best rosy pink.
Pt. 10c; oz. 25c

SPECIAL 1 oz. each of the above 7 kinds only $1.00. 1 packet, each 50c. SPECIAL

R. R.'s Superb Giant Spencer Mixture of Sweet Peas

This is our own special mixture and is composed only of the best giant orchid-flowered wavy Spencer types, also contains some new seedlings that have not as yet been named. For healthy, robust growth, wealth of blooms, size of flowers and exquisite and rare colorings; this mixture is unequalled.

Put up and for sale in sealed packages only, 1/2-oz. pkts., 15c; oz. pkts., 25c each; 3 for 60c; 6 for $1.00.

PRIZE SWEET PEAS—If you want to grow giant flowers on long stems, you must give your sweet peas good soil, plenty of water at the roots in dry weather, some Wonder Fertilizer and pick the flowers often. Our "leaflet" tells all—free with each order.
Up-to-Date Spencer Sweet Peas of Real Merit—Continued

No seed house offers a more select list. We classify under colors for your convenience.

SPECIAL—Make up your own collections, 65c worth for 50c; $1.35 for $1.00.

Don’t grow your Sweet Pea Vines too close together, after the plants are 4 inches high, thin to 4 to 6 inches apart.

WHITE

ETA DYKE.—The largest and most exquisitely formed pure white Spencer according to N. S. P. S. Beautifully waved; color absolutely pure.

Pkt. 10c; oz. 40c

KING WHITE.—(See “Novelties,” page 62.)

NORA UNWIN.—Pure white and large in size; exquisitely crinkled, wavy petals.

Pkt. 5c; oz. 20c; 4 oz. 50c

WHITE SPENCER.—(See page 63.)

ZENOPHON.—Distinct and attractive. Large flowers, full and wavy, some double standard. Color white, edged lavender.

Pkt. 10c; oz. 35c

YELLOW-PRIMROSE

CLARA CURTIS.—The best light yellow in color and size. Placed at the head of the list by N. S. P. S.

Pkt. 10; oz. 35c

PRIMROSE SPENCER.—(See Collection, page 63.)

PINK ON CREAM

ETHEL BOOSEY.-A soft, pleasing primrose, overlaid with dainty bright pink; very large and fine.

Pkt. 10c; ¼-oz. 20c

MARGARET ATLEE.—(See Novelties,” page 62.)

MAY CAMPBELL.—A most distinct sweet pea and ground color cream, shaded and slightly veined light pink.

Pkt. 15c; ½-oz 25c

MRS. HENRY BELL.—(See page 63.)

MRS. A. Ireland.—(See page 63.)

MRS. W. C. BREADMORE.—An English introduction of exquisite beauty. Buff ground, beautifully shaded with pink; large.

Pkt. 10c; oz. 35c

PIKMK

COUNTRESS SPENCER.—Improved strain. Flowers extremely large, beautifully expanded, crumpled and waved. Color soft shell pink, deeper at the outer edges. True pure seed.

Pkt. 10c; oz. 35c

CONSTANCE OLLIVER.—A refined variety of great beauty and form: rich, rosy delicate salmon pink; charmingly waved and crimped. The large, beautiful flowers, usually in fours are well placed on long, strong stems.

Pkt. 10c; oz. 35c

ELFRIDA PEARSON.—A magnificent and a very large pale pink flower, of a lovely shade. A vigorous grower, producing plenty of fours. This pea should be grown by every exhibitor.

Pkt. 15c; ¼-oz. 25c; oz. 40c

MARSHA WASHINGTON.—A beautiful large, wavy flower, almost pure white, edged carmine rose, very dainty and effective.

Pkt. 10c; ½-oz. 35c

MRS. HUGH DICKSON.—The best light pink to date. A European novelty of sterling merit. You will be delighted with this.

Pkt. 10c; oz. 35c

USE WONDER ODORLESS FERTILIZER TO MAKE MORE AND LARGER FLOWERS AND VEGETABLES. SEE PAGE 34.
Up-to-Date Spencer Sweet Peas of Real Merit—Continued

No seed house offers a more select list. We classify under colors for your convenience. SPECIAL—Make up your own collections, 65c worth for 50c; $1.35 for $1.00.

**ORANGE OR SALMON**

NOTE—To get the most delicate shade in this color, flowers should be lightly shaded.

**BARBADAS**—Salmon-colored self or large size. It makes a “telling” bunch either for exhibition or table decoration, and is most effective. Pak. 15c; 1/2-oz. 25c

**DECORATOR—1913**—The color of old rose with a sheen of terra-cotta giving a bright orange effect. The placement and poise of the flower is perfect. When exhibited, this variety never fails to attract attention.

**MRS. KING**

**VEBBUBIOH**

**PBOBEHCE**

**CHABBES**

**Barge**

**SPECIAL**—Changing, very large, with three or four fine, very large blooms of a rich deep maroon.

**Pkt. 10c; oz. 25c**

**BLUE—PURPLE**

**CAPTAIN OF THE BLUES, SPENCER**—Clear purple, blue; a bright striking color.

**Pkt. 10c; oz. 25c**

**MRS. G. CHARLES**—A new shade of deep blue, large wavy flowers of excellent form.

**Pkt. 15c; 1/2-oz. 25c**

**ROSIE ADAMS**—New, peacock blue, a color that has long been wanted; try it.

**Pkt. 10c; oz. 35c**

**ROYAL PURPLE**—[See “Novelties,” page 62.]

**STRIPE—SHAD**

**JESSIE CUTHBERTSON, SPENCER**—[See “Novelties,” page 62.]

**RAMONA SPENCER**—Very attractive, clear white, with soft, delicate lines and flake of blush pink.

**Pkt. 10c; oz. 25c**

**SENIATOR SPENCER**—Claret and chocolate stripe, on light ground, large and most distinct, much admired; a profuse bloomer.

**Pkt. 10c; oz. 35c**

**MRS. WILCOX**—Bright and attractive; white, striped bright red; very pretty.

**Pkt. 10c; oz. 25c**

**MRS. CUTHBERTSON**—[See “Novelties,” page 62.]

**Winter Flowering (Forcing)**

For florists’ use for forcing in greenhouses for winter flowers. All leading colors in named varieties at 20c oz.; 4 oz. 50c.

**Double Mixed**

These generally bloom about 50 per cent double flowers.

**Pkt. 10c; oz. 20c**

**Cupid Sweet Peas**

Compact dwarf plants, not over six or seven inches high. Flowers of good size and substance. For edgings, low beds and pot culture they are unique and pretty.

**Mixed, Pkt. 5c; oz. 15c; 1/4 lb. 40c; lb. $1.25**

**Popular and Best Grandiflora Sweet Peas**

Aside from the preceding varieties, these are the “cream” of over 100 named varieties. Your selection, Pkt. 5c; 6 pkts. for 25c; oz. 10c; 6 1-oz. pkts. 50c; 1/4 lb. 30c; lb. $1.00.

**Dorothy Eckford**—A good white of the largest and best grandiflora type. A free bloomer.

**Mrs. Collier**—A rich primrose tint, entirely free from any trace of pink.

**Lovely**—Beautiful shades of soft shell pink, changing to very light rose at the outer edges.

**King Edward VII**—Large flowers of open form, bright crimson-scarlet. Long stems; fine flowers.

**ROSE CITY MIXTURE OF GRANDIFLORA**

Extraordinary care has been taken in the selection of the varieties and the quantities of each to make up the mixture, and the result is one that cannot fail to excite the admiration of even the most critical.

**Large Pkt. 5c; oz. 10c; 1/4 lb. 25c; lb. 75c**

**Free—Our pamphlet, “How to Grow Prize Sweet Peas”—free with any order if asked for.**
Annual Flowering Plants.

For Beds, Borders, Baskets, Boxes or Vases.

READ THIS—During April, May and June we have thousands of flowering and ornamental annual plants, practically every variety from "A to Z" we list under flower seeds. No order too large or too small. Write for price list if interested. For a small amount we can make up a nice assortment for a flower bed, window or porch boxes, hanging baskets or garden vases. The young plants can be sent by parcel post. Large stock from pots by express.

Beautiful Single Geraniums

Price 10c each; set of 12 varieties, $1.00 postpaid.

**Bellerophon**—One of the freest blooming single scarlet bedding varieties; rich, glowing scarlet, crimson maroon shading on upper petals.

**James Kelway**—A most beautiful crimson scarlet, of fine size and satiny texture.

**Jacquerie**—Rich, vivid crimson; immense trusses. Excellent for bedding; blooms freely, stands the sun well.

**Mad Chaquotan**—Beautiful pink upper petals, marked with white; very pretty.

**Mildred Rival**—Pure rose-pink, with conspicuous white blotch on two upper petals; flower beautifully formed, and the largest of its color.

**Marine Kavolenski**—Odd shade of orange red, very distinctive, splendid border, vigorous, handsome, a dependable sort.

**Mrs. E. G. Hill**—Very large trusses; color, clear salmon, with a white center; one of the finest varieties.

**Mrs. J. M. Garr**—A grand single white; plants a mass of white bloom.

**Mrs. A. Blanc**—Silver salmon, shaded peach; glistening texture.

**Tiffin**—Flowers vivid scarlet, with white eye; very attractive.

**C. W. Ward**—Rich salmon shaded to orange. Large trusses on strong stalks. Magnificent zoned foliage.

**Mme. Cibiel**—Light salmon flesh color bordered orange. Grand trusses of very large florets.

Grand Double Geraniums

Price, 10c each; set of 12 varieties, $1.00 postpaid.

**Beaupe Poitevine**—Very large, semi-double flowers of a brilliant salmon color.

**Contraste**—Glowing carmine shaded to velvety scarlet. One of the best bedding sorts.

**Francois Magnard**—Fine, bright magenta shade, flowering very freely.

**Francis Perkins**—The grandest bright pink bedding variety to date, exquisite.

**Golden Dawn**—Rich orange scarlet, the nearest approach to yellow in geraniums.

**Heteranthe**—A fine bedding variety, color bright vermilion red of a most pleasing shade. Trusses very large.

**Jean Vlauw**—Soft rose color shaded to white. Immense florets in large trusses. Magnificent variety.

**La Favorite**—Trusses very large; flowers pure snow white; a favorite.

**Le Cid**—Bright scarlet, very free and a fine bedding variety.

**Marquis de Castellane**—Rich sasserine color, immense trusses on strong stalks. Robust grower and very free blooming.

**S. A. Nutt**—The best of the rich, dark crimson varieties; very popular.

**Alfonse Ricard**—Rich velvety scarlet; extra.

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Routledge Seed & Floral Co.

Gentlemen: We received seeds and plants last spring and they were certainly fine. My plants are doing finer than I really expected them to.

Yours,

*MRS. ED McCLeURe*.

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Grass Valley, Ore., May 18, 1915.

Routledge Seed & Floral Co.

Gentlemen: Received my order of Geraniums a few weeks ago and was well pleased with them all. They are doing just splendidly.

Yours truly,

REBA OLDS.
Lady Washington Geraniums or English Show Pelargoniums

These are commonly known as Lady Washington Geraniums. Like geraniums they flower during the summer months and are very ornamental either as house or bedding plants.

**Price, 20 cents each; set of 6 sorts, $1.00**

**Countess**—Very large flowers of a distinct shade of cerise salmon color; upper petals splashed with maroon.

**Crimson King**—Superb dark colored variety. Flowers rich crimson, blotched and feathered maroon. Very free flowering and easy growing.

**Easter Greeting**—A new free blooming variety of the greatest merit. Flowers amaranthe red with a well outlined maroon blotch on each petal. Blooms very large and in good sized trusses.

**Mabel**—Delicate light pink, upper petals feathered and blotched maroon. Elegantly fringed flowers of great substance.

**Madame Vibert**—Of very sturdy growth, bushy habit and free blooming. Flowers bright red, blotched black and maroon and edged with light pink and white. One of the most admired.

**Vivid**—Flowers very large and full with crisp, waxy petals. Color rich crimson of great brilliancy.

**Ever-Blooming Carnations.**

For beauty, fragrance and abundance of flowers, for its hardness, easy culture and adaptability to outdoor or indoor cultivation, no plant excels the ever-blooming Carnation, or, as so frequently called, the Pink; rivaling the Rose in beauty of colors and shades, equalling in perfume and even excelling it in profusion of flowers.

**St. Nicholas Collection Giant Carnations**

**Price, 20c each; set of 8 sorts, $1.25 postpaid.**

**Bonora**—A delightful fancy carnation; color, white, lightly splashed with scarlet, very distinct.

**Herald**—Flowers large, with finely fringed petals. Strong stems holding the flower erect. Color, rich dazzling scarlet. A true ever-bloomer.

**Gorgeous**—A giant among Carnations. Flowers finely fringed, of elegant form with high center. Color, rich ruby-carmine shaded to velvety scarlet.

**Matchless**—A wonderful new white. Large massive flowers on strong upright stems. Sweetly perfumed.

**Philadelphia**—Very free flowering. Flowers very large. Color, soft medium rose-pink, of a delicate and pretty shade.

**Pink Delight**—Flowers large, round and full; color a delicate flesh pink, with a very strong clove fragrance; has excellent keeping qualities.

**Pocahontas**—The largest and best of its color, a bright dazzling crimson. Always in bloom.

**Yellowstone**—Vigorous growing, free flowering. Color canary yellow, lightly splashed with pink. A gem among fancy carnations.

**Victory Collection Everblooming Carnations**

**Price, 15c each; 12 for $1.25 postpaid.**

**Afterglow**—Superb; brilliant dark pink.

**Becan**—A brilliant, deep scarlet.

**Enchantress**—A superb flesh pink.

**Eldorado**—Yellow, nicely streaked crimson.

**Dorothy Gordon**—Rose pink; fragrant.

**Lady Bountiful**—Pearly white; fringed.

**May Day**—Soft pink with silvery sheen.

**Mrs. G. W. Ward**—Bright, glinting pink.

**President Roosevelt**—Bright, rich crimson.

**Victory**—Best intense scarlet.

**White Enchantress**—A beautiful white.

**Windsor**—The handsomest of all pinks.

**Beautiful Flowering Begonias**

**Price, 10c each, full collection of 6 50c postpaid.**

Probably the most satisfactory class of plants for house culture obtainable. Of easiest possible culture, their waxy flowers produced in much profusion together with their handsome foliage make them most desirable subjects for the window garden.

**Alba Picta**—A strong grower, pointed dark green leaves, profusely covered with pure white spots. Racemes of white flowers.

**Argentea Guttata**—Handsome erect growing sort, with pointed wine-colored leaves with silvery white spots. Pure white flowers.

**Cuprea**—A fine, erect Begonia, with dark, rough leaves; the panicles of unopened flowers are bright red, with surface like plush.

**Foliosa**—The freest-flowering Begonia we have; glossy green leaves and bright pink flowers.

**Marguerite**—Bronzy green, with purple cast; large trusses of cream and rose-colored flowers.

**Marjorie Daw**—A strong growing variety of slender habit with glossy green foliage and producing large racemes of salmon pink flowers, drooping gracefully about the plant.
Oriental Collection Japanese Chrysanthemums

Price, 15c each; sets of 10 sorts, $1.00 postpaid.

Artistic Queen—Fine exhibition variety. Extra large blooms, loosely incurved, very strong stem. Color, rose-pink, very fresh and beautiful.

Ethel Fitzer—Extremely beautiful color, rosy, golden bronze; with nice big, incurved blooms.

George Bruzard—A beautifully shaped bloom; bronzy red in color with reverse side of petals old gold.

General Hutton—Large in size, perfect in form and a superb golden yellow in color.

Harvard—Produces a good medium sized bloom of the darkest shade of crimson.


Pink Gem—A beautiful broad-petaled, incurving variety, round and ruffled; one of the prettiest forms.

Ramapo—An excellent variety. The heavy golden yellow, richly colored.


William Turner—Pure white in color. It is enormous in diameter, deep in build and very perfect in form.

"Incurved" Chrysanthemum Flower.

New English Garden Chrysanthemums

To those persons who have planted the late flowering sorts and failed to get them into bloom before frost, these new imported sorts will appeal. All will flower readily in the garden during September and October, and while the flowers will not be as large as the late sorts their freedom of bloom will make up for anything that may be lacking in that respect.

Price, 15c each; full collection of 10 sorts, $1.25.

Carrie—Bright golden yellow flowers in great profusion during September. Dwarf habit.

Cranford Pink—Lovely silvery pink flowers of fine size, nicely incurved and very lasting. Fine for cut flowers.

Countess of Carie—A very free flowering sort or dwarf habit. Color, terra cotta and bronze. Rich and handsome.

Glory of Seven Oaks—Deep golden yellow, very free flowering. Excellent dwarf habit.

Grochers Crimson—Large handsome flowers of a rich shade of crimson. Blooms very early.

Debbie—Light canary yellow. Undered with its pretty flowers early in the fall.

Mignon—Rosy pink, shaded silvery. Strong vigorous grower and very free.

Mina Bick—Rich golden bronze shaded to yellow. Dwarf spreading habit and free flowering.

Normandie—Delicate shell pink flowers of wax-like texture. Fine for cut flowers. One of the best of this type.

Queen of Whites—Snowy white flowers cover the plant early in the fall. A gem in the garden.

Six Choice Fuchsias

Price, 10c each; set of six sorts, 50c.

Beautiful, graceful, free flowering, easily grown, plants for window, porch or yard decoration.

Annie Earle—Tube and sepals waxy white, corolla single, clear carmine; plant splendid and free blooming.

Dr. Brooks—Rich, dark blue corolla, with crimson sepals. A beautiful single variety; never out of bloom.

General Roberts—Flowers very large, corolla plum color, tube and sepals crimson; one of the finest double varieties.

Little Beauty—A dwarf growing double variety, producing with great freedom small flowers of great beauty. Purple corolla with scarlet sepals. A little gem.

Molesworth—Superb double white variety; tube and sepals bright scarlet; corolla large, double and waxy white.

Sylvia—Calyx scarlet. Corolla giant in size and pure white in color. Beautifully formed single flowers.

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; also useful in vases and baskets.

20c each; 3 sorts for 50c

OTHER ANNUAL PLANTS—Read notice below the pansy cut top of page 66—we have all popular annual plants.
BEAUTIFUL FERNS

A home, no matter how lavishly furnished, is not complete without decorative plants and palms.

The bold, majestic palms and delicate, feathery foliage of the fern lend a grandeur and magnificence that cannot be obtained in any other way.

OSTRICH PLUME (See cut)—The fronds of this popular variety are the most delicate and plume-like. They are beautiful, full and fluffy, well-grown plants; are truly magnificent and last well in the house. Choice plants, 20c to 35c, post paid; specimen plants in pots, $1.00 to $2.00; extra large, $2.50 to $3.50.

BOSTON FERN—One of the most beautiful and useful of house plants. It is of easy culture, and its sword-like fronds, in large specimens, attain a length of 3 to 4 feet, produced in a bewildering mass, arching, curving and interlacing in every conceivable direction. Choice plants, 20c to 35c, post paid; specimen plants in pots, 75c to $1.00; $1.50 and up to $2.50.

ASPARAGUS Sprengeri (Emerald Feather) (See cut No. 1)—This is undoubtedly one of the handsomest and most valuable evergreen trailing plants for the house and conservatory ever introduced. It is especially valuable for pots, vases, baskets, etc., covering all with its beautiful sprays of lovely green, feathery foliage; quite hardy and valuable for hanging baskets or porch boxes in summer if given partial shade and plenty of water. Choice plants, 20c to 35c, post paid; specimen plants in pots, 35c to 75c; extra large pots or baskets, $1.50 to $2.50.

ASPARAGUS Plumosus (Climbing Lace Fern) (See cut No. 3)—A finer and more delicate plant than the Sprengeri, but hardy and easily grown. Very satisfactory for window and house culture. An extremely graceful window climber, bright green, feathery foliage, as fine as the finest silk or lace.

Choice plants, 20c to 30c, post paid; specimen plants in pots, 35c to 70c.

MAIDEN HAIR FERN (Adiantum Crystatum) —A very beautiful and graceful fern.

Small plants, 20c, post paid; choice plants in pots, 35c and $1.00 each.

Ostrich Plume Fern

Filled Fern Dishes

These are pretty popular, fashionable and very desirable for center pieces for the tea or dinner table or as ornamental plants on the sideboard or center tables.

A choice collection of plants in pretty matte green dishes, $1.50 to $2.00. In fancy dishes $2.00 to $3.50. (See cut No. 2.)

NOTE.—Must go by express; cannot be mailed.

Beautiful Small Ferns

These handsome little ferns are used mostly in filling fern dishes, your choice of the following 20c each; 3 for 50c, post paid.

Aspidium Tsussimense.—Without question the most valuable of all ferns yet introduced for fern dishes; of strong but dwarf and graceful habit.

Cryptium Falcatum (The Holly-Leaved Fern.)—One of the most desirable, very hardy and pretty.

Pteris Agyren (Silver Fern)—A very showy fern, with variegated foliage.

Pteris Wilsonii.—A very pretty and useful fern; green leaves with the ends very peculiarly crested; beautiful sort for fern dishes.


Specimen Plants.—These are large, choice, well-shaped plants, growing in pots and are very beautiful. They cannot be mailed. We wrap and pack carefully and ship by express.

Read what we do about prepaying charges—inside front cover.
PALMS AND DECORATIVE POT PLANTS

Every one knows how beautiful palms and decorative plants are, and how much they improve the parlor, hall or dining room. We offer here only the best and most desirable kinds of the easiest culture, but we can supply rare tender specimens if wanted.

Note.—Potted plants cannot be mailed. Read note, bottom page 69.

ARACÁCIA EXCELSIA
(Norfolk Island Pine)—
This beautiful plant resembles the pine somewhat, though much finer in texture; it is particularly adapted to parlor table decoration. It is most unique in appearance, the branches being arranged in neat, symmetrical whorls.

They do not require much sun, and are hearty and easily cared for.

(See cut No. 5.) Choice plants in pots, 10 to 12 in., $1.00 to $1.50; 15 to 18 in., $2.00; 18 to 24 in., and up, $2.50 to $4.00.

KENTÍA (See cut No. 6)—A beautiful, graceful, handsome-looking, strong-growing palm, with deep green, crisp foliage; inclined to dwarf and spreading habit. One of the most popular for house culture, as they are very hearty, and stand the dry atmosphere. If we could have but one palm, it would be a Kentia. (See cut.)

Small plants, 12 to 15 in., 75c to $1.00, postpaid. Choice plants in pots, 15 to 24 in., $1.50 to $2.00; specimen plants, $5.00 to $25.00.

ASPIDÍSTRA (See cut No. 4)—Stately decorative house plant of rapid and hardy growth. The leaves grow quickly from the ground to a height of 18 inches or more. Will stand more gas, dust, cold or heat than any other palm we know of. We have both green and variegated green and white.

Green or Variegated Leaves, fine specimens, in pots, $1.50 to $3.00 and up.

PHÓNEIX ROBELENI (See cut No. 7)—A new palm. One of the most graceful and the hardiest. The horticultural world has enthused over this beautiful palm. It has the grace and lightness of Cocos Weddelliana, but is more robust in growth and has ten-fold the foliage of that fine variety. Foliage from the ground up, gracefully recurved and spreading in habit. It will be most popular for house decoration. Choice plants in pots, $1.00 to $3.00; specimens, $2.50 to $4.00.

BURBBER PLANT (Ficus Elastica) (See cut No. 8)—This is certainly one of the best plants grown for decorative purposes. It succeeds well with ordinary treatment. Its glossy, thick dark-green leaves are not affected by dust or gas.

Choice plants in pots, 12 to 18 in., 75c to $1.00; 15 to 24 in., $2.00 to $2.50.

DRACÁENA INDIVISA (Fountain Plant)—This plant is unsurpassed for hardiness. Leaves graceful, long, narrow and pointed, used extensively for centers in pots, boxes or urns with other plants. Perfectly hardy outside in summer.

Nice plants, 12 to 15 in., 35c to 50c, postpaid; 15 to 24 in., in pots, $1.00 to $1.50.

COCOS WEDDELLIANA
(See cut No. 9)—The most elegant and graceful of all the smaller palms. Its slender, erect stem is freely furnished with its graceful arching leaves of rich green color. Small plants are very desirable for centers in fern dishes.

Choice plants, 12 in., 50c to 75c, postpaid; 15 to 18 in., in pots, $1.50 to $2.00. Specimens, $3.50 to $5.00.

No. 4, Aspidistra. 5, Aracaria Excelsior. 6, Kentia Palm.

No. 7, Phoenix. 8, Rubber Plant. 9, Cocos Palm.

Jardinieres, Pots, Japan Tubs, Etc.—We carry a full line of standard and new styles.

CANARY BIRDS
Did you ever hear an imported Hartz Mountain Canary sing?
They are the sweetest singers on earth. See page 126.
HARDY PERENNIAL FLOWERING PLANTS
You Should Plant More Perennials

No class of plants enjoy greater popularity at the present time than the Hardy Perennials. They have made rapid strides into public favor the past few years, until now they may be considered to have a prominent and a permanent place in our American gardens. Beginning almost before the snow is off the ground, early-flowing varieties open their blossoms, as welcome harbingers of spring. Almost every week until late in the fall some new variety bursts forth into entrancing loveliness, blooming so persistently as to almost defy Jack Frost in his efforts to subdue the floral kingdom. A start may be obtained at so small an expenditure as not to be counted when measured with the satisfaction and pleasure derived from them. Once planted they are there to stay, requiring very little care, increasing in size and bloom and growing better from year to year.

VERY LARGE CHOICE PLANTS—LOW PRICES.

This year we are in a position to supply you with the most desirable, new and popular varieties at lower prices than ever. We have 25,000 extra large field-grown plants in the following varieties, also many other kinds which limited catalog space will not permit us to describe.

PRICES THIS YEAR: All perennials unless otherwise priced are 15c each, $1.50 per dozen, postpaid.

NOTE—If you wish to pay express or freight charges we will send very large plants and leave more dirt on the roots.

ALYSSUM—Gold Dust. (Saxatile Compactum.)—Large heads of golden yellow flowers in May and June; silvery foliage; fine for rockeries; 6 inches.

AQUILEGIA or Columbines—The Columbines are one of the most elegant and beautiful of hardy plants, producing their graceful spurred flowers on stems rising two feet or more above the beautifully divided foliage, and are highly prized for cutting; June to September.

Yellow, Blue or Mixed Colors—Each, 15c; doz., $1.50.

Rose Queen—Beautiful rose color, with white center, yellow anthers. New.

Nivea—Grand, long stems, pure white.

NOTE—New parcel post rates now enable us to send this class of plants by mail at prices quoted. These plants are perfectly hardy and will bloom nicely the first season.
Hardy Perennial Flowering Plants—Continued

PRICES—All varieties, strong, field-grown plants, 15c each, $1.50 dozen, unless otherwise priced. Largest plants always sent when ordered by express or freight.

Coreopsis

Lanceolata Grandiflora. Popular hardy plants. The flowers are a rich golden-yellow, of graceful form and invaluable for cutting; the main crop comes during the latter part of June, but it continues in bloom the entire summer and autumn; it succeeds everywhere; 1½ feet. (See cut.)

Delphinium

Hardy Darks pur. These are deservedly one of the most popular subjects in the hardy border, bold, attractive and highly prepossessing plants of easiest culture; perfectly hardy; 3 feet.

Light or Dark Blue or Mixed.

Belladonna. The freest and most continuous bloomer of all, never being out of flower from the end of June until cut down by hard frost. Flowers clear turquoise blue. Each, 20c; doz., $2.00

Duke of Connaught. Rich oxford blue, white eye. Each, 20c; doz., $3.00

Canterbury Bells

Cup and Saucer Campanula

Canterbury Bells

CAMPANULAS—or Bellflowers. Indispensable hardy garden flowers, of much variety of form, some being of tall and imposing habit, while others are dwarf, compact little plants suitable for edging, rock work, etc.

Persicifolia (Peach Bells).—Large bell shaped flowers during June and July. 3 feet. Blue or white.

Medium Calycanthema (Cup and Saucer Canterbury Bells).—A beautiful form of this favorite flower. Blue, Rose, White or Mixed.

Gigantea Moerheimi.—A grand sort with long stems of pure white double camellia-like flowers, 2 to 2½ inches in diameter; in bloom from the middle of May until late in July, 2 to 3 feet.

Each 20c; doz. $3.00

DAISY—See “Bellis” for English, also “S” for Shasta Daisy

Dicentra—Bleeding Heart

Spectabilis. An old-fashioned favorite; its long racemes of graceful heart-shaped pink flowers are always attractive. Perfectly at home in any part of the hardy border, and especially valuable for planting in the shade. (See cut.) Each, 25c and 35c

NOTE—New parcel post rates now enable us to send this class of plants by mail at prices quoted—a great saving.
**Helianthus— Hardy Sunflowers.**

Multiflorus Pl. Pl. Large, double, golden-yellow flowers in great profusion during July and August; 4 feet.

Sparisiflorus. Gracefully formed single variety, large, deep yellow color, long stems; splendid for cutting; August to September; 6 feet.

**Hypericum—St. John’s-wort.**


**Iberis—Hardy Candytuft.**

Sempervirens. Most desirable dwarf plants with evergreen foliage, which is completely hidden with dense heads of white flowers early in the spring.

**Lupinus—Lupine.**

Polyphyllus. An effective plant, producing large, long spikes of blue flowers. June. Each, 20c; doz., $2.00.

**Moerheimi Roseum.** A very pretty variety with rosy-pink flowers. Very effective; 3 feet. June. Each, 25c; doz., $3.00.

**Poppy.**

**Ruderalis (Iceland Poppy.)** A beautiful race and among the most desirable of our herbaceous plants. The plant forms tufts of fern-like foliage, from among which the slender flowers—stalks rise to about a foot in height and bear fragrant, cup-shaped flowers of white, yellow and orange—scarlet. The profusion of bloom is astonishing. June to October.

**Orientals.** Bright red with a black blotch at the base of each petal. June to July.

**Oriental Brilliant.** Bright vivid scarlet. Each, 25c to 35c.

**Oriental, Salmon Queen.** Beautiful salmon pink. Each, 20c; doz., $2.00.

**Delphinium—Plant and Flower Spike.**

**Digitalis—Foxglove.** Old-fashioned, hardy, desirable plants with broad foliage and showy flowers borne on spikes. June and July. 3 to 4 feet. Mixed colors.

**Monteana (Giant Foxglove).** Handsome, variously colored flowers in spikes surmounted with one large, saucer-shaped terminal flower. Each, 25c.

**Doronicum—Leopards Bane.** One of the most effective early flowering perennials. Very large, rich yellow single flowers with long stems during May, June and July; 2 feet. Often called Yellow Marguerite.

**Eulalia.**

**Japanica Variegata.** A very ornamental variety; long, narrow leaves, striped green, white and often pink or yellow.

Small plants 15c to 25c; clumps 50c to 75c ea.

**Forget-me-not—Myosotis.**

**Palustris.** A variety that is hardly ever out of flower; useful in a shady spot in the border.

**Gaillardia—Blanket Flower.**

**Grandiflora.** One of the showiest of perennials. Rich and pleasing flowers ranging from red to yellow around a dark maroon center; excellent for cutting; 3 feet; June to frost.

**Gypsophila—Baby’s Breath.**

**Paniculata.** Minute white flowers borne in enormous quantity in open panicles during summer months. Be sure and have a few plants of this for cutting, as it works up beautifully in bouquets of other flowers; 3 feet.


**Hollyhocks— Few hardy plants combine as many good qualities as the Hollyhock.**

For planting in rows or groups on the lawn, or for interspersing among shrubbery they are invaluable. The flowers form perfect rosettes of the most lovely shades of color. We offer strong plants which will flower this season. Separate or mixed colors.

**Iceland Poppy.**
Hardy Perennial Flowering Plants—Continued

**Phlox**—Continued

**Phlox Decussata.**

Among the hardy perennial plants no class is of more importance than the Phloxes, succeeding in almost any soil and position, and flowering through a long season. Excellent for cutting and decorating or for mass effects. Keep well in water.

**NEW AND EXTRA SELECTED VARIETIES**
—Rare and rich shades and flowers of largest and best types, very choice. **Prices:**

- Each, 30c; doz., $2.00; one plant each variety (9), for only $1.25 postpaid.

**Antonin Mercia.** Large panicals bluish lilac, white halo.

**Selma.** A pretty delicate soft pale rose with distinct red eye.

**Von Lessburg.** Splendid pure white, very large.

**Vesuvius.** Pure red, with bright purple eye, a dazzling color.

**Goliath.** Bright crimson, handsome, large flowers.

**Mrs. Jenkins.** Immense panicals of large, white flowers. Fine for masses.

**Gruppenkoenigin.** Beautiful salmon.

**Gen. Von Hentsz.** Brilliant salmon red, white eye, large.

**CHOICE NAMED VARIETIES OF REAL MERIT.**

- Each, 15c; doz., $1.50. Special—One each in this collection of 7 for 85c postpaid.

**Mrs. Lingard.** Pure white, early and continuous bloomer.

**Coquelicot.** A fine pure scarlet, crimson eye.

**Champs Elyse.** Bright rose, majestic, very effective.

**Eugene Danzanvillier.** Lilac shading to white. Free bloomer.

**Sunshine.** Dwarf, large aniline red, crimson eye, light halo.

**Obergartner Wittig.** Bright magenta, crimson eye, large, fine flower.

**Diadem.** Fine pure white, rather dwarf plant.

**Pampas Grass**

A noble ornamental grass, easily grown, producing long, narrow pointed leaves and majestic, silvery white plumes, which are very valuable for winter decoration. Grows 6 to 8 feet high.

**Gynernium Argenteum.**—Young plants, 25c; strong roots, 35c to $1.00; large specimen plants, $1.50 to $2.50 up.

**FIRLEYS—Dianthus.**

**Hardy white or pink.**

**Primroses.** Bearing sweet clove-scented flowers in the greatest profusion during May and June. Indispensable for the hardy border and for cutting. 1 foot. Finest. Mixed.

**Primulus—Primrose**

The hardy primroses are among the most beautiful and interesting of our early spring flowers. (See cut.)

**Vires (English Cowslip).** The richest shades, from pure yellow to the deepest crimson maroon.

**Vulgarus.** Canary yellow, very early and fragrant.

**PHLOX HARDY—**

**Subulata (Moss, or Mountain Pink).** An early spring-flowering type, with pretty moss-like evergreen foliage, which, during the flowering season, is hidden under the masses of bloom. An excellent plant for the rockery, the border, and invaluable for carpeting the ground or covering graves. White, Pink or Lavender.

- Each, 15c

**Amoena.**—Best for carpeting the ground, the rockery or the border; it grows but 4 inches high, and in spring is a sheet of rich, bright pink flowers.

- Each, 15c; doz., $1.50

**Pampas Grass Decussata.**

**Remembe**

All prices of above stock is 15c each, $1.50 dozen (unless otherwise priced) and is for large 2-year, field-grown clumps, that will bloom profusely the first season.
REMEMBER—We prepay charges at 15c each, $1.50 dozen (unless otherwise priced). Plants are large, 2-year, field-grown clumps, that will bloom profusely the first season.

RUDBECKIA—Cone-flower.
Indispensable plants for the hardy border; grow and thrive anywhere, giving a wealth of bloom, which are well suited for cutting.

Lanceleatus (Golden Glow). Flowers beautiful golden-yellow; very double. Marvelous continuity of bloom from June till late fall; 6 to 8 feet.

SAXIFRAGAS—
Umbrosa (London Pride). A low-growing, spreading sort, throwing up stems a foot high of pretty pink flowers in dainty clusters. Small, dark evergreen leaves, a fine border plant or for rockeries.

Shasta Daisy—Burbank
Chrysanthemum Lancifolium Daisy. Very large daisy-like flowers, often measuring 4 to 5 inches across, having three or more rows of petals of the purest white. Flowers produced in great profusion on long strong stems. Very popular; 2 to 3 feet. Each, 10c, 15c and 20c

Shasta Daisy.

Tritoma—Red-Hot Poker
The early, free and continuous blooming qualities of the newer varieties have made Tritomas one of the great bedding plants; 3 to 4 feet flower spike.

VIOLETS
California. Single. Very showy and beautiful. Each, 15c; doz. $1.50
Double Russian. Flowers double of gigantic size; color, a very rich shade of blue, and extremely fragrant. Each, 15c; doz. $1.50
Small Plants, single or double and blue or white. 10c each; $1.00 per dozen

WALLFLOWERS
The old favorite fragrant Wallflower. Yellow, Red, or Mixed Colors. Each, 15c; doz. $1.50

Yucca (E).—Adam’s Needle
A stately foliage and flowering plant equally imposing in solitary or group plantings, always conspicuous. The broad sword-like foliage is evergreen; while midsummer shows great erect branching stems bearing a showy display of pendant, creamy-white bells. 1-year plants, 8 to 10-inch, 20c each, $2.00 dozen; 2-year and up, 35c to 50c; 15 to 24-inch, 75c to $1.00; specimen plants, $1.50 to $3.00.

OUR DESCRIPTIVE CATALOG OF TREES, SHRUBS AND ORNAMENTALS
Limited space in this catalog will not permit us to give full descriptions of all our Fruit, Shade and Ornamental Trees and Shrubs and Vines, Roses, etc., but we will gladly mail you a copy of our DESCRIPTIVE FALL CATALOG OF NURSERY STOCK. Remember we employ no agents and prepay charges on certain sized orders.
BEAUTIFUL HARDY LILIES

These are the most fragrant, beautiful and stately of all flowers produced from bulbs; they require very little care. Do not disturb them oftener than every three to five years. Plant about six to twelve inches deep, according to size of bulb, and if the ground is not well drained use plenty of sand around the bulb, and lay it on its side. Plant in clusters or groups of six or more for best effect. The Formosa and Longiflorum Lilies force very easily. The Speciosum, the most magnificent species for outdoor culture. They increase in size and beauty each year.

LILIUM LONGIFLORUM.—More generally known as the “Easter Lily.” Thousands are forced by florists for Easter day. Plant one bulb to a 6-inch pot or planted outside they bloom in June or July. Each, 15c; doz., $1.50; mammoth bulbs, each, 20c; doz., $2.00.

LILIUM CANDIDUM. This is the ever-popular, fragrant, snow-white, hardy garden Lily. The flowers are produced in clusters, at the top of 4 to 5-foot stems; blooms in the open ground in June. A very hardy and popular Lily. (See cut.) Each, 15c; doz., $1.50; mammoth bulbs, 20c.

WASHINGTONIANUM (Mt. Hood Lily). A beautiful lily, native of Oregon; flower of open form; white, tinted with pink; grows 3 to 5 feet high; very fragrant. Three sizes, 15c, 20c, 25c each.

Lilium Auratum (Gold Banded Lily)

The handsomest and probably the most popular of the Japan Lilies. Its immense ivory-white flowers are thickly studded with yellow and crimson spots, while in the center of each petal is a golden band, shading its edges into white; very fragrant. (See cut.) Each, 15c; doz., $1.50; mammoth bulbs, 20c; doz., $2.00.

AURATUM MACRANTHUM. One of the most wonderful Lilies in cultivation. The stems attain a height varying from 7 to 10 feet. The flowers are similar in color to Auratum, heavily spotted, but are much larger, the petals more overlapping, and of greatest substance.

Each, 25c; doz., $2.50

AURATUM PICTUM. A most magnificent flower of same shape and color as Auratum above except that one-half of the gold band on each petal is a bright crimson; very rare and showy.

Each, 25c; doz., $3.50

AURATUM RUBRUM VITTATUM. Very large flowers, often one foot across, pure ivory-white, with broad crimson stripe through center of each petal.

Each, 40c; doz., $4.00

SPECIAL OFFER—One bulb each kind on this and the next page, our entire collection (14 bulbs), VALUE $3.00, ONLY $2.25 POSTPAID.
Lilies—Continued.

Tenuifolium. The lovely Coral Lily of Siberia. A great beauty. The brightest of all lilies. Grows 20 inches high, with finely cut foliage, slender stems and beautiful shaded flowers of a very brilliant coral-red. Blooms very early with 12 to 20 flowers per stem. (See cut.)

Each, 15c; doz., $1.50

Speciosum Bubrum.

Lilium Speciosum

No words can overestimate the brilliant beauty of this charming variety. Its six broad white or pink petals are thickly dotted with rose or carmine spots, and the graceful form, brilliant color, and exquisite fragrance make this one of the most effective and desirable of the lily family. They are profuse bloomers, and last for many days after being cut and put in water. (See cut.)

SPECIOSUM ALBUM. Pure white; flowers freely. Each, 20c; doz., $2.00; mammoth bulbs, 25c; doz., $2.50.

SPECIOSUM BUBRUM. White, with dark rose spots. Each, 15c; doz., $1.50; mammoth bulbs, 20c.

SPECIOSUM MAGNIFICUM. A new and rare variety; the finest of all the Speciosums: flowers very large, white, shaded rich blood crimson, heavily spotted; very rich and showy.

Each, 20c; doz., $2.00; mammoth bulbs, 25c; doz., $2.50.

HENRYI. (The Yellow Speciosum). A splendid new rare Lily from the mountains of China. Destined to be the Lily among Lilies. It is so healthy and sturdy, so hardy and beautiful, so easy to grow, that in time it will be in every garden, as the Tiger Lily is now. It grows, when established, 3 to 5 feet high, each stem producing 5 to 8 large rich apricot yellow flowers, banded with green. (See cut.)

Each, 50c; doz., $3.00

Tiger Lilies

TIGRINUM FLORE PLENO (Double Tiger Lily). A magnificent lily of stately habit, bearing immense clusters of large, double flowers; color bright orange, spotted with black.

Each, 15c; doz., $1.50; mammoth size, 20c; doz., $2.00.

TIGRINUM SPLENDENS (Improved Single Tiger Lily). Large flowers of excellent form; color orange salmon, with dark spots; hardy and free bloomer.

Each, 10c; doz., $1.00; mammoth size, each, 15c; doz., $1.50.

NOTE.—On display at our salesroom we have colored plates of all our lilies, which will give you an excellent idea of just the shape and colors.
IRIS

Magnificent plants for the garden. They bloom profusely and are exceedingly showy and fragrant. The colors are brilliant and cover a wide range of different shades and combinations. In the open ground they are perfectly hardy, increase rapidly and make a magnificent display, either in groups or borders. When the clumps get too large take up in the fall, divide and reset. Plant in the fall or early spring.

German Iris—Iris Germanica

The German Iris are among the most desirable and easiest grown of our spring-flowering hardy plants, producing in May their showy flowers of exquisite coloring, combining the richest and most delicate tints.

CHOICE MIXED—All fine varieties.
Each, 7c; Doz., 75c.

Choice named varieties as follows, each 10c; dozen $1.00.

Florentina Alba. An excellent variety for cutting, and an early bloomer. Flowers ivory white, tinged with lilac.

Honorable. Intense yellow, falls a beautiful bronze.

Mad. Chereau. Pure white, edged with azure blue; falls deep white with blue penciling.

Parlonsis. Uprights fine blue, falls deep blue, large and very early, fine companion to Florentina Alba.

NEW AND RARE VARIETIES

Your choice 25c each, or the collection of 4 kinds for 75c.

Darwin. Standards rich canary-yellow; falls lilac, margined white, rich orange beard. One of the most distinct and beautiful.

Her Majesty. New and very beautiful. One of the choicest. Standards lovely rose pink.

Pallida Dalmatica. A queen among Iris; grand and stately. Silvery light blue.

Sappho. Large pure white, frilled lilac.

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Japanese Iris—Kaempferi

The Japanese Iris is quite distinct from all others, and never fails to excite the admiration of all who see it. It is becoming more popular each year. The enormous flowers produced in June and July display a marvelous blending of rich and rare shades. They like a rich soil and plenty of water when in bud and flower. We offer a select collection of named varieties, as well as a very fine mixture.

Mixed, good assortment: Each, 15c; doz., $1.50
SELECT NAMED JAPAN IRIS

YOUR CHOICE EACH, 20c; Doz., $2.00


O-Sho-Kum. Deep blue, showing darker veins, six petals.

En-U No-Sora. A charming pink shading to rose, six petals.

Momiji-Ga-Take. Deep rich blood red, edge of petals lighter, six petals.

Gel-Sho-Ul. Bright red, beautifully frilled, six petals.

Shi-Chu-Ka. Creamy white shaded and edged carmine, six petals.

Kuno-Ubi. Light blue or lavender pencilled yellow to the center.

Ho-So-Kawa. Rich royal purple, yellow and white markings in the center, six petals.

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English Iris—Anglica

Beautiful, attractive and worthy of a place in every garden. Their large, peculiarly shaped flowers remind one of the rare orchids. Set the bulbs in clumps three inches apart each way and three inches deep.

Finest Mixed, doz., 30c; 100, $1.50

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Plant more Iris—they increase in size and profusion of flowers each year and are truly beautiful and hardy.
CALLA LILIES

The Calla is one of the best winter flowering plants for room culture, needing little care beyond abundant water and an occasional washing of the leaves to keep them free from dust. Take a 4 or 5-inch pot, fill it with good, rich loam (¼ leaf mould and ¼ good garden soil), then put in bulb, cover it one inch, water well and set away in a dark place for three or four weeks. As soon as it starts growing bring to the light, give abundance of water, light and heat and the result will be most satisfactory. After blooming, set the pots away and let them dry out until the following fall.

WHITE CALLA.—The most extensively grown. Bulbs in season from September to May.

Small, 15c; large, 20c to 25c; extra large, 35c

YELLOW ELLIOTIANA.—This new Yellow Calla is of marvelous beauty. Flowers are large, rich, dark golden yellow, often 4 to 5 inches across the mouth; leaves are beautifully spotted with white. A most valuable bulb for planting inside. Bulbs in stock from November to June. (See cut.) Price, each 30c

Dad’s Electric Lantern.

Everyone has use for this wonderful new light. Sure, safe and useful in a thousand ways. See page 110.

TUBEROSES

A very desirable and most easily grown summer flowering bulb. Easily recognized by its exquisite fragrance and beautiful spikes of white flowers, which are borne on long stems, making it an admirable cut flower for house decoration. If started in pots and then transplanted to open ground, can be had much earlier. For flowering in the open border, plant in the spring after the ground becomes warm.

Excelsior Dwarf Pearl—select bulbs.
Each, 5c; doz., 50c; 100, $2.50

TUBEROUS ROOTED BEGONIAS

Excellent for pot culture or planting in lawn beds and borders. They should be grown more extensively than they now are, for they require very little attention and are in flower, out-side, from early summer until heavy frosts; inside, potted, they are a constant and prolific bloomer. They will thrive either in full sunshine or in shade, but when fully exposed to the sun the beds must be well watered in hot weather.

Culture.—Before planting, keep the bulbs in a moist, warm place to start them, so that you can tell which is the top. Plant a foot apart in beds or 1 bulb to a 4-inch pot inside, cover about 1 inch.

SINGLE FLOWERED, White, Red, Yellow or Orange.
Each, 10c; doz., $1.00
MIXED—2 for 15c; doz., 75c.

DOUBLE FLOWERED.—Separate colors as above.
Each, 15c; doz., $1.50
MIXED—2 for 25c; doz., $1.25.
CALADIUM ESCULENTUM.
( Elephant's Ear.)
One of the most effective plants in cultivation for beds, borders or for planting out upon the lawn. To obtain the best results it should be planted where it will obtain plenty of water and an abundance of rich compost. When full size it stands 6 to 10 feet high, and bears immense light green leaves, 3 to 4 feet long by 2½ feet wide. For best results start early inside and plant out when ground and weather is warm.

Mammoth Bulbs, the only kind it pays to plant, each 25c and 35c.

TIGRIDIAS.
(Tiger, or Shell Flower.)
These are gorgeous, rare and unique summer-flowering bulbs. They come in all colors of Yellow, Crimson, White, Rose and Spotted and look well associated with Gladioli, Lilies and kindred stock; grow about 1½ feet high, and flower freely throughout the summer. They require the same treatment as Gladioli, and should be lifted in autumn and dried off in the same way. (See cut of flower only.)
Mixed, all colors, each 5c; dozen 50c, per 100, $2.50.

AMARYLLIS.
These hardy lily-like flowering bulbs are very popular for pot culture and easily grown by everyone, the chief point being to give the bulbs alternate periods of rest and growth. Plant 6 to 10 inches apart in beds; 1 bulb to a 6-inch pot for inside culture.

AULICA OR LILY OF THE PALACE.—Summer and autumn bloomer. Broad foliage and large spreading wide open flowers of rich crimson scarlet, lined and penciled white and maroon. Blooming bulbs.
Each, 30c; doz., $3.00

BELLA DONNA, the Lovely Pink Bella Donna Lily.—One of the most satisfactory, bearing on long stems clusters of 8 to 10 superb large beautiful pink, lily-like flowers, with a delightful fragrance. A fine fall bloomer.
Each, 25c; doz., $2.50

LILY OF THE VALLEY
One of the most charming spring flowering plants, producing in profusion its delicate bell-shaped, delightfully fragrant white flowers. Valleys thrive in any common soil, and will do well in shady situations, where few other plants will succeed. Highly prized for cutting purposes, and exceedingly well adapted for flowering in pots in the winter. Can be forced to bloom in four to six weeks from time of planting. Plant 8 pips to a 6-inch pot.

They are perfectly hardy and most charming planted in beds or borders around the lawn, where they can remain, increase and bloom from year to year. Ready from November to March.

SELECTED PIPS, for forcing indoors or planting outside.
Each, 5c; doz., 50c; 100, $3.00

NOTE—Higher in price on account of war.

Our Fall Catalog of Dutch Bulbs, such as Hyacinths, Tulips, Narcissus, Crocus, etc., which should be planted from October to February, is issued September first. Free on request.
CHOICE HERBACEOUS PAEONIES.

One of the most beautiful flowering plants, blooming in May and June. The new varieties are simply gorgeous. Once planted they increase in size and profusion of bloom. Most desirable and beautiful for hedges, groups or individual planting.

**DELICATISSIMA**—Large and showy, a profuse bloomer; very desirable, a beautiful silvery pink; mid-season. Each 35c

**FESTIVA MAXIMA**—This truly superb variety, the finest white in cultivation, combines wonderful purity of color, freedom and earliness of flower. Delicate fragrance. Each 40c

**FRAGRANS**—Very double; fine shaped bloom; perfect in outline; exquisitely fragrant; color clear, fine, deep pink. A splendid bloomer. Each 35c

**JEANNE D'ARC**—Beautiful and graceful flowers of blush white with a sulphur yellow center. Guard petals suffused with pink. Its fluffy appearance and delicate colors attracts the attention at once. A fine sort. Each 35c

**LOUIS VAN HOUTTE**—One of the most conspicuous of the dark colored varieties, blooms are produced in clusters on strong upright stems well above the foliage, color rich dark crimson. Very desirable. Each 40c

**LA TULIPE**—Very large globular flesh-pink shading to ivory-white, outer petals tipped carmine; fragrant; one of the best. A vigorous grower and free bloomer; late mid-season. Each 50c

**TRIOMPHI DE PARIS**—A strong-growing, pure white variety with creamy-white center; good bloomer and habit; mid-season. Each 35c

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**CANNAS.**

Everyone knows the value and beauty of Cannas for bedding. Their large, massive, tropical looking leaves and magnificent flowers can not be equalled in any other plant, of such easy culture. Plant in May or June, 18 inches apart in the richest bed you can give them (18 plants required for a 7-foot circular bed).

While there are many varieties of Cannas, we offer only 5 kinds, but they can be depended upon to be the most showy and desirable and especially adapted to Western conditions.

**PRICES**—Strong Roots or Plants in season 20c each; $2.00 per doz. Large plants from pots, 25c each, $2.50 per doz. Except Portland.

**NEW 1915 CANNA—PORTLAND.**

Named in honor of the City of Portland. This remarkable new canna is a cross between Mrs. Alfred Conard and Venus. The plants are stately, erect and sturdy; attractive green foliage of the best substance. It is an early, profuse bloomer, doing equally well in hot or cool weather. Flowers, a beautiful glowing "testout" pink, showing a little salmon. Pronounced by experts to be the finest all-round pink to date. This superb new canna is especially recommended for our cool Oregon climate (3½ to 4 feet). A novelty of sterling merit, that should sell at not less than 75c each, but we wish to popularize this variety quickly and will sell roots at 25c; doz. $2.50.

** KING Humbert **—King of the bronze-leaved Cannas; its mammoth flowers are produced in heavy trusses of gigantic size, and are of a brilliant orange scarlet, while the foliage is broad and massive and of a rich, coppery bronze; bold, effective (5 feet).

**Louisiana**—Beautiful and showy; green leaves edged bronze, strong and healthy, very fine bloomer. The mammoth flowers are of fine form and a vivid scarlet (4½ feet).

**Festiva Maxima.**

**TENUIFOLIA PL. PL. (Fringed or Carrot Leaved)**—Distinct; handsome divided foliage; flowers large, very double and of a deep blood-red; a dwarf, compact bloomer. Each 35c and 50c

**Special Collection Offer**—One each of above (8 sorts) value $2.75, special for only $2.25, prepaid.

**Pink Peony Offer**—We have a surplus of pink sorts, and as they are not all of one shade of color they will make a beautiful bed or border.

Each 25c, Doz. $2.00
Routledge's Superb Gladioli Bulbs

Plant 3 inches deep and as close as 6 inches in beds or borders or among the roses or shrubs. Planted at intervals from very early spring until July 1st, they will give a profusion of flowers until the first frosts.

**Choice Mixed Gladioli**

Our mixed Gladioli are very fine indeed, being all old and common ones have been discarded and customers can depend upon having a large and magnificent variety of colors.

**Popular Mixture**

This mixture will produce a large variety of flowers at a little expense; unequalled for the price.

- **First size bulbs.**
- **Second size bulb, but of blooming age.**

**AMERICA**—Conceded to be one of the finest varieties for cutting or bedding ever sent out; color a beautiful soft flesh-pink.

**BRENNLEYNESIS**—Vermillion—scarlet; bright and very showy, a great favorite.

**BARON HULOT**—Rich, royal violet-blue. This, when cut in combination with one of the yellow varieties, is truly exquisite.

**CANARY BIRD**—Canary yellow, a very massive spike closely set with flowers.

**GLORY**—Each petal is exquisitely ruffled and fluted at the edges. Delicate cream pink with carmine shading on the lower petals; flowers large.

**GLORY OF HOLLAND**—Pure white, with slight marking of red in the throat. The best white of moderate price.

**GOLDEN KING**—Large flower of clear yellow, with maroon throat. One of most admired of its color; new.

**INDEPENDENCE**—Clear salmon pink, exceptionally robust; rather late bloomer.

**JEAN DEULAFRA**—One of the earliest to flower. The lovely creamy white blooms are decorated with a conspicuous blotch of red in the throat, which makes it very attractive.

**KLONDYKE**—Soft light yellow, with crimson maroon blotch on each petal; very attractive. Fine for border, not as tall as the average.

**MRS. FRANCIS KING**—One of the largest and most showy varieties. Of great merit. Color is a brilliant scarlet, which attracts attention at once.

**MRS. FRANK PENDELETON**—All experts agree that this is one of the finest varieties yet introduced. The flowers are of largest size, borne on strong, straight spikes. In color a lovely salmony pink with brilliant deep red blotches in the throat. Rich and exquisite in every way.

**NIAGARA**—A charming American variety, with all the good qualities of America, but of a delicate cream-yellow, lightly marked and splashed with rosy-carmine in the throat; very large, open flowers on tall, straight spikes; beautiful as a cut-flower.

**PRINCES**—The dazzling scarlet florets are immense in size and beauty. The slight markings of white on the lower petal set it off to great advantage.

**PANAMA**—An American introduction of sterling merit; is a favorite wherever high grade varieties are given. It is similar to and has all the good qualities of America, but in color is a rich rose-pink.

**PEACE** (New).—Immense pure white flowers with a touch of carmine in the lower petals. These are borne on tall, graceful spikes; a beautiful and exceedingly refined variety.

**BOSELLA**—Delicate rose, overlaid lavender and white, large open orchid-like flowers.

**TACONIC**—Bright lively pink, flecked and striped with shades of the same color.

**WAR**—Deep blood red, shaded crimson black; very tall and conspicuous.

**VICTORY**—Yellow flushed with pink. Good number of flowers open at one time; very beautiful.

Don't compare our prices with the cheap mail order houses that send out little bulbs that will not flower the first year. Our bulbs are first size and all will flower nicely.
NEW AND POPULAR DAHLIAS

We are the largest growers of new and up-to-date Dahlias, but not the largest growers of seedlings or out-of-date varieties. We believe in keeping in the front ranks with quality first. Wonderful advancements have been made in the different classes of Dahlias in the past few years, lasting qualities when cut, length of stems, upright (not drooping) blooms, size and perfection of flower is what constitutes our standard of judging in our field trials, where we grow thousands without irrigation or special cultivation. If they do well and pass our test under ordinary farm culture, they can be depended upon to be prize winners under special garden culture.

NOTE—We believe there are far too many varieties of named Dahlias of ordinary merit, many are almost duplicates; we will endeavor to keep our list down to about 100 of the choicest varieties.

Best Paeany Dahlias

Special—Our full collection of 16 varieties (value $7.25), only $5.00; or our selection of 4 colors, $1.00.

America—A glowing old rose overlaid with a rich shade of old gold; giant flowers with broad, gracefully twisted petals; long, strong stems.
Each 50c

Avalanche—Pure white, the latest introduction and claimed to be the best.
Each 75c

Bertha von Suttner—Color beautiful salmon-pink, suffused yellow; large flowers, good stems.
Each 35c

Duchess of Brunswick—(New)—Flowers bright apricot red, showing some orange. Prize winners in Holland and London.
Each 75c

Caesar—A large semi-double flat petaled, pure yellow flower, produced freely on long stiff stems.
Each 75c

Great Britain—Magnificent, large, full flowers; graceful, beautiful, clear mauve color.
Each 40c

Germania—Large, full fluffy flowers, bright glowing crimson, the best in this color. Fine for cutting.
Each 25c

Giant Edelweiss—Pure white, petals extra long and pointed.
Each 25c

Gelena—No garden is complete without one of these gigantic flowers. Often ten inches across. The center is yellow, beautifully shaded and suffused scarlet and gold. The petals twist and curl, giving it a graceful, fluffy appearance.
Each 50c

Hortulanus Witte—A giant white of great beauty, the broad, graceful petals are of good substance and of a glistening pearly white; good stems.
Each 60c

H. J. Lovink—A grand large flower, white shaded lilac. Excellent.
Each 25c

Hortulanus Budd—Opens a clear, bright crimson, changing to old rose and delicately shaded fawn; broad, velvety petals. A grand, giant flower.
Each 60c

Avalanche.

Leo XIII—A most remarkable free-flowering, full, fluffy, deep pure yellow flower. Long graceful twisted petals.
Each 60c

P. W. Janssen—Old rose and salmon bronze; excellent stems and flowers.
Each 35c

Queen Emma—A graceful, flat petaled flower, freely produced on long stiff stems. The best pink in this class.
Each 50c

Zeppelin—A beautiful, true, new lavender. Large, well-formed, open flowers, gracefully poised on long, strong stems. Excellent for cutting and decorations.
Each 40c

1916 Paeany Novelties to Be Shown This Fall.

These new novelties, all prize winners in Holland, came by special delivery in December from our growers in Sassenheim and many as not as yet been shown in America. For those who wish to have the very latest for exhibition we offer a few of these, in pot plants only, about June 1st, stock very limited. Your choice $2.00 each, 4 sorts for $6.00 postpaid. Descriptions very short; we can not give special points of merit until we see the flowers in our trials this fall.

Attraction—Very large elegant flowers of a clear lilac rose color; an exhibition flower.

Bridal—A giant pale sulphur color.

Mrs. J. C. Vaughn—Silver cup winer, clear yellow.

Special Cash Offer—In collections (of 3 or more bulbs) we will give you $2.00 worth for $2.00; $3.00 for $3.00, etc. (20c extra on the dollar) collection and dozen prizes excepted.

SPECIAL CASH OFFER—In collections (of 3 or more bulbs) we will give you $2.00 worth for $2.00; $3.00 for $3.00, etc. (20c extra on the dollar) collection and dozen prizes excepted.
Hybrid Cactus Dahlias

In order to distinguish these giant flowering chrysanthemum shaped Cactus Dahlia from the ordinary cactus type, the National Dahlia Society, at our last Dahlia Show, made a new class to be known as the Hybrid Cactus.

These flowers are a cross between the Peony and Cactus type, very large and full and have long, rather broad, curling and twisted petals in fantastic shapes. The flowers are more than double the size of most Dahlias and very beautiful. Produced on strong stiff stems; make beautiful single specimens for small vases or a gorgeous display in large vases or baskets.

The following new varieties we procured direct from our Hydrizider in Holland and were first shown by us in Portland last fall.

Price, Each $1.25; Collection of 3 for $3.00.

MRS. WARNAA—(1915)—Giant flowers on long stiff stems. Cream white, tinged pink, the back of the long twisting petals, shell pink, giving the flower a very pleasing and beautiful appearance. Award of Merit at Haarlem and Amsterdam.

YELLOW KING—(1915)—By far the finest and most beautiful clear yellow to date. mammth flowers on upright stems; produces in great profusion perfect flowers of elegant shape and style. First class certificate Haarlem and Amster-dam.

GABRIELEDI—(1915)—The very large flowers are perfect in form, with long flat petals that curl and twist in most fantastic style. Color bright scarlet, shading deeper to center, back of petals orange scarlet; very free bloomer. Awards of Merit Haarlem and Amsterdam.

New and Standard Cactus Dahlias of Real Merit

As stated before (see page 82) we do not offer so many varieties of Dahlias. You will not find this class containing as many kinds as formerly, for we have discarded many varieties. Any one or all of the following if well grown should be a prize winner in any show. There is not a poor or inferior variety in the whole list, so you can make your selection to suit your fancy with perfect safety.

SPECIAL CASH OFFER—In collections (of 3 or more bulbs) we will give you $2.40 worth for $2.00; $3.60 for $3.00, etc. (20c extra on the dollar) collection and dozen prices excepted.

ALFRED NOMBLOT—Extra large; incurving petals; Geranium red; under side of petals plum; with a golden sheen at base of petals. Very desirable. Each 50c

CARDINAL KING—A brilliant, rich cardinal red; the flowers of perfect form and exceptionally large; a grand exhibition variety. Each 35c

COUNTRESS OF LONSDALE—For perfection of bloom, size, stem, abundance of flowers and lasting qualities when cut, this variety has not been excelled. The color is a rich salmon, tinted apricot. Each 25c

DUCHESS DE CHARTRIS—An incurved long petaled exhibition variety. The color combination of sulphur-yellow and mauve produce a beautiful pink. Each 50c

EXTASE—Beautiful rosy pink, lighter to the center. A grand flower in every way and very large. Each 35c

F. HONORE—New French variety; center yellow, passing to blush white at tips, streaked and sprinkled rosy-carmine. A large beautiful incurved flower. Each 35c

FERDINAND CAIEXUX—The darkest Dahlia to date, deep velvet maroon, long pointed petals, extra good stems. Each 50c

GOLDEN GATE—A giant golden-yellow. Highly recommended by Eastern growers; profuse bloomer. Should be disbudded and pinched back to secure large beautiful flowers. Each 50c

GOLDFEIGN—Pure yellow; large handsome flowers. An ideal yellow. Each 35c

GUNTER—A splendid pure white Dahlia with broad, twisted petals. Each 50c

CACUTUS DAHLIA SPECIAL—Our selection of varieties all labeled, your selection of colors only in White, Yellow, Pink, Red or Orange shades—6 for $1.00; 12 for $1.50. This enables us to use surplus stocks, even though they may be our high-priced varieties.
OTHER VARIETIES?—We are in close touch with all Oregon Dahlia growers and will gladly procure any particular dahlia you want, send price listed at by others.

GWENDOLINE TUCKER—A beautiful shaded silvery pink, large, full flowers; petals incurved, carried on long, strong stems. An exhibition variety. Each 50c

INDIANERIN—Carmine scarlet, dark center, a rare rich color; a free bloomer. Each 50c

JACQUELINE GULLOT—A beautiful and attractive flower of good size, long stems; blood red, capped or tipped pure white; the best of this type. Each 25c

JEANNE HARDY—Extra large handsome flowers, petals incurving in the most pleasing style. Pure carmine red, lightly tipped white. Each 75c

JOHN RIDING—Dark rich scarlet; long florets; incurving over the center of the flower; best of its color. Each 50c

KALIF—A giant majestic flower; color, pure scarlet; good stems, fine bloomer. Each $1.00

MANDELELUTE—Beautiful in shape and color, a rich deep pink. Each 25c

MANON—Extra large flowers, sulphur-yellow shading to primrose at points of petals. A free bloomer. Each 25c

MAD. PAUL BULTOT—A beautiful combination of aurora and salmon, of fine form; incurving, twisted petals. Each 25c

MADEMOISELLE CAZALIS—Pure white flower, perfect in form, large, very full; very free bloomer. Each 25c

MERRIST—Very fine, full showy flowers. Shining fiery red, borne on long, stiff stems, petals curved. Each 35c

MERCURY—Beautiful large full flowers. Petals fine and pointed, incurving. Coral red, deeper to the center. Each 35c

MAD. EUGENE REMY—Rosy lilac, very rich; free bloomer; petals long and incurving. Each 35c

MODELL—Yellow, with a delicate plum blush sheen over tips of petals; a dainty, lovely flower of large size, perfect form; erect on long stems. Each 35c

MONSIEUR CAZALIS—White, overlaid with violet rose, producing a lavender shade. Very desirable. Each 25c

MAD. PELLEGRINI—A large and beautiful flower; color, white, striped and lined purple and violet, making it very showy. Each 50c

MRS. DOUG. FLEMING—Wonderfully double the best white Cactus Dahlia. Petals long and tubular and so numerous as to make massive flowers. Exhibition variety. Each 60c

MAD. HENRY CAYEUX—Of premier merit, elegant form. A beautiful, tender rose. Petals long, white tips. Each 50c

MRS. HENRY WINTH—This splendid variety is in full bloom from early until late, full double flowers of intense rich glowing scarlet. Each 25c

MRS. PIERCE JEFFRIES—Long petals curved and twisted; beautiful and full; deep velvety red. Each 25c

MAD. HANTRY—Very dainty and graceful; golden yellow, overlaid salmon, incurving; narrow pointed florets. Each 35c

NEW YORK—Rosy salmon-orange color, with bronze shadings. One of the largest, held erect on long, strong stems; perfectly free bloomer. Each 60c

HENE CAYEUX—An early, continuous and fine bloomer. Flowers borne well above the foliage. For a hedge or a mass effect it could not be equaled. A rich, bright red. Busses rather dwarf. Each 25c

SEQUOIA—Deep saffron-yellow, with long tubular petals cleft at the tops. Each 25c

SUSANNE CAYEUX—White exhibition variety; flowers very large, beautiful and graceful; incurving. Each 50c

UNCLE TOM—Free bloomer; deep crimson, almost black; excellent shape. Each 25c

VILLA DE LYON—Flowers magnificent, large and of superb texture. Petals round, long, straight and pointed; rich rose; center almost pure white. Each 50c

VIOLA—A full well-shaped flower, very rich and desirable. Violet purple. Each 35c

WM. MARSHALL—Flowers extra large, fine form, long twisted petals. Color yellow overlaid and shaded orange. Each 50c

SPECIAL CASH OFFER.—In collections (of 3 or more bulbs) we will give you $2.40 worth for $2.00; $3.60 for $3.00, etc. (20c extra on the dollar) collection and dozen prices excepted. 6 Cactus Dahlias, 6 sorts our selection, $1.00.
Show Dahlias—Quilled

Very beautiful and desirable. Excellent for cutting. Stand handling and shipping well. In shape they are rather round or ball-shaped, and the petals are quilled (see illustration below).

**PRICES—**Unless otherwise priced, your choice 20c each, 6 for $1.00, postpaid.

**BALEAC**—Extra large perfect flowers, dark velvety maroon, very rich. Each 25c

**CAJAN**—Early, free bloomer. Good size, soft pink, splendiferous. Each 25c

**DIADEM**—Very large, of fine form on long stems; a beautiful rich crimson. Each 25c

**DREER’S WHITE**—A pure glistening white. Free flowering and most valuable for cutting and show. Each 25c

**FASCINATION**—Rosy pink, free flowering. Each 25c

**GRAND DUCHESS MARIE**—Extra large flowers, same style as Le Siam, but of a pleasing orange buff and light salmon. A free bloomer. Each 35c

**GRAND DUKE ALEXIS**—Very popular and always in demand. Color, ivory white, lightly tinted rosy lavender on edge of petals. Each 25c

**HENRY CLAIRE**—Pure lilac, edged and penciled with a deeper shade. Each 25c

**LE SIAN**—A grand flower, same style and shape as the popular W. W. Rawson, but of a rich, silvery rose. Free bloomers and good stems. Each 35c

**LUCY PAWLITT**—Sulphur-yellow, flaked crimson. Fine large flowers, very full. Each 35c

**NORMA**—Bright orange; one of the best grown; extra fine shape. Each 25c

**TOMAS PENDLE**—Without doubt the finest yellow show Dahlia ever offered. Each 25c

**Decorative Dahlias**

Many beautiful varieties have been introduced, some with flat petals, other reflexed, incurved or curiously twisted, but nearly all are without formality or stiffness, and practically all of them are leaders as cut flowers, bearing

**DELICIA**—A beautiful glowing rose-pink. Perfect shaped flowers on long, stiff stems. Excellent for cutting. (See cut.) Each 35c

**GAIETY**—A superb new vivid scarlet, beautifully tipped with pure white. Each 25c

**HALLERBADE**—Extra large. A pleasing combination of yellow and orange. Each 35c

**Hortulanus Pict**—New. Of mammoth size. A rich and pleasing apricot shading to old gold in center. Beautiful flowers on good stems. Each 50c

**LE GRAND MANITO**—A most effective fancy variety of splendid shape and very large, shaded, striped and blotched with deep red and violet, some flowers may be sold color. Each 35c

**MAMMOTH**—Large handsome flowers, shape of S. De G. Doazon, but of a dark velvety red. Each 35c

**MEADOW GOLD**—Flowers large and produced in great profusion. Primrose yellow, tinged delicate pink. Each 25c

**MONSIEUR CABRON**—Handsome, large flowers, amaranth crimson, each petal delicately edged pure white. Each 50c

**MME. JEANNE CHANTERIE**—Rich pink or bright rose, shading to a creamy white. Grand, showy and pleasing flowers on strong stems. Each 50c

**PFELE DE LYON**—A valuable white decorative Dahlia for cut-flower purposes; of good size and held erect on long, stiff, wiry stems, superior to Mrs. Winters. Each 35c

**PRINCESS JULIANNE** (See Cut.)—Award of Merit, Amsterdam; Award of Merit, R. H. S. London. Flower large, full, pure white, perfect shape, stands erect on long, stiff stems and lasts for days. Each 50c

**REISE VON STUTTGART**—Sport from Souvenir de Gustave Doazon. A bright blood-red, shading deeper to the center. Each 25c

**SOUVENIR DE GUSTAVE DOAZON**—The immense flowers are borne in profusion; color bright red. Each 25c

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Princess Julianne.

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SPECIAL CASH OFFER.—In collections (of 3 or more bulbs) we will give you $2.40 worth for $2.00; $3.60 for $3.00, etc. (20c extra on the dollar) collection and dozen prices excepted.

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W. W. RAWSON—(See Cut)—Large, perfect but graceful flowers are borne on long, stiff, erect stems. The color is pure white, overlaid with amethyst-blue, producing a beautiful effect. Each 35c
French Collarette Dahlias

An entirely distinct type, having a row of artistic petals around the disc, which form a frill or collar and which is of a different color from the rest of the flower. Excellent for cutting, have good stems, last well in water and the fall rains do not discolor them. (See cut.)

PRICE—Your choice 30c each, 4 for $1. Full set of eight distinct varieties only $1.65.

DUREKA (Diadem)—Perfect pointed petals of brilliant carmine; collar white. Very pretty. (See cut.)

EXPOSITION DE LYON—Very gay; bright garnet; collarette cream-yellow; very attractive; free bloomer.

FROGMORE—Yellow overlaid vermillion; splendid petals and very perfect flowers; collarette yellow.

IDEAL—Cardinal red, collarette yellow, very attractive.

M. MARTINET—Very large, vermillion shaded yellow, collarette yellow.

Mixed Dahlias

We have decided it is only confusing and unnecessary to list over 100 varieties of Dahlias. We have therefore cut our list of varieties in half and made a mixture of about 100 named varieties (unlabeled) which we offer at 15c each, 2 for 25c, 12 for $1.25, postpaid. These are all very choice varieties and will make a beautiful display at little cost.

New Single Flowered Dahlias

This class of Dahlias has become quite popular of late, they are showy in the garden, very free flowering and excellent for cutting and general decorating.

Prices—Your choice (except where noted), each 25c. Full collection (6 kinds), $1.25 postpaid.

CARDINAL CENTURY—Very large, bright cardinal red with round petals.

FRAU DE NEBELTHAU—The best pure white, excellent stems, large flower.

FREGOLI—Giant flowers on long stems. Carmine with a large spot of pure white on each petal; very showy and distinct. Each 35c

MRS. J. C. HANCE—Large, well rounded flowers; white slightly flushed with soft pink.

ROSE PINK CENTURY—Largest and best deep pink with long stiff stems; fine for cutting.

ROSE GOLD—Brilliant red, centered with a broad, yellow zone; very attractive. Giant flowers on long stems. Each 50c

Dahlias Culture—When you get your bulbs, put them in a warm, moist place so as to start an eye or sprout. Some varieties sprout quicker and earlier than others, but do not plant until they start, then you will have no vacant places. Lay the bulb on its side and cover four inches and 30 to 40 inches apart.
CHOICE ROSE PLANTS
FOR SPRING AND EARLY SUMMER PLANTING AND NOT FOR
FALL DELIVERY.

On this page we are offering four choice collections of the finest roses. This is the popular mail order size that we send by mail prepaid. They are grown in 3-inch pots, are strong, healthy and well rooted, and from 10 to 12 inches high. They should not be planted outside before severe weather is over in the spring. While this size will not produce so many blooms the first season as our large field-grown plants offered on the following pages, you will be surprised at the results you can obtain, and at quite a saving in price.

Novelty Collection of New Roses
Price 25 cents each.

**BRITISH QUEEN.**--A grand new Gold Medal rose from Ireland. Pure white. The highest order of merit.

**DUCHESS OF Sutherland.**--Strong grower; handsome, large flowers. Beautiful rose pink with lemon shadings on base of petals.

**George Dickson.**--Very large, full and perfectly formed flowers freely produced. Color, blackish crimson of velvety texture. A magnificent rose invaluable for exhibition.

Beauty Collection Choice Roses
Price, 15c each; set of twelve for $1.25.

**American Beauty.**--Large rosy crimson flowers; sweet-scented.

**Belle Belbrecht.**--Rose-pink; beautiful buds.

**Dean Hoar.**--Bright carmine with silvery shadings.

**Kaiserin Auguste Victoria.**--Large pure white; very free and constant.

**Lady Battersea.**--Bright cherry crimson, long pointed buds.

**Mad. Abel Chatenay.**--Salmon pink, shaded

Favorite Collection Everblooming Roses
Price, 15c each; set of twelve sorts $1.25.

**Bessie Brown.**--Ivory white, tinged flesh. Very large.

**Bon Lione.**--Dark rosy carmine; an old standby.

**Duchess de Brabant.**--Rosy pink with silvery shadings.

**Duchess of Albany.**--Deep pink; large and globular.

**La France.**--Silvery pink, large and very sweet-scented.

**Marie Van Monte.**--Light yellow, flushed carmine.

Popular Collection Hardy Roses
Price, 15c each; set of twelve sorts $1.25.

**Anna de Diesbach.**--Beautiful, clear carmine pink.

**Baron de Bonstetten.**--Dark, rich red; very large.

**Clio.**--Massive, light pink flowers.

**Conrad F. Meyer.**--Beautiful silvery pink.

**General Jacquemont.**--Bright crimson; one of the best.

**Glorie Lyonnaise.**--Chamois yellow; full, sweet, distinct.

Climbing or Pillar or Rambler Roses
We can supply most of our climbing roses in one-year-old plants at 15c each, 4 for 50c. Make your selection from varieties described on page 92.

**REMEMBER:** These pot grown rose plants can be supplied in the spring and early summer months only.
Choice Field Grown Rose Bushes

We make a specialty of Rose Bushes and sell thousands upon thousands. Our bushes are strong, healthy field grown stock, well rooted, and will produce a profusion of bloom the first season, if given good care and cultivation. We enjoy the reputation of supplying the best stock at reasonable prices. The following list is the choicest of American and European introductions.

SHIPPING AND DELIVERY.

We can fill orders for our large two-year-old rose bushes any time from October to May—the best planting time is during favorable weather in November, December, January, February and March. One-year-old from March to July.

WE PRUNE THE TOPS of all bushes sent by mail as they carry better. If all rose bushes when set out were cut back to within 10 or 12 inches of the ground, results would be better than when tops are left on.

Abbreviations

T.—TEA—One of the best classes of Roses and truly ever blooming. They are hardy in this section, although during our coolest weather and in cold sections they should be protected with a covering of fir boughs, straw or burlap.

H. T.—HYBRID TEA—Most of these are as free flowering and as constant bloomers as the teas, and are harder, stronger growers.

H. P.—HYBRID PERPETUAL—The hardi-est of all roses, vigorous in growth, free blooming.

AMERICAN BEAUTY (H. P.)—Constant bloomer, magnificent buds; large, bold flower; color rich, rosy red. Each 35c and 50o

AUGUSTUS HARTMANN (H. T.)—Brilliant geranium red flushed with orange. It obtained the silver medal on many occasions as “the best bloom in the show,” and the National Rose Society gold medal at the Botanical Gardens, 1914. Each $1.50

AYOCA (H. P.)—Brilliant, velvety-crimson; buds long; flowers large, sweetly perfumed. Each 40c and 50c

BARONESS ROTCHIILDS (H. P.)—Large size, fine globular form; color bright rosy pink. Each 35c and 50c

BRITISH QUEEN (H. T.)—Pure white, large full flowers of exquisite form. Each 75c

CHATEAU DE CLOS VOUGEOT (H. T.)—A very rich, fiery scarlet shading to deep velvety crimson. It is delightfully fragrant, a prolific and continuous bloomer. Each 50c and 60c

DUCHESS OF SUTHERLAND (H. T.)—Color, warm rosy pink with lemon yellow shadings. A grand exhibition rose. Each $1.00

Geoffrey Henslow.

DUCHESS OF WELLINGTON (H. T.)—Intense saffron-yellow, later becomes deep coppery yellow; delightful fragrance. Each 60c

DOBRETH PAGE ROBERTS (H. T.)—Coppery pink suffused with apricot yellow, very free and profuse bloomer. Each 50c and 60c

EDWARD MAWLEY (H. T.)—Of grand size and build and a free bloomer. Color intense crimson scarlet and of velvety texture. Each 50c and 60c

FRAU CARL DRUSCHKI (H. T.)—A large, grand, hardy, pure white; best and most popular. A splendid variety for hedges. Each 25c, 35c and 50c

FLORENCE PEMBERTON (H. T.)—Creamy white, suffused pink; flowers very large and full. Each 35c and 50c

GENERAL MCArTHUR (H. P.)—Color, brilliant scarlet; beautiful buds and most desirable in every way. Each 35c and 50c

GENERAL JACQUEMINOT (H. P.)—Bright shining crimson scarlet; very rich and velvety; one of the best. Each 25c, 35c and 50c

GEORGE DICKSON (H. T.)—A velvety blackish crimson with the back of the petals heavily veined with pure crimson maroon. Pronounced by all who have seen it to be unequaled to date. Each $1.00

HENRY MUNCH—See Pink Druschki.

HERZOGIN MARIA ANTOINETTE (T.)—Deep orange striped salmon crimson, passing to old gold. Fragrant. Each $1.00

HIS MAJESTY (H. P.)—The Crimson

DOZEN PRICES.—We give you our 35c selected two-year-old bushes at $3.00 doz.; our 40c and 50c extra selected at $4.00 doz. We can supply the ordinary grade of 25c bushes at $2.50 doz. All charges prepaid. (See page 83.)
HUGH DICKSON (H. P.)—Brilliant crimson, shaded scarlet; good size and fine form; finely perfumed.
Each 35c and 50c

IBISH ELEGANCE—Bronze orange in the bud, opening into large single flowers of a lighter shade.
Each 35c and 50c

IBISH FIREFLAME (Dickson & Sons, 1914.)—These buds are wonderfully rich in coloring; a rich deep orange, splashed with crimson, opening to a large single flower of a satiny, old-gold shaded with ochre. Awarded gold medal.
Each $1.00

JULIET (H. E.)—Very attractive; inside of petals golden yellow, outside rosy red; large, full, fragrant.
Each 50c

JUNEEDE J. L. MOORE (H. T.)—A magnificent and unique rose. Inside of petals red, outside bright pink. Each 50c and 60c

JOSEPH HILL (H. T.)—Salmon pink, shaded orange and copper.
Each 50c and 60c

J. B. CLARKE (H. T.)—Deep dark scarlet, large and beautiful.
Each 35c and 50c

KAESEBIRN AUGUSTA VICTORIA (H. T.)—Beautiful buds and flowers; creamy white; deliciously fragrant.
Each 25c, 35c and 50c

KILLARNEY—It mildews so badly we recommend Madame Leon Pain.

KING GEORGE (H. T.)—A new rose of great merit; blackish-crimson with deep velvety-violet flush.
Each 75c

Each 25c, 35c and 50c

LADY HILLINGDON (H. T.)—Deep apricot yellow, long pointed bud.
Each 25c, 35c and 50c

LADY URSULA (H. T.)—Truly magnificent; a delightful shade of flesh pink.
Each 50c and 60c

LYON ROSE (H. T.)—Distinct. Shrimp pink with salmon and chocolate yellow shadings, beautiful beyond description.
Each 50c and 60c

MABEL DEW (H. T.)—A magnificent rose, exquisitely shaped; deep cream, passing to intense canary-yellow in the center.
Each $1.00

MADAME CAROLINE TESTOUT (H. T.)—Portland's famous brilliant pink rose.
Each 25c, 35c and 50c

MADAME EDOUARD HERBIE—Long pointed buds, a deep coral red shaded to yellow at the base; flower of a rare shade of rose-scarlet flushed with shrimp and apricot tints. Won the Daily Mail's $500 gold cup.
Each $1.50

MAD. EDONARD HERBIE—Straw-yellow suffused with carmine and pink. A great favorite.
Each 50c and 60c

MADAME LEON PAIN (H. T.)—A beautiful salmon-pink overlaid with silvery-white, center yellow. Similar, but better than Killarney.
Each 35c and 50c

MAD. SECOND WEBBER (H. T.)—A magnificent light rose salmon. Buds long and pointed, flowers immense.
Each 50c and 50c

MADEMOISELLE CECILE BRUNNER—Dwarf Polythamanus. Exquisite little roses, buds dainty, pointed, bright salmon pink, yellow center.
Each 35c and 50c

MAMAN COUCET (T.)—Very popular; a deep, rosy pink, the inner side of petals silvery rose.
Each 35c and 50c

MARIAN VAN HOUTTE (T.)—Straw-yellow color; outer petals shaded bright carmine.
Each 35c and 50c

MELODY (H. T.)—Yellow, deepening to apricot in the center; perfect in form, free bloomer.
Each 75c

MARGUERITE DE SINETY (H. T.)—Beautiful golden-yellow shaded rosy-red, delightfully fragrant.
Each 60c and 75c

Each 75c

MISS CYNTHIA FORDE (H. T.)—A deep brilliant rose-pink, very large; sweetly perfumed. Gold medal N. R. S. Each 75c

MRS. AARON WARD (H. T.)—Very distinct. Coppery orange in the bud, shading to gold and pink.
Each 50c and 50c

MRS. A. WADDLE (H. T.)—Color, deep reddish apricot toned with salmon; long pointed buds.
Each 35c and 50c

MRS. FOLKE HOBB (T.)—A veritable giant among Tea roses; delicate ivory white tinged pink on edge of petals; deliciously scented.
Each 75c

MRS. FRANK BRAY (H. T.)—A rich deep coppery eeu, developing as the flower opens to a very delicate coppery-fawn with a shading of ivory shell-pink.
Each 75c
Bach, Bach, Bach, Bach, Each—
dainty.
clear, intense
very
color.
sunny
Rose,

dark;
coral
peach
apricot
scented.
color,
shading.
Rose
1915
MY
PBINCB
PBBBB
PBBBB
PBBBB
MBS.
BHBA
SAPBANO
BICHMONB
PAUB
PINK
PAPA
OBD
OBiliZA
long
SPECIAL—All rose bushes sent PREPAID this year as we are employing NO
AGENTS—see note inside front cover—(Tree roses are not mailable.)
Climbing Roses. Hardy, Large Flowering

The lavish profusion of bloom on climbing Roses, literally hundreds of flowers on each plant, their beautiful colors and exquisite fragrance render them unequalled for covering houses, arbor, pergolas, fences and boundary walls.

CLIMBING SAFFRANO (Reve d’Or).—A beautiful saffron yellow, very desirable. Each, 35c and 50c

CLIMBING WHITE COCHET.—Flowers white, edged pink, beautiful form and substance. Strong grower, perpetual bloomer. Each, 60c

CLIMBING WOOTTON.—Bright red, shaded deep crimson; free flowering, strong grower. Each, 35c and 50c

DR. W. VAN FLEET (Clb.).—Large semi-double flowers, delicate pink, shaded rose, very pretty. Each, 50c

GLOIRE DE DION (Clb.).—Large, fragrant yellow flowers shaded amber and carmine; a magnificent climber. Each, 40c and 50c

MADAM ALFRED CARRIERE. Extra large, very double and sweet, profuse bloomer, white, tinged pale yellow. Each, 35c and 50c

MARECHAL NEIL.—The popular fragrant golden yellow climber, but not as hardy as others. Each, 25c, 50c and 75c

PILAR OF GOLD.—A vigorous climber. Color, rich apricot, shaded with carmine. A rare colored variety and very desirable. Each, 50c

REINE MARIE HENRIETTE.—Vigorous; flowers large, full; glowing crimson. Each, 35c and 50c

SILVER MOON.—Large, semi-double blooms of good substance with golden stamens. Foliage bronze green and is immune to mildew. Each, 50c

SHOWER OF GOLD.—A beautiful new semi-double; golden yellow flowers in masses. Each, 35c and 50c

WHITE DOROTHY.—As its name indicates, it is a sport from Dorothy Perkins, possessing all the fine qualities of that grand variety, but having pure snow-white flowers. Each, 25c, 35c and 50c

YELLOW RAMBLER (Aglaia).—Strong grower, profuse bloomer. Each, 25c, 35c and 50c

RAMBLER OR PILLAR ROSES

The following climbing Roses all grow vigorously, and are profuse bloomers and very hardy anywhere. The flowers are borne in large clusters. They all belong to the polyantha class, or more commonly known as the Ramblers.

AMERICAN PILLAR.—A single-flowering variety of great beauty. Flowers large and a lovely apple blossom pink, white eye and yellow stamens. Each, 25c, 35c and 50c

CRIMSON RAMBLER.—See Flower of Fairfield.

DOROTHY PERKINS.—(See illustration). Flowers in immense clusters, beautiful shell-pink, very double, with petals artistically crinkled; pretty pointed buds. Each, 25c, 35c and 50c

FLOWERS OF FAIRFIELD.—A perpetual flowering “Crimson Rambler.” The flowers are bright scarlet and produced in great profusion. Each, 25c, 35c and 50c

HIAWATHA.—Produced in long, pendulous sprays, with frequently from 40 to 50 flowers on a spray; in color it is a brilliant ruby carmine with a clear white eye; golden stamens—a glowing combination of colors. Each, 25c and 40c

TAUSENDSCHON (Thousand Beauties).—Entirely distinct. The individual flowers are very large, fully 3 inches across, of a most elegant and graceful single. A most delightful shade of soft pink, shaded carmine and produced in trusses of from 10 to 15 flowers, each truss a veritable bouquet. It is a rampant grower, very healthy with magnificent foliage. Each, 25c, 35c and 50c

WHITE RAMBLER (Thalia).—White Dorothy is better.

DOZEN PRICES.—We give you our 35c selected two-year-old bushes at $3.00 doz.; our 40c and 50c extra selected at $4.00 doz. On high priced kinds multiply the single price by 10 to get the dozen price. We can supply the ordinary grade of 25c bushes at $2.50 doz.
DID YOU GET YOUR COPY?

About September 1 we mailed to about 40,000 of our customers our 32-page illustrated and descriptive

FALL CATALOGUE OF

"HIGHEST QUALITY"

Bulbs
Roses
Ornamental Shrubs
Trees and Evergreens

"HIGHEST QUALITY"

Fruit and Nut Trees
Berry Bushes Vines Roots, Etc.

If you did not get one or have misplaced it and would like another copy, write us—a request on a postal card will do. We will send copy by return mail.

Space in this catalog will not permit us to describe our Nursery Stock, which makes a large and important part of our business. We would like very much to have you look over our Fall Catalog if interested in this line of stock.

REMEMBER—WE NO LONGER EMPLOY AGENTS; YOU GET BETTER RESULTS, JUST WHAT YOU WANT, AND SAVE THE AGENT’S COMMISSION.

HERE’S SOMETHING WE WANT YOU TO KNOW ABOUT

When we find something of special merit we always want our friends and our customers to know about it, ESPECIALLY when it is something that will give PLEASURE, or COMFORT and SERVICE.

DAD’S NEW ELECTRIC LIGHT is something that will be of great service to our city, suburban and country customers. It’s an all-around light, lantern or flashlight, in fact, it’s “THE LIGHT OF ALL LIGHTS”—makes “NIGHT TIME A BRIGHT TIME.”

DAD’S ELECTRIC LANTERNS are made to last and are inexpensive. They take the place of ALL open flame, gas or oil explosive lights for ALL PEOPLE and ALL PURPOSES. They are always ready, quick as a bullet, and silent as night. See page 110, or send for fully illustrated and descriptive folder.
FRUIT TREES, BUSHES, VINES AND PLANTS

Our Descriptive Fall Catalog

Limited space in this catalog will not permit us to give full descriptions of all our Fruit, Shade and Ornamental Trees and Shrubs and Vines, but we will gladly mail you a copy of our DESCRIPTIVE FALL CATALOG OF NURSERY STOCK. (See page 93.)

Why Not Have a Small Fruit Garden?
WHAT'S NICER THAN FRESH FRUIT FROM YOUR OWN GARDEN?
We will describe a few of our best small fruits.

Currants
PERFECTION.—New; a late introduction of great merit. Perfection is the largest, most productive, finest-flavored, rich, mild, sub-acid; plenty of pulp; few seeds; healthy, bright red currant to date. 1-year, 15c; 2-year, 20c each
Cherry, Fays, White Grape or Black Naples.—All well known kinds. 1-year, 10c each; 2-year, 15c

Gooseberries
OREGON CHAMPION.—Berries large, round and pale green; fine for table use and pies; hardy, strong, and a very prolific bearer; most popular and best commercial variety. 1-year, 6c each; 2-year, 10c
INDUSTRY.—English variety; large oval; dark, red, hairy, rich and agreeable; vigorous and productive. 1-year, 25c each; 2-year 30c

Grapes
CAMPBELL'S EARLY.—Clusters large and handsome; berries large, round, black, with purplish bloom; flesh firm but tender; seeds few; flavor rich, sweet and slightly vinous. A strong and vigorous grower and ripens its fruit early. A fine home variety for all purposes. Fruit keeps a long time in perfection. 1-year, 20c each; 2-year 35c
Concord, well known Delaware, the best red variety. Niagara, best white; your selection. 1-year, 15c each; 2-year, 20c

Raspberries
ST. REGIS (New).—The St. Regis ever-bearing red raspberry is the sensation of the day. It is being talked about from the Atlantic to the Pacific. The demand is enormous. It is a very valuable variety. It originated in New Jersey among a colony of Italians who made money by selling the fruit to hotels and restaurants late in the fall after all other kinds of berries were gone. It is a fine berry in every respect, being hardy, very productive, of good color and fine flavor. It does finely in the regular season and you get the fall crop extra. We unhesitatingly recommend this variety. Price, each, 10c; doz. $1.00; 100, $7.50 prepaid
Cuthbert and Marlboro, well known red varieties, or Gregg and Cumberland, popular black caps. 1-year, each, 6c; doz., 60c; 100, $4.00

Blackberries
ELDORADO.—New bush variety. Very vigorous and hardy; yield is enormous; berries large, jet black, borne in large clusters, and ripen together; sweet, melting and pleasing to the taste; no core, and keep well. Price 1-year, 12c each; extra strong, 15c
Lawton or Blowers, well known popular sorts. 1-year, 8c each; extra strong, 10c
Evergreen or Himalaya Giant, trailing sorts, strong plants. 15c each; $6.00 per 100

DOZEN PRICES—For dozen prices on Fruit Stocks multiply the each price by 10. Remember, we pack safely and will and prepay charges to you.
Plant a Few of These Delicious Berries

Trail Them On the Garden Fence or Over a Trellis.

PRICES—Your Choice of the following, strong transplanted 2-year plants 15c each, $1.50 doz., $8.00 per 100. TIPS OR 1 YEAR ROOTS GIVE POOR RESULTS—WE DO NOT OFFER THEM.

New Mammoth Blackberry

A grand addition to the list of Blackberries. The handsome, large, juicy berries are delicious. It is a rampant grower; of trailing habit; enormously productive and early. Fruit is enormous, specimens measuring two and one-half inches long; seeds small, soft and abundant; cores small and soft. In size and flavor it surpasses all other varieties of blackberries. Excellent for home use.

Burbank's Phenomenal

A most desirable, refreshing berry for the home garden. Of a bright crimson raspberry color; very productive, and most delicious of all berries for pies, canning, jellies or jams. Sweeter than the Loganberry and fine as a fresh table fruit. Prices above.

Loganberry

In great demand again for canning and drying. An exceedingly strong grower and an enormous bearer. The fruit is larger and longer than the blackberry and produced in immense clusters; color, dark red. Has a pleasant, vinous flavor, delicious and peculiar to this berry alone; fruit ripens early. It is excellent for the table, eaten raw or stewed, and for jelly or jam is without an equal. Prices above.

General Price List Fruit and Nut Trees

If you have not time to send for our descriptive catalog of Nursery Stock (see page 93) you can order any varieties of the following. We can no doubt supply them. In case they can not be had locally tell us if we can substitute some good western variety of merit.

<table>
<thead>
<tr>
<th>KIND</th>
<th>1 Year</th>
<th>2 Year</th>
<th>Selected</th>
</tr>
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<tr>
<td></td>
<td>3-4 Feet</td>
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<tr>
<td>Apples</td>
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<td>Quince</td>
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<td>Nectarines</td>
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<tr>
<td>Almonds</td>
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<tr>
<td>Persimmons</td>
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<td>60c</td>
<td></td>
</tr>
<tr>
<td>English Walnuts</td>
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<td>60c</td>
<td></td>
</tr>
<tr>
<td>Select Seedlings</td>
<td>1.00</td>
<td>6-7 ft. 1.25; 7-9 ft. 1.50 to 1.75</td>
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</tr>
<tr>
<td>French Grafted</td>
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<td></td>
</tr>
</tbody>
</table>

DOZEN PRICES—To get the dozen prices on above multiply the single price by 10. Very low prices by the 100 or 1000. Write.

QUALITY—We call your attention to the fact that we are catering to the "Particular Planter," who wants "High Quality," and is willing to pay a price necessary to secure it. Any sensible person knows that "Highest Quality" in stock of any kind is more expensive to produce than common, and therefore is worth more. Our prices are low, quality con- sidered.
Our strawberries are carefully grown, trimmed and packed in the best manner to insure their arrival in good, fresh condition. If you want good, strong, healthy, vigorous plants and true to name, send to us. Our prices are right; our plants are O. K.

**Superb-Everbearing**

This we believe is the best of the everbearing kinds. **Superb** is a truly wonderful fall bearing variety. It is doubly valuable as it yields heavily, early as well as late. This new Superb is really a true everbearer and gives a good supply of choice, rich, red berries, until stopped by heavy frosts in the fall. This is the first everbearing strawberry that we have found of real merit and of a good flavor and color. Growers who have tested it on this coast are enthusiastic over it. Supply of plants limited this season. Prices, postpaid, doz., 60c; 25, $1.00; 50, $1.50; 100, $2.00.

**Glen Mary (Early).** Growing more popular year by year. There are few other berries having a wider habitat than this variety, and it has proved profitable and successful wherever planted. A heavy producer of big, dark red berries. Its popularity is not to be wondered at. The berries are inzet with bright-yellow and very prominent seeds which give them a beautiful appearance in the box. As a shipper it has no superior. Glen Mary, although a bi-sexual, is not a strong poliniser and we recommend that it be set with Wm. Belt. (See prices next page.)

**Wm. Belt (Early).** This variety grows big crops of large, red, attractive berries that hang in clusters from powerful stems. The flesh is very rich and meaty and of deep red, which extends to the center. The berries are in every respect "extra," and the fact that it grows, like its famous mate Glen Mary, under practically all conditions, makes it one of the most valuable varieties ever originated. (See prices next page.)

**Magoon.** Berry large, fine and excellent; sub-acid flavor; bears heavily and throughout the season.

**Clark's Seedling.** The berry that has made Hood River famous; excellent shipper; berries large, firm and of delicious flavor; vines bear large crops; is especially adapted to Pacific Coast.

**Marshall.** One of our best Western varieties and very popular wherever known. In California it has been very extensively planted in recent years, and in Oregon it has the distinction of topping the Portland market in three successive seasons. Marshall is one of the blood-red varieties that never fails to attract the eye and to satisfy the taste. It is deliciously sweet, generously prolific, and is in every way an ideal variety for extensive planting or home garden. Excellent for canning, as it holds its color, shape and flavor. (See prices next page.)

**Oregon Improved.** One of the finest and most satisfactory strawberries ever introduced. It always looks bright, fresh and attractive. The berry is very large, firm and handsome; rich, dark red, extending to the center. The flavor is rich, sweet and delicious. For table use and canning, it cannot be surpassed. The "Oregon" ripens early and continues in bearing all late in the season. Very prolific and a heavy cropper. (See prices next page.)

**Brandywine (Late—Bi-sexual).** Has been grown for 20 years in the East, and is now being largely planted by Western growers who have tried it out. Its large size, high rich color and beauty of its fruit, excellent flavor and great productiveness makes it rank among the leaders. The fruit stems grow erect, and hold the berries well up from the ground. The foliage is ample having a dark leathery leaf which affords full protection to the bloom.

**Gold Dollar.** One of the earliest berries on the market. Fruit good, medium size, and attractive; rather tart; fine flavor; foliage heavy, large and spreading, which protects the blooms from early frosts.

**Wilson.** A heavy bearer of fine, moderate-sized berries; sharp acid flavor; leading sort for canning.

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### New Price List of Strawberry Plants.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Charges Prepaid</th>
<th>Not Prepaid</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Per doz.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>25</td>
<td>100</td>
</tr>
<tr>
<td>Brandywine</td>
<td>.30</td>
<td>.50</td>
</tr>
<tr>
<td>Clark's Seedling</td>
<td>.25</td>
<td>.40</td>
</tr>
<tr>
<td>Glen Mary</td>
<td>.30</td>
<td>.50</td>
</tr>
<tr>
<td>Gold Dollars</td>
<td>.25</td>
<td>.40</td>
</tr>
<tr>
<td>Magoon</td>
<td>.25</td>
<td>.40</td>
</tr>
<tr>
<td>Marshall</td>
<td>.25</td>
<td>.40</td>
</tr>
<tr>
<td>New Oregon (Improved)</td>
<td>.25</td>
<td>.40</td>
</tr>
<tr>
<td>Wilson</td>
<td>.25</td>
<td>.40</td>
</tr>
<tr>
<td>Wm. Belt</td>
<td>.30</td>
<td>.50</td>
</tr>
</tbody>
</table>

500 plants, all one kind, 10c more per hundred than thousand rate.

All our strawberry plants packed in special strawberry crates holding 500 plants each. Special low prices on 5000 or more. Write, stating quantity and kind wanted.
A New Strawberry of Great Merit for 1916

The illustration on the back cover of our 1915-16 Nursery Catalog shows a photographic reproduction of our field of growing plants, a mother plant showing productiveness of fruit and life-size berries.

WELLINGTON’S MARVEL

If there is anything in nature that can cause one to forget the frailties of human existence and make the honest lives of industrious workers worth living, it is the Wellington Marvel Strawberry. The plant has a magnificent crown system, which, under restriction, stools up to mammoth proportions and circles itself with a massive wreath of large oviform crimson berries, sparkling like rubies in the sunlight.

When we observe the penetrating power of the Marvel through its root growth, we cease to view the festive array of the striking red beauties with astonishment, and think of the persistent toll and painstaking care exercised by the originator for the purpose of eliminating objectionable features and placing on the market an ideal strawberry, absolutely immune from all lop-sided, scruffy, defective specimens.

We feel confident that all progressive growers, as well as the amateur, will want to be the first in each locality to grow this grand new strawberry. It will be the first to catch the eye of connoisseurs, who wish to buy. The ruddy glow of the Marvel spreads evenly and leaves no white tints. It is very firm and a peerless shipper; the most class for canning. Heat does not impair its quality, but intensifies the color to deep red. The flavor of the Marvel is distinct and, when once tasted, its ripening season will be looked forward to as the festal event of a lifetime.

The blooms are perfect and are protected from frost by a dense growth of leaves. Fruiting season early, long and marvelously productive.

WELLINGTON’S “MARVEL” was originated by Wellington B. Butler, of Merlin, Ore., a strawberry specialist. We have obtained the fruiting crown from all his plants and have great pleasure in introducing to our customers and all lovers of strawberries this really superb and meritorious new variety. In all our experimental and observation plots, we have never seen the equal of the “Marvel,” in color, shape, size and quality. The ripe berries command instant attention on account of the bright, fresh, delightful appearance. We predict a bright future for the “Marvel,” and the commercial grower, who gets a start of this variety and markets the fruit, will reap a rich harvest.

About the Prices—Mr. Wellington Butler, the originator, set his price at $2.50 per dozen, but we finally persuaded him to allow us to sell his plants at $1.50 per dozen; $10.00 per 100. At this price, everyone can afford to get a start.

Price List of Popular and Well-Known Strawberry Plants

<table>
<thead>
<tr>
<th>Variety</th>
<th>Charges Prepaid</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Per 25</td>
</tr>
<tr>
<td>Brandywine</td>
<td>$0.50</td>
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<tr>
<td>Clark's Seeding</td>
<td>$0.50</td>
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<tr>
<td>Glen Mary</td>
<td>$0.75</td>
</tr>
<tr>
<td>Gold Dollar</td>
<td>$0.75</td>
</tr>
<tr>
<td>Magoun</td>
<td>$0.75</td>
</tr>
<tr>
<td>Marshall</td>
<td>$0.75</td>
</tr>
<tr>
<td>New Oregon</td>
<td>$0.75</td>
</tr>
<tr>
<td>Superb Everbearing (Doz. 60c)</td>
<td>$1.00</td>
</tr>
<tr>
<td>Wilson</td>
<td>$0.75</td>
</tr>
<tr>
<td>Wm. Belt</td>
<td>$0.50</td>
</tr>
</tbody>
</table>

500 plants, all one kind, 10c more per hundred than thousand rate.

OUR FALL CATALOG of Nursery Stock gives full description of the above varieties—free.

WELLINGTON “MARVEL” (Quart box)
Why Not Raise Some Asparagus and Rhubarb

Every garden large or small should have at least a small supply. If you want special information on culture of these roots, we have ASPARAGUS CULTURE, by Hexamer, 174 pages, 60c, and NEW RHUBARB CULTURE, by Morse and Piske, 130 pages, 90c.

ASPARAGUS ROOTS

One of the earliest and finest of spring vegetables; very easily grown. A bed once planted is good for years if properly attended to and well manured. Set plants 18 inches apart, in rows 3 feet apart.

ONE YEAR OLD.—Prepaid, dozen 25c; 50, 75c; 100, $1.00. By express or freight, 1000, $6.00.

TWO YEAR OLD.—Prepaid, dozen, 40c; 50, $1.00; 100, $1.25. By express or freight, 1000, $8.00.

Buy Roots and Save 2 to 3 Years.

Hop Roots.

Regular Root Cuttings, price, 5c each; 40c per dozen; $1.20 per 100. Low prices by the thousand.

Crown Roots give quicker results; each, 10c; dozen, $1.00.

Horse-Radish Roots.

Prices, 5c each; 40c per dozen; $1.50 per 100. Low prices by the 1000.

Rhubarb.

RHUBARB

PIE PLANT—WINE PLANT

Plant in the fall or early spring from 3 to 4 feet apart, in the richest soil you have, or can prepare. New book: "Rhubard Culture," a complete guide to dark forcing and field culture (well illustrated), 130 pages, 90c.

BANWINE RHUBARB—A Moneymaker

This is a new giant variety, a quick grower, very early, heavy stalks, very tender, brittle, and of finest flavor. Our grower claims it excels Burbank’s Giant, Riverside Giant (Cumming’s), and is far superior and three times as profitable as the ordinary Giant or Victoria, Linneous and others. Has produced close to $900.00 profit per acre. We could write a whole page about this grand variety and print letters and testimonials of merit, but space will not permit. (Send for pamphlet if interested.)

PRICES: Divided Roots (Buds or Eyes, as they are often called), 15c each, 2 for 25c, 6 for 60c, 12 for $1.00, postpaid; per 100, $7.50 prepaid. Quantity price on request.

Note—Divided roots from the true mother plant is the only safe way to propagate—seeds do not come true.

BURBANK’S CRIMSON WINTER

Very early medium size, brilliant crimson and of fine quality. Highly esteemed in California. Prices: Small roots, each 15c. doz., $1.50; large, 25c, $2.50 doz., postpaid.

VICTORIA OR MAMMOTH

One Year.—Each, 10c; doz., 75c; 100, $4.00.

Two Year.—Each, 15c; doz., $1.25; 100, $6.00, prepaid. If wanted in larger quantities, write for special prices.
Beautiful Hardy Climbing Vines.

**Clematis.**

These bear large and beautiful flowers of various shades of color through the latter part of the summer and early fall. The following varieties are the very best and our plants are all two years old.

**YOUR CHOICE** of the following strong roots 75c each; 3 for $2.00; 5 kinds, $2.75 post paid.

- **Lawsoniana** (No. 1) — The best light blue or lavender.
- **Ville de Lyon** (No. 2) — The best bright red; equal to Jackmanii in size.
- **Henryi** (No. 3) — Fine, large, creamy white flowers. A fine strong grower.
- **Jackmanii** (No. 4) — Intense violet purple; most popular variety.

**Duchess of Edinburgh.** — A free-flowering double white variety; very fragrant.

**CAUTION.** — IN PLANTING CLEMATIS DIG A LARGE HOLE AND SPREAD THE ROOTS OUT VERY CAREFULLY AND COVER CROWN OF PLANT ABOUT FOUR INCHES. KEEP WATERED IF SET CLOSE TO A DRY WALL.

**Paniculata (New Sweet-Scented Japan Clematis).** — Of very rapid growth, quickly covering trellises and arbors with handsome, clean, glossy, green foliage. The flowers are of small size, pure white, borne in profusion in September and October, and of a most delicious and penetrating fragrance.

Small plants, 25c; strong 2 to 3-year-old plants, 35c to 75c each.

- **C. Montana.** — A hardy rapid grower, flowers snow-white, fragrant and freely produced in May and June.
  - Strong plants, 50c to 75c

- **Montana Rubens.** — New, same as above, except in color, which is of a pleasing shade of soft rosy red.
  - Each, 60c to 75c

**FEED YOUR PLANTS.** You must supply "food," in other words, fertilizer, if you want the best results. Read about "Wonder," page 34, and ask for "Booklet."
Hardy Climbing Vines—Continued

**AMPLOPHIS**

Veitchi (Boston Ivy, or Japan Ivy).—The most popular and desirable climbing plant for covering brick, stone or cement walls, etc.; when it becomes established at the root it is of very rapid growth, and clings to the smoothest surface. The foliage is of a rich olive green during the summer, changing to various shades of bright crimson and scarlet in the fall. In planting cut back to within the plants should be cut down to within 6 inches of the ground, so that the new growth may cling to the wall from the bottom up.

Strong plants 25c to 75c; extra strong 50c

**Quinaquifolia (Virginia Creeper, or American Ivy).**—This well-known climber is one of the best and quickest growing varieties for covering trees, trellises, arbors, etc.; its large, deep green foliage assumes brilliant shades of yellow, crimson and scarlet in the fall.

Strong plants 25c to 35c; extra strong 50c

**ENGLISH HYDRANGEA**

Schizophragma.—This bears large panicles or trusses of flowers, which resemble a white Hydrangea. It clings readily to any rough surface or wall, flowering freely during July and August.

Large imported plants $1.00 each; prepaid $1.50.

**DUTCHMAN’S PIPE (AristolochiaSPECIES)**

A strong, rapid growing vine with handsome light green leaves. It will give a quick, dense shade and is much used on arbors and trellises. The brown flowers are shaped like the bowl of a pipe.

Each 75c to $1.00

**HONEY Suckle**

A beautiful climber, rapid grower and very desirable; flowers very fragrant, and produced in great profusion. Your choice of the following 35c to 50c each; extra strong 60c to 75c:

- **Malleana.**—Very popular; almost evergreen; profuse bloomer; flowers white, passing to yellow.
- **Belgica (Monthly Fragrant).**—Flowers are large and very fragrant; color red and yellow.
- **Sempervirens (Scarlet Trumpet Honey-suckle).**—Trumpet-shaped flowers of a bright scarlet.
- **Flava (Yellow Trumpet).**—A choice but scarce species, with bright yellow flowers.

Each 50c to 60c

**TRUMPET VINE—Bignonia**

For covering unsightly places, trellises, rockwork, or wherever a showy-flowering vine is desired, the Bignonias will be found very useful. The flowers are large, attractive and borne profusely when the plants attain a fair size.

Strong plants each 50c to 75c

**WISTARIA**

A rapid, hardy climber that will grow to a height of 50 feet or more. The fine foliage and flowers are produced early in the season, and come in magnificent clusters. One of the most desirable and showy climbers we know of.

**Sinensis.**—Lovely panicles of flowers produced in the most wonderful profusion. WHITE OR PURPLE, strong, 2-year vines, 50c to 75c; extra heavy, $1.00 to $1.50 each.

**Multijuga.**—This valuable new Wistaria was introduced from Japan, and produces magnificent racemes of lovely flowers, often measuring 18 to 24 inches in length. WHITE OR PURPLE—budded stock from Japan $1.00 to $1.50; extra old and strong, $2.00 to $2.50.

Wistaria Vine and Flowers.
Lawn Mowers

We do not carry a large variety, but we do offer the makes that run easily, wear well and do satisfactory work.

GREAT AMERICAN BALL-BEARING.—
Open cylinder, five blades, 10-inch wheel, solid cast steel butting knives, hardened in oil; steel balls of highest grade, placed in dust-proof steel cup; cuts close; easily adjusted. 15-inch, $10.50; 17-inch, $12.50; 19-inch, $13.50; 20-inch, $15.00.

GREAT AMERICA.—Closed cylinder, three blades, 7-inch wheel; hardened and tempered solid cast steel cutting knives, positively self-sharpening. 12-inch, $7.00; 14-inch, $8.00; 16-inch, $9.00; 18-inch, $10.50.

FAULTLESS.—Best cheap lawn mower for money; has 3 blades tempered tool steel; good adjustment, 14-inch, $3.50; 16-inch $4.00.

Grass Catchers

SIMPLEX.—Good, cheap grass catcher. Canvas sides, galvanized bottom, wire frame. No. 1 for 14 to 17-inch mower, $1.50; 18 to 21-inch, $2.00.

For Grass Hooks, Shears, Sickle, etc., see page 108. For Garden Hose, see page 105.

Great American Lawn Mower.

Dunham Water-Weight Lawn Rollers

This roller has a water-tight steel drum which can be filled with water to make it heavy, and emptied when storing away.

The roller is fitted with steel roller bearings and is an easy running, long-wearing machine. Ask for booklet—“The Proper Care of Lawns”—free. We carry the following sizes in stock.

We will gladly get larger sizes on orders.

<table>
<thead>
<tr>
<th>No.</th>
<th>Diam.</th>
<th>Weight Empty</th>
<th>Weight Filled with Water</th>
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</thead>
<tbody>
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<td>14</td>
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<td>200</td>
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<td>5</td>
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<td>7</td>
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<tr>
<td>11</td>
<td>24</td>
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<td>330</td>
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</tr>
<tr>
<td>13</td>
<td>32</td>
<td>160</td>
<td>650</td>
<td>24.00</td>
</tr>
</tbody>
</table>

During Winter Months freezing and thawing and heavy rains loosen the soil and heave the turf away from the sub-soil, leaving millions of sensitive "feeder-roots" exposed to the air.

In the spring when the grass should start growing these roots soon dry out and die.

In summer, too, sun and wind tend to dry out, bake and crack the surface soil around the roots and this is equally harmful to the lawn. A good roller will compress the soil around the roots, and press the turf back against the moist sub-soil so the roots can absorb the water and plant food.

Rolling occasionally throughout the summer (especially after heavy rains) keeps the surface even and prevents the soil drying out. It discourages the work of worms, ants, moles and gives a smooth even lawn for the mower to run over.

It is absolutely impossible to keep a lawn, large or small, in perfect condition without rolling, no matter how many other things may be done in taking care of it. This fact should be well understood by the large and growing army of Americans who take pride in the beauty of the lawns surrounding their city or country homes.

Before Rolling. After Rolling.

Dunham Lawn Roller (Showing new "No Tip" handle lock and how to fill.)

R. R.'S EVERGREEN LAWN GRASS SEED (page 37) and WONDER ODORLESS FERTILIZER (page 34) makes those beautiful green, velvety lawns so much admired.
SPRAY PUMPS AND SPRAYERS

We can supply nearly twenty different styles, from a light hand pump to the large powerful power outfits. Hardie Pumps are guaranteed to do the work claimed or your money back. Our experience shows us that if you get a good outfit, one large enough to do your work, you will spray well and as often as necessary; but if you get a cheap outfit or one that is too small, you will become disgusted, throw it aside and let this most important work go undone. Read the bottom line on this page.

NO. 5 HARDIE BARREL PUMP

Used in our wheel outfit No. 21 and barrel outfit No. 14; is arranged for two lines of hose; will supply from two to three nozzles; plunger tube is 1½ inches inside diameter; stroke of plunger, 4 inches; and when operated at 30 strokes per minute will convert into a fine spray 50 gallons of liquid per hour.

Price, with iron air chamber, $9.50; with brass air chamber, $11.00.

NO. 6 HARDIE BARREL PUMP

Fitted for two lines of hose; will supply from four to six nozzles; inside diameter of plunger tube 2 inches; stroke of plunger from 4½ to 5 inches; when operated at the rate of 30 strokes per minute will convert into a fine spray 120 gallons of liquid per hour. Furnished with flat plates for end of barrel or flat top tank, if so ordered, without extra cost.

Price, with iron air chamber, $11.00; with brass air chamber, $14.00.

HARDIE BUCKET PUMP.

A high-grade, all-brass bucket pump, especially designed to meet the long-felt want in this line. It is the only bucket pump on the market that has a mechanical agitator and that is so designed as to always stand in position in the center of the bucket. It can readily be detached from the bucket by unscrewing a nut on the spider. This new device for holding the pump firmly in place in the center of the bucket enables the operator to carry the whole outfit with one hand. A practical outfit for light work. This is the only bucket pump in the market that is giving entire satisfaction. Good-sized air chambers enables one to maintain a high pressure and continuous spray.

Price, including No. 4 Pump, one 5-gallon heavy wooden bucket, three feet best ¾-inch hose, one spraying lance 18 inches long, one spraying nozzle, $7.00.

To reach the tops of tall trees, you should order, extra, an extension rod. For price of extension rods, see page 105.

No. 6 Hardie Mounted.

OUR SPECIAL OUTFIT NO. 17½.
One No. 5 all-brass pump, mounted on barrel, one 15-foot lead best ¾-inch hose, one 10-foot bamboo extension rod with stopcock and drip guard, one 2-cluster Vermorel nozzle, all complete and ready for work.

Price $21.00; mounted on barrel, $25.00; extra lead of hose, extension and nozzle, $5.00 extra.

OUR SPECIAL OUTFIT NO. 21—(See cut.)
This outfit is designed to meet a long-felt want by the small fruitgrower and gardener. The 30-gallon barrel is mounted on strong wrought-iron wheels, 26 inches in diameter, with 1½-inch tires. No. 5 pump, 5 feet best hose and couplings, 8-foot bamboo rod and leakless stopcock, 1 Vermorel nozzle. Price $22.00

TELL US what amount of spraying you have to do and WE WILL RECOMMEND A RELIABLE OUTFIT, WITH PRICE.
LOWELL FOUNTAIN SPRAYER

The only perfect and satisfactory compressed air sprayer on the market. It’s really a pleasure to operate them.

Every city gardener, florist and poultry keeper needs a Lowell Fountain Sprayer; clean and easy to operate; no need to get any spray on your hands or clothes; will last a lifetime with reasonable care. (Try one at our store.)

Lowell Fountain Compressed Air Sprayer.

Exclusive Points (note the illustration.)—It is devoid of complex or intricate parts, both automatic and positive in its action. One charge of air is sufficient to expel entire contents. Always ready, a few strokes of its plunger starts the continuous spray. No slopping or spilling of the spray. The spray discharge is in the form of a dense fog or mist. There is absolutely no drip and therefore no shield or guards are needed.

Construction.—The heads after being seam-ed and riveted are dipped into molten solder, making it absolutely air-tight and the strongest Air-Pressure Sprayer made—standing five times the air pressure necessary to operate.

Note: can be carried by the handle or the shoulder strap and the automatic controlling valve under the handle is easily operated with one finger. You have perfect control of the spray and don’t waste any.

Saves Its Cost.—This valve and lever will save the cost of the sprayer in making a given amount of solution do so much work. None is wasted. The short crook shown in the cut is used, without the hose when spraying vegetables and small fruits. For reaching the under side of leaves of low bushes, attach the hose and use the vine attachment extension rod. For tree work you can use as many two-foot brass extensions as is necessary to reach the desired height.

Price: (Not prepaid) No. 110, Brass Tank, $7.50; No. 111, Galvanized Tank, $5.00. (P. 12 lbs.)

NOTE.—Can be sent by parcel post, but express is safer.

EXTRAS—2-foot brass extension rods, each 75c; vine attachment, a 2-foot extension with bent neck, $1.00. (P. P. 1 lb.)

NOTE—Any little part can be furnished at any time. If wanted, send for catalog showing parts.

DON’T WAIT until the fungi, such as mildew, rust, black spot, etc., have attacked your roses and trees; the Bordeaux sprays should always be used in the fall or early in the spring before leaves appear, as a preventive.

HAND SPRAYERS OF “MERIT”

NO. 5 CONTINUOUS.—Latest and best continuous hand sprayer on the market. As the name implies, is so constructed that it not only sprays on the downward stroke of plunger, but also when it is drawn back, thus causing a continuous, mist-like spray, enabling one to spray three times as fast and with one-third the labor. Positive in its action and practically indestructible. Length 20 inches; capacity, one quart. (P. P. weight, 2 lbs.) Each: tin, 75c; galvanized, $1.00; brass, $1.50. (Add postage.)

NO. 7 PERFECT.—Capacity, one quart. The special arrangement of the spraying tube is such that it thoroughly breaks up or atomizes all oils and solutions into a fine mist-like spray which penetrates all cracks and crevices. Adapted for all kinds of general spraying and is used very extensively for spraying disinfectants, etc. Length 20 inches. (P. P. weight, 2 lbs.) Each, 50c.

NO. 6 PERFECT.—Practically the same as No. 7, except the reservoir is put on crossways. Preferred by some. (P. P. weight, 2 lbs.) Each, 50c.

NO. 3 GLASS TANK.—Well constructed, the glass reservoir which is a quart Mason jar is not affected by any kind of spray. You can have several jars of different sprays (already prepared) and when you wish to change, take out one and put in another. No delay. Extra long air chamber, special plunger and throws a strong, fine spray in any direction. (P. P. 3 lbs.) Each, (not prepaid), $1.00.
Spray Pumps—Continued

NEW NO. 32 BUCKET PUMP.—Made entirely of brass. Has bulb shaped air chamber at top of cylinder, which is also made of brass, and causes the pump to be operated with ease, and discharge a continuous steady spray. Furnished with three feet of heavy best quality rubber hose, (detachable), three nozzles, one fine and one coarse, for spraying; also a fire nozzle for fire protection. This Pump will throw a solid stream fifty feet. Often used for washing wagons, windows, etc.

Price, all complete, $3.50. (P. P. 7 lbs.)

O. K. BRASS BUCKET PUMP.—(See cut.)—Constructed entirely of brass. It is furnished with three feet of best quality rubber hose, detachable; malleable iron stirrup, three interchangeable brass nozzles which throw a continuous fine mist, coarse spray or a solid stream. Pump is provided with large air chamber, with brass ball valves and valve seats. Neat in appearance as well as durable in construction. Much superior to pumps of this class offered heretofore. Look at illustration carefully. (P. P. 7 lbs.) Price $2.75.

O. K. Bucket Pump.

Powder Sprayers, Blowers and Dusters

These are used for applying Sulphur, Bug Death, Dry Bordeaux or insect powder of any kind.

No. 32 Bucket Pump.

LOWELL POWDER GUN (See cut.)—Heavy tin. Finished in aluminum. We give a positive guarantee with each sprayer that it is impossible to draw powder back into the cylinder pump, and if the powder is sifted through a screen and kept absolutely dry it will not clog and throw a fine cloud of powder. The powder can holds one quart. (P. P. 2½ lbs.) Price 90c

Lowell Powder Gun.

DEFENDER.
10c; postpaid 15c

JUMBO.
Larger, Better.
25c; postpaid 30c

DICKY BUG DEATH DUSTER.—For using when applying Lime, Dust or Powder of any kind. For use on small gardens this is very handy. Saves powder, puts it on evenly and just where you want it. (P. P. ½ lb.) Each 35c

ACRE AN HOUR DUSTER OR SIFTER.—Bucket shaped, straight sides, made of heavy tin, good handle, holds 5 lbs. powder. A simple twist of the wrist does the work. As its name implies, you can cover an acre of plants an hour. (P. P. 2 lbs.) Each 55c

SPRAY AND GARDEN HOSE

XXX GRADE (Non-kinkable).—Guaranteed. This hose gives excellent satisfaction. Good enough for any ordinary spraying outfit, and by far the best hose for florists' or gardeners' use. One customer reports that he used a 50-foot length of this grade for 3 seasons continuously, which proves that it is the cheapest hose to buy. We have this on 500-foot reels, and cut any length wanted.

Price, ½ in. 15c; ¼ in. 18c

SPECIAL SPRAY HOSE.—The highest grade extra heavy spray hose made; guaranteed.

Price, ½ in. only, 20c ft.

TROUT COTTON HOSE.—Makes an excellent garden hose for those preferring cotton on account of lightness. Made of 4-ply canvas with a good, thick, rubber lining. Price in 50-ft. lengths only, coupled, ½ in. $4.50; ¼ in. $3.50

We offer new stock only of high-grade hose for spray pumps and garden purposes. We advise our customers to buy the best. It is cheapest in the end. Don't buy old stock.
Our Motto—"Highest Quality" Seeds, Bulbs, Plants and Supplies

NOZZLES, SPRINKLERS, RODS, EXTRAS, ETC.

**Fountain Sprinkler.**

Don’t waste time holding the hose nozzle—use lawn sprinklers, and change positions as often as necessary.

**Fluvius Lawn Sprinkler** (see cut below)  
*(F. P. 4 lbs.)* Each $1.35

**Monarch or Midget**—Same style as above, only lower.  
*(F. P. 2½ lbs.)* Each $1.15

**Busy Lawn Sprinkler** (see cut below).—Very desirable for medium sized yards.  
*(F. P. 3 lbs.)* Each $1.00

**Fountain Sprinkler** (See cut).—All brass. Small 75c, postpaid 85c; large $1.00, postpaid $1.10.

**Half Circle** (See cut).—All brass, sprays half circle.  
*Each 50c, postpaid 60c*

**Little Wonder** (see cut No. '37).—Excellent in small yards. Covers 20 feet.  
*(F. P. 1 lb.)*  
*Each 40c*

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**Bordeaux Spray Nozzle**

**HARDIE BAMBOO EXTENSIONS**

These have seamless aluminum tubing, leakless stopcock, drip guard, lance and brass connections at each end. (Not mailable.)

**Price**  
6-ft. $2.25; 8-ft. $3.50; 10-ft. $2.75; 12-ft. $3.00. These are the lightest and best Extension Rods ever offered, and well worth the difference in price.

**EXTENSION RODS—Ordinary**

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<thead>
<tr>
<th>Size</th>
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<tr>
<td>6-foot</td>
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<td>12-foot</td>
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**Bamboo Extension with “Lance” Attached**

**SPRAY PUMP NOZZLES**

**Single Bordeaux** (Best for Whitewash) $0.75

**Single Vermorel** (Very fine spray) $0.75

**Two-Cluster Vermorel** 1.50

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**No. 31—Diamond Nozzle.**—Best for sprinkling; adjustable from solid stream to a fine spray.  
*(F. P. ½ lb.)* Each 40c

**Mist Nozzle** (See cut).—All brass, very fine, full, mist-like spray.  
*Each 25c, postpaid 30c*

**No. 38—Wire Hose Straps.**—Good, but cheap. Postpaid, ½ in. or ¾ in. each 3c; doz. 25c

**No. 41—Dandy Hose Mender.**—Best mender made, simple and quick; nothing to catch; sure to hold.  
Postpaid, ½ in. 20c; ¾ in. 25c

**No. 43—Wire Hose Pliers.** (F. P. 12 oz.)  
*Each 25c*

**No. 40—Hose Connections.** Both male and female couplings.  
½ in. or ¾ in. pair 25c (6 oz.)

**Hose Washers.**  
*Dozen 10c postpaid*

**No. 45—Brass Mender Tubes.**—Very handy.  
½ in. or ¾ in. each 5c; dozen 50c postpaid

**No. 42—Hose Clamps.** Single band.  
½ in. or ¾ in. each 5c; dozen 50c postpaid

**No. 44—Hose Clamps.** Double band.  
½ in. or ¾ in. each 10c; doz. $1.00 postpaid

BEAUTIFUL ANNUAL FLOWERS—See our Special Collection Offer, page 46.
SPRAYS, INSECTICIDES, ETC.

The best and most economical method of spraying is with an automatic sprayer, which forces the liquid out under air pressure, producing a very fine spray or mist and enables one to spray the top as well as the underside of the leaves, where the insects are always found, this being the most tender part of the plant to feed upon.

DIPPING OF POTTED PLANTS.—Place a cloth over the top of pot to keep in the earth and then invert and immerse the plant in the dipping bath prepared.

ARSENATE OF LEAD (Paste Form).—For spraying trees and shrubs against the attacks of leaf-biting or leaf-eating insects of all kinds, such as green worms, slugs, etc., that appear on plants, shrubs or trees. Especially valuable for spraying to prevent the codling moth on Apple and Pear, and should be used just before the catlyx cups close, for eating insects, whenever they appear. It comes in paste form and is diluted in water at the rate of about 1 oz. to a gallon of water. Full directions on each package. (Not mailable.)

Price, 1 lb. jar, 25c; 2 lb. 45c; 5 lbs. $1.00; 10 lbs. $1.50.

S.W. DRY POWDERED ARSENATE OF LEAD.—Claimed by those who have tested it to be better in many ways than the paste. Easier to mix and requires much less. Use 1 lb. to 50 gallons. This is mailable.

Price, 1 lb. 40c; 2 lbs. 75c; 5 lbs. $1.75; 10 lbs. $3.00; postage extra. Quantity price on request.

Bordeaux

Very effective in preventing and checking all fungous diseases, such as blight, black spot, rust and mildew, on trees and shrubs, and scab on Apples and Pears.

QUICK BORDEAUX MATERIAL (“Target Brand,” powder form).—The best Bordeaux on the market. All ready to mix with water at the rate of 1 pound to 10 gallons of water for winter; use 1 to 20 for summer. It is an excellent idea to sprinkle this powder under small bushes to prevent mildew. Per lb. 30c; 5 lbs. $1.25; 10 lbs. $2.00 (mailable).

Bordeaux Mixture.—(Liquid)

Directions.—Winter strength 1 to 50, summer or when leaves are on the bushes 1 to 100.

Price, Qt. 60c; gal. $1.25 (Not mailable).

BLACK LEAF "40."—A concentrated solution of nicotine sulphate containing 40 per cent nicotine. Indorsed by the foremost experts of the U. S. for curd leaf, green and woolly aphids, trip, plant lice, codling moth, pear psylla and all leaf-eating insects. Descriptive pamphlet on request.

Prices—1 oz. can 25c, postpaid 30c; ½ lb. can 75c (P. P. 1 lb.), makes 47 gals. spray; 2 lb. can, $2.50, makes 240 gals. spray; 10 lb. can, $10.75, makes 1000 gals. spray. (1 oz. and ½ lbs. cans only, mailable.)

NOTE.—Whale oil soap used in this solution makes it more lasting, as it sticks better. Use 4 lbs. to 50 gals. solution.

Full and detailed instructions with each can.

LILLY’S SOLUBLE SULPHUR COMPOUND

This is the famous Niagara Sulphur Spray in dry form, now manufactured on the Pacific Coast under label “Lilly’s.” Successfully used three years. No sediment, no crystallization, no heavy barrel to handle. Dissolves readily in cold water. Always ready for instant use. Used the same way and for the same purpose as Lime-Sulphur Solution. It should be used on all fruit trees and shrubs in spring as a scale control and general clean up, later for Scab and Fungus. Use at the rate of 10 pounds to 50 gallons of water for winter or spring spray. This is the cheapest and best spray.

Descriptive 4 page pamphlet free.

100 lb. drum, f.o. b. Portland. $7.50
10 lb. cans (P. P. weight 1½ lbs.). 1.25
1 lb. can (P. P. weight 1½ lbs.). .20

LIME AND SULPHUR SOLUTION.—Known and used everywhere, is one of the best sprays for San Jose scale. Our liquid is properly prepared and all ready to mix just as you get it. Add 8 gallons of water to each gallon of the Lime and Sulphur Solution. Beware of cheap mixtures. We offer only “Highest Quality.” (Not mailable.)

Price: Qt. 25c; gal. 50c; 5 gal. $1.75; 10 gal. $3.50. Write for price per barrel.

SCALE DESTROYER (“Target Brand”).—An oil spray of decided merit for San Jose scale and scale advantages over Lime and Sulphur Solution. Being a soluble oil spray it spreads more readily, getting into every little crevice. Will go twice as far making it as cheap. Has no bad odor and does not discolor foliage, and is much easier and more agreeable to apply. Now used very extensively in the East. Use one gallon to 20 of water, after the leaves are off and up to time buds appear. For summer spray use one gallon to 100 gallons of water. (Not mailable.)

Price: Pt. 25c; qt. 35c; gal. $1.00; 5 gals. $3.75; 10 gals. $7.50. Write for price per barrel.

SEE THE INEXPENSIVE HAND SPRAYERS on page 103, prepaid FOR ONLY 50c.
SULPEO-TOBACCO SOAP
For spraying or sponging or dipping ferns, palms or potted plants, or spraying roses, shrubs, trees or vines it is invaluable. Kills Aphids, Red Spider, Plant Lice and Sucking Insects. Acts quickly and effectively against these pests, at the same time it is a fertilizer and revives plant life. Will not injure the tenderest plant. Two ounces of soap make a gallon of solution. Non-poisonous, perfectly safe and yet very efficient.
Price: Postpaid, 3 oz. bar 15c; 8 oz. bar 25c.

ROSE NICOTINE
An effective and concentrated spray material to be diluted with water and applied as a spray or bath as directed. For Lice, Aphids, etc., on plants, flies or lice on animals, bed bugs, etc. When diluted Rose Nicotine is colorless odorless and stainless.
Price: 25c can, prepaid 30c; 50c can, prepaid 60c; pt can, $1.50, prepaid $1.75. Full directions on each can.

BUG DEATH (Non-poisonous).—A most effective powder that kills the bugs, cumber and cabbage bugs, currant worm and all bugs and worms that injure the leaves of plants and vines. Bug Death is a wonderful protection against insects. Absolutely non-injurious. Contains no arsenic. Kills the bugs, prevents blight, revives and aids the healthy growth of plants and shrubs. Does the work as nothing else will. You can't afford to be without it. Bug Death is generally applied dry, but is very effective when mixed with water and sprayed. Use 1 pound to 2 gallons water.
Price: 1 lb. cans with perforated shaker tops, 25c; 3 lbs. 50c; 5 lbs. 75c; 10 lbs. $1.25; 25 lbs. at 12c lb.; 100 lb. bags, $10.00. Add postage.

Send for pamphlet, "Bug Death," which gives full information.

BLUE LABEL SLUG DESTROYER.—This is the first powder of its kind that we ever found to positively kill slugs and keeps them away from young plants. Full directions on each package.
Price. 1 ½ lb. pkg. 25c. (P. F. 2 lbs.)

POTASSIUM SULPHIDE.—(Liver of Sulphur.) One of the best preventives of mildew on roses and berry bushes. Dissolve ⅛ ounce in one gallon of hot water. When cold apply as a spray.
Price: 1 oz. 10c; 4 oz. 25c; 1 lb. can, 60c

GRATTING WAX. ½-lb. 10c; lb. 35c

WHALE OIL SOAP.—For aphids, plant lice, etc. Best grade. 1 lb. 10c; 10 lbs. 85c; 100 lbs market price

SULPHUR POWDER. Lb. 10c; 100 lbs. market price

SULPHUR CANDLES.
Each 10c postpaid 15c; 3 for 25c

TO-BAK-INE
The strongest and most highly refined nicotine product offered for spraying, vaporizing and fumigation in Green Houses. Our Florists like TO-BAK-INE better than other similar preparations, such as Nicotine, Nico-Fume, etc., because it is safe and less expensive.

TO-BAK-INE Liquid for spraying or vaporizing. ½ pint, 75c; 1/2 pint, $1.35; 1 pint, $2.50; gal. $17.50 (not mailable).

TO-BAK-INE Fumigating Paper.—Quick, safe and effective. Price, per can of 24 sheets: $1.00; 6 cans (144 sheets) $4.50, mailable; weight per can 1 ½ lbs. (Add postage.)

SURE, DEATH TO Gophers, Squirrels, Prairie Dogs, Rabbits, Rats and Mice.
No more use for traps. Guaranteed to do the work or your money back.
The only prepared poison that will get a gopher. The government advises poisoning as the most effective and best method of exterminating ground pests. Gophergo is a combination that never fails. They are sure to get it, they like it and they eat it. Gophergo has been tested and endorsed by many state experiment stations. If farmers and gardeners would carry a small can of Gophergo when walking around their places and leave a few pellets where "signs" are discovered the pests will soon disappear. Full directions on each can.
Price: 10 oz. can 25c; 1½ lb. can 50c; 3½ lb. can $1.00. (Add postage.)

TOBACCO DUST.—Valuable as an insecticide and fertilizer. Better as a mulch than the stems. Lb. 10c; 10 lbs. 75c

RatBis-Kit Paste
The new poison in the tube
Kills Rats, Mice and Roaches Instantly
A New Formula, Guaranteed to kill every time or money refunded. No mixing, no spreading—just press the tube—the paste will spread itself. Clean, simple and sure, lies on any kind of bait. Keeps indefinitely. Price 25¢ per tube; f 1 v for $1, postpaid.

OUR MOTTO—"Highest Quality" Seeds, Bulbs, Plants and Supplies
Miscellaneous Tools That Every Gardener Needs

**DANDY-LION WEED KILLER**

A new, simple, yet practical tool that is automatic, quick and sure in its work. Cutting or pulling off the tops of weeds only makes the roots grow more vigorously; digging them out with a knife gives one the backache or lame knees, therefore use the "Dandy-Lion" same as a cane.

The amount of solution deposited can be regulated. Spring, valve and base removable. **Price, No. 1, Brass Covered, $1.00; No. 2, Solid Brass, $1.50. P. P. Weight 3 lbs. (Add postage.)**

**"ALCA" GARDEN TOOL**

Best all-around garden tool made. This remarkable combination tool is a trowel, fork, hoe, weeder and dibble—all in one. A spring releases the particular tool you desire. Light but strong and handles nicely. (15 inches long—see cut). **Price 50c, postpaid 60c**

**WEEDERS**

| No. 2—EXCELSIOR—Five Jawed (P. P. 1 1/2 lb.) | $0.15 |
| 3—LANGS—Very handy (P. P. 1 1/2 lb.) | .20c |
| 4—DIAMOND—Very popular (P. P. 1 lb.) | .20c |
| 5—FORK—Fine (P. P. 1 1/4 lb.) | .15c |

**GRASS SHEARS**

| No. 6—B B A—6 1/4-inch; high grade; best on the market (P. P. 1 1/4 lbs.) | $1.00 |
| 7—6 1/4-inch blade; good value (P. P. 1 lb.) | .40c |

**TROWELS**

| No. 9—6-inch steel blade (P. P. 1 lb.) | .35c |
| 10—Very strong all steel; 6-inch (P. P. 1 lb.) | .50c |
| 11—Same grade as No. 10 but has a 5-inch blade (P. P. 1 lb.) | .40c |
| 12—Best low-priced; 6-inch blade (P. P. 1 lb.) | .15c |
| 13—MAYNARD—6-inch steel blade and shank; highest grade made. (P. P. 1 lb.) | .60c |

**HALL DANDELION PULLER**

Here is a tool that gets the dandelion roots and all, and operator stands up. No wet knees or aching back. Just push the blade down in the ground close to the weed, press towards the weed and pull up. A patent hook near point of blade does the trick. A slot prevents dirt from clogging the hook. Is made of polished steel and will last a lifetime. Handle 36 inches long, steel part 6 inches (See cut). **Price 50c. (P. P. 1 lb.)**

At work with a Hall Dandelion Puller. Easy on the back and really a pleasure.

---

Other Tools

**REMEMBER**—We keep in stock a large assortment of PRUNING SHEARS, SAWS AND KNIVES, BUDDING AND GRAFTING KNIVES, BRANCH SHEARS, GARDEN FORKS, RAKES, SPADES, HOES, ETC. Our illustrated and priced pamphlet on request.
Garden or Rose Stakes

CEDAR.—Round; painted green, white top; last and look well. Per doz., 3 ft. 75c; 3 1/2 ft. 80c; 4 ft. 85c; 5 ft. $1.25; 6 ft. $1.75; 8 ft. $2.25.

BAMBOO.—Inexpensive and very desirable for pole beans, etc., or flowering plants or shrubs.

NOTE.—State for what purpose you want them, as we have them from pencil thickness (1/4-inch) up to 1 1/4 inch.

Price per dozen: 1 1/2-ft. 10c; 2-ft. 15c; 3-ft. 20c; 4-ft. 25c; 5-ft. 30c; 6-ft. 50c; 8-ft. 75c. Write for low price by the 100 or 1000.

Sprinklers

SPRINKLING CANS.—Regular style; strong and well made.

4qt. 30c; 6 qt. 40c; 8 qt. 50c; 10 qt. 60c; 12 qt. 75c.

ENGLISH.—Imported, for florists, price on request.

Labels

The tree and pot labels we offer below are strictly No. 1 labels, smooth and well wired. The painted labels are "really painted," not dipped in oil. Ordinary lead pencil writing on the painted labels is always readable; it don’t wash off.

TREE LABELS. (P. F. 4 lbs.)

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POT AND GARDEN LABELS

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Hall’s E-Z Garden Cultivator

Just the right size and the right price for the average garden maker. Everyone who makes much garden should have one, as it reduces the labor one-half. Makes gardening a pleasure.

A combination tool for all kinds of garden work. Does away with the tiresome hand hoeing, weeding, etc.

Equipment consists of a Plow, a Bake for harrowing, a Weeder, a Diamond Point or Bull Tongue, for cultivating between narrow rows.

The patent spring device as shown in cut between the handle and tool is an exclusive feature of the Hall Cultivator. It causes the tool to run even and steady without jar on the arms.

The handle can be adjusted to correct height for a child or tallest man. Power is applied direct to axle, making it easy running.

SIXTEEN-INCH WHEEL. Note the narrow, compact build of this tool, enabling one to use it between narrow rows and close up to the plants. Can be taken apart and sent by parcel post. (P. F. weight packed 14 lbs.) Price, complete, $3.50.

EXTRAS.—3 Prong Cultivator attachment, (P. F. 1 1/4 lbs.), 50c; 5 Prong, (P. F. 1 1/4 lbs.), 75c.

Cahoon Broadcast Seeder

The standard broadcast seed sower, made of steel, iron and brass, will last a lifetime. Has force feed. Every farmer should have one, as it sows perfectly any kind of seed or grain. Full instructions with each machine.

Price $2.50

With a Garden Cultivator you can cultivate your whole garden in the time it would take you to hoe a few rows.
DAD’S ELECTRIC LANTERN.

The Light of All Lights

These are a little out of our line, but of great merit and of such value to the majority of our customers that we have decided to stock them.

Dad’s Electric Lantern is a full-sized search-light lantern. It stands 7 ½ inches tall, 5 ½ inches wide, 2 ½ inches thick, excluding the projecting ball, headlight and handle. It’s the most wonderful light ever invented for all general purposes. It’s in a class entirely by itself and should not be confused with flash-lights or so-called electric lanterns using one cell.

The dry cell container, or body, is so constructed that there is no possible chance for prematurely “run-down” cells, short circuits, etc.

Dad’s Electric Lantern uses two ordinary standard 6-inch dry cells (or batteries), obtainable from us by parcel post or any Electric, Hardware or Gun Store, or any General Merchandise Store in any city or small village.

THE LIGHT OF ALL LIGHTS—WIND, RAIN AND WEATHER PROOF

No. 1 General Purpose.

THE LIGHT FOR A THOUSAND USES

DAD’S GENERAL PURPOSE PORTABLE LANTERN (See cut)—A wide angle real light, that you can work by, in the barn, woodshed, cellar, garage, house, sick room, etc., etc. Light is turned on or off in a second—no matches to scratch or danger from fire. If placed to one side of a living room or work shop, it will light brilliantly the three walls and floor. Can be set down or carried by the bail or handle on the back. Ideal for Hunters, Fishermen, Campers and Travelers.

Can be fastened to any vehicle or motor by using one of Dad’s Adjustable Holder Brackets.

SPECIAL VEHICLE LANTERN (See Cut)—Excellent for use on Bicycles, Buggies, Motorcycles, Wagons, Boats or Automobiles, easily and quickly attached. The regular Diffusing Reflector will throw an even, bright light over a wide circle and for a great distance, while the Search Light Reflector throws a powerful, illuminating, brilliant light 300 feet or more.

Send for descriptive circular giving full illustrations and information.

Price List of Dad’s Electric Lanterns and Extras

Dad’s No. 1 General Purpose Lantern, without dry cells $3.00 (mailing weight 2 ½ lbs.); complete with 2 dry cells $3.25 (mailing weight 7 lbs.)—add postage if wanted by parcel post. (Get dry cells at your store and save postage.)

Dad’s Special Vehicle Lantern, Style No. 14, is ½ lb. heavier and costs 50c more than Dad’s No. 1.

Dad’s Adjustable Holder Bracket, Style 40, for holding No. 1 Lantern on Vehicles, etc., $1.00 (weight 2 ½ lbs.)—add postage if wanted by parcel post.

Extra Search-Light Reflectors each 50c, postpaid 60c.

Extra Lens (White or Red), each 25c, postpaid 30c.

Extra Electric Tungsten Bulb, each 30c, postpaid 35c.

Dry Cell Batteries (weight 2 ½ lbs.), 35c to 50c each.

Descriptive Pamphlet giving full information and illustrations on request.

Planet Jr. Hand and Horse Seeders and Cultivators.

Now used and recognized the world over as the most practical, best constructed and most useful time, labor and money saving implements on the market today. Every gardener large or small should investigate the latest models, which are priced very low. Space in this catalog will not permit us to tell you all about these tools, but we will gladly send Planet Jr. 64-page 1916 Catalog and Price List free on request.

Combined Hill and Drill Seeders from $3.25 Single and Double Wheel Cultivators from $4.25 to $10.00.

REMEMBER—A request on post card will bring the handsome Planet Jr. illustrated, descriptive and priced catalog.
Our Motto—"Highest Quality" Seeds, Bulbs, Plants and Supplies

We are devoting the following pages of this catalog to incubators, brooders, poultry supplies of all kinds, poultry food, remedies and insecticides, etc., and are offering you what we believe to be the best line of poultry supplies in the West. We have practically everything needed and used in the profitable rearing and keeping of poultry.

OUR MOTTO, "Quality first—price as low as we can make it," will be strictly adhered to in this department, as well as in our other stocks.

WE ARE AUTHORIZED AGENTS FOR CYPHERS COMPANY INCUBATORS

MADE IN THREE STYLES—EIGHT DIFFERENT SIZES

For the season of 1916 we offer our customers the Cyphers Incubator Company's complete line of incubators. These three styles of high-class, guaranteed hatching machines, running through eight different sizes, represent all that is efficient, convenient and reliable in incubator construction. In buying a Cyphers Company Incubator you take no chances.

READ THIS: For 5 years we have sold Cyphers' Incubators and Brooders and have had no complaints. Every buyer has been fully satisfied as far as we know. This is a record that could not have been made with any other line. WE KNOW—"We've been there"—the writer having sold in his 20 years experience on this Coast every well known make.

Standard Cypher's Incubators

The CYPHERS' INCUBATOR is known as the "business incubator of the age." It has WON IT'S WAY in all parts of the world because it gives the BEST RESULTS. It is used on more Government Agricultural Experiment Stations, on more Large Practical Poultry Plants, on more successful Egg Farms, and by more prominent Poultry Fanciers than all other makes combined. It hatches a LARGER PERCENTAGE of the eggs entrusted to it and produces LARGER, STRONGER, HEALTHIER and more VIGOROUS chicks and ducklings than any other Incubator ever built. This is the CYPHERS guaranty!

CYPHERS INCUBATORS are built to hatch and to last. With proper care—the same care you would give a valuable piece of household furniture—a Standard Cyphers will last an ordinary lifetime. They are guaranteed by us to last ten years without repairs. We make this guarantee because they have lasted much longer than this—and are still doing first-class work.

These are machines that for nineteen years have been recognized as the "standard hatchers of the world." Tens upon tens of thousands of them have been sold and are in successful use in every civilized country on the globe. They are the last word to date in incubator building, not a penny being spared anywhere in their construction to make sure of their doing satisfactory work in all climes, under widely different conditions, in the hands of all sorts of people.

PRICES AND SIZES

Built in four popular sizes and at prices as follows: 70 eggs, price complete, $16.50; 140 eggs, price complete, $24.50; 244 eggs, price complete, $32.50; 390-400 eggs, price complete, $42.50. Satisfaction, or your money back.

FREE IF INTERESTED—If you want to know more about Cypher's Incubators and Brooders we will gladly mail copy of Cypher's 1916 Catalog free.
CYPHER'S COMPANY INCUBATORS—Con't.

Columbia Hot Air Incubators

Are built to meet the widespread demand for large capacity, lamp-heated machines that can be sold at surprisingly low prices and yet be guaranteed to do high-class work. Have wooden cases, attractively finished in dark green, with brass trimmings and double walls. Seamless-bottom lamp bowls, best quality brass burners, zinc and steel Standard Cypher's toggle-joint thermostat and same regulating equipment as used on highest priced machines. Fume-proof, forced draft heater, asbestos covered and metal banded. Automatic in ventilation and embodies diffusive principle. Roomy chick nursery under egg trays.

PRICES AND SIZES

Are made in two sizes: 140 EGGS, price complete, $17.50; 250 EGGS, price complete, $24.00. Fully guaranteed.

Superior Hot Water Incubators

These machines are exactly what the name says. They are heated by hot water, instead of with hot air, and are "superior" in every detail. The water boiler and tank (tubular) are of heavy-weight copper. Lamp has seamless bowl; burner is best on market. Incubator case is of wood, attractively finished in golden brown, with brass trimmings (hinges, buttons, etc.) and has double walls, with air space insulation. Are equipped with Standard Cypher's zinc and steel toggle-joint thermostat and knife-edge regulator. Have forced water circulation and are automatic in ventilation. Roomy chick nurseries.

PRICES AND SIZES

Are built in two sizes: 65 EGGS, price complete, $12.75; 130 EGGS, price complete, $17.50. Fully guaranteed.

Cypher's Electric Incubators and Hovers

The use of electricity in hatching and brooding has several advantages over the usual methods. Convenience in operation and saving in labor are important items, while absence of fumes and gases allows of locating the apparatus wherever most convenient. Regulation is simple and accurate, and is electrically controlled. Heat distribution by this method is very uniform.

The use of both the Electroator and Electrohover is very simple and easy. Poultry keepers will find the help of electricity reliable, economical and extra convenient.

CYPHER'S ELECTROATOR. Made in two sizes, finely finished, quarter sawed oak cases. No. 1 Electroator, capacity 60 hen eggs, price $19.00. No. 2 Electroator, capacity 120 hen eggs, price $25.50.

CYPHER'S ELECTROHOVER. Is both portable and adaptable. Can be used anywhere, just as shown in picture, provided the room temperature does not go below freezing. In colder temperature—and to save waste of heat—should be enclosed or encased. Is electrically-heated, noncombustible, self-regulating and bears the Fire Underwriters' 'Inspected Brooder' label as a separate device. Capacity 15 newly hatched chicks. Price $12.00.
Cypher’s Portable Hover

The Cypher’s Portable Hover is self-regulating and self-ventilating and one of the best brooding devices of the kind on the market. As it is equipped with the same high-grade thermostat as the Cypher’s Incubators and the Cypher’s Adaptable Hover, it maintains a steady and uniform heat. It is positively and infallibly automatic in ventilation, preventing the trapping of “dead” air or poisonous gases underneath the curtain. A continuous supply of fresh, warmed air is automatically forced beneath the hover.

This Portable Hover is very convenient for cleaning and moving. Rated capacity, 75 newly hatched chicks, or 50 chicks that are ten days to six weeks old. Price $10.00.

Cypher’s Adaptable Hover

This hover is used in all Standard Cypher’s Brooders, but is also complete in itself and is intended to be used separately in brooding houses, colony coops, portable houses and in home-made brood coops. Is self-regulating, self-ventilating and bears the Underwriters’ Inspected Brooder Label. Capacity, 75 newly hatched chicks. Price $10.00.

Standard Cypher’s Brooders

The Standard Cypher’s Brooders are fire-proofed and insurable, and are the most durable, convenient and efficient brooders thus far invented. They are equipped with Cypher’s Adaptable Hover, which is Self-ventilating and Self-regulating—you can therefore depend upon an even, steady temperature in the hover, and a lively, thrifty, growing lot of chicks.

**STYLE B OUTDOOR BROODER.**

The best “Foster Mother” made and sold at any price and thousands are in use. (See cut.)

Dimensions.—Floor space, 32x62 inches; height, 32 inches in front, 24 inches in rear. Capacity (normal), one hundred newly-hatched chicks; can accommodate one hundred and fifty chicks. Price $20.00.

**STYLE “A” OUTDOOR BROODER.**

One of the best sellers on account of the lower price. Same size, design and construction as the first section (left end half) of Style “B.” Anyone who is handy with tools can build and join on another apartment for a “feeding and exercising room” to be used when the weather is bad. Capacity, 100 baby chicks. Price, $16.00.

**STYLE “D” INDOOR BROODER.**

This is the same in all respects as the Style A outdoor type, except that the upper half is more convenient in shape and construction for indoor use. Size, about 3 ft. square. Can be used anywhere, just so it is under a roof. Price, $15.00.

The best indoor brooding device for newly hatched chicks and ducklings. Complete brooder has four sections, each section holding two separate flocks of 50 chicks. Total capacity 400 chicks. Means for feeding and caring for chicks are very convenient and chicks are always under control of the operator. One large oil heater provides warmth. Chicks have proper heat, light, ventilation, fresh water and room for exercise. (See illustration.)

Price, Base Section, $27.50. Additional sections (can be added as desired), each $18.00.

Coal Burning Colony Hover

The latest development in the brooding of chicks. Will brood from 300 to 1,000 chicks in one flock. Descriptive pamphlet on request.

Cypher’s Style “B” Three Compartment 1916 Outdoor Brooder. Four Section Paradise Brooder.
BUCKEYE HOT WATER INCUBATORS

It is no longer a wonderful feat to build an incubator that will hatch some chickens from some eggs, but the truly successful incubator must hatch a chicken from every hatchable egg.

OLD STYLE

BUCKEYE HOT WATER SELF-REGULATING INCUBATORS.—One of the best hot water incubators on the market. We have sold them for the last 4 years with great success.

For twenty-two years Buckeye Incubators have been sold with a guarantee to hatch every hatchable egg.

The Buckeye is so simple that a boy or girl can operate it. That's the secret of its wonderful success.

TO CLOSE OUT

BARGAINS.—We have only a few of the following models that we offer very low; bought before the raise in metal and change in style. Order quick—they will not last long.

Style A (short legs, see cut) 60 eggs...$10.00
Style C (short legs) 50-egg............. 7.50
No. 4 (tall legs, old style), 350-egg... 32.50

Style A, (short legs) 60-Egg Buckeye.

BUCKEYE HOT WATER, SELF-REGULATING BROODERS.—Well made and properly constructed. Equipped with automatic heat regulator and overhead hot water tank. Outdoor Styles, Nos. 2 and 4, will operate outside in any kind of weather. (See cut.) Indoor Styles, Nos. 1 and 3, should be kept under cover. (See cut.)

CUT PRICES FOR 1916

<table>
<thead>
<tr>
<th>No.</th>
<th>Style</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. 1</td>
<td>50 chick, size 20x20 inches</td>
<td>$6.00</td>
</tr>
<tr>
<td>No. 2</td>
<td>50 chick, size 20x44 inches</td>
<td>8.50</td>
</tr>
<tr>
<td>No. 3</td>
<td>100 chick, size 26x26 inches</td>
<td>7.50</td>
</tr>
<tr>
<td>No. 4</td>
<td>100 chick, size 26x52 inches</td>
<td>11.00</td>
</tr>
</tbody>
</table>

Late 1916 Model Buckeye

These guaranteed incubators are built and equipped with every desirable device, to add to their duration, efficiency and safety.

The 1916 Model Standard Buckeye Incubator

GUARANTEED

"To Hatch Every Hatchable Egg"

They are so simple they can't go wrong. The most wonderful hatching device in the world.

SOLD ON FORTY DAYS' TRIAL.

Made in six sizes, from 60 egg to 600 eggs and priced more moderately than any other first class incubator.

NOTE THESE LOW PRICES.

<table>
<thead>
<tr>
<th>Number</th>
<th>Capacity</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. 15</td>
<td>60 Hen Eggs</td>
<td>$11.00</td>
</tr>
<tr>
<td>No. 60</td>
<td>60 Hen Eggs</td>
<td>14.50</td>
</tr>
<tr>
<td>No. 1 Standard</td>
<td>110 Hen Eggs</td>
<td>19.00</td>
</tr>
<tr>
<td>No. 2 Standard</td>
<td>175 Hen Eggs</td>
<td>24.75</td>
</tr>
<tr>
<td>No. 3 Standard</td>
<td>250 Hen Eggs</td>
<td>31.50</td>
</tr>
<tr>
<td>No. 4 Standard</td>
<td>350 Hen Eggs</td>
<td>37.00</td>
</tr>
<tr>
<td>No. 5 Standard</td>
<td>600 Hen Eggs</td>
<td>55.00</td>
</tr>
</tbody>
</table>

NOW—if you are interested in these new model, guaranteed hatchingers, won't you drop up a postal asking for complete 1916 Buckeye Catalog, nicely illustrated and gives full information and reports.

REMEMBER—We are so sure of these new models that they are sold on 40 Days' Trial and You are the Judge.

Buckeye Style No. 2 and No. 4 Outdoor, 2 Compartment Self-Regulating Brooders.

BUCKEYE Style, No. 1 and No. 3 Indoor Self-Regulating Brooder.

Keep your Hens LAYING. Use a BUCKEYE OUTFIT to HATCH AND BROOD your chicks; save time, worry and trouble.
International Sanitary Hover

A successful, economical brooding device. Note the illustrations showing parts and general construction, the simplicity and perfection. We highly recommend it after thorough testing the last three seasons. Baby chicks will leave any other hover to go under this one, they "take to it" like "sweet sixteen to candy."

INTERNATIONAL HOVERS are as practical for the small backyard poultry raiser as for large poultry plants. They are usable anywhere, ready for business wherever placed. All that is necessary is to place the Hover where you want it and light the lamp, or cutting of holes or building of platforms; no kneeling in mud and dust to get at the lamp.

Special Feature.

IT IS THE WARMEST NEAR THE CURTAIN.—This causes chicks to distribute themselves around the edge of the curtain, where they have plenty of room and fresh air as well as warmth. No deaths by crowding of the chicks to the center.

IT IS ESPECIALLY SUITABLE for use in colony or brooder houses; but it can be used with equally good results in a hen house, tent, barn, stable, piano box, or even a dry goods box. It can be picked up and carried around with ease.

The International Sanitary Hover provides 200 square inches more of hovering space than any other. Gases and fumes from the lamp cannot get under the hover.

This hover is constructed of heavy galvanized iron and is sanitary, warm and fire-proof. Will last a lifetime, and give perfect brooding service every day of that time. It is only necessary to lift the thermometer to ascertain the temperature under the hover.

BEST BY TEST.—Many tell us that they raise 94, 96, 98 and some even 100 per cent of the baby chicks put under this hover. It has many advantages that the old hen does not have, always warm and ready to "brood" the chicks; "no lice or big feet."

The air is kept wholesome by diffusion through the cloth curtain. There are no drafts under the hover. It hovers 100 chicks and has enough ventilation for 2400 (weight 33 lbs.). Not mallable. Portland price, complete, $10.00 each.

Reports

Newport, Ore., April 4, 1915.
Routledge Seed & Floral Co.

Gentlemen: The International Sanitary Hover that I got from you proves that this make is certainly a dandy. I put 93 chicks in it and have only lost two, and one of those was a cripple. They will be five weeks old tomorrow and are a fine, healthy lot of chicks.

Yours truly,

W. G. EMERY.

Box 38, Dallas, Ore., April 8, 1915.
Routledge Seed & Floral Co.

Gentlemen: I wish to state that the International Sanitary Hover I received is fine and gives ideal results. Have not lost a chick yet.

Yours truly,

SAMUEL J. GIBSON.

Routledge Seed & Floral Co.

Gentlemen: So far as I know, I was the first man in Oregon to use the International Sanitary Hover, having bought two direct from the factory early in 1912, before I knew of an agency in Oregon. These have done very satisfactorily for me and, after having tested and tried the "International" for four years, I can safely say that it is the only hover or brooder that I have ever seen that will beat the old hen at her own game—raising chicks.

Yours very truly,

EDWARD SHEARER.

International Mammoth Built on same principle, excepting the blue flame oil burner. No coal to buy or bother with. Descriptive folder on request. Capacity 300 to 500 chicks. Price, $30.00.
Up-to-Date Sanitary Drinking Fountains and Feeders

Increase your profits by saving the chicks. Start now by ordering sanitary, economical, up-to-date Fountains and Feeders.

Note.—When wanted by parcel post add postage at weight given. See page 1 for rate table.

1. CONE TOP FOUNTAINS

Most desirable, new style, pressed, galvanized. On account of "cone shaped top" (see cut) birds cannot roost on them.

<table>
<thead>
<tr>
<th>Capacity</th>
<th>F. P. Wt.</th>
<th>Each</th>
<th>Doz.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 qt.</td>
<td>1 lb.</td>
<td>25c</td>
<td>3.50</td>
</tr>
<tr>
<td>2 qt.</td>
<td>1½ lb.</td>
<td>35c</td>
<td>3.50</td>
</tr>
<tr>
<td>4 qt.</td>
<td>2 lb.</td>
<td>45c</td>
<td>4.50</td>
</tr>
</tbody>
</table>

2. CYPFER'S DRINKING FOUNTAINS

Pressed out of heavy galvanized iron; will last for years. Easy to clean inside and out. (See cut.)

<table>
<thead>
<tr>
<th>Capacity</th>
<th>F. P. Wt.</th>
<th>Each</th>
<th>Doz.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 qt.</td>
<td>1 lb.</td>
<td>25c</td>
<td>3.50</td>
</tr>
<tr>
<td>2 qt.</td>
<td>1½ lb.</td>
<td>35c</td>
<td>3.50</td>
</tr>
<tr>
<td>3 qt.</td>
<td>2 lb.</td>
<td>40c</td>
<td>4.00</td>
</tr>
</tbody>
</table>

3. SANITARY STONE FOUNTAINS

An old and popular style that keeps the water cold; see cut. (Not mailable.) 
Price, 1 qt. 25c, 2 qt. 35c, 4 qt. 50c, & 8 qt. 75c.

4. STAR JAR FOUNTAIN

Very desirable style—chicks can't get wet. Any Mason jar fits it. Price (without jars), each 20c; doz. $2.25, prepaid.

5. PERFECTION FOUNTAIN

This consists of a shallow 6-inch pan and a collar to fit on any size Mason jar. You can fill the jar, slip the pan on the collar, slip the pan in and turn it over. Simple, sanitary and perfect for small chicks. The best in this style. Price (without jar) 20c each, $2.25 per doz., prepaid.

6. "ALL-RITE" FOUNTAIN-FEEDER

(See cut.) Hangs up out of the litter. It feeds water, mixed chick feed, etc. It is easy to fill; simply snap out the pan, fill the jar, slip the pan in again and invert; no need of removing the jar from the wire holder. Made to hold the old zinc-top Mason pint, quart or two-quart jar. Use small jars for baby chicks, large for adults. Price (without jars), each 15c; doz. $1.50 postpaid.

WALL FOUNTAINS

Very desirable for adult fowls; hang up on the wall out of litter and dirt; made of heavy galvanized iron.

7. Cypher's Style. 
Price, each, 1 gal. (P. P. 3 lbs.), 50c; 2 gal. (P. P. 3½ lbs.) 75c; 3 gal. (P. P. 5 lbs.) 1.00; 5 gal. (P. P. 8 lbs.) 1.75; 10 gal. (P. P. 16 lbs.) 3.00.

8. Moe's Style. 
Opening pressed in. ¼ gal. (P. P. 2 lbs.), 40c each; 1 gal. (P. P. 3 lbs.) 50c; 2 gal. (P. P. 3½ lbs.) 75c.

GALVANIZED FEEDERS

For Shell-Grit, Sea-Pro-Co, Dry Mash, Charcoal, Beef Scraps, Etc.

Made of galvanized iron; soon pay for themselves in preventing waste. Sanitary, closed top self feeders for granulated bone, beef scraps, grits, shells, charcoal, dry mash, etc. If these necessary foods are kept before your fowls they will eat just what their systems require for profitable results; in other words, properly balance their rations. (See cut.) Should be hung up out of the litter.

9. CYPFER'S.—Three compartments holding 2 qts. each (P. P. 3½ lbs.) Each 60c; doz. $5.00

10. NATIONAL.—Same style, little smaller; three compartments, 3 pts. each (P. P. 3 lbs.) Each 50c; doz. $5.00

11. MOE'S.—Extra strong and well made; the feed trough at bottom is round; 4 section, 2 qts. each (P. P. 5 lbs.) Each 85c; doz. $8.75. 3 section, 2 qts. each (P. P. 4 lbs.) Each 60c; doz. $5.00.

12. LARGE.—Two compartments, one 6 qt. and one 4 qt. (P. P. 4 lbs.) Each 50c; doz. $5.00.

13. MOE'S CHICK SERVER

Practical and a great saver of feed. Chicks can not get into it. For water or feed. Small (P. P. weight 2 lbs.) each 25c; large (P. P. weight 3 lbs.) each 35c

FOOD AND WATER CUPS

Made of galvanized iron, strong and durable; wire hangers; hold half pint. For exhibition or shipping coops.

Each 15c; doz. $1.50 (P. P. doz. 4 lbs.)
FOOD AND WATER HOLDERS

For Poultry and Ducks of All Ages.—They are especially recommended for use in feeding mashers of any kind; steamed or dry alfalfa or sprouted grain. This protected receptacle saves 15 to 25 per cent in food stuff. The guard lifts out of the pan, making them easy to clean. There is nothing to get out of order. Made of heavy galvanized iron; safe, sanitary, saving and serviceable.

<table>
<thead>
<tr>
<th>Size</th>
<th>P. P. Wt.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small</td>
<td>1.25 lbs</td>
<td>60c each</td>
</tr>
<tr>
<td>Medium</td>
<td>2 1/4 lbs</td>
<td>60c each</td>
</tr>
<tr>
<td>Large</td>
<td>3 3/8 lbs</td>
<td>85c each</td>
</tr>
</tbody>
</table>

Food and Water Holders.

BOSTON DRY FOOD HOPPERS

We believe this Food Hopper to be the best device of the kind on sale for the use of thrifty, up-to-date poultry raisers. With this device fowls cannot waste food, yet food is always accessible and always in sight. It cannot clog, is easily refilled when empty, and easy to clean and keep clean. During the day the front screen is dropped down against the feed, at night lifted up and hooked to keep the rats out. (See cut.) Insures your chickens clean food entirely free from filth of any kind. Every poultryman will appreciate this feeder. Made of heavy galvanized iron; with care will last forever.

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Size</th>
<th>P. P.</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. 3 Lg</td>
<td>17 x 8 x 13</td>
<td>7 lbs</td>
</tr>
<tr>
<td>No. 2 M</td>
<td>17 x 8 x 7</td>
<td>6 lbs</td>
</tr>
<tr>
<td>No. 4 S</td>
<td>15 x 8 x 4 1/2</td>
<td>4 lbs</td>
</tr>
<tr>
<td>No. 1 Lg</td>
<td>29 x 8 x 6 1/2</td>
<td>5 lbs</td>
</tr>
</tbody>
</table>

Boston Food Hoppers.

FOOD AND WATER CUPS

Made of galvanized iron, strong and durable; wire hangers; hold half pint. For exhibition or shipping coops.

Each 15c; doz. $1.50 (P. P. wgt. doz. 4 lbs.)

Moe's Never Fail Trap Nest

Made of galvanized iron, light, durable and as the name implies, it never fails. Every nest set up and ready for use when shipped.

No. 33, 12 x 12 x 12 in. (P. P. 6 lbs.) ... $1.00
No. 34, 12 x 12 x 14 1/2 in. (P. P. 7 lbs.) ... 1.25

"KAN'T KLOG" FEEDER AND EXERCISER

The best combined feeder and exerciser; cannot clog. No spring to get out of order. Swinging deflector scatters the grain all around, a little at a time. Holds enough to last your birds some time. Set to feed little or much.

No. 29. Capacity 10 qts., each ... $2.50
No. 31. 6 qt., for low houses, each ... $1.75

Equip your poultry houses and yards with these money-saving, sanitary utensils. Don't invite diseases and loss by using old pans, open dishes or wooden troughs. Add postage.

INCUBATOR HYGROMETERS

"Moisture Indicators"

Millions of chicks die in the shell every year, for the want of proper moisture conditions. The importance of a correct percentage of moisture during incubation has made the "Tycon" Incubator Hygrometer as necessary as the "Tycon" Incubator Thermometer. Neither takes the place of the other, but together they give the practical poultry raiser all the facts required for successfully regulating the heat and moisture of the incubator. Descriptive pamphlet on request. (See Thermometer next page.)

Hygrometer, with full instructions, postpaid $1.50; with Tyco's 75c Incubator Thermometer, only $2.00.
NEW
STYLE,
CUSHION
FRAME,
LIGHT,
STRONG,
AND
SAFE
OPEN END SHOWING CONSTRUCTION

DIAMOND EGG BOXES

The Diamond Egg Carrier is something entirely new and in a class by itself. We ship it to you in the flat, thereby saving on freight or express. The peculiar construction of the box in V-shaped wedges enables us to make it of very light material while still retaining great strength so that a man can stand on them. It is easily set up.

The Diamond Egg Box has several advantages over any other box offered for shipping eggs by mail. A box, no matter what its construction is NOT SAFE where eggs set on a FLAT BOTTOM. The Diamond "V-shaped" fillers hold the egg in suspension and protect them from breakage. No other box has this feature.

If properly packed, the Diamond Egg Carrier can be dropped a distance of six feet and not harm the eggs. No other light egg box made will stand this test. Packed flat, one dozen to a package, and containing address labels, gum paper and tissue paper.

DIAMOND EGG BOX FOR "HATCHING EGGS."

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>16 egg</td>
<td>12 lb.</td>
<td>16c</td>
<td>$1.50</td>
<td></td>
</tr>
<tr>
<td>30 egg</td>
<td>21 lb.</td>
<td>25c</td>
<td>2.75</td>
<td></td>
</tr>
<tr>
<td>25 egg</td>
<td>19 lb.</td>
<td>30c</td>
<td>2.50</td>
<td></td>
</tr>
<tr>
<td>9 egg Turkey</td>
<td>10 lb.</td>
<td>15c</td>
<td>1.50</td>
<td></td>
</tr>
<tr>
<td>9 egg Goose</td>
<td>14 lb.</td>
<td>16c</td>
<td>1.50</td>
<td></td>
</tr>
<tr>
<td>12 egg Duck</td>
<td>15 lb.</td>
<td>25c</td>
<td>1.50</td>
<td></td>
</tr>
</tbody>
</table>

For 100-egg size use four 25-egg size.

DIAMOND PARCEL POST EGG BOX.

Practical and SAFE, designed especially for sending eggs by Parcel Post to your customers who can empty the cases and return to be filled again.

This new parcel post box is similar in construction to the 15-egg size above, only they are made to hold Twelve Eggs with additional cases provided for Two, Three and Four and up to Eight Dozen.

Put up "flat" in pkgs. of 12 with gummed paper for fastening, and address labels for each box.

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Each</th>
<th>Weight</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 doz. S. C.</td>
<td>2½ lbs.</td>
<td>2½ lbs.</td>
<td>$1.00</td>
</tr>
<tr>
<td>2 doz. D. C.</td>
<td>1½ lbs.</td>
<td>4 lbs.</td>
<td>25c</td>
</tr>
<tr>
<td>3 doz. D. C.</td>
<td>2 lbs.</td>
<td>6½ lbs.</td>
<td>30c</td>
</tr>
<tr>
<td>4 doz. D. C.</td>
<td>2½ lbs.</td>
<td>8½ lbs.</td>
<td>40c</td>
</tr>
</tbody>
</table>

Write for prices by the 100 and for larger sizes.

POSTAGE.—In ordering above egg boxes by mail or P. P., be sure you add extra money for postage. RATE TABLE PAGE 1. P. P. stands for parcel post not PREPAID.

LIVE CHICK BOX

Made from the best grade of corrugated card board. Shipped in the flat, but quickly set up by anyone. The use of this box has made long distance express shipments of live baby chicks possible and safe.

<table>
<thead>
<tr>
<th>Size</th>
<th>Weight</th>
<th>Empty Each</th>
<th>Doz.</th>
</tr>
</thead>
<tbody>
<tr>
<td>25 chick</td>
<td>P. P. 1¼ lbs.</td>
<td>20c</td>
<td>$2.00</td>
</tr>
<tr>
<td>50 chick</td>
<td>P. P. 2¼ lbs.</td>
<td>25c</td>
<td>2.50</td>
</tr>
<tr>
<td>100 chick</td>
<td>P. P. 3 lbs.</td>
<td>40c</td>
<td>4.00</td>
</tr>
</tbody>
</table>

ANDERSON EGG CARRIERS

This has been a popular egg box for several years. A safe box for the expressing of fancy eggs, for hatching. Each egg should be wrapped before dropping into its place.

<table>
<thead>
<tr>
<th>Size</th>
<th>Weight</th>
<th>Empty Each</th>
<th>Doz.</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 egg</td>
<td>1 lb. each</td>
<td>15c</td>
<td>$1.50</td>
</tr>
<tr>
<td>30 egg</td>
<td>1½ lbs. each</td>
<td>25c</td>
<td>2.50</td>
</tr>
<tr>
<td>50 egg</td>
<td>2½ lbs. each</td>
<td>35c</td>
<td>3.50</td>
</tr>
<tr>
<td>100 egg</td>
<td>4 lbs. each</td>
<td>60c</td>
<td>5.25</td>
</tr>
</tbody>
</table>

IDEAL EGG BOX

Hold 12 eggs; very handy and convenient for private trade. Saves eggs and counting.

Price—For doz. 20c (P. P. 1½ lbs.); 100 for $1.00 (P. P. 11 lbs.); 1000, $8.00.
POWDER GUNS
For applying insect and lice powder, saves powder. Hold the bowl by the feet.
DEFENDER, 10c; postpaid 15c
JUMBO.—Larger and better 25c postpaid 30c

POULTRY MARKERS
Very necessary for marking the web between the toes of baby chicks, if you wish to know different strains or stocks. Put leg bands on when they get older.

OTTIS & MOE.—About the same style as Pettey's, punches a clean hole, also has a cigar end clipper and eye for attaching to key chain.

Price, postpaid, 25c

BUCK PARCEL POST EGG CRATE
Very light, but strong; metal corners; holds 12 dozen eggs; wire bale wooden handle. (P. P. weight 6 lbs.) Each 65c.

POULTRY MARKERS

LATEST AND BEST LEG BANDS FOR Poultry AND PIGEONS

Keep a supply of Leg Bands on hand at all times; this is the only safe way to mark your different birds so you can tell certain stock or strains. Of course every bird must be marked with a band before it can be entered in a show.

WHAT SIZE?—When you order, tell us size or what kind of birds you want them for and whether male or female. DON'T FORGET.

NO. 1. LEADER ADJUSTABLE (see cut).—Has neat, compact and smooth fastening; with no catching points, easily attached and is absolutely secure.

Prices, postpaid, any size, 12 for 15c, 25 for 30c, 50 for 50c, 100 for 80c. (State size.)

NO. 2. CHALLENGE ADJUSTABLE.—A new, light weight, smooth, adjustable band, having embossed or raised numbers which makes them easier to read. (One size adjustable for any breed.)

Prices same as Leader No. 1

NO. 3. COLORED LEADER.—Adjustable. Latest band. The color is inlaid in metal protecting band. Answers every purpose. Colors, white, pink, red, blue, yellow and green.

Prices, 12 for 30c, 25 for 60c, 50 for $1.00, 100 for $1.75

NO. 4. MOE'S SELF LOCKING LEG BAND.—You simply push ends together to lock it and it must be destroyed to remove it. For superior and much cheaper than the leg bands requiring a sealing tool to seal them. Same price as Double Clinch. (State size.)

NO. 5. DOUBLE CLINCH.—A desirable band, very safe; no exposed corners, ends or loops: has double fasteners (see cut). Also made in Pigeon sizes.

Prices postpaid, any size, 12 for 15c, 25 for 30c, 50 for 50c, 100 for 80c. (State size.)

NO. 6. SPIROL COLORED—Durable, Practical, Economical.—(See cut.) Provide instant identification without handling the bands. You can identify birds as far as you can distinguish colors, which will tell you the yearling hens which are older, your different matings, and so on. Fine for baby chicks. Eight colors: Red, White, Pink, Amber, Blue, Black, Ruby, Green. Slipped on like a key ring; cannot drop off. Prices, 12 for 20c, 25 for 25c, 50 for 60c, 100 for $1.00. (State size wanted.)

NO. 7. OPEN PIGEON OR CHICK BANDS.—Same price as Double Clinch (see cut).

NO. 8. SEAMLESS PIGEON OR BABY CHICK BANDS. Prices, postpaid, 12 for 30c, 25 for 50c, 50 for 85c, 100 for $1.50. (State size.)

DOG, CAT, CANARY, PARROT, POULTRY AND STOCK REMEDIES FOR ALL AILMENTS.
See what we offer in guaranteed products, pages 124-126.
SANITARY WOODEN PIGEON NESTS

Made of 10-inch, solid square redwood blocks. Sanitary and prevents chilling of eggs or squabs. Cannot tip over. Large enough for any variety of pigeons.

Price: 25c each; 2.00 doz. (Parcel Post weight, 20 lbs. per doz.)

AUTOMATIC CHICK GREASER

(See illustration)—every chick its own doctor. It is the large lice which collect on the heads of young chicks which cause them to droop and die; and formerly the only way was to catch each chick and rub grease on its head; but this slow and tedious process is not necessary since the invention of the Automatic Chick Greaser. The wick around the upper part of the greaser is saturated with Conkey's Head Lice Ointment or with a mixture of two-thirds lard and one-third kerosene (or black oil) and every chick which eats out of the pan will get its head thoroughly greased in a very few minutes. Can be moved from one pen to another.

NEW STYLE.—Mailing wgt. 2 lbs., add postage. Price $1.00

UP-TO-DATE SHIPPING COOPS

These coops are really "up-to-date" and will give your customers that impression of you if you use them when shipping. Buyers who pay fancy prices for thorough-bred birds like to see them come in a nice coop—not some old cracker box or oil case. These coops are light but strong. The ends have the cleats nailed on. We ship in the flat to save charges, but it's an easy matter to nail them together, for each part is marked.

Number Width Length Height Each Doz
NO. 2 10½ in. 15 in. 24 in. 40c $4.00
NO. 4 10½ in. 24 in. 24 in. 50c $5.00
NO. 6 19½ in. 24 in. 24 in. 60c 6.00

For Parcel Post—No. 2 weighs 8 lbs.; No. 4, 9 lbs.; No. 6, 15 lbs.

Capacity.—No. 2 suitable for single birds or pair Mediterraneans. No. 4 for Asiatic male, American or Mediterranean pair or small trio. No. 6 for a pen of five birds, any variety.

GRINDING MILLS

NO. 32 HAND GRINDING MILL.—In this mill are embodied all the good features of other hand grinding mills to which have been added universal burrs or grinding plates that are quickly adjusted and locked for grinding coarse or fine. This machine will grind any kind of grain or seeds, dry bone, shells, crockery, etc., for feeding to poultry. Has a 16-inch fly wheel and is light running; the capacity is not equaled by any other of the same size. Weight 40 lbs. Price $5.50

NO. 35 B. HAND OR POWER (1/2 horse power) Price $10.00

GREEN BONE CUTTERS

MANN'S GREEN BONE CUTTER.—Without any doubt the best and only successful green bone cutter on the market today. The No. 5-B and No. 7-BM are the two best and most popular sellers.

MANN'S NO. 5-B.—Has a large balance wheel, making it easy to operate. Should be mounted on a bench. Has four knives, large, solid cylinder, and has the latest patent automatic governing spring feed. This makes it one of the best low-priced bone cutters ever offered.

MANN'S NO. 7-BM.—The new No. 7-BM is mounted on a strong iron stand, and has patent automatic governing spring feed. Large, open-hinged cylinder, giving instant access to all working parts, has six knives, gear guard, anti-clog device, heavy balance wheel and other improvements. (See cut.)

Price $15.00

Plant berry bushes in the poultry yards. YOU get the FRUIT and the BIRDS get the SHADES in summer. Our nursery catalog on request.
CAPONIZING TOOLS

Poultrymen can double their profits by caponizing. The operation is very simple; the instructions are so full and explicit that any man, woman or child, after a careful reading, will be able to perform the operation.

Philadelphia Set (see cut).—Complete with instructions. Cardboard box, postpaid, $2.50; wooden case, velvet lined, $3.75.

LAMPS

OAKS HYDRO SAFETY.—Made especially for incubators and brooders. They have a water jacket to keep oil and burner cool and are perfectly safe. Economical and satisfactory in every way.

No. 1—7½ in. high; ½ in. wick (P. P. $1.00)
No. 2—9 in. high; 1 in. wick (P. P. 2 lbs.) ... 1.50
No. 3—9 in. high; 1½ in. wick (P. P. 3 lbs.) 1.75

CYPHER'S INCUBATOR LAMPS, (seamless bottom) with burner and wick complete. No. 0, 85c; No. 1, 95c; Nos. 2 or 3, $1.10, postpaid. Burners only, No. 0, 40c; No. 1, 50c; Nos. 2 or 3, 70c, postpaid.

X-RAY EGG TESTER

Used to test fertility of eggs during first week of incubation. Use on an ordinary lamp (No. 2 burner) in a dark room to illuminate interior of egg.

Price, postpaid, 40c

THERMOMETERS

We sell the "Tyco's," recognized as the most dependable.

FOR INCUBATORS—

No. 22 "Tyco's."—Very popular. Generally suspended on string or wire on level with eggs. (Cypher's style.)

Postpaid 65c; wire hanger 10c extra

Tyco's Certified.—Same style as No. 22. Scale is etched on glass tube as well as metal back. "Certified correct," worth the price.

Postpaid $1.00

No. 20.—Tested, for incubators, used in Buckeye and other incubators.

Postpaid 65c

No. 22½.—Similar to No. 20 with folding legs, adjustable; to be set up in egg tray.

Postpaid 75c

FOR BROODERS—

No. 23.—New style and most convenient; temperature readable from above the hover. Used in both Cypher's and Buckeye Brooders.

Postpaid, each 60c; 2 for $1.00

Cypher's, for Portable Hover: Price, 60c

International, for Hover. Price, 60c

NOTE.—We keep in stock miscellaneous extra parts for Cypher's incubators and brooders. Ask for price list of stock wanted.

NEW MEDICATED.—Answers as a nest egg, also an insecticide. Keeps lice out of the nests and off the hen. Non-breakable. Each egg wrapped with paper and full instructions.

Each 10c; 3 for 25c; 12 for 75c; (P. P. 2½ lbs. per doz.)


Each 5c; 3 for 10c; 12 for 30c (P. P. 2 lbs. per doz.)

POULTRY KILLING KNIVES

You open the fowl's mouth and cut the jugular vein. Let them bleed and dry; pick while warm.


Pilling French Poultry Knife, Postpaid 50c

Angular Killing Knife, Postpaid 50c

Our Motto—"Highest Quality" Seeds, Bulbs, Plants and Supplies 121
"Highest Quality" Poultry Foods

At special prices direct to Poultry Raisers: 5 bags assorted foods at 500-lb. prices. Prices subject to important market changes. Write for quantity price when ready to buy.

The planter who buys better seed gets better crops. He who fertilizes his soil—manures it well—is amply repaid in the size of his harvest. The poultryman who feeds the Highest Quality poultry foods, makes more profit than he who is content with screenings, although his feed costs a lot more.

"HIGHEST QUALITY" CHICK FEED

Prepared especially for chicks 4 to 8 weeks old. Put up for us under the "Pure Food Law" by one of the largest manufacturers of poultry foods in the United States, and is the "highest grade" Chick Food made; always clean and sweet.

Price, 5 lbs. 25c; 12½ lbs. 50c; 100 lbs. $3.00; 500 lbs. @ $2.75.

R. S. & F. CO.'S "HIGHEST QUALITY" SCRATCH FOOD

A complete ration for large chicks or full grown poultry. It is a perfectly balanced feed, composed of a variety of clean grains, mixed with the proper amount of prepared beef, fresh granulated bone, charcoal, grit and shell. Will keep your poultry in perfect condition. Makes an excellent and profitable food. You can't mix it as cheaply as we sell it, if you mix it right.

Price, 6 lbs. 25c; 10 lbs. 35c; 50 lbs. $1.35; 100 lbs. $2.40; 500 lbs. @ $3.35.

GRANULATED BONE—"SPECIAL"

We offer only highest quality, white, pure and clean. The fresh bone contains about 40 per cent water and 12 per cent grease; 52 per cent of matter which your fowls do not need. The granulated bone we offer is made from fresh, green bones, from which the moisture and grease have been taken, leaving the phosphates, lime and protein. Should be kept before your chickens at all times. Feed in a Sanitary Shell and Grit Box.

Price, 6 lbs. 25c; 14 lbs. 50c; 100 lbs. $3.00; 500 lbs. @ $2.75.

BEEF SCRAPS

Our "Highest Quality" beef scraps are rich in materials which make bone, muscle and lean meat. They insure health, thrift and vigor, and satisfy the natural craving of the bird's system for flesh-food in some form. Rich in protein, pure and free from any adulteration. Can be fed dry or with cooked rations. Don't waste any, feed in one section of your Sanitary Shell and Grit Box. (Read about "SeaProCo," page 14.)

Price, 5 lbs. 30c; 10 lbs. 50c; 50 lbs. $2.25; 100 lbs. $4.00; 500 lbs. @ $3.85.

GRIT—Best Grade

Every poultry raiser should keep a supply of this grit in each pen. Baby chicks and ducklings must have it. Made in three sizes, chick, pigeon or broiler and hen size. We always send hen size unless otherwise ordered.

Price, 5 lbs. 10c; 14 lbs. 25c; 100 lbs. $1.00; 500 lbs. at 90c.

POULTRY SHELLS, CRUSHED

These should be within reach of your hens at all times. Not straight Oyster Shells, but a combination of Oyster, Sea and Clam Shells that is rich in lime material for egg shells. Gives good results and is much cheaper. Put in one section of your Sanitary Feeder.

Price, 5 lbs. 10c; 14 lbs. 25c; 100 lbs. 90c; 500 lbs. 80c.

OYSTER SHELL, CRUSHED

This is pure hard oyster shell crushed and sifted, preferred by some to our Poultry Shell.

Price, 5 lbs. 10c; 12 lbs. 25c; 100 lbs. $1.25; 500 lbs. @ $1.10.

IMPORTANT NOTICE TO POULTRY KEEPERS.—We want your trade direct—not the dealer's, therefore give you strictly wholesale prices in 5, 10 and 20-bag lots.
Our Motto—"Highest Quality" Seeds, Bulbs, Plants and Supplies

Cypher's Chick and Poultry Foods

IMPORTANT NOTICE—Cypher's Mixed Poultry Foods are now manufactured on the Pacific Coast and car load lots will be kept in storage in our Portland warehouse, therefore you are assured of prompt shipments of the "Highest Quality" foods made in the U. S. A.

Cypher's Booklet—Foods and Feeding—is full of valuable information. Tells What to Use, When and How and why "Cypher's" is best. FREE. 2c stamp for postage.

CYPHERS' CHICK FOOD
A complete, scientifically compounded food for young chicks. No weed seeds, by-products or grit. Fed solely of sound, sweet grain. Fed by thousands of earnest men and women who year after year are raising chickens the "Cypher's Company Way.
Prices, 5 lbs. $2.00; 12 lbs. $2.85; 50 lbs. $1.60; 100 lbs. $3.00.

CYPHERS' DEVELOPING FOOD
A special dry grain mixture intended for properly maturing chicks after they are ready to be weaned from Chick Food, and to carry them along to the age when it is desirable to place Scratchings and Laying Mash before the pullets.
Prices, 5 lbs. $2.00; 12 lbs. $2.85; 50 lbs. $1.60; 100 lbs. $3.00.

CYPHERS' GROWING MASH
We recommend the use of Growing Mash in connection with Developing Food until the middle of the 4th month or when the Developing Food should be replaced by Scratchings.
Prices, 12 lbs. $2.00; 50 lbs. $1.60; 100 lbs. $3.00.

CYPHERS' FATTENING MASH
Specially designed to promote rapid formation of firm, tender flesh. Cypher's Fattening Mash will produce results that can't be obtained by any other method.
Prices, 12 lbs. $2.00; 50 lbs. $1.60; 100 lbs. $2.85.

CHARCOAL
Our Granulated Charcoal is prepared especially for poultry; no dust; a good thing for bowel troubles, sour crop and indigestion; a health preserver. State size wanted A for mash, B for chicks, C for large chickens or hens.
Price, 1 lb. 10c; 3 lbs. 25c; 10 lbs. 75c; 50 lbs. $2.00; 100 lbs. $3.75.

SEA-PRO-CO. FRESH FISH FIBER
A New Process Clean, High Grade Food for Poultry 68% Protein.

SeaProCo contains 25 per cent more available flesh and egg forming protein than any other Fish, Meal or Beef Scraps.

ANIMAL FOOD OF MERIT.
We positively guarantee no fish flavor to eggs or flesh of poultry fed with our Sea-ProCo fresh fish fiber.

A NEW PROCESS.
SeaProCo fresh fish fiber is manufactured by a new process which retains the rich, nutritious and cleanest of the fish. It examines it they notice a great difference between SeaProCo Fresh Fish Fiber and other fish meals and beef scraps sold for poultry food. There is nothing like it. Our process cooks the fish, extracts the crude oil, evaporates the water and separates the flesh fiber from the refuse, which is converted into fertilizer.

Free Sample and 8 page description Pamphlet on request.

Examine SeaProCo fresh fish fiber, notice the meat fiber, the rich, sweet smelling baked fish flavor, no rank odor of decayed fish.

Also notice it is not cooked and dried until all rich nutritious food elements are extracted.

That is why—

It is more easily digested.

It is more quickly assimilated.

Contains more crude Protein.

Contains more available Protein.

There is a greater per cent of availability of all food nutrients. Better than green bone and will not spoil if kept in dry place.

Unequalled for baby chicks, growing stock and Egg Production. SeaProCo Fresh Fish Fiber is clean and pure, in fact, fit for human food. An food in hoppers or mixed in dry or wet mash.

Small sample and 8 page pamphlet giving full information and detailed analysis free on request; but better still, order a 5 lb. package postpaid, 35c.

Prices, 5 lbs. $2.50; 50 lbs. $1.50; 100 lbs. $2.50.

CYPHERS' LAYING MASH
This is not in any sense a condiment or an egg stimulant. On the contrary, it is strictly A FOOD—palatable, highly nutritious, balanced egg ration, ready mixed for the daily mash.
Prices, 12 lbs. $2.50; 50 lbs. $1.50; 100 lbs. $2.50.

CYPHERS' FERTILE EGG MASH
This food has for its special object the production of well-fertilized eggs in large numbers—eggs that possess in abundance, also in proper proportions, the rich materials needed to develop and feed the chick embryo so that the chick at hatching time will be large, vigorous and in perfect health. Feed once a day.
Prices, 12 lbs. $2.50; 50 lbs. $1.50; 100 lbs. $2.50.

CYPHERS' PIGEON FOOD
In compounding a food for pigeons the proper selection, age and condition of the various grains is of great importance. This food is prepared by experts and will give the best results.
Prices, 5 lbs. $2.50; 12 lbs. $2.85; 50 lbs. $1.60; 100 lbs. $3.15.

CYPHERS' SALT CAT (for Pigeons)
This preparation possesses aromatic and tonic properties of such roots, herbs and seeds as gentian, anise, caraway, cummin, and coriander; also bone, crushed oyster shell, granulated charcoal, crushed limestone, rock salt, sulphate of iron, etc. It aids digestion, invigorates the system and promotes good health. It is put up in a box form, which keeps the birds busy picking at it, and prevents waste. Crumble the salt cat for young birds.
Prices, per brick, 25c; doz. $2.50. Mailing weight 1 lb. each.
Conkey’s Guaranteed Poultry Remedies

READ THIS.—We handle 2 to 3 carloads a year of these celebrated remedies which have built their reputation upon the scientific basis of one remedy for each disease.

A “Cure All” is not made by the Conkey Company. Each remedy is intended to serve one special purpose and serve it well. These goods are absolutely guaranteed and we offer them to you on this basis: If they fail to satisfy you in any particular, your money will be refunded to you cheerfully. Conkey’s Descriptive Book, free.

CONKEY’S HEAD LICE OINTMENT.—Save your little chicks from the ravages of the deadly head lice. Absolutely harmless to the little chicks. Put up in tubes. Easy to apply.
Price, 10c and 25c prepaid

CONKEY’S LICE POWDER.—It is positive death to lice, ticks, etc. Equally effective for lice on setting hens and young chicks. Gets them all. Cleans up the coop. Absolutely harmless to even the smallest chick. Easy to apply and does the business or your money back. Easy to use, your money will be refunded to you cheerfully.
Prices (not prepaid): 8 oz. pkg., 10c; 1½ lb. 25c; 4 lbs. 50c; 8 lbs. $1.00; 25 lb. pail $2.50.

Note.—Weights given prepaid for mail, add postage.

CONKEY’S LICE LIQUID.—A powerful liquid that will destroy the thousands of red mites that live in the cracks and crevices of the house and nests in the day and swarms the fowls’ bodies at night. You can’t reach them with a powder. Paint or spray the roosts, nests and walls. Prices: 1 qt. can 50c; 2 qts. 60c; 1 gal. $1.00; 2 pails $4.00.

CONKEY’S LAYING TONIC (Poultry Tonic).—It insures the maximum egg production both summer and winter. Guaranteed to please you or your money back. Prices (not prepaid): 2 lbs. 25c; 4 lbs. 50c; 8 lbs. $1.00.

NOTE.—Add postage if wanted by mail. Weights given are wrapped.

CONKEY’S DOG REMEDIES

Mange Remedy.—An absolute cure. Price 50c; 60c prepaid

Distemper Remedy.—This is an excellent remedy for this terrible disease. Price 50c; 50c prepaid

Dog Tonic. Price 50c; 60c prepaid

Pint is a valuable disinfectant and germicide for the dog owner. Very agreeable pine odor.

Prices: 1 pt. 50c, prepaid 60c; 1 qt. 75c; 2 qts. $1.00; gal. $1.50 (not mailable).

Conkey’s Guaranteed Stock Remedies

CONKEY’S STOCK BOOK.—This 234-page $1.00 and is well worth it, but we get a few FREE to our customers as long as they last.

Stock Tonic.—For horses, cows, sheep and hogs.
Prices (not prepaid): 2 lbs. 25c; 3 lbs. 50c; 7 lbs. $1.00. Mail weights given, add postage, 12 lb. pails, 2.00 and 25 lb. pails $3.50 (not mailable).

Worm Remedy. 50c prepaid

Colo Remedy.—Just a few drops on the tongue, a few drops in the water. 50c; postpaid 60c; $1.00 size postpaid, $1.10

Eye Lotion.—For sore eyes. 50c prepaid

Distemper and Cough Remedy. 50c; 50c prepaid

Healing Powder.—For cuts and wounds, excellent. 25c; 50c postpaid

Gall Salve. 25c and 50c; postage 10c extra

Pain Lotion.—For swellings, etc. (P. F. 2 lbs.) 50c

Absorbt.—For spavin, etc.

(P. F. 1 lb.) $1.00

Illustrated and up-to-date book is priced at $1.25; gal. $2.00.

BY PARCELS POST.—At last we have an inexpensive way of getting these valuable remedies to our far away customers. On those NOT MARKED, prepaid, take the P. F. (Parcels Post) weight and consult the Zones and Rate Tables, page 1, SO YOU CAN ADD PROPER AMOUNT FOR POSTAGE. Liquids in more than pint cans NOT MAILABLE.
GOLDFISH GLOBES, FOOD, ETC.

We are the largest retail and wholesale dealers in Fancy Gold Fish in the Northwest, often having a thousand or more on display in our large aquarium at our store.


An aquarium is a beautiful ornament. It suits everywhere, parlor, library, dining and sitting room, and may indeed be introduced in apartments of the sick. The bright, active Gold Fish are very interesting, a perpetual source of amusement for both old and young folks. Children are always delighted with them.

CARE OF GOLD FISH.—The care of Gold Fish is very simple and little trouble. The water in the aquarium must be changed from one to six times a week, depending on the size of the globe, number of fish and the temperature. When the fish come to surface and gasp for air, they should be given more water. FEEDING.—The only safe diet is our prepared Fish Food, fed daily and only what they will eat up quickly. Bread or cracker crumbs should never be fed—more fish die from over-feeding than any other cause. Keep the aquariums out of the direct hot sun light and in a cool place.

Price List of Fish

COMMON GOLD FISH (see cut).—Very hardy and lively. Each, very small, 15c; small, 25c; medium, 35c; medium large, 50c; large, 3 to 4 inches, 75c; extra large, $1.00; extra large breeders, $1.50 to $2.00. Fancy Tri-colored, 35c to $1.00 and up.

COMMON SILVER FISH.—Same as above, except they are silvery white. Each, medium, 25c; large, 50c; large breeders, $1.00.

JAPANESE FAN-TAIL (see cut).—The most popular fancy fish. The fins and tail are of a delicate lace-like appearance, very attractive. Price, golden, small, 25c; medium, 35c; large, 50c to $1.00; Tri-colored, golden, red, pearly white and black, showing two or all three colors, 50c, 75c and $1.00 each.

Note.—All shipments (outside of the city by express only). A charge of 15c is made to cover cost of Shipping Bucket, holding from two to six fish. Gold Fish can be shipped safely overland hundreds of miles.

COMET.—Very fancy; the most graceful of all. Similar to the Japanese Fan-tail, but the fins and tail much longer and delicate. The tail is often longer than the fish. Price, each, small, 25c; medium, 50c; large, 75c to $1.00; large fountain size, $2.50.

CHINESE TELESCOPE (see cut).—Curious and attractive on account of the long, elongated eyes, having the appearance of a telescope. Flowing double tails. Very rare. Price each, small gold, 50c to 75c; all black, 75c to $1.00; black and gold, 75c to $1.50.

TADPOLES.—Desirable as scavengers for the aquarium. They consume the decaying matter and help keep the water pure. Price each, 15c.

GREEN TURTLES in season, April to July. 1½ to 2 inches. Each, 50c

LITTORIDS (Water Dogs), Eastern. About 3½ inches long. Each, 25c

BOOK—AQUARIUM AND GOLD FISH. Gives full information on care, breeding and feeding; illustrated. 25c

Aquaria Plant or Moss

This water plant improves the appearance of the aquarium or globe and helps purify the water. Price per bunch, 25c. postpaid. Directions for feeding and care on each box.

Fish Food

Best imported wafer, large box, enough food for four fish for six months, 25c postpaid. Directions for feeding and care on each box.

Fish Globes

Cannot be sent by mail. Without foot or base, each quart, 25c; ½-gal, 35c; 1-gal, 50c; 1½-gal, 75c; 1¾-gal, $1.00; 2-gal, $1.25; 3-gal, $1.75; 4-gal, $2.25. WITH BRASS CHAINS FOR HANGING, 25c extra.

Standard Globes

Cannot be sent by mail. Like illustration, each, ½-gal, $1.00; ¾-gal, $1.25; 1-gal, $1.50; 1½-gal, $1.75; 2-gal, $2.00; 3-gal, $2.50; 4-gal, $3.00.

Aquaria Castles

As ornaments to set in the globes. 25c to 60c and up to $1.00 each

When? We have the largest supply of Gold Fish on hand during the FALL, WINTER and EARLY SPRING. It is not safe to ship fish during the hot summer months.
BIRDS

We are the largest importers and dealers in Birds and Gold Fish in the Northwest. This department of our business has grown rapidly and we now carry large and complete stocks of supplies and foods and all birds in their season.

Note.—Write for prices on any birds wanted, that are not listed.

Canary Birds

Note.—Do not compare our prices with the irresponsible bird sellers, who sell for little prices and supply inferior stock and females for males, etc.

AMERICAN BRED ROLLERS. Healthy, hardy, well-shaped birds, fine singers; all colors. MALES, $2.50 each. FEMALES, $1.50; Selected deep yellow, $2.00.

HARTZ MOUNTAIN ROLLERS (Imported). From the Hartz Mountains, Germany. Beautiful and incessant singers, hardy and thrive anywhere. Their cheery song is like sunshine to the soul; their bright plumage, active wings and cheerful dispositions make them the favorites and most popular. MALES, $5.00 to $8.00 each. FEMALES, $1.50 to $2.00 each.

ST. ANDREASBERG (Imported). These are world-renowned and the sweetest singers. They are given three to six months' musical training to develop the long trills, flute notes, etc. MALES, $7.50 to $10.00 each. FEMALES, $2.00 to $3.00.

Birds and Pet Books.

 Feathered Pets—140 pgs., 25c; Parrots and Talking Birds, 30c; Canary Breeding and Training, Geisler, 25c; Belgian Hare Guide, 25c; Rabbits and Cavies, 25c; Pigeons, Care and Management, 25c.

Bird and Pet Books.

 BIRD CAGES, ETC.

Our large Illustrated Folder shows large pictures of our leading styles of Canary, Parrot, Chipmunk and Squirrel Cages, Mangers, Feeders, etc., etc., gives sizes and prices. Free on request.

Canary Cages

BRASS.—Square, neat and well made. Our leading sellers. (See cut.) WITH SEED GUARD (which keeps the birds from throwing seeds and dirt out of the cages), 9 1/2 x 8 x 8 1/2 inches (floor). $2.25; 10 1/4 x 7 1/4 inches, $3.50; 10 1/2 x 8 1/2 inches, $3.50. WITHOUT GUARD, $1.75, $2.00 and $2.25 respectively. Packing and postage 5c extra.

BRASS, Mission, Globe and Fancy Designs with or without patent bottoms with 6 1/2 and up. Not mailable.

ENAMELED.—Square, Very neat and satisfactory. Without guard, 10 1/2 x 7 1/2; $1.50; 11 x 7 1/2, $1.50. Sound style, 9 inch dia., $1.50. Packing and postage 5c extra.

OTHER CAGE BIRDS—Space will not permit us to show other birds we have such as Paroquets, Cockateels, Finch, White Java, etc. Write if interested.
Canary Breeding Cages
Enamelled, all complete, nests, etc. No. 4 Single, $2.25. No. 2 Double, 19x10x14 inches, $2.75. No. 1 Double, 22x11x15 inches, $3.25. No. 1 Double, 25x12x16 inches, $3.75.

Cage Extras
Food and Water Cups.—Opal or clear glass, open or closed top. Each 10c; postpaid 15c.
Brass Suspension Springs.—10c postpaid; with chains, 30c postpaid.
Brass Wall Brackets for Cage Hooks—25e to 75c each; postage, 10c extra.
Cage Swings.—10c each; postpaid, 15c.
Resting Platforms.—15c to 30c postpaid.
Nests.—Wire or willow, 10c; postpaid, 15c.
Wooden Perches—10c each postpaid.
BIRD BATH HOUSE—New.—White enamelled. Bottom, glass sides and top, 4 inches square. Fill the bottom with warm water, open cage door and hook bathhouse before it. Has his bath when he pleases and cannot splash water outside. Price, each 50c; postpaid, 60c.
Bathing Dish.—Glass, 10c; postpaid, 15c.
Opal Glass, 15c; postpaid, 20c.

BIRD SEEDS, FOODS AND REMEDIES
We are making a specialty of bird foods and seeds and our rapidly increasing trade shows that the public appreciates the opportunity to get "High Quality" foods and remedies of "High Quality" (HIGHEST QUALITY) Imported Bird Seeds.

M. Q. IMPORTED BIRD SEED.—Our own special mixture for imported Hartz Mountain and Sie Andreasberg Canaries. We have found it to give results. The correct amounts of Imported Canary, Sweet Eape, Millet and Maw. Put up in sealed 1-lb. cartons of the correct weight. We stand behind our guarantee. Price, each carton, 25c; postpaid 30c.

ORDINARY CANARY SEED—10c lb.
M. Q. Imported Canary Seed, re-cleaned. 20c lb.
Hemp Seed (feed sparingly). 10c lb.
M. Q. Imported Sweet German Eape 30c lb.
Easily detected by the sweet taste.
BY MAIL—If you order above seeds by mail be sure you add postage to cover.

Max Geisler's Bird Foods and Tonics
Highly recommended by all who have used them. Full directions for use with each package.
M. G. Imported "Roller" Seed for Canaries. Pbkg. 25c, postpaid 30c.
M. G. Sweet Finchy Seed for Finches. Lb. 25c; postpaid 30c.
M. G. German Bird Biscuit. Keeps birds in health and song. Per carton 10c; postpaid 15c.
M. G. "Health Food" for Canaries, Redbirds, Mockingbirds and all other seed-eating and soft-billed cage birds. Per carton 15c; postpaid 20c.
M. G. Song and Moulting Food.—Excellent for birds when shedding feathers and off song. 25c per vial.
M. G. Prepared Mockingbird Food. Per tin 30c; postpaid 40c.
M. G. Medicinal Bird Food.—Foods and medicinals. Excellent for weak and sick birds. Per carton 15c; postpaid 20c.
Treatment A.—(Song Restorer.) For birds which have lost their voices from cold, etc. 25c postpaid 30c.
Treatment B.—(Digestive Troubles.) For loss of appetite and bowel disorder; 25c; postpaid 30c.
Treatment C.—(Cold Cures.) For birds which are breathing hard, coughing, etc. 25c; postpaid 30c.
Treatment D.—(General Tonic.) For birds which are puffed up and sick; 25c; postpaid 30c.

Parrot Cages
SQUARE, heavy tinned wire, all complete: No. 101—15x14, 27 inches high, slide drawer, $6.50.
No. 102—18x15, 28 inches high, slide drawer, $7.50.
No. 115—18x11, 23 inches high, slide bottom, $6.00.
No. 120—18x14, 25 inches high, slide bottom, $7.50.
ROUND
No. 55—14 inches diameter, 21 high, $3.00.
No. 65—16 inches diameter, 23 high, $4.00.
No. 65—17 ½ inches diameter, 23 high, $5.00.

PARRT STANDS. Enamelled, with tray and feed cups. Each $7.50.
PARRT CAGE CUPS, Heavy metal, self-locking. 25c; postage 10c extra.

Chippmunk Cages, Etc.
SQUIRREL CAGES, CHIPMUNK and MOUSE CAGES, with wheels. Prices, $1.50 to $5.00. Write if interested.

Our Motto—"Highest Quality" Seeds, Bulbs, Plants and Supplies

OUR ILLUSTRATED FOLDER OF CANARY AND PARROT CAGES ON REQUEST.
Philadelphia Bird Co.'s Remedies

Full directions and information with each remedy.

Ant Eggs. 10c; postpaid 15c.

Bird Manna. 25c; postpaid 15c.

Bird Bitters. 25c; postpaid 30c.

Bird Orange Color Food. 25c; postpaid 30c.

German Song Restorer. 15c; postpaid 30c.

Merckan Salve. 25c, postpaid 30c.

Distemper Ant Vermifuge. 10c.

Cat Touring Large Milk. 15c; postpaid 25c.

Cats. A staple and constant food for all breeds of dogs, known and recommended throughout the world. 3-lb. carton 25c; 50-lb. sack $2.50; 100-lb. sack $4.50; Postpaid 50c.

COD LIVER OIL CAKES. For dogs, tonic and regulator. 1-lb. pkg. 25c; postage extra.

PUPPY BISCUITS. A complete food for young puppies from 1 to 6 months old. 3-lb. carton, 25c; postage extra.

PUPPY BONE MEAL 2-lb. pkg. 25c.

DOG SOAP. White. Kills lice and fleas, prevents skin diseases and leaves the coat smooth and glossy, contains no tar, nicely perfumed. For cakes, 25c; postpaid 50c.

Alternative Cooling Tablets. For heated blood, etc. Postpaid 50c.

Digestive Tablets. For severe cases of indigestion. Postpaid 50c.

Diarrhoea Tablets. To relieve diarrhoea. Postpaid 50c.

Purgative Tablets. Perfectly safe and effective. Postpaid 50c.


Worm Capsules for Puppies. May be given with perfect safety to puppies from six weeks old to six months. Postpaid 50c.

Tonic and Condition Tablets. For toy dogs and puppies. Postpaid 50c.

Distemper Tablets for toy dogs and puppies. Postpaid 75c.

 Vermifuge Capsules for toy dogs and puppies. Postpaid 50c.

Dip. Flints, 50c; prepaid, 45c.

Mange Remedy. Flints, 50c; prepaid, 45c.

FOR CATS

Cat Food. An excellent food and general conditioner. Plain with fish or with milk. Small package (F. P. 1 lb.) 15c; large (F. P. 2½ lbs.) 50c.

Vermifuge Capsules for Cats. Postpaid 50c.

Distemper Tablets for Cats. Postpaid 75c.

RABBITS, BELGIAN HARES, CAVIES

These make most desirable pets for the children and educational experts advise that all children are better by having pets. Aside from this, there is quite a demand for these pets and good money in raising them for sale.

BELGIAN HARES.—Pure bred young. $1.00 to $1.50 each; breeding age, $2.50 to $3.50 each; with pedigree, $3.50 to $5.00 each.

BUFFALO RED BELGIANs are improved high bred strain, beautiful rufus red in color, coat fine and soft. Young, $1.50 to $2.50 each; breeding age, $3.50 to $5.00 each; with pedigree, $5.00 to $7.50 each.

NEW ZEALAND BELGIANs—A hardy, sturdy strain, very popular and much in demand. Grows larger and heavier than (see cut), being raised more and more for market: lighter in color than above. The meat is fine and white, claimed to be better than chicken. Young, $1.50 to $2.50; breeding age, $3.50 to $5.00; with pedigree, $5.00 to $7.50 and up.

WHITE ENGLISH (Pink eye).—In great demand about Easter time, they make ideal Easter rabbits. Young, 50c to 75c each; breeding age, $1.50 to $2.50.

New Zealand.

Belgian Hare.

CAVIES—Guinea Pigs

Bright, active and harmless pets, they come in most all colors, generally spotted and prettily marked.

SHORT HAIRRED variety, each $1.00; pair, $1.50.

LONG HAIRRED, each $1.50; pair $2.00 to $2.50.

NOTE.—By Young Stock, we mean from 2 to 3 months old, by Breeding Stock, 6 months or over.
In filling this order we will use the greatest care to have it true to name, and will replace any that may prove untrue. But no sale by us carries a warranty of quality, express or implied, and for any error we shall not be liable for more than the purchase price. Every purchase from us is made on these terms.

| NAME | |
| POST OFFICE | R. P. D. NO. |
| STATION | (If different from P. O.) |
| COUNTY | STATE |
| DATE | AMOUNT ENCLOSED, $ |
| FORWARD BY | |

(Read Note on bottom of this page.)

<table>
<thead>
<tr>
<th>Quantity</th>
<th>NAMES OR ARTICLES WANTED</th>
<th>Amount</th>
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Amount Carried Forward

NOTE—Before you send this order read carefully what we have to say about parcel post and transportation charges on inside of front and back cover.
<table>
<thead>
<tr>
<th>Quantity</th>
<th>NAMES OR ARTICLES WANTED</th>
<th>Amount</th>
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<tbody>
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</table>

Amount Brought Forward

Total Amount of Order

SPECIAL NOTICE.—We shall esteem it a great favor if you will give us in the spaces below the names and addresses of some of your neighbors or any acquaintances in the West whom you think would be interested in this catalog. For your kindness, we will put in your order a premium plant, bulb, or seeds, free of charge.

<table>
<thead>
<tr>
<th>NAME</th>
<th>POS OFFICE</th>
<th>E. F. D.</th>
<th>STATE</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>

NOTE—Before you send this order read carefully what we have to say about parcel post and transportation charges on inside of front and back cover.
**REFERENCE TABLES**

**Quantity of Seeds to produce a given number of plants or to sow an acre.**

<table>
<thead>
<tr>
<th>Plant</th>
<th>QUANTITY PER ACRE.</th>
<th>QUANTITY PER ACRE.</th>
<th>WEIGHT PER BUSHEL.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asparagus, 1 oz. to 200 plants</td>
<td>4 lbs.</td>
<td>Timothy ............ 15 lbs.</td>
<td>Barley ............ 48 lbs.</td>
</tr>
<tr>
<td>Barley ................</td>
<td>In drills 75 lbs.</td>
<td>(Timothy 2-3, Clover 1-3.)</td>
<td>Beans ............ 68 lbs.</td>
</tr>
<tr>
<td>Beans Dwarf, 1 lb. to 75 ft.</td>
<td>60 lbs.</td>
<td>Orchard ............ 30 to 40 lbs.</td>
<td>Buckwheat ........ 50 lbs.</td>
</tr>
<tr>
<td>Beets German, 1 oz. to 50 lbs.</td>
<td>6 lbs.</td>
<td>Rye Grass ........... 30 to 40 lbs.</td>
<td>Blue Grass 14 to 30 lbs.</td>
</tr>
<tr>
<td>Broccoli, 1 oz. to 3,000 plants</td>
<td>4 lbs.</td>
<td>Horse Radish Roots 19,000 to 15,000</td>
<td>Sugar Cane, 1 oz. to 100 lbs.</td>
</tr>
<tr>
<td>Brussels Sprouts, 1 oz. to 3,500 plants</td>
<td>4 lbs.</td>
<td>Kale, 1 oz. to 4000 plants .4 oz.</td>
<td>38 lbs.</td>
</tr>
<tr>
<td>Cabbage, 1 oz. to 3,000 plants</td>
<td>4 lbs.</td>
<td>Kale, Cow Kale drills .4 lbs.</td>
<td>Grass Seed, un-otherwise stated</td>
</tr>
<tr>
<td>Cabbage, 1 oz. to 3,000 plants</td>
<td>4 lbs.</td>
<td>Kaffir Corn, drills .3 lbs.</td>
<td>Hungarian Millet 48 lbs.</td>
</tr>
<tr>
<td>Cauliflower, 1 oz. to 3,000 plants</td>
<td>4 oz.</td>
<td>Kohl Rabi, 1 oz to 300 lbs.</td>
<td>Lawn Grass 14 to 30 lbs.</td>
</tr>
<tr>
<td>Celery, 1 oz. 7,500 plants</td>
<td>4 ozs.</td>
<td>Leek, 1 oz. to 100 ft 4 lbs.</td>
<td>Meadow Fescue 24 lbs.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lettuce, 1 oz. to 300 lbs.</td>
<td>Millet—For Seed. 20 lbs.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Milt—For Hay .... 50 lbs.</td>
<td>Oats—For Grain .... 80 lbs.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Melon—Musk, 1 oz. to 50 hills</td>
<td>For Sets .... 50 to 60 lbs.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 to 3 lbs.</td>
<td>Onions, 3 lbs. to 40 ft. 250 lbs.</td>
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<td></td>
<td></td>
<td>2 oz. to 100 lbs.</td>
<td>Parsnips, oz. to 200 lbs.</td>
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<tr>
<td></td>
<td></td>
<td>2 oz. to 200 lbs.</td>
<td>Parsley, 1 oz. to 150 lbs.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8 ozs.</td>
<td>Peas—Garden, 1 lb. to 75 lbs.</td>
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<td></td>
<td></td>
<td>8 oz.</td>
<td>Field ........ 100 lbs.</td>
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<tr>
<td></td>
<td></td>
<td>1 oz.</td>
<td>Pepper, 1 oz. to 1,500 plants</td>
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<tr>
<td></td>
<td></td>
<td>1 oz.</td>
<td>Potatoes, cut .... 600 lbs.</td>
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<td></td>
<td></td>
<td>1 oz.</td>
<td>Pumpkin, 1 oz. to 25 lbs.</td>
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<td></td>
<td></td>
<td>1 oz.</td>
<td>Radish, 1 oz. to 100 lbs.</td>
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<td></td>
<td></td>
<td>1 oz.</td>
<td>Rape, 1 oz. to 150 lbs.</td>
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<tr>
<td></td>
<td></td>
<td>1 oz.</td>
<td>Rye—For Grain .... 60 to 80 lbs.</td>
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<tr>
<td></td>
<td></td>
<td>1 oz.</td>
<td>For Hay .... 100 to 150 lbs.</td>
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<tr>
<td></td>
<td></td>
<td>1 oz.</td>
<td>Salsify, 1 oz. to 50 lbs.</td>
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<td></td>
<td></td>
<td>1 oz.</td>
<td>Speltz ........ 60 lbs.</td>
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<tr>
<td></td>
<td></td>
<td>1 oz.</td>
<td>Squash, Summer, 1 oz. to 25 hills</td>
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<td></td>
<td></td>
<td>1 oz.</td>
<td>Tomato, 1 oz. to 250 plants</td>
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<td></td>
<td>1 oz.</td>
<td>Turnip, 1 oz. to 4000 plants</td>
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<td></td>
<td></td>
<td>1 oz.</td>
<td>Vetches ........ 85 lbs.</td>
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<td></td>
<td></td>
<td>1 oz.</td>
<td>(Or 60 lbs. with 40 lbs. of grain.)</td>
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<tr>
<td></td>
<td></td>
<td>1 oz.</td>
<td>Wheat .... 80 to 100 lbs.</td>
</tr>
</tbody>
</table>

**Suitable Distance for Planting Trees and Plants**

Note.—In planting in the home garden for hand cultivation, you can set plants or trees closer.

**Apples, Standard** 20 to 30 feet  
**Apples, Dwarf** 10 to 20 feet  
**Pears, Standard** 18 to 20 feet  
**Pears, Dwarf** 10 feet  
**Plums** 12 feet  
**Grapes** 6 by 12 feet  
**Currents** 4 by 4 feet

**Number of Trees or Plants On An Acre**

<table>
<thead>
<tr>
<th>Number of Trees or Plants On An Acre</th>
<th>1 by 2 feet</th>
<th>1 by 3 feet</th>
<th>1½ by 2 feet</th>
<th>1½ by 3 feet</th>
<th>2 by 2 feet</th>
<th>2 by 3 feet</th>
<th>3 by 4 feet</th>
<th>3 by 5 feet</th>
<th>3 by 6 feet</th>
<th>4 by 4 feet</th>
<th>4 by 6 feet</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>21,784</td>
<td>14,520</td>
<td>10,890</td>
<td>9,520</td>
<td>7,251</td>
<td>5,446</td>
<td>3,630</td>
<td>2,904</td>
<td>2,176</td>
<td>1,723</td>
<td>1,315</td>
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<td></td>
<td>4 by 8 feet</td>
<td>8 by 8 feet</td>
<td>8 by 8 feet</td>
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**RULE.** Multiply the distance in feet between the rows by the distance the plants are apart in the row, and the product will be the number of square feet, for each plant or hill, which, divided into the number of square feet in an acre (43,560), will give the number of plants to the acre.