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1917

LILLY'S
SEEDS

SEEDS
FERTILIZERS
BEE SUPPLIES
SPRAY MATERIALS
POULTRY SUPPLIES
Seeds
Fertilizers
Stock Foods
Bee Supplies
Spray Materials
Poultry Supplies

Lilly's COMPLETE ANNUAL CATALOG 1917

THE CHAS. H. LILLY CO.
ESTABLISHED 1885

General Offices, Factory and Warehouses, Hanford Street and West Waterway
Seattle Store, Pioneer Square, Foot of Cherry Street

SEATTLE, WASHINGTON

Portland Branch, Front and Yamhill Streets, Portland, Ore.
Ellensburg Branch, Ellensburg, Wash.
Wapato Branch, Wapato, Wash.
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President

H. P. Chapman
Manager

J. E. McGowan
Manager
Seattle Store

H. A. Lawrence
Alaska Representative

W. H. Brownell
Head Miller

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Superintendent

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Treasurer

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Seed Packing

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Salesman

L. E. Herzberg
Salesman

P. J. Helgeson
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L. E. Herzberg
Salesman

A. Christianson
Superintendent

C. W. Johnson
Exports

Field Work
CASH PRIZES
FOR BEST EXHIBITS OF PRODUCE GROWN FROM Lilly'S SEEDS

Exhibited at the Agricultural Fairs in Washington, Oregon and Idaho

At certain agricultural fairs in the states of Washington, Oregon, and Idaho, to be designated by us, we will give to the exhibitor receiving the fair association's highest award for best exhibit of farm and garden produce an additional premium of $10.00 in cash, provided there is conspicuously displayed with the exhibit a card, furnished by us, reading "Grown from Lilly's Seeds.

This will apply only at fairs which have this offer listed in their premium list, and have our authority for doing so. If you wish to compete at a fair with which no arrangements have been made, have the secretary take the matter up with us, or give us the name and address of the secretary, and, if consistent, we will make the necessary arrangements with him. This must be done in time to be printed in the premium list.

In all cases we must be advised by you of your intention to compete, at least one week before the opening of the fair, so that we may furnish cards to display with the exhibit. No cards other than those furnished by us will be considered.

Immediately on receipt of proper certificate signed by the secretary of the fair association we will mail our check for $10.00 to the successful competitor. The certificate must be on a form which we will furnish to the secretary, reading as follows:

"This is to certify that Mr. Address has been awarded the Fair Association's highest award for best exhibit of farm and garden produce, and that there was conspicuously displayed with the exhibit a printed card reading 'Grown from Lilly's Seeds,' also that your offer of a $10.00 cash prize to be given in addition to such award was listed in the premium list of this association, a copy of which has been mailed to you.

Per Secretary."

This premium is worth competing for; see that your fair association has it listed in their premium list. Don't forget to notify us that you intend to compete.
REGARDING ORDERS

Kindly Observe the Following Suggestions, and Assist Us in Our Endeavor to Give Prompt and Efficient Service

Order early. During the spring planting time, from the middle of March to the middle of May, we are crowded to full capacity, and although our facilities and system of handling orders are highly efficient, occasional delays and errors are bound to occur; also, late in the season, we are liable to be sold out of some varieties. It is to your advantage, as well as ours, to order before the spring rush.

Use our order blanks, which are enclosed in this book, to avoid delay and chance for error.

Write name and address distinctly. We receive many orders which are illegible, or the name or address is omitted, and are unable to fill the order until we receive a complaint.

We acknowledge receipt of all orders amounting to twenty-five cents or more. If you do not receive an acknowledgment card promptly, it is evidence that the order has not been received. In case it is necessary to write to us in regard to any order for which you have received an acknowledgment card, please refer to the number which is shown on the card. Orders are usually filled the same day that they are received by us. If, for any reason, there will be a delay of more than a few days, we will write to you explaining the delay.

Prices of some seeds, foods, fertilizers, etc., are liable to fluctuate, and, to avoid making them high enough to cover any advance in the market, prices shown in this catalog are subject to change. Before ordering, if the supplement enclosed with this catalog is not of recent date, write to us for latest catalog supplement.

Our prices are as low as is consistent with the quality of the goods, and are net. We allow no discounts and give no premiums.

Market gardeners and others requiring seeds in very large quantities will please write for special quantity prices, stating varieties and quantities wanted.

Remittance in full is required with all orders. To ship goods C. O. D. would cause considerable unnecessary labor, confusion and expense. We are always prompt in adjusting errors or reasonable complaints. Remittances should be made in the form of Post Office Money Order, Express Money Order, Bank Draft or Registered Letter. We will accept stamps in small amounts, but cannot assume responsibility for stamps, currency or coin lost in the mails.

We do not pay transportation charges except when prices are quoted “postpaid.” We pay transportation charges, by parcel post, express or freight, at our option, on flower seeds and vegetables seeds in lots of one pound or less, except Beans, Peas, Corn, Mushroom Spawn and Onion Sets. Except in the few cases where we specify that prices are “postpaid,” if goods are to be shipped by parcel post, a sufficient amount must be remitted to pay postage; otherwise the goods will be shipped by express or freight. If goods are to be shipped by express or freight to a station at which there is no agent, a sufficient amount must be remitted to prepay transportation charges.

We make no charge for sacks or packing. Seeds, grains and feeds are sold on gross weights.

Non-warranty. Most failures of seeds and plants to grow are caused by unfavorable weather, soil, or cultural conditions, which are entirely beyond our control, and it is impossible for us to guarantee success. We exercise every precaution to grow and secure only the very best seeds and plants, but give no warranty, express or implied, as to description, quality, productiveness or any other matter of any Seeds, Bulbs or Plants sent out, and will not be in any way responsible for the crop.

PARCEL POST RATES

Parcels weighing four ounces or less, except books, seeds, plants, etc., 1 cent for each ounce or fraction thereof, any distance.

Parcels weighing eight ounces or less, containing books, seeds, cuttings, bulbs, roots, scions and plants, 1 cent for each two ounces or fraction thereof, regardless of distance.

Other parcels of fourth class matter are chargeable according to distance zone at pound rates as follows:

Local Zone. Shipments handled by one post-office only. 5c for first pound and 1c for each additional two pounds. Limit, 50 lbs.

First and Second Zones. To any postoffice within 150 miles. 5c for the first pound and 1c for each additional pound. Limit, 50 lbs.

Third Zone. More than 150 miles, less than 300 miles. 6c for the first pound and 2c for each additional pound. Limit, 20 lbs.

Fourth Zone. More than 300 miles, less than 600 miles. 8c for the first pound and 4c for each additional pound. Limit, 20 lbs.

Fifth Zone. More than 600 miles, less than 1,000 miles. 8c for the first pound and 4c for each additional pound. Limit, 20 lbs.

Sixth Zone. More than 1,000 miles, less than 1,400 miles. 9c for the first pound and 5c for each additional pound. Limit, 20 lbs.

Seventh Zone. More than 1,400 miles, less than 1,800 miles. 11c for the first pound and 10c for each additional pound. Limit, 20 lbs.

Eighth Zone. All over 1,800 miles. 12c for the first pound and 12c for each additional pound. Limit, 20 lbs.

The limit of size of a package that will be accepted by parcel post is 3/4 inches in length and girth combined.

Poisons and explosives cannot be shipped by parcel post.

To insure prompt and full delivery, place your order early.
**Lilly's VEGETABLE GARDEN ASSORTMENTS**

THESE ASSORTMENTS consist of our choicest varieties, the same seeds and packages as are listed among our specials in the following pages. The varieties and quantities are carefully chosen as suitable for the average home garden, and, unless one has had experience, will prove more practical than most persons would be able to select from the general list. These assortments are packed ready for shipment, and cannot be changed in any way. By packing them during the dull season, and large quantities at one reduced prices. Additional seeds may, of course, by assortment number only.

### Assortment No. 1

**Regular price, 75c.**

**Assortment price, 50c, postpaid.**


### Assortment No. 2

**Regular price, $1.55.**

**Assortment price, $1.00, postpaid.**


### Assortment No. 3

**Regular price, $2.25.**

**Assortment price, $1.50, postpaid.**


### Assortment No. 4

**Regular price, $3.00.**

**Assortment price, $2.00, postpaid.**


### Assortment No. 5

**Regular price, $3.85.**

**Assortment price, $2.50, postpaid.**

AFTER careful tests and observation of practically all varieties of the various garden vegetables we have chosen those listed in the following pages as being most desirable for the West. We consider this preferable to listing a great number of varieties and compelling the gardener to ascertain which is most suitable. The varieties listed as specials are especially recommended, and those who are uncertain as to which to order will be safe in selecting those which our experience has proven to be the best.

Our seeds are grown from selected stock, under our supervision, carefully rogued, thoroughly cleaned, and are tested for purity and germination. All seeds which we send out will grow and produce satisfactory crops if soil, weather, and cultural conditions are right. Lilly’s Seeds and culture such as is recommended in the Crop Book insure bountiful crops. The Crop Book is furnished free with any order when requested.

Prices shown for vegetable seeds in lots of one pound or less include postage when shipped by parcel post, except in the case of Peas, Beans, Corn, and Mushroom Spawn, for which an amount sufficient to pay postage must be remitted in addition to price.

ARTICHOKE
Large French Green Globe
The Green Globe Artichoke is a delicious vegetable which is very popular in Europe and deserves to be more generally grown in this country. The plant resembles a mammoth thistle. The edible portion is the immature flower heads, which are boiled and served with butter dressing. The young suckers which spring up around the bottom of the plant are also used, served like asparagus.

The flower heads are not produced until the second season. It is a perennial, and will last for several years. It is not at all similar to the Jerusalem Artichoke, the edible portion of which is the tubers, which are used mostly for stock food.

Packet, 5c; ounce, 35c; postpaid.
Jerusalem Artichoke tubers are listed in Farm Seeds Section of this catalog.

ASPARAGUS
Columbia Mammoth
A very superior variety of this delicious early spring vegetable, which should have a place in every home garden. It is of exceptionally large size, white, tender, and is unrivalled in flavor.

Pkt., 5c; oz., 10c; 1⁄4 lb., 25c; postpaid.

Palmetto
A very early and prolific variety, producing an abundance of very large, deep green shoots of the best quality.

Pkt., 5c; oz., 10c; 1⁄4 lb., 20c; postpaid.

Asparagus plants from seed do not produce a crop until the third year. One year can be saved by purchasing plants. The plants are listed in Plants Section of this catalog.

Market Gardeners, and others requiring seeds in very large quantities, will please send us a list of varieties and quantities wanted, and we will quote special quantity prices.
Jones' Select Stock

**JONES' STRINGLESS WAX BEAN**

A Delicious Yellow-podded Bush Variety

A comparatively new variety, very popular with many of our customers, some of whom claim that there is no other wax-podded dwarf bean to compare with it. The pods are a beautiful waxy yellow, very long and nearly straight, round, plump, full, very brittle, stringless and without fiber. In flavor and quality they are unexcelled. The ripe dry seeds are white and are excellent for shelled beans. The plants are of medium size, thick stemmed, erect, without runners, early and productive. Our strain is grown with special care, and is sold only in sealed packages.

**Packet, 10c; 1 lb., 30c; 10 lbs. or more, 25c per lb.**

**LILLY'S LONGFELLOW BEAN**

An Unequaled Extra Early Green-podded Bush Bean

Longfellow is an extra early green podded snap bean, producing splendid crops of very long, round, straight, solid, fleshy pods, which are deliciously tender and brittle. They are stringless when young, although they may become stringy when the pods are quite old. The flavor is excellent, and the delicate green color of the pods is retained after cooking.

The plants are robust, without runners, and are very productive. The mature seeds are of medium size, oval, white, mottled with red.

**Packet, 10c; 1 lb., 25c; 10 lbs., 22½c per lb.**

**GOLDEN WAX BEAN**

A standard yellow-podded dwarf wax bean, very popular for both the home garden and for market. The pods are of medium length, broad, flat, golden-yellow, very fleshy, wax-like and stringless. The plants are erect, compact, and produce early and abundantly. The seeds are of medium size, oval, white mottled with red.

**Packet, 10c; 1 lb., 25c; 10 lbs., 22½c per lb.**

**Davis White Kidney Wax Bean**

A handsome wax-podded variety, very popular for shipping. The plants are very hardy, productive and medium early. The pods are light yellow, straight, remarkably long, crisp and tender. The seed is medium size, kidney shaped, clear white, and the dried beans are excellent for baking.

**Packet, 10c; 1 lb., 25c; 10 lbs., 25c per lb.**

**Prolific Black German Wax Bean**

This is an improved strain of Black Wax, and is an exceptionally productive, dwarf, wax-podded variety; hardy, reliable, and of the best quality. The pods are of medium size, curved, cylindrical, fleshy, and of a light golden color. The seeds are small, oblong, and jet black.

**Packet, 10c; 1 lb., 25c; 10 lbs., 25c per lb.**

**Burpee's Stringless Green-pod Bean**

A very early and hardy green-podded bean of excellent quality. The pods are rich green, round, straight and about five inches long, very meaty and entirely stringless.

**Packet, 10c; 1 lb., 30c; 10 lbs., 25c per lb.**

**Dwarf Horticultural Bean**

An early green-podded bush bean, splendid for either snappy or green shelled beans; the dried beans may also be used for baking or soup. The pods are of medium length, slightly curved, and when nearly developed are freely splashed with bright red. The plants are erect, compact, without runners, and fairly productive.

**Packet, 10c; 1 lb., 30c; 10 lbs., 25c per lb.**

**Lady Washington Field Bean**

This white field bean is an improvement over the old Navy Bean; is earlier, larger, and more productive, especially to the West.

**Packet, 10c; 1 lb., 15c; 10 lbs., $1.25.**

**White Navy Bean**

The well known small white field bean. It is of little use as a snap bean, and is grown for the dry shelled beans only.

**Packet, 10c; 1 lb., 15c; 10 lbs., $1.25.**

If Beans are to be shipped by parcel post, postage is in addition to price of seed.
GOLDEN JERSEY WAX BEAN
The Best Yellow-podded Bush Bean
An improved strain of the old standard Golden Wax, which has been so universally grown in all sections of the country for so many years. The plants are small, hardy, very erect, vigorous, thick stemmed, without runners, early and very productive.

The pods are rich golden yellow, large and handsome; they are broad and thick, solid fleshed, of splendid quality, tender, brittle, and stringless. The dry seeds are of medium size, white with mottling of violet and yellow around the eye and ends. Sold in sealed packages only.

Packet, 10c; 1 lb., 30c; 10 lbs., 25c per lb.
Postage additional if shipped by parcel post.

LONG YELLOW SIX WEEKS BEAN
A standard green-podded bush bean, popular with market gardeners as it is very productive and is an unusually good shipper. The pods are long, flat, uniform and handsome, but are inclined to be stringy. The plants are of medium size, erect, without runners, early, productive and reliable.

Packet, 10c; 1 lb., 30c; 10 lbs., 25c per lb.

Lilly's CARMINIE POLE BEAN
Best Pole Bean for the Northwest
The best and most attractive all-round pole bean for snap green shell, or dry shell beans, either for home or market. The pods are brilliantly splashed with bright carmine on a greenish-yellow background; very long and flat, generally straight, surface smooth, very brittle, entirely stringless and without fiber, and of splendid quality. Free from anthracose. Sold only in sealed packages.

Packet, 10c; 1 lb., 30c; 10 lbs., 30c per lb.

KENTUCKY WONDER BEAN
The most popular and one of the best early pole snap beans for home or market. The snap pods are green in color, with wrinkled surface, very long, curved, extremely brittle, slightly stringy, without fiber, of good quality and free from anthracose.

Packet, 10c; 1 lb., 25c; 10 lbs., 20c per lb.

LAsY WIFE POLE BEAN
One of the most largely grown kidney pole varieties, and the best general purpose late pole bean, excellent for either home or market, of superior quality as snaps, and on account of large white seeds and attractive pods it is also excellent for green or dry shell beans.

Packet, 10c; 1 lb., 30c; 10 lbs., 25c per lb.

Horticulturally, or Speckled Cranberry
Decidedly the best of the horticultural varieties for general use and almost equal to Lazy Wife as a general purpose late snap and green shell pole bean for home or market.

Packet, 10c; 1 lb., 20c; 10 lbs., 15c per lb.

SCARLET RUNNER BEAN
Popular for both ornamental and culinary purposes. Grows about ten feet high, bearing large scarlet flowers followed by large green-podded beans, excellent as either snap or shell beans.

Packet, 10c; 1 lb., 30c; 10 lbs., 25c per lb.

BURPEE'S BUSH LIMA BEAN
The most generally grown bush lima bean, growing about twenty inches high and bearing exceptionally large pods and beans of fine quality. Medium early and very productive.

Packet, 10c; 1 lb., 25c; 10 lbs., 17½c per lb.

King of Garden, or Large White Lima
The most popular and best of the pole lima beans, but not so well adapted to the Northwest as the bush varieties. It is unsurpassed in productiveness, large handsome pods and large seeds.

Packet, 10c; 1 lb., 22c; 10 lbs., 16c per lb.
CRIMSON GLOBE

Best Second Early or Main Crop Beet

A splendid variety, the finest of all for the home garden, also popular with market gardeners. It is not quite so early as Crosby's Egyptian, but for second early and succession it has no equal, on account of the exquisite quality and delicious flavor.

The beet is nearly globular, slightly elongated, of medium size, about three inches in diameter, with small tops and very small tap-root. The flesh is deep crimson beautifully ringed or zoned, and is entirely free from stringiness or woodiness.

The extreme tenderness, sweetness, fine flavor and attractive appearance makes this the highest type of blood turnip beet. Our seed is specially selected from the choicest strain, and is sold in sealed packages only.

| Pkt. | 10c; oz., 15c; ¼ lb., 50c; lb., $1.50; postpaid. |

LILLY'S SELECT STOCK

CROSBY'S EGYPTIAN

Early Blood Turnip Beet

An improvement over the old Extra Early Egyptian. It is fully as early as the old variety, and excels it in all other respects, being larger, smoother, thicker, and of much finer quality. The color is rich vermilion slightly zoned: it is fine grained, tender and sweet, and does not become woody or hard. It is a great favorite with market gardeners. Sold only in sealed packages.

| Pkt. | 10c; oz., 15c; ¼ lb., 50c; lb., $1.50; postpaid. |

Early Egyptian Beet

An extra early variety, suitable for forcing and early garden culture. The beets are small and flattened: dark red: tender.

| Pkt. | 5c; oz., 10c; ¼ lb., 35c; lb., $1.00; postpaid. |

Early Blood Turnip Beet

A standard medium early variety of excellent quality: also good for summer and fall use. The flesh is deep red zoned with lighter shade; sweet, crisp and tender; nearly round.

| Pkt. | 5c; oz., 10c; ¼ lb., 35c; lb., $1.00; postpaid. |

Eclipse Blood Turnip Beet

Very early, of uniform globular shape, deep red color, fine grained, tender and sweet. Popular for both market and home garden.

| Pkt. | 5c; oz., 10c; ¼ lb., 35c; lb., $1.00; postpaid. |

Half-Long Blood Beet

A half-long blood beet of superior quality: tender, sweet and free from woody fiber. The roots are deep red, half long, smooth and uniform.

| Pkt. | 5c; oz., 10c; ¼ lb., 35c; lb., $1.00; postpaid. |

LILLY'S LUCULLUS SWISS CHARD

Spinach Beet or Sea Kale Beet

Lucullus is the newest, largest, and best variety of Swiss Chard or Spinach Beet. This type of beet is grown for its leaves, tender, succulent leaves, which make the most delicious greens, or the thick, fleshy leaf stalks which are cooked and served like asparagus. The seed is planted in spring the same as beets, and the tops are cut off as wanted during the summer, fall, and following spring.

| Pkt. | 5c; oz., 10c; ¼ lb., 30c; lb., 85c; postpaid. |

Stock Beets Mangels Sugar Beets are listed in "Farm Seeds" Section of this Catalog.

The Crop Book, giving cultural directions for vegetables, flowers, and farm crops, will be given free with any order if requested at the time the order is mailed to us.
Broccoli

Large White French. The heads resemble cauliflower, and it is used in the same manner, but is harder and inferior in quality.

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

Brussels Sprouts

Dwarf Improved. The heads or sprouts are formed on the stalk of the plant, are one to two inches in diameter, and resemble miniature cabbages.

Pkt., 5c; oz., 15c; 1/4 lb., 45c.

Lilly's GLORY CABBAGE

A Splendid Second Early Variety; Round, Solid Heads

Although this is very early for a round headed cabbage, as early as Early Flat Dutch or other second early varieties, it is a splendid keeper and is excellent for winter use. The heads are of good size, almost perfectly round, extremely solid and heavy, deliciously tender and of the finest quality. The plants are of vigorous growth and are sure heading. Our seed is grown in the Puget Sound country, famous for producing the best cabbage seed grown in this country.

Pkt., 10c; oz., 20c; 1/4 lb., 75c; 1 lb., $2.50; postpaid.

Danish Ballhead or Hollander

Unsurpassed for Winter Use

A medium or late variety, one of the very best keepers, and excellent for late winter or spring shipping. The heads are round, of medium size, very solid and hard, and of good quality. The plants are vigorous, compact, exceedingly hardy, and reliable. Our seed is grown with special care from carefully selected heads.

Pkt., 10c; oz., 20c; 1/4 lb., 75c; 1 lb., $2.50; postpaid.

Cabbage Plants

We can furnish sturdy, well grown cabbage plants in season, March 1st to June 30th. See Plants Section of this catalog. Special prices on large quantities.

Market gardeners and others requiring seeds or plants in large quantities will please write for special prices, stating varieties and quantities wanted.
Lilly's Early Jersey Wakefield
An Improved Strain of the Standard Extra Early and Popular Variety

This old standard variety is still the most popular extra early cabbage, and is more generally grown than all others. It is equally popular for either the home garden or for market, and is always first in the markets in spring. The heads are pyramidal in form, pointed at the top, with but few outside leaves, and are uniformly solid and of fine quality and flavor. The plants are extremely hardy, and on the Pacific Coast the seed is sown in fall and the plants wintered over in the open ground. Our seed is grown in the Puget Sound country and is of a particularly fine strain.

Early Winnigstadt
An excellent variety, but not so early as Early Jersey Wakefield. The heads are similar in form and size, but are more sharply pointed; very hard and the leaves are tightly folded.

Pkt., 5c; oz., 20c; ¼ lb., 60c; lb., $1.75.

Lilly's Copenhagen Market
The Earliest Large Round Headed Cabbage—A Wonderful New Variety

This splendid new variety was recently imported from Denmark, and is really a wonderful cabbage. Although it is very early, earlier than most second early varieties, the round, solid heads grow to very large size, 10 to 12 pounds. The heads are very nearly globular, very solid, of excellent quality, are produced on short stems and have few outer leaves. The plants are hardy, sturdy, and may be depended upon to produce solid heads at an early season. Our seed is grown in the Puget Sound country, where the best cabbage seed is produced, from seed stock imported from Denmark.

Pkt., 10c; oz., 20c; ¼ lb., 75c; lb., $2.50; postpaid.

Growing Cabbage Seed is one of our specialties. No better seed is grown in America.
One of the Most Satisfactory Second Early Cabbages for General Use

A very desirable second early or intermediate season cabbage. As its name implies, it is adapted for either summer, fall, or winter use. The heads become solid long before they are fully grown, and may be used at that time or during the long season until they are mature. It is not liable to split. The heads are very large, are nearly round, slightly flattened, are very solid and of excellent quality. This variety appears to be especially adapted to the Pacific Coast, and makes a splendid showing in our seed fields. Our seed is grown in the Puget Sound country, and is of exceptionally fine quality.

All Head Early

A large heading second early variety of good quality. May be planted late and used in fall and early winter. The plants are compact, with few outer leaves. Stems are short. Heads are large, solid and flat, but very deep.

Fottler’s Brunswick

One of the best second early or intermediate cabbages for fall use. The plants have very short stems, large leaves, and are very compact. The heads are large, flat, solid and of fine quality.

Surehead

One of the most reliable late or main crop cabbages; very hardy and exceptionally sure heading. The heads are large, broad, thick, somewhat flattened, compact, very solid and of excellent quality.

Large Late Drumhead

A favorite winter cabbage for shipping. The heads are large, solid and of good texture, flattened on top but very deep. Can be kept in good condition until late in spring.

Red Dutch

A popular hard headed red cabbage for pickling, etc. A good keeper. Rather small but of excellent quality and flavor.

Prices shown for Cabbage Seed in lots of one pound or less include parcel post charges.
GOLDEN HALF-LONG
FINEST MAIN CROP CARROT

Superior Quality, Delicious, Sweet, Crisp and Tender
Golden Half-long is by far the best carrot for home use and for market, and it is preferred for stock feeding. Although it is not as large as the stock carrots, the yield is almost as great and the quality is much superior.

It is of good size, six to seven inches long; cylindrical and smooth; tapers to a round, blunt end, with a very small tap-root. The color is a rich orange-red. The flesh is finely grained, crisp, tender, almost coreless, and delicately flavored.

For table use it is unexcelled.

Carrots should be more generally grown, both for table and for stock food. They are a delicious and healthful vegetable, easy to grow, and are in perfect condition for eating at any time during their growth, from the time they are the size of a lead-pencil until long after they are matured. On the Pacific Coast they may be left in the ground during the winter, and pulled as wanted for use. Our climate and soil is especially adapted to growing them.

Lilly's Golden Half-long Carrot is sold only in sealed packages.

Pkt., 10c; oz., 15c; ¼ lb., 50c; 1lb., $1.60; postpaid.

DANVER'S HALF-LONG CARROT
A standard half-long orange-colored carrot, grown largely on account of its great productiveness and adaptability to all kinds of soil. It is a desirable second-early carrot for the home garden, and is also popular for field culture. The tops are of medium size. They are round but may be six to eight inches long, tapering gradually to a blunt point. The flesh is deep orange, tender, and of good quality. Although the roots of this variety at maturity are comparatively short, they often produce as large bulk as the longer stock sorts, and they are more easily harvested.

Pkt., 5c; oz., 10c; ¼ lb., 35c; 1lb., $1.00; postpaid.

Chantenay, or Model
An excellent stump-rooted variety, about six inches long, very broad at the shoulder and tapering to a blunt point; free from core, fine grained and tender; orange-red; medium early.

Pkt., 5c; oz., 15c; ¼ lb., 40c; 1lb., $1.25; postpaid.

SHORT HORN
Early Scarlet Horn, or Early French Forcing Carrot
One of the earliest varieties in cultivation, and very desirable for forcing. The tops are very small; the roots are reddish-orange and are nearly round when forced quickly in very rich, well prepared soil, but are somewhat longer when grown outdoors. When fully matured the roots are about two to two and one-half inches long, but they should be used before fully grown, while young and tender.

Pkt., 5c; oz., 15c; ¼ lb., 40c; 1lb., $1.25; postpaid.

Improved Long Orange
This improved strain is medium to late maturing, and is suitable for either table use or for stock food. The roots are very deep orange, long and comparatively thick, often twelve inches long and three inches in diameter at the crown, tapering regularly to a point. The tops are rather large; it is very productive, and when grown in light, deep, rich soil the roots are straight and uniform. When of a size suitable for the table, the roots are tender and of good quality.

Pkt., 5c; oz., 10c; ¼ lb., 35c; 1lb., $1.00.

Oxheart, or Guerande
Especially desirable on shallow or hard soil where longer rooted varieties would not thrive. The roots are about five inches long, very thick, ending abruptly in a small tap-root. The flesh is bright orange, fine grained and sweet. It is medium early, and when young is desirable for table use; when mature they are excellent for stock food.

Pkt., 5c; oz., 10c; ¼ lb., 35c; 1lb., $1.00.

Improved Short White Carrot
A desirable stock carrot on account of its great productiveness and the ease with which it can be harvested. The roots are half-long, seven to nine inches in length, smooth, very heavy at the shoulder, tapering to the point. The color is white with light green crown.

Pkt., 5c; oz., 10c; ¼ lb., 30c; 1lb., 85c.

White Belgian Carrot
A large and very productive white carrot, recommended for stock food only. Very similar to Improved Short White.

Pkt., 5c; oz., 10c; ¼ lb., 30c; 1lb., 85c.

MASTODON, Stock Carrot
The most popular white carrot for stock feeding. Its excellent of its immense size, productiveness, and being short and easy to harvest. It sometimes yields as much as twenty-five tons per acre. Not suitable for table use.

A more complete description of this variety will be found in Farm Seeds Section of this catalog. Sold only in sealed packages.

Ounce, 10c; ¼ lb., 30c; 1lb., 85c; postpaid.

Those requiring seeds in larger quantities than listed in this catalog will please write for special quantity prices, stating varieties and quantities wanted.
E A R L Y  A L B A  C A U L I F L O W E R

An Unequaled Variety for Early or Main Crop, for Home or for Market

Early Alba is by far the best cauliflower grown, either for early or late, for home use or for market, for forcing or for outdoor culture. It is the largest early cauliflower, and is equally good for either extra early or for main crop. It is a sure producer of large, solid, compact, snow-white heads of unequaled quality, flavor, and beauty.

The Puget Sound country is noted as being peculiarly adapted to growing cauliflower, and there is no other place on the American continent where such high-grade seed is produced. Our soil and climate, cool summers, mild winters and uniform temperature are ideal for the production of the best plants and heads, and for maturing the seed.

Lilly’s Early Alba Cauliflower Seed is sold in sealed packages only.

Packet, 25c; ¼ ounce, 75c; ½ ounce, $1.40; 1 ounce, $2.50; postpaid.

DANISH DRY-WEATHER CAULIFLOWER

Danish Dry Weather Cauliflower is especially adapted for growing in dry localities where other varieties fail to produce good heads, but is also an excellent variety for more favorable conditions.

It is not as early as Early Alba, and is not suitable for forcing, but the heads are large, solid, pure white, of splendid quality, and for main crop it is excelled by none, as it is the surest header known, and is therefore the most profitable for the market gardener. It will make a good crop in dry climates where it has heretofore been considered impossible to grow good cauliflower. Sold in sealed packages only.

Pkt., 25c; ¼ oz., 75c; ½ oz., $1.40; 1 oz., $2.50.

CAULIFLOWER PLANTS are listed in Plants Section of this catalog. If you have not a hotbed or greenhouse, it is best to purchase the plants

Snowball Cauliflower

A standard early variety, excellent for forcing, early outdoor culture, or for main crop. The plants are compact, with few outside leaves, and may be planted closely. The heads are of medium size, solid, compact, round, white, and of good quality.

Pkt., 5c; ¼ oz., 60c; ½ oz., $1.10; 1 oz., $2.00.

Large Late Algiers

A valuable late sort, sure to head, of excellent quality and popular with market gardeners. The plant is large but of upright growth, the leaves protecting the heads so that they are uninjured by frost that would ruin other varieties.

Pkt., 5c; ¼ oz., 25c; ½ oz., 40c; 1 oz., 75.

SEEDS are tested for purity and germination. If the package is branded “Lilly” the seeds may be depended upon.
VILMORIN’S PARIS GOLDEN YELLOW CELERY

Very Popular Variety, Unequalled for Home or Market

This delicious French variety is deservedly popular, and our seed is the best that it is possible to procure, coming direct from the originators, Vilmorin, Andrieux & Co., Paris. The plants are of medium size, with beautiful yellowish-green foliage, and as they mature the inner stalks and leaves become a beautiful golden-yellow; as nearly self-blanching as any variety in existence.

The handsome color, crispness, tenderness, freedom from stringiness, delicious nutty flavor, sturdy growth, ease of blanching, and earliness of this variety make it unequalled for either the home garden or for market. Sold only in sealed packages.

Packet, 10c; ounce, $1.50; ¼ lb, $5.00; postpaid.

GIANT WHITE WINTER

Giant White is unequalled as a late winter celery. Like other winter varieties, it is not self-blanching, and must be blanched by Banking with earth or with boards. On the Pacific Coast it may be left in the garden until wanted, and will be fit for use as late as March or April.

This variety is unexcelled in keeping qualities; grows very tall, but with large, solid stalks; makes a splendid appearance, and when properly blanched is pure white, very brittle, and the flavor is delicious.

Pkt, 15c; oz, 75c; ¼ lb, $1.75; postpaid.

GIANT WHITE SOLID

An excellent late fall and winter variety of immense size and good quality. Blanches white and tender.

Pkt, 5c; oz, 20c; ¼ lb, 60c; lb, $2.00.

CHERVIL

Curled. Very finely curled, resembling parsley; used in soups and salads.

Pkt. 5c; oz. 10c; ¼ lb, 30c; lb, $1.00.

Prices shown for Vegetable Seeds, except Beans, Corn, Peas, Onion Sets and Mushroom Spawn, include postage.

Celery Plants are listed in Plants Section of this catalog.
Field Corn is listed in Farm Seeds Section of this catalog.

**Lilly's**

**GOLDEN BANTAM**

Sweetest and Most Deliciously Flavored Early Sweet Corn

Golden Bantam is the sweetest and most deliciously flavored sweet corn that has ever been grown, and has no equal for the home garden or early market. In earliness it is excelled only by Jack Frost, and in flavor it is equaled by none. The ears are short, thick, and compactly filled with large, plump, creamy-yellow kernels which become golden-yellow as they ripen. The stalks are of dwarf habit, sturdy and very productive. It is one of the hardiest varieties, may be planted early, and is especially adapted to the Northwest. Sold only in sealed packages.

Packet, 10c; 1 lb., 15c; 10 lbs., $1.25 per lb. Postage additional if shipped by parcel post.

**Lilly's**

**JACK FROST CORN**

The Earliest Dwarf Sweet Corn

This is the earliest variety of sweet corn, and is peculiarly adapted to the Pacific Coast. The ears are small, about five inches long, and are well filled with large, white kernels of delicate flavor and melting tenderness. It remains tender and fit for use longer than other varieties. The plant is dwarf, and each stalk bears two or more ears. Sold in sealed packages only.

Pkt., 10c; 1 lb., 15c; 10 lbs., $1.25 per lb.

**Early Minnesota**

A standard second early variety. The stalks grow about six feet high. The ears are about eight inches long, eight rowed, and the kernels are very broad, white, sweet and tender.

Pkt., 10c; 1 lb., 15c; 10 lbs., 10c per lb.

**Peep o' Day**

Extra early and prolific, the dwarf stalks producing two or more ears each. The ears are about five inches long, and the kernels large, white and tender.

Pkt., 10c; 1 lb., 15c; 10 lbs., 12½c per lb.

**Stowell's Evergreen**

An old and popular late sweet corn. The stalks grow about seven feet high, and are very productive. The ears are seven to eight inches long, and the kernels are white, very tender and sugary, and remain a long time in condition for use.

Pkt., 10c; 1 lb., 15c; 10 lbs., 10c per lb.

Field Corn and Pop Corn are listed in Farm Seeds Section of this catalog.

**CORN SALAD**

Large Headed Petticoat, or Lamb's Lettuce.

A small, quick growing salad plant for late fall, winter and spring use. The leaves are used as a substitute for lettuce and spinach.

Pkt., 5c; oz., 10c; ¼ lb., 25c; 1 lb., 75c.

Prices shown for Corn, Beans, Peas, Mushroom Spawn, and Onion Sets do not include postage.
**Lilly's Pride of the Pacific Cucumber**

*Early, Prolific and of the Finest Quality*

Pride of the Pacific is a highly improved strain of the White Spine family, brought to its present state of perfection by the most careful methods of selection and cultivation. It is the best variety for greenhouse culture, and is unsurpassed for growing outdoors, either for market or for home use.

The hardy, vigorous vines produce immense crops of smooth, rich deep green fruit, large, symmetrical and very uniform. It is ideal for slicing, the flesh being sparkling white, crisp, tender, and of a delicious flavor. Sold only in sealed packages.

Packet, 10c; ounce, 20c; ¼ lb., 60c; ½ lb., $1.15; 1 lb., $2.00; postpaid.

**Lilly's Pickling Cucumber Unequaled for Large or Small Pickles**

An excellent variety for either small or large pickles. The young cucumbers are thickly set with small spines, and possess the distinctly roughened surface so much desired for small pickles. The full grown fruits are nine to ten inches long and two and one-half inches in diameter; of good shape, fine quality and flavor, and are good for slicing. The vines are hardy, exceedingly prolific, and continue to bear longer than most sorts. Sold only in sealed packages.

Pkt., 5c; oz., 15c; ¼ lb., 40c; 1 lb., $1.25.

**Long Green**

The fruits are long, firm and crisp; excellent for slicing, or when small they are good for pickling. The vines are sturdy and very productive. The fruits are uniform in size and shape, slender, often a foot long, and very dark green. The best variety for sweet pickles.

Pkt., 5c; oz., 15c; ¼ lb., 40c; 1 lb., $1.25.

**Davis Perfect**

A Splendid Extra Early Cucumber

A comparatively new cucumber, growing nine to twelve inches long, and perfect in shape, color, quality and flavor. It is very early, and when grown outdoors so closely resembles hot-house fruit that it often brings the same fancy prices. It is uniform in shape, and handsome in appearance. The glossy dark green color is maintained almost to maturity, and it retains its color and freshness longer than other varieties, making it splendid for market. Lilly's Select Stock is sold in sealed packages only.

Pkt., 10c; oz., 15c; ¼ lb., 40c; 1 lb., $1.25.

**Early Cluster**

An early and very productive variety. The vines are hardy and very vigorous, bearing fruits in clusters of two or three. The fruits are short, thick, bright green, crisp and tender. Used for both pickling and slicing.

Pkt., 5c; oz., 10c; ¼ lb., 35c; 1 lb., $1.00.

**Early Frame, or Short Green**

An early bright green cucumber of medium size, extensively used for slicing and pickling. The vines are vigorous and productive. The fruits are bright green, crisp and tender.

Pkt., 5c; oz., 10c; ¼ lb., 35c; 1 lb., $1.00.

**Boston Pickling Cucumber**

A very productive variety, extensively grown for pickles. The fruits are bright green, of medium size, smooth and symmetrical. The flesh is crisp and tender.

Pkt., 5c; oz., 10c; ¼ lb., 35c; 1 lb., $1.00.

Prices shown for Vegetable Seeds, except Beans, Corn, Peas, Onion Sets and Mushroom Spawn, include postage. If to be shipped by express or freight, charges to be paid at destination, deduct 5c per pound from these prices.
**EGG PLANT**

New York Improvd. A standard variety for market and home use. Very productive, the plants bearing six to eight fruits each. The fruits are large, nearly round, dark purple, free of thorns, and of excellent quality.

Pkt. 5c; oz., 30c; ¼ lb., 50c; 1b., $1.00; postpaid.

Black Pekin. An early variety with fruit nearly as large as the later sorts. The fruit is nearly round; the skin smooth, black and glossy.

Pkt., 5c; oz., 30c; ¼ lb., 90c.

**HERB SEEDS**

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**Lilly's EMERALD ISLE KALE**

Hardy, Dwarf, Compact, Densely Curled; Delicious Winter Greens

Emerald Isle is a comparatively new variety of green curled winter kale, and is most desirable on account of its hardiness, excellent quality, and beautiful appearance. It is of medium height, the leaves are so finely fringed and curled as to resemble parsley, and it is of a beautiful, rich, emerald green color. This variety is so hardy that on the Pacific Coast it is rarely injured by freezing, is improved by frost, and may be cut and used at any time during the winter. The seed is generally planted in late summer or early fall, for fall, winter and early spring use, but may be planted very early in spring for summer use. It supplies splendid greens at a time.

Pkt., 10c; oz., 15c; ¼ lb., 30c; 1b., $1.00; postpaid.

**Tall Scotch Kale**

This variety grows three to four feet high, bearing long, plume-like, light green leaves, which are deeply cut and finely curled at the edges. Very ornamental, and sufficiently hardy to resist ordinary frost.

Pkt., 5c; oz., 10c; ¼ lb., 25c; 1b., 75c.

**Siberian Kale**

A very hardy and vigorous variety or dwarf spreading habit. The large green leaves have a bluish tinge or bloom, are comparatively plain in the center, but are cut and frilled at the edges.

Pkt., 5c; oz., 10c; ¼ lb., 25c; 1b., 75c.
KOHLS-RABI

Early White Vienna. A turnip-like bulb, formed above ground, combining somewhat the flavor of cabbage and turnips. The bulb is large enough to be used in ten to twelve weeks from time of sowing, and is most tender and deliciously flavored before fully matured.
Packet, 5c; oz., 20c; ¼ lb., 50c; lb., $1.50.

LEEK

Large American Flag. The Leek belongs to the onion family, and is a good fall and winter substitute for green onions. This is a very superior variety, with thick stems, broad leaves and good flavor.
Packet, 5c; oz., 15c; ¼ lb., 45c; lb., $1.25.

Musselburg. An improved variety growing to very large size, with broad leaves spreading like a fan.
Packet, 5c; oz., 15c; ¼ lb., 45c; lb., $1.25.

WONDERFUL LETTUCE

A Mammoth New Head Lettuce Solid as a Cabbage

A new and very popular variety, thriving in all sections and during all seasons. It is a crisp, cabbage-heading lettuce, producing heads which are extremely large, sometimes fifteen to sixteen inches in diameter, and very heavy. It is deep rooting, slow to run to seed, and is especially adapted for growing during the summer months. It is a sure header under the most trying conditions. The interior is beautifully blanched, creamy white, crisp, tender and delicious. It is especially recommended as a standard, main crop, hot-weather lettuce. Very popular with market gardeners, and equally good for home use. Not recommended for forcing. Lilly's select stock is sold in sealed packages only.
Packet, 10c; oz., 20c; ¼ lb., 50c; lb., $1.50.

FORCING LETTUCE

Unsurpassed for Greenhouse Forcing
Excellent for Extra Early Outdoor Culture; Finely Curled and Attractive
For forcing in greenhouse or cold-frames, or for extra early outdoor culture, Lilly's Forcing Lettuce has no superior. The plant grows upright; does not form heads, but makes a quick growth of large, thin, light green leaves, finely curled; crimped and savoyed; of handsome appearance and excellent quality. It is not liable to rot; remains in condition for cutting for a considerable time; does not wilt quickly; and stands shipping better than most varieties, making it the best variety for winter forcing in greenhouse. Sold only in sealed packages.
Packet, 10c; ounce, 20c; ¼ lb., 50c; lb., $1.25; postpaid.

Lettuce, to be crisp and tender, must be grown quickly. Nitrate of Soda or Nitrate of Lime will produce wonderful results. An article on this subject is contained in the Crop Book, which will be furnished free with any order if requested.
An Extra Early Head Lettuce

This splendid new variety is very early, forming handsome, compact, firm heads of medium size and of the finest quality earlier than any other head lettuce. The color is a light yellowish-green, the outer leaves slightly tinged with brown, and the inside Blanching to a rich golden yellow. The thick leaves are tender and have a delicious, rich, buttery flavor peculiarly its own. Although generally used for early outdoor culture, it is excellent for forcing and for succession during the summer. The heads are round, solid, and stand shipping well. Sold only in sealed packages.

Pkt., 10c; oz., 20c; 1/4 lb., 50c; lb., $1.50

Lilly's Nonpareil Hanson Head Lettuce

A Splendid Late Head Lettuce

Nonpareil Hanson is a highly improved strain of the always popular Hanson Head Lettuce, and is a splendid head lettuce for either market or home use for late summer. The plant is compact, and forms large, solid, cabbage-like heads of fine quality and flavor; remaining in good condition longer than most other sorts. The leaves are bright yellowish-green; broad; somewhat crumpled and frilled at the edges; and with distinctive midrib. Inner leaves are white, very crisp, and sweet. Sold in sealed packages only.

Pkt., 10c; oz., 20c; 1/4 lb., 50c; lb., $1.50.

Early Curled Simpson

A popular market variety for forcing or for very early outdoor culture. It does not form heads. The leaves, in loose clusters, are light green, slightly frilled and much blistered, are crisp, tender and sweet. It is especially adapted for sowing thickly and cutting while the plants are young.

Pkt., 5c; oz., 15c; 1/4 lb., 35c; lb., $1.00.

Grand Rapids

A very popular loose leaved variety for greenhouse forcing. It grows quickly, is hardy, not liable to rot, and remains in condition for cutting for several days, and stands shipping better than most sorts.

Pkt., 5c; oz., 15c; 1/4 lb., 35c; lb., $1.25.

Early Curled Silecia

An excellent early curled lettuce for greenhouse forcing or early outdoor culture. The leaves are beautifully curled and are formed in large, very attractive clusters.

Pkt., 5c; oz., 15c; 1/4 lb., 35c; lb., $1.00.

Boston Market

or White Seeded Tennisball

A popular, small, compact head variety for early outdoor culture or for forcing. Hardy; crisp; and of good flavor.

Pkt., 5c; oz., 15c; 1/4 lb., 35c; lb., $1.25.

Hanson Head Lettuce

A very desirable late summer head lettuce. The plant is compact and forms a large cabbage-like head, which remains in condition longer than most sorts.

Pkt., 5c; oz., 15c; 1/4 lb., 35c; lb., $1.25.

Prices shown for Vegetable seeds, except Beans, Corn and Peas, include postage.

May King

This is a very hardy variety of early head lettuce and will stand much cold, damp weather. It may be planted under glass or outdoors, and in either case will produce fine heads much sooner than most other varieties.

Pkt., 5c; oz., 15c; 1/4 lb., 35c; lb., $1.00.

Prizehead

A large, clustering, non-heading lettuce, easy to grow and an excellent variety for the home garden, but not recommended for market, as it is too tender to stand shipping and handling. The leaves are bright green, tinged with red; crisp, tender and sweet.

Pkt., 5c; oz., 15c; 1/4 lb., 35c; lb., $1.00.

Paris White Cos

Distinguished by its long, narrow, spoon-shaped leaves, folding into loose sugar-loaf-shaped heads. The leaves are blanched by tying them together at the top.

Pkt., 5c; oz., 15c; 1/4 lb., 35c; lb., $1.00.
LAMBERT'S PURE CULTURE MUSHROOM SPAWN

American Pure Culture Mushroom Spawn is produced by a new system of selection and inoculation. The pure cultures are taken direct from selected specimens, and for that reason produce mushrooms of the finest quality and of one uniform variety and color. We can furnish either the White, Cream-White, or Brown varieties. It is pressed in bricks weighing about 1/2 lbs. One brick is sufficient to spawn nine square feet of bed. Cultural directions are contained in the Crop Book. Price: 1 brick, 25c; 5 bricks, $1.00; 10 bricks, $1.50; 25 bricks, $4.25; 50 bricks $8.00; 81 bricks, $12.00; 100 bricks $15.00; 160 bricks (full case), $22.40. F. O. B. Seattle. If shipped by parcel post, a sufficient amount must be remitted to pay postage.

LILLY’S IMPROVED ROCKY FORD

MUSKMELON

The True Pollock Strain

The Rocky Ford is the delicious little cantaloupe demanded by all the best markets, as there is no other to compare with it in flavor. It is small, about five inches in diameter, oval in form, and the skin is rich greenish-gold covered with a beautiful yellow netting. The flesh is light green, very deep, ripening clear to the rind, very solid and with a very small seed cavity. The seed is grown for us by one of the most reliable growers in Rocky Ford, Colorado, and is of the famous Pollock strain. Sold in sealed packages only.

Osage, or Miller’s Cream

Medium early, large, and nearly round. The skin is deep green, free from netting, heavily ribbed and light green bands between the ribs. The flesh is very thick; orange colored; firm and of fine quality.

Extra Early Hackensack

A large, green fleshed variety, round, slightly flattened, deeply and broadly ribbed, and with strongly defined netting. The flesh is very thick and of rich flavor.

Market gardeners will please write for special prices on large quantities.
SWEET AS HONEY WATERMELON
Unequaled for Home Use in the Northwest

This is the best and most delicious of all early watermelons for the home garden, especially for the Northwest. It is medium in size, oblong in form, and the skin is a rich dark green. The flesh is bright scarlet clear to the rind, and entirely free from stringiness. The seeds lie close to the rind, leaving a very large solid core, luciously sweet, crisp and melting. The rind is too thin to make it a good long-distance shipper, but for home consumption, or for nearby markets, it is unequaled, especially for the country west of the Cascade Mountains, where only the earliest melons can be made to mature.

Suggestions for maturing melons in this locality are contained in the Crop Book. Sold in sealed packages only.

Ounce, 10c; 1/4 lb., 35c; lb., $1.25. Postpaid.

KING AND QUEEN WATERMELON
Best Early Variety for Market

King and Queen is the best watermelon for market and for shipping in this locality. The fruit is of uniform medium size; round, smooth, and of fine appearance. It is very early, and yields prodigiously. The flesh is a beautiful bright red, crisp and of delicate texture, granulated, cool and sparkling. It has very few seeds. The heart is solid, and the fine quality is sustained clear to the rind.

Sold only in sealed packages.

Ounce, 10c; 1/4 lb., 35c; lb., $1.25; postpaid.

GEORGIA RATTLESNAKE

Very large and long; suitable for warm localities. The skin is light green, distinctly striped and blotted with a darker shade. The flesh is bright scarlet, tender and sweet.

Pkt., 5c; oz., 10c; 1/4 lb., 25c; lb., 75c.

FLORIDA FAVORITE

Very large and of excellent quality. The fruits are long, dark green irregularly striped and mottled. The flesh is deep red, very sweet and tender. slopes nearly white.

Pkt., 5c; oz., 10c; 1/4 lb., 25c; lb., 75c.

OKRA, OR GUMBO

Dwarf Green. Grown for its green pods, which are used in soups, stews, etc., to which they impart a rich flavor and are considered very nutritious. This is a favorite variety, and produces an abundance of long, slender, pale green pods which are very tender when young.

Pkt., 5c; oz., 10c; 1/4 lb., 20c; lb., 60c.

COLE'S EARLY

One of the easiest varieties to grow; very early, and adapted to conditions in the Northwest. A good shipper and excellent for market; also a good variety for the home garden. It is not large, but is very productive; nearly round; the rind is very thin; and the deep red flesh is of excellent quality.

Pkt., 5c; oz., 10c; 1/4 lb., 25c; lb., 75c.

Kleckley Sweet, or Monte Cristo

An excellent variety for home use, but the rind is too thin to stand shipping long distances. It is of medium size; oval; dark green, slightly mottled. The flesh is bright red and exceedingly sweet.

Pkt., 5c; oz., 10c; 1/4 lb., 25c; lb., 75c.

CITRON MELON

Small, round melons, used exclusively for preserves or pickles; not suitable for eating. The skin is dark green, distinctly striped and marbled with light green. The flesh is white. Matures late in the fall, and may be kept for a long time.

Pkt., 5c; oz., 10c; 1/4 lb., 25c; lb., 75c.

MUSTARD

Southern Curled. Hardy and vigorous, with large, light green leaves crimped and frilled at edges. Excellent while young for salads, and garnishing. Seed is dark brown and small.

Pkt., 5c; oz., 10c; 1/4 lb., 25c; lb., 75c.

White English. Leaves are dark green, small, smooth, and deeply cut; mild and tender when young. The seed is large and light yellow.

Pkt., 5c; oz., 10c; 1/4 lb., 20c; lb., 50c.

Market gardeners, and others requiring seeds in very large quantities, will please write for special quantity prices, stating varieties and quantities wanted.
LONGKEEPER ONION

The Most Popular and Profitable for Market; Unexcelled for Home Use

Longkeeper, as the name implies, has marvelous keeping qualities, which in addition to its splendid appearance, fine quality and flavor, and phenomenal yield, makes it the most popular and profitable for market. It is also unexcelled for home use, as the bulb forms early and may be used all summer. It is globular in form; of an attractive brownish-yellow color; mild and of delicious flavor. The neck is very small, and the tops die down entirely; of medium size, uniform, very solid and heavy, and produces immense crops. Sold only in sealed packages.

Best Red Onion for the Pacific Coast

An improved strain of Western Wethersfield, acclimated to the Pacific Coast. It is flattened like the Red Wethersfield, is very large, and our selected seed produces large crops, free from necky or misshapen bulbs. The color is a rich dark red; flesh is a sparkling purplish-white, and the flavor is good. Highly recommended for those who wish a large red onion. Sold in sealed packages only.

Packet, 10c; oz., $2.00; ¼ lb., $1.00; 1 lb., $3.00; postpaid.

WESTERN WETHERSFIELD

Large Red Wethersfield

A very large onion, flattened in shape, with skin of a purplish-red color, and flesh purplish-white; rather strong flavored, but good, and an excellent keeper.

Packet, 5c; oz., 30c; ¼ lb., 75c; 1 lb., $2.50

Australian Brown

An early onion of medium size and nearly globular shape; a sure cropper and long keeper. The skin is a bright brown, and the flesh is white, crisp, extremely solid, and of a sweet, mild flavor.

Packet, 5c; oz., 30c; ¼ lb., 75c; 1 lb., $2.50

Yellow Flat Danvers

Very similar to Yellow Globe Danvers except in shape. It is early; very productive and reliable; the form is round, flattened, with small neck; the skin is thin and pale yellow: the flesh is white and mild.

Packet, 5c; oz., 35c; ¼ lb., 90c; 1 lb., $2.75

PRIZE TAKER

Select Stock Seed

Prizetaker is recognized as one of our best standard varieties, but the seed must be genuine Prizetaker. Our Select Stock seed is grown with special care, and produces bulbs enormous in size and prodigious in yield. It is the largest onion grown in this country, almost equal to the mammoth Spanish onions. The skin is pale yellow, and the flesh clear, sparkling white. Sold only in sealed packages.

Packet, 10c; oz., $2.00; ¼ lb., $1.00; 1 lb., $3.00; postpaid.

WHITE QUEEN

For Pickles and Early Green Onions

This small white onion is used for pickling, and is also a favorite for green onions in the market garden and home garden, as it produces green onions almost as early as they can be produced from sets. They are early, very small, round, not necky, handsome, and very hard and crisp. The color is a beautiful waxy white, and the flavor is deliciously mild. Sold in sealed packages only.

Packet, 10c; oz., 35c; ¼ lb., $1.00; 1 lb., $3.00; postpaid

YELLOW GLOBE DANVERS

A very popular variety, especially for market. It is globular in form; very solid and one of the best shippers. The skin is brownish-yellow; and the flesh is fine grained, creamy-white, crisp, mild and of excellent flavor. One of the best main crop varieties.

Packet, 5c; oz., 35c; ¼ lb., 90c; 1 lb., $2.75

WHITE PORTUGAL, or SILVER SKIN

A very popular medium early white onion, much used for green onions, pickles, and for fall and early winter use. The bulbs grow to good size, ripening early and quite evenly, are silvery white, nearly round when of bunching size, but flattened when mature. The flesh is mild and of splendid quality.

Packet, 5c; oz., 35c; ¼ lb., 90c; 1 lb., $2.75

Market gardeners will please write for special quantity prices, stating varieties and quantities wanted.

Seeds in sealed packages, branded "Lilly's," can be depended upon. They are tested.
Onion Sets

Yellow Danvers, Bottom Sets of Fine Quality

Our onion sets are northern grown, hardy, handsome, small, and of uniform size. We grow only the Yellow Danvers sets, as that variety has proved to be best for this purpose. These sets, if planted very early, will produce green onions early in summer, much earlier than they can be produced from seed. They will also produce mature onions, but for that purpose seed is generally required.

Price: 1 lb., 10c; 10 lbs., 12½c per lb.

If to be shipped by parcel post, postage will be additional at regular parcel post rates. Those requiring large quantities will please write for prices.

Palo Alto Parsnip

A Highly Improved Strain

Palo Alto is a highly improved strain of Hollow Crown Parsnip, and is a favorite with our customers. The flesh is white and of fine texture, tender, free from core and stringless, and of superior flavor, sweet and rich. It is very hardy, and may be left in the ground all winter, or until wanted for use. Frost improves the quality and flavor.

If grown in favorable soil, the roots are smooth, well rounded and tapering. They are heavy at the shoulder, and are half-long, rendering them easy to harvest. It yields immense crops, and in addition to being a de-licious winter vegetable, it is an excellent stock food. Sold in sealed packages only.

Hollow Crown Parsnip

A standard and excellent variety. The roots are long, with smooth, white skin, uniform in shape, tender and of good quality. This variety is distinguishable by the leaves growing from the depression in the crown.

Packet, 10c; ¼ lb., 30c; lb., $1.00; postpaid.

Champion Moss Curled Parsley

A beautiful plant, and excellent for garnishing and for flavoring soups and stews. This is a hardy, vigorous, compact growing variety, with very attractive, deep green foliage, and is most popular for both home and market. The leaves are very finely cut and are very closely curled as to resemble moss.

Packet, 5c; oz., 10c; ¼ lb., 25c; lb., 75c; postpaid.

Sugar, or Sweet Pie. A small, fine grained, very sweet pumpkin; the best variety for making pies. The vines are very productive. The fruits are round, somewhat flattened, and of a deep orange color. The flesh is a rich yellow, thick and meaty.

Packet, 5c; oz., 10c; ¼ lb., 25c; lb., 75c; postpaid.

Connecticut Field. A large, productive, orange colored field pumpkin, usually grown for stock, but good for pies.

Packet, 5c; oz., 10c; ¼ lb., 20c; lb., 50c; postpaid.

Jumbo, or King of Mammoths. The largest pumpkin grown, sometimes weighing more than two hundred pounds when grown under favorable conditions. The skin is salmon-orange, and the flesh is bright yellow, very thick, and of excellent quality for pies as well as for stock.

Packet, 5c; oz., 10c; ¼ lb., 35c; lb., $1.00; postpaid.

Market gardeners and others requiring seeds in very large quantities will please send us a list of varieties and quantities wanted. We will be pleased to quote lowest possible quantity prices.
WORLD’S RECORD PEA
An Excellent Early Wrinkled Variety
World’s Record is an English variety which has proved to be perfectly adapted to the Northwest. Our seed has been grown in this locality for several seasons, and is thoroughly acclimated. The vines are semi-dwarf, growing about three feet high, and the yield, size, and quality of the peas is wonderful considering its extreme earliness. The pods are large, dark green, of the Gradus type, and are filled with eight or ten large, wrinkled peas, sweet and of fine flavor.
Packet, 10c; 1 lb., 20c; 10 lbs., $1.75. Postage additional.

LINCOLN PEA
A Dwarf Main Crop Pea of Fine Quality
A splendid dwarf main crop pea. It originated in England, but our seed is grown and acclimated in the Northwest. The vines grow only two feet high, making it popular with those who dislike the labor of making a support for them. The pods are of medium size, curved and pointed, and are well filled with good sized, wrinkled peas, very sweet and of excellent quality.
Packet, 10c; 1 lb., 20c; 10 lbs., $1.75. Postage additional.

WASHINGTON WONDER
Favorite Extra Early Dwarf Wrinkled Pea
An old favorite, and a splendid extra early dwarf pea. It grows only about sixteen inches high, and requires no support. It is quite prolific, and produces a good crop of well filled pods containing six to nine good sized, wrinkled peas of excellent flavor. It is sufficiently hardy to be sown in the fall on the Pacific Coast, thereby producing peas a month earlier than spring sown seed. It is as early as the extra early smooth varieties, and very much superior in quality and flavor.
Packet, 10c; 1 lb., 20c; 10 lbs., $1.75. Postage additional.

Prizewinner Pea
An English pea, acclimated to the Pacific Coast. The vines grow about three feet high and bear abundantly, very large, deep green, slightly curved, pointed pods, well filled with large, wrinkled peas of exceptionally fine flavor. Second early or main crop.
Packet, 10c; 1 lb., 20c; 10 lbs., $1.50. Postage additional.

Boston Unrivaled Pea
A good main crop pea, growing about five feet high, and very productive. The pods are large, pointed, and pale green. The peas are large, wrinkled, blue-green in color, and are of good flavor.
Pkt., 10c; 1 lb., 20c; 10 lbs., $1.50. Postage additional.

Nott’s Excelsior Pea
A dwarf early variety, about fourteen inches high, and quite productive. The pods are three inches long, round, and blunt at the ends. The peas are of medium size, green, wrinkled, and of good quality.
Pkt., 10c; 1 lb., 20c; 10 lbs., $1.25. Postage additional.

American Wonder Pea
Very early, and of dwarf, compact growth, ten to twelve inches high. Very popular with those who object to making a support for the vines. The pods are about three inches long, straight, round, blunt at the ends, and light green. The peas are of medium size, wrinkled, and fine quality.
Pkt., 10c; 1 lb., 20c; 10 lbs., $1.25.

Little Gem Pea
Quite similar to Premium Gem. The vines are fifteen to twenty inches high, robust, branching, and productive. The pods are about three inches long, well filled with medium sized, green, wrinkled peas of good quality and flavor. Medium early.
Pkt., 10c; 1 lb., 20c; 10 lbs., $1.25.

Alabama Pea
A well known, smooth seeded, extra early variety, extensively used by canners. The vines are strong and vigorous, two feet high, and of a light green color. The pods are about three inches long, straight and blunt at the ends. The peas are round, blue, and slightly pitted.
Pkt., 10c; 1 lb., 20c; 10 lbs., $1.00.

Prices shown for Peas, Beans, Corn, Onion Sets, and Mushroom Spawn do not include postage.
RHUBARB, or PIE PLANT
Mammoth Victoria. The largest and finest cooking variety. It is vigorous and very productive of thick, red stalks of fine quality, juicy and rich.

Packet, 5c; oz, 15c; ¼ lb, 50c; postpaid.

Rhubarb Plants are listed in Plants Section of this catalog.

SALFISY, or OYSTERPLANT
Mammoth Sandwich Island. A very desirable winter vegetable; palatable, nutritious, and may be served in a variety of ways. This is the most popular variety, growing twice the size of any other, and resembles a parsnip in appearance. Mild and delicately flavored.

Packet, 5c; oz, 15c; ¼ lb, 50c; postpaid.

If Peas, Beans, Corn, Onion Sets, or Mushroom Spawn are to be shipped by Parcel Post, a sufficient amount must be remitted to pay postage, in addition to prices quoted.

**RHUBARB, or PIE PLANT**

**SALFISY, or OYSTERPLANT**

**GRADUS OR PROSPERITY**

Best Extra Early Wrinkled Pea

This grand, extra early pea has no superiors, and few, if any, equals. It is practically as early as the small, round, hard, smooth peas commonly grown for extra early, and is so much better in every other way that it is fast displacing them for first early crop. It is equal in quality to most of the late varieties, and many of our customers use it exclusively, sowing in succession for early, medium and late.

The vines are vigorous, robust, heavy stemmed, and grows only two and one-half to three feet high. The pods are large, and are filled with six to ten very large, wrinkled, narrow peas of the most delicious flavor; as large, as sweet, and as tender as the finest late peas. Our seed is grown from the original strain, acclimated in the Northwest. Sold only in sealed packages.

Packet, 10c; 1 lb, 20c; 10 lbs., $1.75.

If Peas are to be shipped by Parcel Post, postage must be remitted in addition to price.

**THOMAS LAXTON**

Extra Early and Fine Quality

Thomas Laxton Peas are very similar to Gradus in every way except the shape of the pods, the ends of which are square, and the pods and vines are a darker green. It is nearly or quite as early as Gradus, and the large, wrinkled, dark green peas are sweet, tender, delicious, and unexcelled in quality by any of the late varieties. The vines grow about three feet high. Sold only in sealed packages.

Packet, 10c; 1 lb, 20c; 10 lbs., $1.50.

**ALDERRMAN PEA**

A splendid new large podded, main crop pea, growing about five feet high. The pods are larger than Telephone, are dark green, and are well filled with large wrinkled peas of fine flavor.

Packet, 10c; 1 lb, 20c; 10 lbs., $1.50.

**QUITE CONTENT PEA**

A tall-growing late or main crop variety, five to six feet high, bearing exceedingly large pods in pairs. The peas are large, wrinkled, and of good quality. Our original seed stock was imported from England, and has been acclimated on the Pacific Coast.

Packet, 10c; 1 lb, 20c; 10 lbs., $1.50.

**TELEPHONE PEA**

The standard market gardener's main crop pea. Grows about five feet high, and bears an abundance of long, straight, pointed pods filled with large peas of a rich, sugary flavor.

Packet, 10c; 1 lb, 20c; 10 lbs., $1.00.

**DWARF TELEPHONE PEA**

An excellent late dwarf pea, bearing a heavy crop of large, well filled, attractive, straight pods. The plants grow about two feet high. The peas are of good quality.

Packet, 10c; 1 lb, 20c; 10 lbs., $1.25.
CRIMSON GIANT
KING OF ALL EARLY RADISHES

Crimson Giant is double the size of any other variety of the early turnip-shaped type, but regardless of its great size it does not become hollow or pithy; the flesh remaining white, solid, crisp, tender and juicy, and of the mildest flavor for a much longer period than any other. It is equally suitable for forcing or for early planting outdoors, and for succession. The shape varies from round to oval, but the bright, deep crimson color is always the same, and the texture and flavor is unequalled. Sold only in sealed packages.

Ounce, 10c; ¼ lb., 30c; lb., 85c; postpaid.

White Icicle Radish

The finest early long white radish. It is ready for use nearly as early as the early turnip-shaped varieties, and remains in good condition longer than any other early variety. The tops are very small, and the roots are long, slender, pure white and very attractive. The flesh is crisp, tender, sweet, and delicious, and remains in that condition until the roots have attained large size. Our seed is carefully grown and selected, and is sold only in sealed packages.

Ounce, 10c; ¼ lb., 30c; lb., 85c; postpaid.

Early Scarlet Turnip Radish

A standard variety for early outdoor planting for home or market. The roots are small, round, and deep scarlet. The flesh is white, crisp and tender.

Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c.

Early Scarlet Turnip White Tip Radish

A very popular extra early turnip-shaped radish. The roots are bright scarlet with a distinct white tip. The flesh is white and of good quality.

Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 80c.

French Breakfast Radish

A quick-growing, small, olive-shaped radish. The color is deep rose-scarlet except a little clear white about the tip. Excellent for forcing or for the home garden.

Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c.

Long, Bright Scarlet Radish

An excellent early long red radish for home or market. The roots are smooth, slender, about six inches long, uniform in shape, and very attractive. They remain crisp and tender until nearly matured.

Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c.

White Strasburg Radish

A splendid variety for growing during the summer season. The roots, when mature, are four to six inches long, thick at the shoulder, somewhat tapering. They may be used when quite small, and remain crisp until matured, much longer than the early varieties. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 80c.

China Rose Winter Radish

An excellent winter radish. The roots grow about five inches long and two inches in diameter, largest at the bottom. The skin is smooth and of a deep rose-color. The flesh is white, firm, crisp and pungent. Seed should be sown late in summer.

Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 80c.

Round Black Spanish Radish

A popular winter radish. The roots are round, sometimes top-shaped, three or four inches in diameter. The skin is black; the flesh white, very compact, decidedly pungent but well flavored. Keeps well through the winter.

Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 80c.

Radishes, to be crisp and tender, must be grown quickly. Nitrate of Soda, applied in several light applications, will produce good results.

See the article, "Nitrate of Soda for Garden Crops," in the Crop Book.
Lilly's Mammoth Victoria Spinach

A Specially Desirable Variety

Spinach is one of the best of the vegetables grown for greens, and Mammoth Victoria is a very superior variety. It is especially good for early spring and successive plantings for summer use, but is also an excellent variety for fall planting for winter and early spring use. It is a long-standing variety, very slow in going to seed. The long, pointed leaves have very small midribs, are of a deep green color, thick, fleshy, heavily crimped, and tender.

Packet, 10c; oz., 15c; 1/4 lb., 25c; 1 lb., 60c; postpaid.

Viroflay Spinach

Has very large, thick, dark green leaves. A favorite with market gardeners for either fall or spring sowing.

Packet, 5c; oz., 15c; 1/4 lb., 25c; 1 lb., 60c.

Bloomsdale Savoy Leaved

A very early variety, handy, and suitable for early spring use. The leaves are large, round and thick; very much savoyed.

Packet, 5c; oz., 15c; 1/4 lb., 25c; 1 lb., 60c.

Prickley Winter Spinach

A standard market gardeners' variety for fall sowing. The leaves are bright green, large, smooth, and shaped like an arrow head.

Packet, 5c; oz., 15c; 1/4 lb., 25c; 1 lb., 60c.

Thick Leaved Improved

For either fall or spring sowing. Produces large, thick, bright green, crumpled leaves of excellent quality. Slow in running to seed.

Packet, 5c; oz., 15c; 1/4 lb., 25c; 1 lb., 60c.

Lilly's Delicata Squash

For Summer or Winter

Delicata is the earliest vine squash, maturing nearly as early as the bush varieties, and is of very superior quality. Being a hybrid, it varies considerably in form and color, but the quality is uniformly good. It is as dry, sweet and deliciously flavored as the winter varieties, and if properly stored will keep nearly as long. The fruits are small, and the flesh is rich, dry and meaty.

Ounce, 10c; 1/4 lb., 30c; 1 lb., $1.00.

Early Summer Crookneck

A popular early bush variety. The fruits are of the well known crook-neck form, deep yellow, densely warty, and of good quality and flavor. Packet, 5c; oz., 10c; 1/4 lb., 25c; 1 lb., 75c.

White Bush Scallop

An early bush squash; large, often twelve inches in diameter; flattened; scalloped around the edges; and of a clear, waxy white. Packet, 5c; oz., 10c; 1/4 lb., 30c; 1 lb., 85c.

Boston Marrow Squash

A very popular vine squash for fall and winter use. The fruits are of medium size, oval shape, and orange color. The flesh is rich salmon-yellow, fine grained and of excellent flavor. Packet, 5c; oz., 10c; 1/4 lb., 25c; 1 lb., 75c.

Mammoth Chili Squash

The largest of all squashes. The fruits are smooth; oblong, flattened at the ends; and orange color. The flesh is fine grained, sweet, and good for pies; also good stock food. Packet, 5c; oz., 10c; 1/4 lb., 30c; 1 lb., $1.00.

Lilly's Hubbard Squash

Unequaled for Winter Use

An improved strain of the true Hubbard, which has long been the most popular winter squash, and is still unexcelled. The vines are strong, vigorous and productive. The fruits are large, and the shell is dark green, extremely hard, and densely warty. The flesh is golden-yellow, thick, fine grained, dry, sweet, and no other squash can compare with it in flavor. It is unequaled as a winter keeper and shipper.

Ounce, 10c; 1/4 lb., 30c; 1 lb., $1.00; postpaid.

English Vegetable Marrow

Very popular in England, and can be grown equally well here. They should be eaten when less than half grown, at which time the flesh is very tender, and may be cooked like other squash or fried like eggplant. Oblong in shape; color creamy-white. Packet, 5c; oz., 10c; 1/4 lb., 30c; 1 lb., $1.00.

Lilly's Seeds, Lilly's Fertilizers, and proper culture, will produce bumper crops.
Puget Sound Special Tomato
A Splendid Extra Early Tomato that Will Mature on the Pacific Coast

Puget Sound Special in addition to being one of the very earliest tomatoes, is one of the best for any locality, and is decidedly the best tomato that may be depended upon to mature in the country west of the Cascade Mountains, sometimes producing ripe fruit as early as July 4th, and, although an early tomato is seldom equal to the later varieties in quality, Puget Sound Special is of particularly fine quality.

The flesh is solid, meaty, and of delicious flavor, with few seeds and no hard core or pulpy cavities. It is a heavy yielder of splendid firm fruits, which, although not perfectly round, are of good shape and rich red color. It is the best early tomato for any locality, and for the Pacific Coast it is the best for either early or late; also excellent for hot-house culture.

Sold only in sealed packages
Packet .............. 10c
Ounce .............. 35c
1/4 pound .......... $1.15
1/2 lb.......... $2.25
1 lb .......... $4.00
Postpaid.

Livingston's Coreless
An Excellent Late Variety

Coreless is a medium large, late tomato of recent introduction, is a good variety for slicing, and is especially desirable for canning. In shape it is almost perfectly globular, with little or no depression at the stem end. There is no hard core, and the seed cells are surrounded by bright red, heavy, meaty, delicious flesh. It is very productive, the fruit being borne in large clusters at close intervals along the stem. On account of its superior solidity, it is a good long distance shipper. Sold only in sealed packages.

Packet, 10c; ounce, 35c; 1/4 lb., $1.15; 1/2 lb., $2.00; 1 lb., $3.50; postpaid.

Early Michigan

A popular second early variety of good quality. The vines are vigorous and productive. The fruits are of medium size, smooth, and of attractive crimson-scarlet color.

Pkt., 5c; oz., 20c; 1/4 lb., 65c; 1 lb., $2.00.

Ponderosa
Of Immense Size and Fine Quality

Ponderosa is massive in size, of good form, smooth, free from wrinkles, and does not crack. The flesh is solid and meaty, free from cavities, almost seedless, and of delicious flavor. The plant is luxuriant, healthy, drought and blight resistant, and a prolific and continuous bearer. It is medium late, and cannot be depended upon to mature west of the Cascade Mountains, but is a splendid variety for the country east of the mountains. Our seed is carefully grown from selected stock, and is sold only in sealed packages.

Packet, 10c; ounce, 35c; 1/4 lb., $1.15; 1/2 lb., $2.00; 1 lb., $3.50; postpaid.

Dwarf Champion

A dwarf, compact, second early variety, growing only about two feet high and requiring no stake; vigorous and productive. The fruits are of medium size, smooth, and good quality.

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

We Have
TOMATO PLANTS
in season
First of May
Last of June
See Plants Section
**New Stone Tomato**

A very large and solid main crop or late tomato. The vines are large, vigorous, and very productive. The fruits are bright, deep scarlet, oval, exceptionally smooth and uniform in size, and of excellent quality. A splendid shipper.

Pkt., 5c; oz., 25c; ¼ lb., 75c; lb., $2.25.

**Acme Tomato**

An old, well known variety, popular for home use. The vines are large, hardy and productive. The fruits are ripened evenly and medium early; of medium size, purplish-pink, round, smooth, and free from cracks. The flesh is solid and of good quality and flavor.

Pkt., 5c; oz., 25c; ¼ lb., 75c; lb., $2.50.

**Red Cherry Tomato**

The fruits are very small, less than one inch in diameter, and are used for preserves and pickles. They are perfectly round, smooth, and of bright red color.

Pkt., 5c; oz., 25c; ¼ lb., 75c; lb., $2.50.

We can furnish Tomato Plants in season, from the first of May to the last of June. They are listed in the Plants Section of this catalog.

**Atlantic Prize Tomato**

A very early variety, of uniform shape, medium size, rich red color, smooth surface, and good quality.

Pkt., 5c; oz., 25c; ¼ lb., 75c; lb., $2.50.

**Red Pear Tomato**

Used for preserves and to make “tomato figs.” The fruits are small, pear-shaped, bright red, and of delicious flavor.

Pkt., 5c; oz., 25c; ¼ lb., 75c; lb., $2.50.

**Yellow Pear Tomato**

The fruits are similar to Red Pear in shape and size, but are a rich, clear, yellow color.

Pkt., 5c; oz., 25c; ¼ lb., 75c; lb., $2.50.

**Yellow Plum Tomato**

Fruits are plum-shape; clear, deep yellow color; and the flesh is yellow and finely flavored. Used for preserves.

Pkt., 5c; oz., 25c; ¼ lb., 75c; lb., $2.50.

**TOBACCO**

**Connecticut Seed Leaf.** A hardy variety, adapted to growing in the Northwest.

Pkt., 5c; oz., 25c; ¼ lb., 75c; lb., $2.50.

**Havana.** The leaf is very thin and is of fine texture. Much used for cigar wrappers.

Pkt., 5c; oz., 40c; ¼ lb., $1.20; lb., $4.00.

Market gardeners, and others requiring seeds in very large quantities, will please send us a list of varieties and quantities wanted, and we will be pleased to quote lowest possible quantity prices. Order early, before we are sold out of the choicest varieties.

See our Premium Offer on page 4. It is worth competing for.
**SNOWBALL**

The Finest Early White Turnip

This delicious turnip is the best early variety. It is equalled in earliness only by Extra Early White Milan, to which it is in every other way superior. Under favorable conditions it will be ready for use six weeks after the seed is sown. It is small, uniform in size and shape, and almost perfectly globular. The skin is smooth, white and thin; and the flesh is pure sparkling white, sweet, tender, crisp and delicious. Sold in sealed packages only.

Ounce, 10c; 1/4 lb., 25c; 1/2 lb., 40c; 1 lb., 75c.

**EARLY WHITE MILAN**

The Very Earliest Turnip

An excellent table turnip, and the earliest of all varieties; adapted for very early spring planting. The flesh is fine grained, tender, and of a mild, sweet flavor. It remains in good condition for a long time, and does not become pithy or stringy. Our special strain is sold only in sealed packages.

Ounce, 10c; 1/4 lb., 25c; 1/2 lb., 40c; 1 lb., 75c.

**PETROWSKI TURNIP**

A New Yellow Variety

This new early yellow turnip was imported from Finland, and promises to become very popular in this country. The United States Department of Agriculture has experimented with it in Alaska, and following is description furnished by Prof. C. C. Georgeson, Special Agent in Charge of Alaska Investigations: "Turnip of medium size; top short, spreading so that lower leaves generally lie on the ground. Flesh yellow, tender, very pleasant. Shape rounded, almost spherical; quite uniform in size and shape. Medium early. An excellent keeper, and altogether the best turnip we have ever tried in Alaska."

Sold only in sealed packages.

Ounce, 10c; 1/4 lb., 30c; 1/2 lb., 55c; 1 lb., $1.00; postpaid.

**Golden Ball or Orange Jelly**

One of the most delicately flavored of the yellow fleshed turnips. It is of very quick growth, and is adapted to either early spring or fall planting. The tops are small. The roots are of medium size, round, very smooth, and deep yellow. The flesh is firm, crisp and of excellent quality.

**Early White Flat Dutch**

An early white turnip, popular for both table use and for stock. The roots are of medium size, flat, very white fleshed, fine grained and sweet.

Pkt., 5c; oz., 10c; 1/4 lb., 20c; 1 lb., 60c.

**Purple Top Strap Leaf**

An old and popular variety for both table and stock. It matures very quickly, and may be used for either early spring or fall sowing. The roots are flat, medium size, purple or dark red above ground and white below. The flesh is white, fine grained and tender.

Pkt., 5c; oz., 10c; 1/4 lb., 20c; 1 lb., 60c.

**Purple Top White Globe**

An early, medium sized, globular shaped turnip of good quality for either table or stock. A heavy producer and good keeper. The flesh is white, and of good eating quality while young.

Pkt., 5c; oz., 10c; 1/4 lb., 20c; 1 lb., 60c.

**RUTA BAGA, or SWEDISH TURNIP**

**KING OF SWEDES**

A very productive variety

The best and most satisfactory turnip baga for either table use or stock feeding. It is wonderfully productive, large, of good shape, and a splendid keeper. The flesh is rich yellow and of the finest quality.

Ounce, 10c; 1/4 lb., 25c; 1 lb., 60c; postpaid.

Ruta bagas are also listed in Farm Seeds Section of this catalog.

**American Purple Top**

One of the most popular varieties for table or stock. It is very hardy and productive; and the flesh is yellow, solid and sweet.

Ounce, 10c; 1/4 lb., 25c; 1 lb., 60c; postpaid.

**Cowhorn Turnip**

This turnip grows very long, often twelve inches or more, and two inches in diameter and nearly half above ground. It is very popular for stock feeding, and is clear white except a little shade of green at the top. The flesh is fine grained and of good flavor. It grows very quickly. Well adapted for fall and early winter use.

Pkt., 5c; oz., 10c; 1/4 lb., 25c; 1 lb., 75c.

**Yellow Aberdeen**

A large sized, round, late maturing, long keeping, yellow fleshed turnip. It is hardy, productive, and valuable for stock feeding. The roots are yellow with purple top. The flesh is pale yellow, firm, tender and sweet.

Pkt., 5c; oz., 10c; 1/4 lb., 20c; 1 lb., 60c.
FLOWERS, shrubs and trees often make the difference between a habitation and a home, and it is surprising that there are so many unattractive habitations when so little expense and labor would transform them into real homes. It is so much easier to be cheerful among pleasing surroundings. Many of the prettiest and most satisfactory flowering plants are easily grown from seed, and are especially pleasing when tastefully arranged with regard to color, height and season of blooming and to harmonize with surroundings.

Our list of flower seeds is condensed for the reason that few of our customers care to make a collection of all the different varieties and are only confused with a long list to select from. We list only the seeds of plants which are desirable and are adapted to this locality.

Some flower seeds may be simply sown broadcast and will require little further attention, but some are quite difficult to get started, and the person who plants them all in the same manner, or in the manner that vegetable seeds would be planted, is liable to disappointment. Cultural directions will be found in the Crop Book, which we will furnish free with any order if requested.

In the following descriptions we show the height, color and season of blooming. We have also classed the plants as Annuals, Biennials and Perennials, dividing these into Tender, Half-hardy and Hardy. These descriptions are important to those who are not familiar with the plants, and will assist in choosing those which will be suitable.

Hardy Annuals may be sown outdoors in the fall or early spring, preferably fall. They bloom the following summer, and then die.

Half-hardy Annuals require an even temperature of at least sixty degrees to germinate the seed, and will not stand frost. For early blooms the plants must be started under glass or in the house, and not planted outdoors until danger of frost is past.

Tender Annuals must be grown in pots in greenhouse or in the house, and exposed outdoors only during the most favorable weather.

Biennials are best sown outdoors in September, and will bloom the following summer, after which they will die. If sown in spring they will not bloom until the next year.

Hardy Perennials seldom bloom the first year, but usually bloom the second and many succeeding years. They may be sown in spring, but are best sown outdoors in September.

Half-hardy Perennials require some protection during cold winter weather. The seed should be sown in boxes or pots, or outdoors late in spring.

Tender Perennials require protection during the greater part of the year.

The seed bed for flowers should be carefully prepared. The soil should be rich, consisting of a good proportion of sand and leaf mold, and should be very finely pulverized. The smaller seeds should be covered very lightly by sifting fine dirt over them, just enough to hide them. Water should be applied in a fine spray, and not too much of it.

For starting flowers or vegetables early in spring a hotbed is essential. Lilly's Crop Book gives instructions for building and operating a hotbed. Free with any order if requested.
Abronia (Sand Verbena)
A very pretty, trailing, hardy annual, bearing verbenalike clusters of fragrant pink flowers early and continuously. Will grow in dry places where other plants would not thrive, and is valuable for covering barren banks, also for rockeries and hanging baskets.
No. 1018. Abronia umbellata grandiflora. Pkt., 5c; oz., 40c.

Adlumia
(Mountain Fringe. Allegheny Vine. Fumitory.)
A graceful hardy biennial climber, growing to a height of about fifteen feet, with attractive pale green foliage resembling Maidenhair Fern. It bears the first year from seed clusters of small tube-shaped, rose-colored flowers in great profusion.

Adonis
(Floss Adonis. Peahat's Eye.)
A hardy annual, growing about one foot high, with fine-cut, feathery foliage, and crimson flowers.

Ageratum
(Floss Flower.)
One of the very best bedding plants, covered with bloom from early summer until late in fall. They are hardy annuals of easy culture. The plants are neat, erect and bushy, six to eight inches tall and should be planted eight to twelve inches apart. The pretty brush-like flowers are borne in clusters, and are splendid for blue effects in the garden.
No. 439. Little Dorrit. The plant is six inches tall and a foot wide and is a perfect mass of blue flowers all summer. Pkt., 10c.
No. 411. Imperial Dwarf Blue. A splendid bedding variety, growing about eight inches high and covered with blue flowers. Pkt., 5c; oz., 40c.

Alyssum
(Sweet Alyssum.)
This dainty little plant is unexcelled for borders, beds, baskets, pots, rockeries, and for cutting. It is a hardy annual, grows about nine inches high, and is covered with spires of small white flowers during the entire summer and fall. It may also be grown in pots in the house during the winter, where the exquisite fragrance of the pure white flowers is very pleasing.
No. 2. Alyssum Benthami. Pkt., 5c; oz., 25c.

Amaranthus
Strong growing and highly ornamental hardy annuals, chiefly valuable for their highly colored foliage. Very showy and effective for bedding and backgrounds. Three to four feet tall.
No. 270. Amaranthus Candatus. (Love Lies Bleeding.) Light yellowish-green foliage; long, drooping, blood-red flower spikes. Pkt., 5c.
No. 102. Amaranthus Tricolor. (Joseph's Coat.) The plant grows about three feet tall with brilliant colored leaves in variegated red, yellow, green, etc. Pkt., 5c.

ANTIRRHINUM
(Snapdragon.)
Unusually effective bedding displays are made with these unique, bright colored plants. They are half-hardy perennials, but as they bloom the first year from seed, are generally grown as annuals.
No. 321. Lilly's Giant Flowering Black Prince. The flowers of this splendid Snapdragon are very dark, rich, maroon color, and are of immense size and splendid texture and substance. They grow about two feet tall and bloom profusely until very late in the summer. Pkt., 10c.
No. 4. Tall Varieties, Mixed. A mixture of good tall varieties; all colors. Pkt., 5c; oz., 40c.

Aquilegia
(Columbine.)
A delightful hardy perennial especially adapted to the Pacific Coast. It grows about two feet high and bears early in spring, lasting for a considerable period, peculiar, interesting, pendent flowers in colors clear blue, white, rose, yellow, purple and striped. It thrives in partial shade and under the spray of a fountain or other moist location. It forms large clumps, and is desirable for permanent beds and borders.
No. 5. Double, Mixed colors. Pkt., 5c; oz., 50c.
No. 1052. Single, Mixed colors. Pkt., 5c; oz., 40c.

Arabis
(Rock Cress. Snow on the Mountain.) Unexcelled for rockeries or edgings. Grows about six inches high, forming a spreading plant a foot or more in diameter, which, very early in spring, is completely covered with pure white flowers. It is a hardy perennial, easy to grow, and blooms the second year from seed.
No. 1035. Arabis Alpina. Pkt., 10c; oz., 75c.

Arctotis (African Daisy)
A handsome, hardy annual from Africa. The plants form bushes two feet or more in height and the same in breadth. The large round buds appear close to the ground at first, but soon rise on long, stout stems well above the foliage. The drooping buds open into large, shining white, daisy-like flowers with blue centers surrounded by a narrow golden circle, with reverse side of the petals a pale lilac. The flowers are especially valuable for cutting, the blooms lasting a week or more. The undeveloped buds may be cut and placed in water in a sunny window and will open up as well as they would on the bush. The plant thrives best in bright sunshine, and bears blooms in abundance from early in July until late in fall.
No. 601. Arctotis Grandis. Pkt., 10c; oz., 50c.

LILLY'S CROP BOOK gives cultural directions for flowers, vegetable and farm crops, also suggestions for fertilizing and caring for the crops. We will furnish it free with any order if requested.
The annual asters are among the most satisfactory flowering plants. From plants started under glass or in the house in March or April blooms may be had in July or August; or the seed may be planted outdoors in May and will produce blooms in September and October.

**Lilly's**

**SUPERB ASTERS**

**THE CHOICEST VARIETIES**

Produce Magnificent Blooms of This Most Satisfactory Annual

**Crego's Giant Asters**

These are the finest and largest of all Comet Asters. The flowers are immense, often five inches or more in diameter, and are composed of long, wavy, twisted petals gracefully formed into loose, yet densely double, half-globes, equaling some of the finer Chrysanthemums.

The plants are of luxuriant, branching growth, two feet tall, and bearing twenty to thirty of these magnificent flowers on very long stems, which gives them added value for cutting. They keep in good condition longer than other varieties.

No. 1012. Crego’s Giant Aster, White... Pkt., 10c.
No. 1013. Crego’s Giant Aster, Pink... Pkt., 10c.
No. 1037. Crego’s Giant, Lavender..... Pkt., 10c.

**Improved Victoria Asters**

Magnificent flowers, double clear to the center, massive and showy, with regular overlapping petals. The plants grow eighteen inches tall and bear twenty-five to forty flowers each.

No. 109. All Colors, Mixed........... Pkt., 10c.

**Lilly's Mixed Asters**

A fine mixture of all the good varieties and colors.

No. 900. Mixed Asters...... Pkt., 5c; oz., 75c.

**Giant Comet**

**OSTRICH PLUME ASTERS**

Medium early-flowering Comet Asters of immense size and great beauty. The plants are sturdy and compact, growing about one and one-half feet tall, and covered with blooms. The petals are long, narrow, twisted and turned backward, forming beautiful fluffy masses.

No. 935. Giant Comet, White......... Pkt., 10c.
No. 936. Giant Comet, Rose........... Pkt., 10c.
No. 937. Giant Comet, Blue........... Pkt., 10c.
No. 938. Giant Comet, Lavender...... Pkt., 10c.
No. 322. Giant Comet, Mixed colors...Pkt., 10c.

**Semple’s Branching Asters**

Splendid late-flowering Branching Asters. They begin blooming about the first of September and continue to bloom profusely until killed by freezing weather. The plants are strong, branching, and grow eighteen inches to two feet tall. The flowers are large, very double, and are borne on long stems. Especially valuable for bedding.

No. 940. Semple’s Branching, White... Pkt., 10c.
No. 941. Semple’s Branching, Pink.... Pkt., 10c.
No. 942. Semple’s Branching, Lavender.Pkt., 10c.
No. 939. Semple’s Branching, Mixed.... Pkt., 10c.

The Crop Book tells how to grow Asters. Furnished free with any order if requested.
Balsam
(Lady Slipper.)

Among the finest of the old favorites for either garden or pot culture. It is a half-hardy annual, and for early blooms the seed should be sown under glass in March; or it may be sown outdoors in May. The plants grow one and one-half to two feet tall, and should be set about eighteen inches apart.


Bellis
(Double Daisy.)

Excellent border plants, about four inches high, bearing attractive double flowers all summer. It is a hardy perennial, but will bloom the following summer if the seed is sown in the fall or early spring.


Calceolaria

Attractive tender perennials used largely in greenhouses and conservatories. This large-flowering variety produces a great profusion of unique pocket-shaped flowers in yellow, maroon, crimson, white, etc., spotted and blotched.


Calendula
(Pot Marigold.)

One of the best and showiest free-flowering hardy annuals. It is of the easiest culture, thrives in almost any kind of soil, grows about one foot high, and produces an abundance of large, bright colored flowers in various shades of yellow from early summer until killed by frost. Excellent for beds and borders; also valuable for pot culture, blooming freely in winter and early spring.

No. 117. Mixed colors. Pkt., 5c; oz., 25c.

CANDYTUFT
(Iberis.)

The annual Candytufts are hardy, of the easiest culture, and are great favorites for beds and borders. The improved varieties are splendid for pots and for cutting. By sowing the seed outdoors in fall, again in spring, and at intervals during the summer, blooms may be had continuously from early spring until winter. To produce the finest spikes the plants should be transplanted.

No. 922. Empress. A grand variety, producing enormous spikes of bloom resembling a white Hyacinth. The spikes often measure seven inches long by two and one-quarter inches in diameter. The plant is about twelve inches high. Pkt., 10c; oz., 50c.


Calliopsis

One of the showiest and most easily grown hardy annuals. The plants form perfect little bushes about two feet high and literally massed with bloom from early summer until killed by frost. Splendid for massing and for cut flowers. The flowers are in various shades of yellow, brown and maroon. By keeping the old flowers cut off the flowering season will be lengthened.


Canary Bird-Vine
(Tropaeolum Canarissim.)

A pretty, rapid-growing, half-hardy annual climber, attaining a height of ten to fifteen feet, and bearing little canary-yellow flowers resembling a bird with its wings half expanded.

No. 148. Pkt., 5c; oz., 25c.

The finest lawns are produced from Lilly's Lawn Grass Mixtures and Lilly's Lawn Dressing.
CANTERBURY BELLS
(Campanula.)

Very ornamental garden plants of easiest culture. They are hardy biennials, flowering the second year from seed, two and one-half feet high, and producing large bell-shaped flowers of exquisite colors. The plants form perfect pyramids of bloom, bearing from one hundred to two hundred exquisite flowers for several weeks during the early summer. The “Cup and Saucer” varieties produce flowers three inches in length.

No. 15. Single, mixed colors.........Pkt., 5c; oz., 25c.
No. 157. Double, Cup and Saucer type.Pkt., 10c; oz., 75c.

Celosia
(Cockscomb.)

Odd, picturesque plants, bearing bright colored flowers or plumes resembling a cock’s comb. Hardy annuals. Fine for massing or border work.

No. 119. Celosia Pyramidalis Plumosa. Large flowered, feathered. Mixed colors. ...Pkt., 5c.

Centaurea
(Corn Flower. Bachelor’s Button. Sweet Sultan.)

Among the most attractive and graceful of the old-fashioned flowers. They are hardy annuals of simple culture. There are several varieties, all growing one and one-half to two feet high, and are excellent for beds, borders, and for cut flowers.

No. 923. Korenbloom. (Cyanus nana compacta Victoria). A highly improved dwarf, compact, variety of Bachelor’s Button, producing large azure-blue blossoms in great profusion.

No. 225. Cornflower. Bachelor’s Button, Ragged Sailor, or Bluebottle. An old-fashioned favorite. Hardy annual. Two feet high. ...Pkt., 5c; oz., 30c.
No. 1016. Royal Sweet Sultan. (Centaurea Imperialis) The finest of all Sweet Sultans for cutting, lasting a long time in water. Beautiful, artistic, sweet scented flowers borne on long, strong stems. Mixed colors. ...Pkt., 10c; oz., $1.00.

No. 1017. Dusty Miller. (Centaurea Gymnocarpa) Narrow, silver-gray foliage; purple flowers. Used for ribbon bedding, edgings, vases, etc. Half-hardy perennial. Eighteen inches high.

Chrysanthemums

The hardy annual Chrysanthemums are quite distinct from the Oriental Chrysanthemums grown in greenhouses and conservatories. These showy garden annuals form compact bushes about eighteen inches high and bear an abundance of attractive flowers which are very desirable for cutting.

No. 1038. Coronarium, Double, Mixed.

Cineraria

Magnificent tender perennials, grown mainly in conservatories, window gardens or greenhouses. The flowers measure two to three inches in diameter and cover the plant with a sheet of bloom. The colors are white, blue, violet and crimson shades.

No. 19. Cineraria Hybrida, Mixed...Pkt., 25c.

Clarkia

One of the prettiest of the hardy annuals, and being a native of the Pacific Coast, is produced here in the greatest perfection. Seed sown in the fall will produce blossoms early the next spring. The plant grows about eighteen inches high and bears a profusion of bright rose, white and purple single and double flowers.

No. 21. Clarkia Elegans, Mixed.

The best fertilizers for flower gardens are Lilly’s Lawn Dressing or Concentrated Fertilizer.
CARNATIONS
(Dianthus)

These splendid half-hardy perennials are used for greenhouse florist's trade in winter and for garden decoration and cut flowers in summer. They are general favorites on account of their delicious fragrance and richness of color. The Marguerites are most popular for outdoor culture. From plants started early under glass or in the house blooms may be had the first summer or fall.

No. 16. Mixed Double Varieties........Pkt., 10c.
No. 419. Choice Double Varieties, Mixed.
   Pkt., 25c.
No. 402. Marguerite, White. Strong growers; free flowering; especially desirable for garden.
   Pkt., 10c.
No. 294. Marguerite, Mixed Colors...Pkt., 10c.
   Pkt., 10c.

Cobaea Scandens
(Cups and Saucers Vine.)

A half-hardy climbing perennial, generally treated as an annual, attaining a height of twenty to thirty feet the first season. It has large leaves and large trumpet-shaped flowers which are green at first, turning to bright purplish-blue.

No. 120. Cobaea Scandens.............Pkt., 5c; oz., $1.50.

Cosmos

One of the notable fall flowers. The plants grow four feet tall and bear a multitude of beautiful, large, single flowers in pure white, pink and crimson. They are hardy annuals.

No. 282. Autumn Pride. A highly improved variety bearing very large flowers in mixed colors...............Pkt., 5c; oz., 35c.
No. 1032. White........................Pkt., 10c; oz., 50c.
No. 1033. Pink........................Pkt., 10c; oz., 50c.
No. 1034. Red........................Pkt., 10c; oz., 50c.

Daisy
(Chrysanthemum Leucanthemum.)

This splendid hardy perennial is a great favorite for bedding and cut flowers. The plants grow two and one-half feet in height and bear magnificent single white flowers with yellow centers on stems eighteen inches or more in length.

No. 1004. Shasta Daisy...............Pkt., 10c.

Digitalis
(Poxglove.)

Hardy perennials, blooming the second year from seed, and especially adapted to this locality. They grow three to five feet tall and produce freely long spikes of Gloxinia-like flowers in various colors. Splendid for permanent beds, masses and backgrounds. Thrives best in a cool, shady location.

No. 165. Mixed Colors...............Pkt., 5c; oz., 50c.

Echinocystis
(Wild Cucumber.)

One of the quickest growing hardy annual vines. The foliage is dense, and it is one of the best vines for covering trellises, tree trunks, fences, or any place where a quick, but not permanent growth is desired. A profusion of fragrant white flowers is followed by an abundance of ornamental prickly seed pods.

No. 995..................Pkt., 10c; oz., 25c.

Dianthus
(Pinks.)

This favorite family embraces some of the most beautiful and sweet scented flowers, producing a great variety of pleasing colors and shades. They are hardy annuals, and will flower the first season from seed sown outdoors early in spring, continuing to bloom during the entire season. Height one foot. Excellent for cutting and bedding.

No. 28. Chinese Pinks. A mixture of the choicest varieties.................Pkt., 10c; oz., 75c.
No. 288. May Pinks. The old-fashioned single flowered garden or border pink...Pkt., 5c; oz., 25c.

Dahlias

Although Dahlias are generally grown from bulbs, they may be grown from seed, and if the seed is sown early in spring will bloom the following fall, producing large single flowers in a gorgeous array of colors and markings that will be interesting and pleasing.

No. 924. Giant Annual Dahlia......Pkt., 10c.

Cultural directions for flowers, vegetables and farm crops are contained in Lilly's Crop Book.
ESCHSCHOLTZIA
(California Poppy.)
The state flower of California, and a hardy annual of striking character, both in form and color, bright, rich, orange-yellow. The plants grow about one and one-half feet in height, with attractive silvery foliage, branching freely and producing large poppy-like flowers lavishly from spring until late fall. They are most effective when grown in beds of considerable size, over which the seed may be thinly sown broadcast and lightly raked in. It is very hardy and the seed may be sown almost any time and in any manner. From seed sown in fall or early spring blooms will be had early the following summer.

No. 192. True California Poppy. Orange-yellow... Pkt., 5c; oz., 25c.
No. 167. White Eschscholtzia. Creamy-white... Pkt., 5c; oz., 20c.

Gaillardia
A showy, hardy annual of the easiest culture. The plants grow in compact, bushy form, about one foot high and the same in breadth, bearing freely until late in fall, large, brilliant flowers in red and yellow, blended and shaded, on long slender stems. Splendid for borders and cut flowers.

No. 444. Annual Gaillardia. Single, Mixed... Pkt., 5c; oz., 50c.

Godetia
An attractive hardy annual, of compact growth, about ten inches high, bearing a profusion of satiny, cup-shaped flowers in red, pink and white, shaded and blended. Valuable for bedding and massing.

No. 494. Semi-dwarf varieties; mixed colors. Pkt., 5c; oz., 25c.

Gourds
Rapid growing half-hardy annual climbers. The ornamental foliage makes them useful for covering arbors, fences, stumps, etc., and the oddly shaped and highly colored fruits make them interesting.

No. 476. Mixed varieties... Pkt., 5c; oz., 15c.

Gypsophila
(Baby's Breath.)
Very pretty free-flowering plants, of easy culture. There are both annual and perennial varieties, both of which are graceful and delicate, and of special value for mixing with other flowers in bouquets.

No. 925. Snowflake. (Gypsophila elegans alba pura) An improved large-flowering hardy annual variety, producing graceful sprays of pure white blossoms. Grows about two feet high... Pkt., 10c; oz., 25c.
No. 276. Gypsophila Elegans, Mixed. Hardy annual. Two feet high. Mixed colors... Pkt., 5c; oz., 20c.
No. 918. Gypsophila Paniculata. Hardy perennial. White. Plants two and one-half feet high... Pkt., 10c; oz., 30c.

Heliotrope
A half-hardy perennial, flowering during the whole season. It is a splendid bedding plant and its delightful perfume makes it a favorite for bouquets and for pot culture during the winter. Height two feet.


HOLLYHOCK
One of the most majestic of hardy plants, and unequaled for planting among shrubbery or for backgrounds for other plants. They grow six to ten feet high and bloom for a long period. The tip may be pinched off when they reach the desired height, thus inducing development of branches and forming a bush.

No. 961. Lily's Annual Everblooming Hollyhock. This splendid variety is a hardy annual, and if planted early will begin blooming in July or August. The diversity of forms and colors among the flowers affords many delightful surprises. Some of the flowers will be densely double, others semi-double, and others single, all being of the most beautiful colors and shades... Pkt., 10c.
No. 37. Double Hollyhocks. The best double perennial hollyhocks in mixed colors... Pkt., 10c.

LILLY'S CROP BOOK tells how to make and maintain a lawn. Free with any order.
Humulus
(Japanese Hop.)
A very rapid half-hardy annual climber, attaining a height of twenty feet in a few weeks. The foliage is luxuriant, making a dense covering for verandas, trellises, etc.
No. 413. Variegated Japanese Hop. (Humulus Japonicus folis variegatis) Leaves liberally striped and blotched with silvery white and gray on deep green. .......... Fkt., 10c.

Ipomoea
(Moon Flower Vine. Evening Glory.)
The most rapid growing of flowering half-hardy annuals, quickly attaining a height of ten to fifteen feet, producing a dense mass of heart-shaped leaves which form a background for a great profusion of beautiful large flowers which open at sunset and close the next morning.
No. 953. Evening Glory, (Ipomoea Bona Nox) Bears abundantly, large, rosy-lilac flowers which open in the evening. .......... Fkt., 10c.
No. 1056. Moon Flower Vine. (Ipomoea Maxima) The vines make a wonderful growth and are covered with large, pure white, fragrant flowers. .......... Fkt., 10c.

Kochia
(Summer Cypress. Belvidere.)
A hardy annual which has the appearance of a compact evergreen shrub. It has light green feathery foliage which in the fall changes to rich crimson. Most effective for the center of a bed or for garden decoration. Height about two feet.

Kudzu Vine
(Pueraria Thunbergiana.)
An immensely vigorous vine, producing stems fifty feet long in a season after it has become well rooted. At home, in Japan, it is covered with clusters of fragrant, sweet pea shaped, purple flowers. In this country it is an uncertain bloomer, but covers everything in reach with its luxuriant foliage. The plants die down in winter, but the roots throw out new shoots in spring.

Linum
(Flowering Flax.)
A hardy annual, about one and one-half feet high, slender and graceful, with smooth stems and bright red flowers, which are borne in great profusion and long duration. An effective and showy bedding plant. Sow seed in spring in bed where it is to remain.
No 243. Linum Grandiflorum Rubrum, Fkt., 5c.

Lupins
Ornamental, free flowering, hardy annuals, growing two to three feet high, bearing richly colored pea-shaped flowers on long, graceful spikes.
No. 46. Mixed colors. .......... Fkt., 5c.

LARKSPUR
(Delphinium.)
The Larkspurs are among the most popular of garden flowers. Seed of the hardy annual varieties sown in the open ground early in spring will produce flowering plants early in July and give a continuous succession of flowers until late in fall. They are handsome in beds, shrubbery borders, or for cut flowers.
No. 927. Lilly's Giant Larkspur. A splendid hardy annual Larkspur, growing only one foot high and producing giant, double, hyacinth-like blooms in a variety of charming colors. .......... Fkt., 10c.
No. 208. Annual Larkspur. Tall hardy annual Larkspur growing two to three feet high. Mixed colors. .......... Fkt., 5c.
No. 1057. Perennial Larkspur. (Delphinium Elatum Hybridum fl. pleno.) Hardy perennial Delphinium growing three to five feet high and bearing flowers in various shades of rich blue.  .......... Fkt., 10c.

Lobelia
Pleasing half-hardy annuals, growing four to six inches high and forming compact little bushes literally covered with small, bright flowers during the entire season.
No. 195. Emperor William. A very dwarf, compact variety, completely covered with white, blue-margined flowers from June to November. Fkt., 10c.
No. 304. Gracilis. A trailing variety with light green foliage and light blue flowers. .......... Fkt. 5c.

Lychnis
(Rose Campion. Jerusalem Cross.)
Handsome hardy perennial plants growing two to three feet high and bearing bright scarlet flowers. Excellent for massing in beds and borders. Will bloom the first year if seed is sown early.
No. 47. Lychnis Calcedonica. .......... Fkt., 5c.

Marigold
(Tagetes.)
The African and French Marigolds are favorite free-flowering hardy annuals of easy culture. The African varieties grow two to three feet tall, bear large yellow or orange-colored flowers, and are adapted for large beds or mixed borders. The French varieties are dwarf in growth, with beautiful striped flowers three to four inches in diameter, and are better suited for bedding and pot culture.
They succeed best in light soil with full exposure to the sun. Either variety is splendid for cut flowers.
No. 409. Tall Double African Marigolds. (Tagetes erecta fl. pleno.) About two feet high with flowers three to four inches in diameter in shades of yellow and orange. .......... Fkt., 5c.
No. 410. Tall Double French Marigolds. (Tagetes patula fl. pleno) One and one-half feet high with large double flowers in mixed colors. .......... Fkt., 5c.
No. 146. Dwarf Double French Marigolds. (Tagetes patula nana fl. pleno.) One foot high with large flowers in mixed colors. .......... Fkt., 5c.

Flower Seeds at prices named will be mailed postpaid to any postoffice.
MIGNONETTE

No garden is complete without this old favorite, sweet scented, hardy annual. The plants grow a foot or more in height, bearing pyramidal-shaped flower spikes about six inches long, made up of thickly set florets which are exceedingly fragrant. Sowings made in April and again in July will keep up a succession of bloom during the entire season. Valuable for bedding or borders, also for pot culture.


No. 252. Golden Queen. Compact plant with large spikes of very fragrant golden-yellow flowers. Pkt., 5c; oz., 30c.

No. 139. Reseda Odorata. The old-fashioned Sweet Mignonette.

Mimulus

Showy, profuse-flowering, half-hardy perennials, blooming the first year from seed if sown early under glass. Fine for greenhouse or moist, shady places outdoors.

No. 928. Hose-in-Hose. (Mimulus quinquevulnus maximus duplex) A new five-spotted Mimulus with extra fine flowers; sulphur ground spotted with scarlet and pink. .......... Pkt., 10c.

No. 49. Mask Plant. (Mimulus Moschatus) Very fragrant. Small yellow flowers spotted with brown. The plants are trailing, and are fine for hanging baskets and window gardens. .......... Pkt., 5c.

No. 50. Monkey Flower. (Mimulus tigrinus) Curiously shaped yellow flowers, spotted like a tiger’s skin. Grows about eight inches high. .......... Pkt., 5c.

Mina

A half-hardy climbing annual attaining a height of eighteen to twenty feet. The buds are a vivid red, turning to orange-yellow before opening, and the flowers when fully opened are creamy-white, covering the plant from bottom to top. The seed should be planted early under glass.


Myosotis

(Forget-Me-Not.)

Hardy perennials and annuals, growing six to twelve inches high and bearing pretty little star-like flowers in clusters on long stems. The plant thrives best in a cool, moist location, and blooms the first year from seed if sown early.

No. 310. Lilly's Victoria Dwarf Forget-Me-Not. A very beautiful hardy biennial variety; of dwarf, bushy habit, bearing large clusters of the brightest azure-blue flowers on long, graceful stems, rendering them splendid for cutting. .......... Pkt., 10c.


Mirabilis

(Marvel of Peru. Four O'Clock.)

A perennial in warm climates, but generally grown as a half-hardy annual in this locality. The plant is two feet high, erect and bushy, bearing throughout the summer hundreds of large, white, yellow, crimson, or striped flowers. The flowers are shaped like the Morning Glory, and open late in the afternoon.

No. 51. Mirabilis Jalapa .......... Pkt., 5c.

MORNING GLORY

Well known hardy climbing annuals, growing about fifteen feet high and bearing pretty flowers in a variety of colors and tints, fully expanded only in the morning. Of easy culture and quick growth.

No. 600. Imperial Japanese Giant Morning Glory. Of remarkable size. The vines present a beautiful wall of luxuriant foliage thickly covered with flowers three to four inches in diameter and in a great variety of shades and markings. .......... Pkt., 10c.


No. 23. Convolvulus Minor. A dwarf or bush variety, growing about one foot high, bearing flowers the same as the tall variety. .......... Pkt., 5c.

Lilly's Fertilizers will make sturdier plants and larger and brighter blooms.
NASSURTUTUMS
Finest Giant Flowering Varieties, Blooming the Entire Season

TALL, OR CLIMBING NASSURTUTUMS

The tall, climbing, or trailing nasturtiums grow six to ten feet high, bloom profusely during the entire summer and fall, and are splendid for covering trellises, fences, rockeries, etc.

No. 1059. CHAMELEON. Each plant bears flowers of a great variety of colors.
No. 1061. VESUVIUS. Salmon-rose. Fine.
Prices, any of the above tall varieties; pkt., 5c; oz., 15c; 1/4 lb., 40c; postpaid.

No. 1062. TALL IVY-LEAVED. The leaves resemble English Ivy. The flowers are of a distinct form and in a great variety of colors.

LOBB'S CLIMBING NASSURTUTUMS

Lobb's Nasturtiums differ from the other tall nasturtiums only in being more compact, having slightly smaller leaves, and in the richer and more varied colors of the flowers.

No. 1063. ASA GRAY. Pale primrose-yellow, almost white.
No. 1065. BRILLIANT. Intense scarlet-red.
No. 903. GOLDEN QUEEN. Pure golden-orange.
No. 1066. SPITFIRE. Fiery scarlet flowers.

Prices, any of the above Lobb's climbing nasturtiums:

DWARF, OR BEDDING NASSURTUTUMS

These dwarf or Tom Thumb varieties form sturdy little bushes completely covered with large, brilliant flowers during the entire season.

No. 264. EMPRESS OF INDIA. Fiery crimson. Compact plant with very dark foliage.
No. 908. DWARF PEARL. Cream-white.
No. 911. DWARF CHAMELEON. All colors borne on each plant.

Prices, any of the above dwarf varieties: Pkt., 5c; oz., 10c; 1/4 lb., 25c; 1 lb., 75c.

Nasturtiums are among the most satisfactory and easily grown annuals, and there is nothing more pleasing than the harmonious blending of the various shades of green, yellow, brown and red in a bed or border of the dwarfs or a trellis or wall covered with the climbers.

SEEDS are tested, and will grow if other conditions are favorable.
Nemophila
(Love Grove)
Pretty hardy annuals, growing about six inches high and bearing abundantly from early spring until late summer, showy bell-shaped flowers in white and various shades of blue. Thrives best in a cool, moist location, and is fine for beds, borders window boxes, pot plants and cut flowers.
No. 54. Mixed colors. .......... Pkt., 5c.

Nigella
(Love-in-a-Mist, Devil-in-a-Bush)
Lovely hardy annuals, growing in oval bush form about one foot in height. In the finely cut fern-like green foliage nestle numerous large double flowers of light blue and white.

Nicotiana
(Flowering Tobacco)
Showy and profuse flowering half-hardy annuals growing two to three feet high, of branching habit, and giving a continuous display of bright colored, fragrant flowers in clusters during the entire summer and fall.
No. 825. Nicotiana Sandrae. This splendid hybrid gives a gorgeous display in a great variety of colors during the entire season. .......... Pkt., 15c.
No. 447. Nicotiana Sylvestris. A most effective plant, either with other plants in beds or as single specimens. The plants are pyramidal in shape, four feet high, with pure white, fragrant flowers in loose, drooping heads. .......... Pkt., 5c.

PETUNIAS
For outdoor decoration or house culture few plants equal the Petunia in effectiveness. They commence flowering early and continue a sheet of bloom throughout the whole season. They are half-hardy annuals, and the single varieties are very easy to grow, requiring only good soil and a sunny location. The double hybrid varieties are more difficult to grow and should be started under glass. On account of having to be hand pollinated, the seed of the hybrid varieties is very expensive.
No. 65. Large Flowered Fringed Double Petunias. This is the highest development of the Petunia, improved by selection and artificial pollination until it little resembles the old varieties. This seed will produce a large percentage of splendid double flowers, the balance being immense, fringed, single flowers of the most beautiful colors and tints. .......... Pkt., 25c.
No. 66. Choice Double Hybrid Petunias. Some of the choicest hybrid varieties and colors mixed. As is well known, double petunia seed produces only a portion of double flowers. The weaker plants should be carefully saved, for those plants will produce the finest double flowers. .......... Pkt., 25c.
No. 61. Choice Single Petunias. A choice mixture of fine single varieties and colors. Single Petunias are easy to grow, and the seed may be sown outdoors after danger of frost is past. .......... Pkt., 5c.

PHLOX
For beds and massing, nothing can surpass the beautiful hardy annual Phloxes. They produce immense trusses of large, brilliant flowers of a great variety of colors and shades throughout the summer. They are very easy to grow, and thrive in most any kind of soil if given a sunny position. The seed may be sown outdoors early in spring, and in a few weeks the plants will be covered with blooms.
No. 336. Lilly's Star Phlox. The beauty and brightness of this variety cannot be over praised. The plants are dwarf, about twelve inches high, and are lavishly covered with large umbels of star-shaped flowers of the most brilliant color. .......... Pkt., 5c.
No. 919. Lilly's Large Flowering Phlox (Phlox Drummondii Grandiflora). This is the finest type, having the largest heads of bloom and the largest individual flowers. The plants are of strong, sturdy growth, attaining a height of about fifteen inches. Makes a very showy bed or border. This mixture contains all the most beautiful colors and shades. .......... Pkt., 10c.
No. 67. Phlox Drummondii, Mixed. The flowers are not so large as those of the grandiflora type, but are just as bright colored and free blooming. The plants are about fifteen inches high. .......... Pkt., 5c.
No. 931. Dwarf Phlox. This variety is of dwarf, compact habit, growing only six or eight inches high but with flowers nearly as large as the taller varieties. .......... Pkt., 10c.

Poppies
Nothing is easier to grow and few flowers are more pleasing than poppies. In brilliancy of color, grace of stem, airiness of poise and delicacy of texture they are unexcelled. They are hardy annuals and perennials and may be sown very early in spring in the beds where they are to remain, as they do not transplant well.
No. 314. Shirley Poppy. A charming hardy annual Poppy with large fluted and crinkled flowers in a variety of forms, colors and tints. .......... Pkt., 5c; oz., 25c.
No. 55. Peony Flowered Poppy. Large, showy, double, globular flowers in various bright colors. Hardy annual. .......... Pkt., 5c; oz., 15c.
No. 341. Iceland Poppy. This is a hardy perennial Poppy, but will bloom the first year from seed. They bear an endless profusion of graceful, delicate, single flowers, with petals like tissue paper, in a variety of pretty colors. .......... Pkt., 10c; oz., 75c.
No. 351. Mixed Poppies. All hardy annual varieties; mixed. .......... Pkt., 5c; oz., 20c.
The Pansy is a hardy perennial, thriving best in a cool, moist location. The largest blooms are produced during the cool months in spring and fall; during the warm summer months the blooms will be small. Abundant irrigation will produce larger flowers during the summer, but care must be taken that the water is warm, for the plants cannot stand the shock of cold water.

For early spring bloom, the seed may be sown outdoors about the first of September. Spring sown seed will produce blooms the following fall. The plants will produce better blooms if transplanted two or three times; in the permanent bed they should be set six to twelve inches apart. Although they are perennials, it is best to start new plants every year.

No. 89. Fine Mixed English Pansies. Finest varieties and colors of English Pansies, mixed. The plants are of compact habit. Pkt., 5c

No. 90. Giant Flowered French Pansies, Mixed. A fine mixture of large flowering French varieties. All colors. Pkt., 5c

No. 91. Odier, or Blotched Pansies. A fine strain of this large flowered type. The blossoms are round and the petals blotched at the base and distinctively margined at the edge. Mixed. Pkt., 25c

No. 92. Giant Trimardeau, Mixed. A splendid type of immense size, distinct shape and beautifully marked. The plants are deep rooted, enabling them to withstand drought, hardy and robust. Pkt., 10c

No. 94. Lord Beaconsfield. A very large Pansy with upper petals white and lower petals purple. Pkt., 10c

No. 95. Snowflake. Large; satin-white with light yellow center. Pkt., 10c

No. 96. White Trimardeau. A very large, white Pansy with three purple blotches. Pkt., 10c


No. 177. Cassier's Large Flowered Blotched. The largest flowered class of blotched Pansies. The flowers are round and are blotched at base of petals. Very showy. Mixed colors. Pkt., 25c

No. 178. Faust, or King of the Blacks. The darkest colored Pansy, almost black. Very large. An extra fine strain. Pkt., 10c

No. 179. Gold Margined. Purple with gold border. Very showy. Pkt., 5c

No. 203. Emperor William. Cornflower-blue; immense size and very showy. Pkt., 10c

No. 429. Goldelse, or Yellow Gem. Pure golden-yellow; large. Pkt., 10c

LILY'S COLOSSAL MIXED PANSIES

This is a splendid mixture of the choicest largeflowering varieties and the most beautiful colors and markings.

No. 930. Lily's Colossal Mixed. Pkt., 25c

To grow Pansies successfully requires some care; for cultural directions see Lilly's Crop Book.
### Portulaca
**Juni Plant**

A brilliant, hardy annual, growing about six inches high, and thriving in warm, dry, sunny situations. Excellent for low beds and borders, and for sowing on exposed banks where other flowers would not thrive. The colors range through all shades of red, yellow, pink, striped, white, etc.

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Packet</th>
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<td>Pkt., 5c</td>
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<td>70</td>
<td>Double, Mixed colors</td>
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### PRIMROSE
**Primula**

Primroses are among the most charming of perennials for winter and spring decoration in the house and conservatory, being splendid winter blooming pot plants. The hardy varieties are also excellent for beds and borders, especially on the Pacific Coast, where they may be grown outdoors without protection.

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
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<tr>
<td>72</td>
<td>Chinese Primrose</td>
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<td>Primula Aurea</td>
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<td>74</td>
<td>Japanese Primrose</td>
<td>Pkt., 25c</td>
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<tr>
<td>76</td>
<td>Golden Feather</td>
<td>Pkt., 5c</td>
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<tr>
<td>342</td>
<td>Pyrethrum Roseum Hybrida</td>
<td>Pkt., 5c</td>
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<td>315</td>
<td>Primula Obconica Grandiflora</td>
<td>Pkt., 10c</td>
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### Pyrethrum

No. 76. **Golden Feather**. Pyrethrum Parthenifolium Aureum. A hardy perennial with bright, golden-yellow foliage; much used for edging and borders.

Pkt., 5c

No. 342. **Pyrethrum Roseum Hybrida**. Hardy perennial, bearing large, daisy-like flowers ranging in color from light pink to deep red, with bright yellow centers. Blooms in May and June and again in fall. One of the most graceful and long-lasting cut flowers. Two feet tall. Pkt., 10c

### Ricinus
**Castor Oil Bean**

Ornamental half-hardy annual foliage plants of luxuriant and rapid growth, attaining a height of six to twelve feet, with brilliant colored fruit, producing a tropical effect. Fine for massing or for center for beds.

No. 140. Castor Oil Bean. Pkt., 5c

### Salpiglossis
**Painted Tongue**

A great favorite among the half-hardy annuals because of its easy culture and beautiful almost orchid-like flowers which are produced from early summer until late fall. Three feet high.

No. 406. Mixed colors. Pkt., 5c

### Salvia
**Flowering Sage**

Favorite bedding and border plants where bright colors are desired. They are half-hardy perennials, blooming the first year from seed if sown early. The plant is bushy, growing three feet high and bears profusely during the summer and fall very fragrant flowers in large drooping spikes.

No. 920. Scarlet Sage. (Salvia Splendens.) Large spikes of the most intense glistening scarlet. Produces a gorgeous effect in a bed, and is splendid in working out color schemes if properly used. Pkt., 5c

No. 142. Blue Sage. (Salvia Patens.) Similar to Scarlet Sage in every way except that the flowers are the brightest blue. Pkt., 15c

### Scabiosa
**Mourning Bride**

This splendid hardy annual is the old favorite, Mourning Bride, Sweet Scabious, or Old Maid’s Pin-cushion, much improved in size and form. The plants grow two to four feet high and bloom continuously from July until late fall.

No. 130. Tall. Mixed colors. Pkt., 5c

No. 143. Dwarf. Double, Mixed colors. Pkt., 5c

### Schizanthus
**Butterfly Flower, Fringe Flower**

One of the airiest and daintiest flowers imaginable. A hardy annual growing about eighteen inches high; excellent for borders and a charming house plant for winter blooming.

No. 80. Mixed colors. Pkt., 5c

### STOCKS

Stocks are among the most popular half-hardy plants for bedding, edging, pot culture and cut flowers. For brilliancy, diversity of colors, fragrance, profusion and duration of bloom, they are unsurpassed. The Ten Weeks and Dresden Stocks are annuals, and from seed started indoors in March or April blooms will be had in July. The Emperor and Brompton Stocks are biennials, but will bloom late the first year from seed, and are treated as annuals.

No. 170. Emperor Stocks. A very fine, double, late flowering biennial. Mixed colors. Pkt., 10c

No. 322. Dresden Stocks. Annuals. Plants are branching and bloom early and continuously. Pkt., 10c

No. 84. Large-flowering Dwarf Ten Weeks Stocks. Dwarf plants and very large flowers. Pkt., 10c

No. 377. Large-flowering Tall Wallflower Leaved Ten Weeks Stocks. Annuals. The plants are about eighteen inches tall and bear a profusion of immense flowers. Pkt., 10c

No. 65. Brompton, or Winter Stocks. These are biennials, but will bloom late the first season from seed. Mixed colors. Pkt., 10c

We are agents for the celebrated G. B. Lewis Co. Bee Supplies, which are known to be the best.
SWEET PEAS are the most universally popular annuals, and deservedly so, for they are of the easiest culture, bloom profusely and continuously during nearly the entire summer, and the beauty and fragrance of the superb flowers is incomparable. They are unequalled as cut flowers, keeping in perfect condition for more than a week. The climate of the Pacific Coast is especially adapted to the most perfect development of Sweet Peas. In no other locality do they grow to such immense size, superb form and beautiful shades and tints.

Good Sweet Peas can be grown with little care and under ordinary garden conditions, but a little extra attention will be liberally repaid in finer blooms and a longer season. On the Pacific Coast the best and earliest blooms are produced by planting the seed in the fall. A good article on Sweet Pea culture is contained in The Crop Book.

The Spencer
Orchid-Flowered
Sweet Peas

This is the most highly improved type of Sweet Peas. The plants grow six to ten feet high, the stems are a foot or more in length and each stem bears three or four of the most magnificent flowers. Many of the flowers are two and one-half inches across, and are beautifully formed, daintily waved and fluted.

Mrs. Routzahn
A beautiful blending of straw-ocolor tinted with blush-pink and shading to apricot and rose at the edges. One of the finest Spencers.
No. 1011 Pkt., 10c; oz., 30c

Margaret Madison
A charming, clear, azure-blue, self colored. An improved strain, large flowered, and one of the most beautiful.
No. 1048 Pkt., 10c; oz., 40c

Margaret Atlee
One of the most magnificent Spencer Sweet Peas. Of immense size, with large wavy wings, well poised, and few stems bear less than four blossoms. The color is very attractive, a rosy salmon-pink on a creamy buff ground.
No. 1043 Pkt., 10c; oz., 50c

Countess Spencer
The original of the Spencer Type Sweet Peas, and still one of the best. Beautiful clear pink.
No. 949 Pkt., 10c; oz., 30c
King White
The King of all white Sweet Peas because of the perfection of the flower in every detail—form, size, waviness, and glistening, immaculate whiteness.
No. 1041. ———-Pkt., 10c; oz., 50c

Dobbie's Cream
A delicate cream-color. The best Spencer of this color.
No. 1042. ———-Pkt., 10c; oz., 30c

Primrose Spencer
The best of its class. Clear primrose of best Spencer form. The flowers are large and beautifully waved.
No. 1002. ———-Pkt., 10c; oz., 30c

Vermillion Brilliant
A brilliant scarlet Spencer of splendid form. The standard is very bold and beautifully waved. On account of its brightness this is a very telling color and should be in every collection.
No. 1046. ———-Pkt., 10c; oz., 40c

Florence Morse
Very large wavy flowers of soft blush-pink flushed towards the edge with deeper pink.
No. 1014. ———-Pkt., 10c; oz., 30c

Thomas Stevenson
Large and brilliant effective flowers of fiery red-orange. Practically sunproof. A grand Spencer.
No. 1044. ———-Pkt., 10c; oz., 40c

Helen Lewis
A very large and fine Spencer Sweet Pea with orange colored standard and orange-salmon wings.
No. 953. ———-Pkt., 10c; oz., 30c

King Edward Spencer
The best pure red Spencer. It is very large, with open form, immense wings and beautifully waved. The color is rich, crimson-scarlet.
No. 1009. ———-Pkt., 10c; oz., 30c

Illuminator
A glorious orange-salmon Spencer Sweet Pea of striking color and magnificent form and size.
No. 1045. ———-Pkt., 10c; oz., 50c

Wedgewood
A clear light silvery-blue with just a suggestion of mauve in the banner. An improved large flowering strain and the best variety of its color.
No. 1049. ———-Pkt., 10c; oz., 40c

George Herbert Spencer
A large and beautiful Spencer Sweet Pea. The color is rose-crimson suffused with magenta and showing veins in the wings.
No. 1033. ———-Pkt., 10c; oz., 30c

Asta Ohn
The best lavender Spencer Sweet Pea. The flowers are very large and beautifully waved. The color is a beautiful soft pinkish-lavender.
No. 1005. ———-Pkt., 10c; oz., 30c

Do not fail to plant Sweet Peas. They are the most satisfactory flowers for the Pacific Coast.
**Othello Spencer**
Of immense size, with large drooping wings. The color is a very dark, rich maroon. The best very dark colored Sweet Pea.
No. 1047. Pkt., 10c; oz., 30c

**Flora Norton Spencer**
Flowers of medium size but very nicely waved and produced profusely. The color is a beautiful pale blue.
No. 1006. Pkt., 10c; oz., 30c

**Apple Blossom Spencer**
A very large, bold flower of best Spencer form. The standard is very, very bright rose; wings primrose with flush of rose tint. Very robust and profuse flowering.
No. 1050. Pkt., 10c; oz., 30c

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**Dainty Spencer**
Very large, splendidly formed flowers of blush-white distinctly picotee edged with rose-pink. A beautiful Sweet Pea of splendid Spencer form.
No. 1008. Pkt., 10c; oz., 30c

**Senator Spencer**
A very large and attractive Spencer; chocolate and seal-brown striped, flaked and mottled on ivory-white. Very distinct and novel, and one of the very largest in size.
No. 1051. Pkt., 10c; oz., 30c

**America Spencer**
Striped and flaked brilliant carmine-red over white. Very large flowers of splendid form and striking color.
No. 1024. Pkt., 10c; oz., 30c

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**LILLY'S Mixed Spencer Sweet Peas**
A Superb Mixture of Best Varieties of Giant Waved Spencer Sweet Peas
This splendid mixture contains nearly all good varieties of the Spencer type, and is designed for the convenience of those who wish all the colors, shades and tints, but do not care to keep them separate or to go to the expense of purchasing each of the many varieties.
No. 1007. LILLY'S MIXED SPENCER SWEET PEAS. Pkt., 10c; oz., 25c; ¼ lb., 75c; ½ lb., $2.50

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**Grandiflora Type Sweet Peas**
A Few of the Best Varieties and Colors
Although the Standard Grandiflora type includes some splendid varieties and beautiful colors, the overshadowing size and beauty of the Giant Waved Spencer Sweet Peas has reduced the demand for the Grandifloras, so that we now list only one or two varieties of each of the good colors.

No. 364. America
Crimson-scarlet striped on white. Large, open form. Very attractive.

No. 365. Black Knight
The popular open form; large. Glossy, deep maroon; one of the darkest colored Sweet Peas.

No. 964. Blanche Ferry
Standard bright carmine-rose, wings white tinged with pink; open form.

No. 969. Dorothy Eckford
Large and pure white; semi-hooded form. The best white Sweet Pea of the Grandiflora type.

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No. 954. King Edward VII
Large; open form; bright red. Best of the pure red Grandifloras.

No. 465. Lady Grisel Hamilton
Soft lavender tinted with mauve in the standard. Hooded form.

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**LILLY'S Royal Mixed Sweet Peas**
A Fine Mixture of Standard Hardy Varieties Producing Abundantly
Included in this mixture are the best of all varieties and colors of the Grandiflora Type Sweet Peas. Every seed is of some worthy variety and will produce a satisfactory blossom. Those who do not care to keep the colors separate will find this mixture very pleasing.
No. 958. LILLY'S ROYAL MIXED SWEET PEAS. Pkt., 5c; oz., 15c; ¼ lb., 40c; ½ lb., $1.25

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The Crop Book contains cultural directions for Sweet Peas.
Silene (Catch Fly)
An effective hardy annual growing about one foot high and bearing during the summer small white, pink and red flowers. Useful for bedding.
No. 82. Mixed colors........Pkt., 5c; oz., 15c

Smilax
A tender climbing perennial with beautiful, bright green, glossy leaves. Much esteemed for conservatories on account of the splendid foliage.
No. 374. Smilax.................. Pkt., 10c

Sunflower (Helianthus)
These hardy annuals are splendid for backgrounds, or even for bedding, and must not be confused with the common Sunflower bearing one immense single flower. These grow four to six feet tall, branching, and bearing a multitude of small, artistic flowers.
No. 926. Lily's Miniature Sunflower. (Helianthus Cucumerifolius). A magnificent variety growing about four feet high and bearing small, yellow daisy-like flowers with black centers. Makes an artistic background and is good for cutting..... Pkt., 10c; oz. 25c
No. 123. Dwarf Double Sunflower. (Helianthus annus fl. pleno). A very double dwarf variety, altogether different from the ordinary single varieties, and much more beautiful. The plants grow about four feet tall........... Pkt., 5c; oz., 20c

Sweet William (Dianthus Barbatus)
An old-fashioned plant producing clusters of gorgeously colored flowers of great fragrance. It is a hardy perennial, but blooms the first year from seed. It grows about one foot high and is good for beds and borders.
No. 26. Single, Mixed.........Pkt., 5c; oz., 20c
No. 27. Double, Mixed.........Pkt., 5c; oz., 75c

Thunbergia (Black Eyed Susan)
Beautiful, rapid-growing, half-hardy annual climbers, preferring a warm, sunny situation; used for hanging baskets, window gardens, covering low fences, etc. Grows about four feet high and bears very pretty flowers in buff, white, orange, etc., with dark centers. No. 147. Mixed colors..............Pkt., 5c

VERBENAS
Verbena are low-growing, creeping, half-hardy perennials, blooming the first year from seed and generally treated as annuals. They are splendid for beds, borders, rockeries, hanging baskets, window boxes and for cut flowers. The plants are vigorous, bloom freely, and produce large trusses of flowers ranging in color from white through the shades of lilac and rose to purple.
No. 88. Giant Hybrid Verbenas..............Pkt., 10c

Violets
These little favorites are deliciously fragrant and are unexcelled for borders and for cutting. They are perennials, quite hardy, but the plants are rather difficult to grow from seed.
No. 319. Large Single Violet, Mixed...Pkt., 10c

Wallflower
An old European favorite deserving of more appreciation than is shown in America. It is especially adapted to the Pacific Coast, where it is entirely hardy, although it must be protected during the winter in colder climates. They are perennials, grow about eighteen inches high, are bushy, and very early in spring bear long spikes of deliciously fragrant flowers in bright colors.
No. 98. Double German Wallflower...Pkt., 10c
No. 99. Single Wallflower............ Pkt., 5c

WILD FLOWER GARDEN
There are few things more pleasing than a wildflower garden hidden away in some secluded spot or among shrubbery. This mixture is ideal for the purpose, being composed of such hardy annuals as will require little care beyond scattering the seed, and producing a great profusion and variety of pretty flowers.
No. 438................................Pkt., 5c; oz. 30c

ZINNIAS
This old favorite half-hardy annual has been greatly improved and produces a profusion of large, double flowers; excellent for bedding and for bouquets. The plants form handsome, compact bushes two feet high, covered with flowers of a great variety of colors and shades. They commence blooming early in summer and continue until killed by frost.
No. 933. Giant Mixed Zinnia. A choice mixture including the best and largest types, producing plants of handsome, compact form, and immense, perfectly formed, double flowers in brilliant mixed colors..........................Pkt., 5c; oz., $1.00
No. 100. Mixed Zinnia. A splendid mixture of good varieties and colors.............Pkt., 5c; oz. 40c

For cultural directions for flowers see The Crop Book, which will be furnished free with any order if requested.
TWO YEAR OLD
FIELD GROWN
ROSES

Mature, Healthy and Hardy Plants of Best Quality

Our stock of roses includes only such varieties as are most desirable and suited to this locality. They are large, sturdy, field-grown plants, two years old or more, and are much superior to the rooted cuttings or pot-grown plants commonly furnished. These plants are guaranteed to be in perfect condition when shipped, and to be delivered in good condition when shipped by express. They should be returned to us at once; otherwise we will not replace them. We do not guarantee delivery in good condition when shipped by parcel post or freight. We cannot guarantee plants to grow, for we have no control over the planting and care after delivery to purchaser. We do not ship our plants before November 1st or after April 1st. Prices do not include transportation charges. When packed for shipment, plants weigh about two pounds each, or ten pounds per dozen. Cultural directions for roses are contained in the Crop Book, which we will give free with any order if requested.

Juliet
A beautiful new rose of the new Hybrid Austrian Brier class; a distinct novelty bound to attract attention. The flowers are large and perfect in form; with outside of petals old gold and interior rich rosy-red changing to deep rose as the flowers expand; powerfully and deliciously fragrant. The foliage is luxuriant and beautiful.

George Dickson
A majestic new Hybrid Tea Rose destined to become very popular. The plant is vigorous and hardy, with thick, leathery foliage. The flowers are very large and of beautiful form, with tips of petals reflexed. The color is a velvety black-crimson, with back of petals heavily veined with crimson-maroon.

Lady Hillingdon
A luxuriant plant with beautiful narrow foliage. The buds are long, slender, and pointed; and the color is a beautiful deep apricot and chrome yellow. Tea Rose

Sunburst
A magnificent yellow Hybrid Tea Rose with long pointed buds carried singly on good stems. The flowers are very large, vigorous and healthy. The color is yellow shaded orange-copper.

Lyon
One of the popular new Hybrid Tea Roses. It is magnificently formed and beautifully colored; shrimp-pink at edge of petals, center coral red shaded with chrome yellow.

Frau Karl Druschki
The very highest type of its class, and the best snow-white rose that has ever been introduced. The plants are strong, branching freely, and with luxuriant foliage. The flowers are glorious, of immense size, very double, of the purest white when fully opened, and are produced in great profusion on long stiff stems. Hybrid Perpetual.

Richmond
One of the most satisfactory red Hybrid Tea Roses. The plant is sturdy and free flowering; the buds are beautifully formed; and the flowers are of good size, not very full; and the color is a magnificent and gorgeous scarlet-crimson, vivid and rich. Does not fade.

Madame Caroline Testout
The most popular and most satisfactory rose grown in the Northwest. The plant is hardy, robust and free from disease. The foliage is very large and dark green. The flowers are borne in great profusion, for a long season, on long, stiff stems. Both buds and flowers are large, distinct and of beautiful form, with a brilliant satiny pink color and a delicious fragrance. Hybrid Tea.

General McArthur
A splendid bright crimson-scarlet Hybrid Tea Rose of good size and shape. The plant is vigorous, healthy and very productive.

Franz Deegan
A beautiful Hybrid Tea Rose, orange-yellow merging into white. The plant is healthy and the foliage dark and leathery.

We do not ship rose bushes before the first of November or after the first of April.
Prince de Bulghaire
A splendid Hybrid Tea Rose, and a constant-bloomer. The plant is vigorous, with good foliage; the buds and flowers are large, full, of beautiful form, and the color is a delicate pink shading to salmon and yellow. 35c

General Jacqueminot
The "Jack Rose" has long been the most popular hardy red rose, and is still one of the best of that color. The plant is strong and vigorous, and a profuse bloomer. The flowers are bright, shining crimson, rich and velvety. Hybrid Tea. 35c

Madame Abel Chatenay
A good, hardy, free-blooming Hybrid Tea Rose. The buds are exquisite; the flowers are of good size and beautiful shape; and the color is a beautiful creamy rose shaded with vermillion and salmon. 35c

Betty
The plant is vigorous, producing a great profusion of large, deliciously-scented flowers of a glowing coppery-rose color, suffused with a golden sheen. Hybrid Tea. 35c

Dean Hole
A beautiful Hybrid Tea Rose. The plant is vigorous and a continuous bloomer; the flowers are very large, full and of fine form; and the color is a silvery carmine shaded salmon. 35c

Papa Gontier
A strong, vigorous Tea Rose, and a constant bloomer. The buds are very large and the flowers magnificent. The color is a vivid cherry-red, shaded yellow, with reverse of petals crimson. 35c

Dr. Van Fleet
A splendid new Hardy Climber; a cross between Souvenir du President Carnot and Rosa Wichuraliana. The plant is of strong, vigorous growth, with dark glossy foliage that resists mildew and insects. The buds are borne on long stems, and are exquisitely shaped, long and pointed. The flowers, when open, are large and are a beautiful rich flesh-pink color. 35c

Silver Moon
A magnificent white Hardy Climber; a cross between Wichuraliana and Cherokee. The plant is a wonderfully strong grower, with large, glossy, bronze-green foliage, practically immune to mildew. The flowers are very large, clear silved white, with bright yellow stamens, delicately fragrant, and borne on long stems. In great profusion. 35c

Crimson Rambler
A strong and rapid climber, producing a great profusion of small crimson flowers in large panicles. Polyantlus. 35c

Kaiserin Augusta Victoria
This grand white rose is unsurpassed in beauty. The flowers are beautifully formed, with gracefully reflexed outer petals. The beautiful long pointed buds are attractively tinted with yellow or green, but the full-blown roses are a delicate, waxy, pure white. Hybrid Tea. 35c each; $3.50 dozen.

Gruss an Teplitz
For intense and dazzling color, there is no other to compare with this splendid Hybrid Tea Rose. The flowers are produced in profusion during the entire season, are of large size and form, and the color is a rich velvety red shaded with a dark velvety sheen. 35c

Ulrich Brunner
A magnificent Hybrid Perpetual Rose, similar to American Beauty, but much superior for outdoor culture. Perfectly formed bright cherry-red flowers are raised high above the foliage on long, strong stems. One of the very best red roses. 35c

La France
This beautiful Hybrid Tea Rose has long been one of the most popular, and still has few equals. The buds and flowers are of lovely form, with daintily reflexed petals, and the color is a beautiful shade of pink tinged with crimson. 35c

Killarney
This splendid Irish rose is considered by many to be the most beautiful of its class in color. The flowers are large, semi-double, of beautiful form, and the color is shell-pink. Hybrid Tea. 35c

Winnie Davis
One of the prettiest of the Hybrid Tea Roses. The plant is strong, upright, healthy, and a profuse bloomer. The flowers are of good size, and the buds are extremely pretty and well formed. The color is a pretty apricot-pink. 35c

Marechal Neil
A splendid yellow climber. The flowers are large, globular, very full, highly scented, and the color is a beautiful, deep, rich, yellow. Noisette. 35c

Climbing Cecil Brunner
A charming Hybrid Polyantha Rose. The plants are robust climbers, and the miniature flowers are perfect in form and a beautiful salmon-rose color. 35c

Tausendschon (Thousand Beauties)
A beautiful new Polyantha Climber, one of the best of the ramblers. The plant makes a wonderful growth, and is literally covered with blooms for a long season. The flowers are large, produced in trusses. 35c

Prices do not include transportation charges. We do not recommend shipping by parcel post.
FRUIT BUSHES

Mature, Robust Plants
We can furnish the following small fruits in season, from the first of November until the first of April. Prices do not include transportation charges. We advise shipping by express, and do not guarantee delivery in good condition when shipped by parcel post or freight; neither do we guarantee plants to grow, for the reason that we cannot be responsible for planting, weather, and soil conditions.

Burbank's Phenomenal Berry
One of Luther Burbank's triumphs; the result of a cross between the California Dewberry and Cuthbert Raspberry. It is different from any other berry except the Loganberry, which it closely resembles, but is larger, sweeter, has a smaller core, will make more jelly, and the canes are more vigorous and productive. 20c ea.; $2.00 doz.

Loganberry
A cross between the blackberry and raspberry, superior to either in size and flavor, and entirely different from any other berry except the Phenomenal. 15c ea.; $1.50 doz.

Himalaya Giant Blackberry
A remarkable berry. The plant is a rampant grower, single canes often making a growth of fifty feet in a season. It produces immense crops of exceedingly large, rich, juicy berries with a delicious aromatic flavor. The berries are produced in immense clusters, beginning to ripen in July and continuing until late in fall. They are hardy, and withstand extremes of cold, heat, and drought. 15c ea.; $1.50 doz.

Mammoth Blackberry
The Mammoth Blackberry is in a class by itself, and no other blackberry is similar to it in size or flavor, berries two and one-half inches long being not uncommon. The fruit ripens three weeks earlier than the Evergreen. 15c ea.; $1.50 doz.

Lucretia Dewberry
A trailing blackberry, the finest of its class. It bears profusely, fine, large, glossy black berries; rich, sweet and luscious. 15c ea.; $1.50 doz.

Downing Gooseberry
A large, handsome, pale green berry of excellent quality. 15c ea.; $1.50 doz.

Oregon Champion Gooseberry
Berries very large, pale green, and sweet. Vigorous and prolific. 15c ea.; $1.50 doz.

Industry Gooseberry
Of English origin. Bears immense crops of large red berries. 15c ea.; $1.50 doz.

Smith's Improved Gooseberry
Fruit large, pale green, thin skinned and sweet. Very prolific. 15c ea.; $1.50 doz.

Concord Grape
The most popular black grape. Sweet and pleasant. zephyry. 15c ea.; $1.50 doz.

Muscadine Grape
The old reliable white grape, one of the most prolific. 15c ea.; $1.50 doz.

Deleware Grape
Berries small, violet red, very sweet and highly flavored. 15c ea.; $1.50 doz.

Salem Grape
A splendid coppery-red grape of good flavor and quality. Hardy. 15c ea.; $1.50 doz.

SUPERLATIVE RED RASPBERRY
This splendid berry was introduced by us in 1907, and has proved to be the best red raspberry in cultivation. The berry is of immense size, very firm, with small, brittle seeds, a rich crimson color, and a delicious aromatic flavor, less acid than others. 15c ea.; $1.50 doz.

Cuthbert Red Raspberry
A popular standard variety for market and home use. Produces an abundance of large, rich, deep crimson berries. Stands heat and sun well, and is a good shipper. 15c ea.; 75c doz.

Plum Farmer Black Raspberry
A new variety, and the best black raspberry ever introduced. The plants are vigorous and very productive. The berries are extra large, exceedingly early, thick meated, and of exquisite flavor. 15c ea.; $1.50 doz.

PERFECTION CURRANT
A splendid new variety. The berries are a beautiful bright red, and both berries and bunches are very large. Of better quality and flavor than any other currant; rich, mild, sub-acid, and with plenty of pulp and few seeds. 20c ea.; $2.00 doz.

Red Cherry Currant
One of the best. A strong grower and good yielder of large red berries. 15c ea.; $1.50 doz.

Victoria Currant
Medium sized, bright red fruit in long bunches. Excellent quality. Late. 15c ea.; $1.50 doz.

White Grape Currant
Best white variety. Large, yellowish-white, hardy and productive. 15c ea.; $1.50 doz.

Black Victoria Currant
Similar to Victoria, except that it is larger, sweeter, and jet black. 15c ea.; $1.50 doz.

Prices do not include transportation charges. Write for prices on large quantities.
VEGETABLE PLANTS AND ROOTS
Sturdy, Well Rooted Plants, Furnished in Season

Our vegetable plants are strictly reliable, carefully grown, true to name, sturdy, healthy, and well rooted. They are properly packed for shipment and, if shipped by express, are guaranteed to reach destination in good condition. If not satisfactory when received, they should be returned to us at once. We cannot guarantee plants to grow, for we have no control over the planting, soil, and weather conditions, and cannot replace them after they have been accepted and planted. We do not recommend shipping by parcel post or freight, and do not guarantee delivery in good condition when so shipped. We can furnish them only during season named. Prices do not include transportation charges.

Tomato Plants
Good, sturdy, well rooted plants. We furnish Puget Sound Special and Earliana plants only, as they are the most popular and best suited to the Northwest. We cannot fill orders before the first of May or after the middle of June. Write for prices on large quantities.

| Transplanted | Dozen, 25c; 100, $1.50 |
| Not transplanted | Dozen, 20c; 100, 75c |

Celery Plants
Splendid plants of the popular early varieties, Vilmorin’s Paris Golden Yellow, Silver Plume, and Golden Self Blanching. Season, first of May to the middle of July.

| Transplanted | Doz., 30c; 100, $1.00; 1000, $7.00 |
| Not transplanted | Doz., 25c; 100, 50c; 1000, $5.00 |

Write for prices on larger quantities.

Rhubarb Roots
Strong, field grown roots of Mammoth Victoria Rhubarb, grown from seed. Season Nov. 1st to May 15th. Write for prices on large quantities.

| One year old | Each, 10c; Doz., 50c; 100, $3.00 |
| Two years old | Each, 15c; Doz., $1.00; 100, $6.00 |

Chives, or Schnittlauch
Large clumps; may be divided. Season Nov. 1st to May 15th. Write for prices on large quantities. One clump, 10c; dozen clumps, $1.00

Prices do not include transportation charges. If shipped by parcel post, post age is additional.

Cabbage Plants
Strong, healthy plants of the following varieties: Early Jersey Wakefield, Lilly’s Glory, Copenhagen Market, All Seasons, Danish Earthead and Premium Late Flat Dutch. Season March 1st to June 30th.

| Transplanted | Doz., 20c; 100, 75c; 1000, $6.00 |
| Not transplanted | Doz., 20c; 100, 50c; 1000, $3.50 |

Write for prices on larger quantities.

Cauliflower Plants
We furnish Early Alba and Snowball Cauliflower plants only, for they are the most in demand, and are best for either market garden or home use. Season April 1st to June 30th. Write for prices on larger quantities.

| Transplanted | Doz., 30c; 100, $1.25; 1000, $8.00 |
| Not transplanted | Doz., 25c; 100, $1.00; 1000, $5.50 |

Asparagus Roots

| One year old | Doz., 20c; 100, 75c; 1000, $6.00 |
| Two years old | Doz., 25c; 100, $1.00; 1000, $8.00 |

Horseradish Roots
Season Nov. 1st to May 15th. Write for prices on large quantities. Dozen, 25c; 100, $1.50
SEATTLE  PORTLAND

Lily's SEED POTATOES

Selected Varieties, Grown Especially for Seed from Thoroughbred Stock

Although potatoes, when grown under favorable conditions, from good seed, are among the most profitable crops that can be grown in the Northwest, entirely too many growers give no thought to the selection of seed or varieties. These same farmers would not think of breeding cattle or raising crops which would not be fit for market.

After experimenting with many of the most promising varieties, we have chosen a few varieties which proved to be best adapted to this locality. We have selected thoroughbred stock of these varieties, and have had them grown, especially for seed, by expert growers, under our direct supervision.

Early Rose

This old standard early potato is one of the best early varieties, but has deteriorated, and there is very little good seed to be had. We procured thoroughbred seed from a strictly reliable potato specialist, and from that seed we have produced a splendid crop of seed potatoes. In fact, this old variety has made a better showing in our fields than any of the newer early varieties.

Early Rose is too well known to require much description. It is of good size, oblong, the skin has a rosy blush, the flesh is white and of excellent flavor; it is very keeping, and a fine keeper.

Price, 10 lbs., 5c per lb.; 50 lbs., 4e per lb.; sack lots, $3.00 per 100 lbs.

Irish Cobbler

A splendid extra early variety, and one of the very best for early market. The tubers are very handsome, hop-shaped, larger than most other early potatoes, and uniform in size and shape, producing very few small potatoes. The skin is creamy white, sometimes slightly netted, which is an indication of good quality. The eyes are strong, well developed and slightly indented. The flesh is white and of excellent quality and fine flavor, cooking dry and mealy. It is a very reliable variety for heavy cropper.

Price, 10 lbs., 5c per lb.; 50 lbs., 4c per lb.; sack lots, $3.00 per 100 lbs.

Up-to-Date

A new main crop potato, introduced from England, which we can expect will be earlier than any other variety grown, also one of the most satisfactory in all other respects. Although so extremely early, it is a splendid large potato, yielding as much as the median early varieties. It is a sure cropper and is uniform in size. The tubers are globular in form, and have a peculiar pink marking which gives them a handsome appearance. It is a very reliable variety for producing the best results.

Price, 10 lbs., 5c per lb.; 50 lbs., 4e per lb.; sack lots, $3.00 per 100 lbs.

Jerusalem Artichokes

These are quite distinct from the Queen Globe. Artichokes listed in the Vegetable Seeds Section of this catalog. The tubers resemble potatoes, but, although by some they are considered a great delicacy, in this country they are used mostly for hog food. They are very easy to grow and are one of the best and cheapest foods for hogs; excellent for fattening when fed to cattle.

They should be planted and cultivated the same as potatoes, and will produce immense crops, but are very hardy and persistent, and will grow crops of excellent quality in most any soil, and Artichokes on new land, and when mature, turn hogs into the field. The hogs will harvest the crop, and at the same time will subdue the land.

Price, 10 lbs., 5c per lb.; 50 lbs., 4e per lb.; sack lots, $2.50 per 100 lbs.

Bovee

One of the best early varieties, earlier than Early Rose, and very productive. It yields a very large percentage of perfectly formed tubers of good size. The cultivator can be used to better advantage on a crop of Bovee than any other sort owing to the short and compact growth of vines and its habit of setting the entire crop close to the hill. Bovee, perhaps more than any other sort, delights in a rich soil and thorough cultivation, and under those conditions will yield abundantly, but under average conditions will produce the best results.

The skin is pink or flesh-color, and the flesh is white and of good quality.

Price, 10 lbs., 5c per lb.; 50 lbs., 4e per lb.; sack lots, $3.00 per 100 lbs.

Quick Lunch, or Noroton Beauty

A new extra early potato which in our fields has proved to be earlier than any other variety grown, also one of the most satisfactory in all other respects. Although so extremely early, it is a splendid large potato, yielding as much as the median early varieties. It is a sure cropper and is uniform in size. The tubers are globular in form, and have a peculiar pink marking which gives them a handsome appearance. It is a very reliable variety for producing the best results.

Price, 10 lbs., 5c per lb.; 50 lbs., 4e per lb.; sack lots, $3.00 per 100 lbs.

Other Varieties

The above are the only varieties that we have had specially grown for us, but we expect to have some other varieties grown, such as Burbank, Netted Gem, American Wonder, Beauty of Hebron, and others.

Such good varieties as we can purchase will be listed in the catalog, and we shall be glad to supply them.

We have purchased from a reliable potato specialist his crop of two new varieties of potatoes which appear to us to be very good, and which are described by him as follows:

NEW ERA

A medium early, or main crop potato (about 90 days) which under favorable conditions produces a large yield of smooth, well shaped tubers, has produced 1 1/2 lbs. per acre in Ellensburg. The vines are fine stemmed and bushy, resembling tomato rather than potato tops. This is much in their favor, as they are not subject to any disease that gains headway through the foliage, such as blight, blackleg, etc.

5c per lb.; $3.00 per 100 lbs.

EARLY SNOWFLAKE

A very early, main crop variety (about 50 days), large, smooth, and a very heavy producer. It will yield good crops under adverse conditions. The vines grow very rank, with coarse, heavy stems; a desirable potato for heavy soil.

5c per lb.; $3.00 per 100 lbs.

Prices are f. o. b. Seattle or Portland, and are subject to change. See Price List Supplement enclosed herewith, or later issues which will be mailed on request.
Lilly's Nonpareil Lawn Grass Seed

Hardy Grasses; Quickly Forms a Tough and Enduring Turf, Always Green

This is a mixture of many suitable grasses; early, medium, late, short, tall, bunch, and those with creeping roots, scientifically selected to produce a lawn which will be green all the year; form a thick, matted turf which will actually be improved by trampling; with roots reaching far into the ground to withstand drought and prevent heaving in winter; and especially adapted to the climate and soils of the Pacific Coast. This mixture contains some White Clover to make a quick showing and act as a nurse crop for the grasses. The grasses are more hardy and not so fine as those in the Imported Lawn Grass Mixture, but will produce a splendid lawn with less care, and is preferable where utility and endurance are desired. One pound of seed is sufficient for about three hundred square feet of new lawn, or to renew about six hundred square feet of old lawn.

Price: Quart package (about 1 lb.), 25c; 5 lbs. or more, 20c per lb. Postage additional.

Lilly's Golf Links Mixture

Indestructible Turf, Smooth, Elastic

A turf, to be suitable for a golf course, must in addition to making a good appearance and remaining green all the season, be smooth, firm, elastic, tough and capable of standing a great deal of abuse. To meet these requirements we have prepared a formula composing such foreign and domestic grasses as will make a short, fine growth with densely intermingling roots reching deep into the ground.

Quart package (about 1 lb.), 35c; 5 lbs. or more, 35c per lb.; 100 lbs., $30.00.

Prices do not include postage.

Lilly's Putting Green Mixture

Not Injured by Constant Trampling

This mixture, in addition to forming a smooth, green, velvety lawn of the finest quality, forms a deep, closely interwoven root system that is not injured by constant tramping. It is equally good for forming new greens or rejuvenating old ones. For new greens, one pound of seed is sufficient for about three hundred square feet, but heavier seeding will give better results.

Quart package (about 1 lb.), 35c; 5 lbs. or more, 35c per lb.; 100 lbs., $32.00.

Lilly's Imported Lawn Grass Seed

For Extra Fancy Lawns

For those who wish an extra fancy lawn, we have prepared this mixture composed of the finest imported lawn grass seeds, carefully chosen as being adapted to conditions on the Pacific Coast, and to produce a firm, velvety, rich green turf of uniform color, and which in our climate will remain green all the year. As the grasses in this mixture are not so easily started as the more hardy grasses, we would recommend the Nonpareil Lawn Grass Mixture for those who do not care to give the lawn the care which an especially fine lawn requires.

Sold in sealed packages only. Quart (about 1 lb.), 35c; 4-lb. package, $1.50.

If to be shipped by parcel post, postage must be remitted in addition to price.

The splendid golf links, parks and lawns of Seattle and other cities in the Northwest are practical demonstrations of the excellence of Lilly Grass Seed Mixtures.

Lilly's Lawn Dressing is the best fertilizer for lawns, flower beds and shrubbery.
Lilly's SEEDS ARE TESTED for PURITY and GERMINATION

"That there are many frauds in the seed trade no good seedsmen will deny, but much of the complaint about poor seed is due to the fact that dealers themselves are ignorant of the quality of the seeds they sell."

United States Department of Agriculture, Farmer’s Bulletin No. III.

There is a difference in seeds; and this is especially true of clover and grass seeds. No farmer would intentionally sow a pound of weed seeds on his land, yet many are sowing more than that amount of weed seeds each year, mixed with clover and grass seeds. Some do this carelessly, not realizing the results; others do it to save the few cents difference in price between good seed and poor seed.

In addition to weed seeds, red clover often contains as much as twenty per cent of dead seeds; that is, seeds which will not germinate, and, although not harmful like weed seeds, they are utterly useless. Thus, it will be seen, good commercial red clover seed, complying strictly with the Pure Seed Law, may contain twenty-eight per cent of seed which is worthless, or worse, and the farmer who buys this seed pays more per pound for the good seed contained in it than if he purchased the very best seed to be had, and paid the highest price.

Few seedsmen have facilities equal to ours for producing good seed. We handle only the very best that can be grown; and it is cleaned and re-cleaned with our splendid seed-cleaning machinery until it is as near perfect as it can be made; after which it is tested for purity and germination. We have a complete seed testing laboratory, with the same apparatus as is used by the United States Government, and every lot of seed is accurate tested before being offered for sale.

Any seed packed in sealed bags branded Lilly’s may be depended upon to be the very best seed that can be produced. It is false economy to sow any but the best that can be procured.

Lilly’s ALFALFA SEED
(Medicago Sativa)
Recleaned and Tested, Free from Dodder and Other Noxious Weed Seeds
99½ PER CENT PURE

Lilly’s Best Alfalfa Seed is the acme of perfection in seeds. It never tests less than 99½% pure, is free from dodder and other noxious weed seeds, and consists only of big, plump seeds; all small and shrunken seeds having been removed. Hand-picked seeds could hardly be better. To maintain this high standard requires that the greatest care be exercised in growing and harvesting the seed. It is never grown in localities infested with dodder. We have the most perfect seed cleaning machinery in the West, and the seed is cleaned until it is practically perfect. We handle only one grade of Alfalfa Seed, for the up-to-date farmer knows that he cannot afford to sow any but the best, and there is no longer a demand for a cheaper grade.

The Pure Seed Law requires 96% purity, but that is too liberal, for it is unsafe to sow the 4% of weed seed which the law allows. When purchasing seed, the price should be only a secondary consideration. At the most, only a few cents per acre could be saved, and seed containing weed seeds is expensive at any price. None but the very best tested seed should be sown.

Alfalfa seed is generally sown at the rate of ten to twenty pounds per acre. Suggestions in regard to growing Alfalfa are contained in the Crop Book, which we will give free with any order if requested. Lilly’s Best Alfalfa, 99½% pure, $23.00 per 100 lbs. Less than sack lots, 25c per lb.

TURKESTAN, or DRY LAND ALFALFA
(Medicago Turkestanica)

This variety comes from central Asia, is very hardy, and is adapted to very dry and unirrigated land. In all other respects it is almost identical with Medicago Sativa. The seed should be sown rather thickly, fifteen to twenty pounds per acre; otherwise the stalks are inclined to be coarse and hard.

Price, $24.00 per 100 lbs. Less than sack lots, 25c per lb.

Prices are subject to change. See Price List Supplement enclosed herewith, or later editions which will be mailed on request. All prices, except when otherwise stated, are f. o. b. Seattle or Portland.
LILLY'S RED CLOVER
(Trifolium Pratense)
Very Nearly Perfect, and Cheapest in the End
99 PER CENT PURE

Lilly's Best Red Clover Seed is guaranteed to test not less than 99% pure, and we make it as much better as possible, usually as high as 99.5% pure. This state of purity is seldom equaled, and would be impossible without our splendid seed cleaning machinery. We handle only the best seed that can be grown, and in addition to cleaning out the foreign seeds, the weeds and shrunken seeds are removed. The pure Seed Law requires only 92% purity, and that is considered very good seed, but it allows more than a pound of weed seeds to each acre, and such seed should never be sown when better seed can be procured.

Red Clover is an important crop in all parts of the country, and is especially valuable west of the Cascade Mountains, where Alfalfa cannot be grown very successfully. In addition to being a very valuable hay, silage, and forage crop, it is of great value for fertilizing and improving the soil, either when plowed under or removed from the field. It is a legume, and draws nitrogen from the air and distributes it in the soil. Red Clover seed is generally sown at the rate of eight to fifteen pounds per acre.

LILLY'S BEST RED CLOVER, $25.00 per 100 lbs.; less than sack lots, 20c per lb.
Choice Red Clover, $24.00 per 100 lbs.; less than sack lots, 25c per lb.

LILLY'S WHITE CLOVER
(Trifolium Repens)
Only the Very Best is Fit for Lawns
97 PER CENT PURE

For lawns, especially, none but the very best White Clover seed obtainable should be sown, as ordinary seed is very liable to contain sorrel. Lilly's Best White Clover is grown on land free from noxious weeds, is thoroughly cleansed, and as near perfect as it can be produced. It is guaranteed to test not less than 97% pure, and is usually better. This is a very high degree of purity, as White Clover seed is difficult to clean. Any seed that tests less than 97% pure is branded Choice. Our Choice grade is always better than is required by the Pure Seed Law, but we do not recommend it for lawns. For lawns, sow twenty-five pounds or more per acre; for pasture, eight to ten pounds mixed with grass seeds.

LILLY'S BEST WHITE CLOVER, 1 lb., 75c; 10 lbs. or more, 67c per lb; 100 lbs., $66.00.
Choice White Clover, 1 lb., 65c; 10 lbs. or more, 56c per lb.; 100 lbs., $55.00.

Mammoth Red Clover
(Trifolium Medium)

Mammoth Red Clover is very similar to common Red Clover except that it grows very rank and the stalks are very coarse, making it of little use for hay or forage, and it is used almost exclusively to plow under for green manure. It is grown quite extensively in the south, but it is not specially recommended for the Northwest, as we have other crops which are better adapted to this locality. Twelve to twenty pounds of seed is sown to the acre. Price, $25.00 per 100 lbs.; less than sack lots, 26c per lb.

Crimson Clover
(Trifolium Incarnatum)

Crimson Clover is an annual, useful principally as a cover crop or to plow under for green manure. It is grown quite extensively in the south, but it is not specially recommended for the Northwest, as we have other crops which are better adapted to this locality. Twelve to twenty pounds of seed is sown to the acre. Price, $21.00 per 100 lbs.; less than sack lots, 22c per lb.

The Crop Book contains information in regard to the culture of Closers and Grasses.
**Lilly's TIMOTHY SEED**

(Pileum Pratense)

The Best and Purest Seed that Can be Procured; Recleaned and Tested

99½ PER CENT PURE

Timothy Seed is one of our specialties, and it would be very nearly impossible to produce better seed than Lilly's Best. The seed is grown in Idaho on land that is free from weeds, and, with our splendid seed cleaning equipment, all small and light seed, as well as all foreign matter, is removed. None testing less than 99½% pure is branded Lilly's Best. The Pure Seed Law requires only 98% purity. Timothy is the standard grass for hay in all parts of the country, and although there are other grasses equally good or better for home use, it is demanded by the markets, and brings the highest price. The seed is sown at the rate of ten to twenty pounds per acre. We handle a second grade, but the difference in price does not justify its use.

**LILLY'S BEST TIMOTHY, $10.00 per 100 lbs.; less than sack lots, 11c per lb.**

Choice Timothy, $9.50 per 100 lbs.; less than sack lots, 10½c per lb.

Prices subject to change. See enclosed Price List Supplement, or later issues mailed on request.

**KENTUCKY BLUE GRASS**

(Poa Pratensis)

Kentucky Blue Grass is a true perennial, lasting indefinitely. Its densely creeping root-stocks, spreading habit, even growth, fine texture and rich green color renders it one of the finest grasses for lawns and pastures. It starts very early in spring, and on the Pacific Coast remains green practically all the year.

Our seed is imported direct from one of the most reliable growers in Kentucky. It is free from Canadian Blue Grass and other foreign seeds, is carefully recleaned, and is the best seed obtainable. For lawn, sow one pound to each four hundred square feet.

**Price, 25c per lb.; $18.00 per 100 lbs.**

**RED TOP**

(Agrostis Vulgaris)

Red Top, or Herd's Grass, is valuable in wet places where other grasses will not thrive. When mixed with other grasses and clovers it makes excellent pasture and a fair grade of hay.

We have two grades of Red Top. We recommend the Fancy Red Top, as it is solid seed and only ten to fifteen pounds is required per acre. The Choice Red Top is good seed, but it contains the hulls, and nearly twice as much seed is required.

**Fancy Red Top, $18.00 per 100 lbs.; less than sack lots, 19c per lb.**

**Choice Red Top, $10.00 per 100 lbs.; less than sack lots, 11c per lb.**

**Canadian Blue Grass**

(Poa Compressa)

Canadian Blue Grass, although not so popular as Kentucky Blue Grass for lawns, is more hardy, easier to get started, makes a very tough turf and is of fine texture. It is also a splendid grass in pasture mixtures. Sow one pound to four hundred square feet of lawn, or twenty to thirty pounds per acre for pasture if used alone.

**Price, $14.00 per 100 lbs.; less than sack lots, 15c per lb.**

**Creeping Bent, or Florin**

(Agrostis Stolonifera)

A splendid grass in lawn or pasture mixtures. Its creeping, rooting stems form a tough, compact turf that is improved by trampling.

**Price, 40c per lb.; $35.00 per 100 lbs.**

**Brome Grass**

(Bromus Inermis)

Brome Grass is valuable in the semi-arid regions where less hardy grasses cannot be grown. It has creeping root-stocks which form a thick turf, and will stand a great deal of drought. It is not especially high in food value, and there are other grasses more valuable for the country west of the Cascade Mountains. It is most valuable as a pasture grass, but grows tall enough for hay. When used alone, sow thirty to forty pounds per acre.

**Price, $20.00 per 100 lbs.; less than sack lots, 21c per lb.**

Prices shown in this catalog are subject to change. Write for current Supplement.
ENGLISH RYE GRASS (Lolium Perenne)

English, or Perennial, Rye Grass is especially adapted to the cool-temperate west of the Cascade Mountains, where it is quite popular, but should be even more generally grown, for it is one of our most valuable grasses. It has high feeding value, is not too averse to shade, and is good in both hay and pasture mixtures. It does well on almost any soil, although it prefers rich loam or clay. It makes a quick, dense, blue-green sod and is excellent in mixtures for lawns or golf links. When used alone for pasture or hay, the seed is sown at the rate of thirty to sixty pounds per acre.

Price: 25c per lb.; $25.00 per 100 lbs.

Crested Dog's Tail (Cynosurus Cristatus)

A perennial grass forming a smooth and lasting turf, excellent in mixtures for lawns, putting-greens and pastures. It thrives best on rich, moist land, but can accommodate itself to almost any soil. It is a rooter, and as the roots penetrate deeply into the ground, it can stand severe drought. He Sheep's Fescue, but Sow twenty to thirty pounds per acre when sown alone, or in that proportion when mixed with other seeds.

Price: 22c per lb.; $21.00 per 100 lbs.

Tall Meadow Oat Grass (Avena fatua)

Also known as Common Oat Grass. Valuable for pasture on account of its early and luxuriant growth. It also produces a large quantity and good quality of hay. It is deep rooted, hardy, and thrives in drought when grown in the drifts in Eastern Washington and California. It is best mixed with other grasses, and should not exceed one-fifth of the total amount of seed sown.

Price: 36c per lb.; $35.00 per 100 lbs.

Sheep's Fescue (Festuca ovina)

Of dwarf, thick growth, yielding a large amount of nutritious herbage, and is valuable in pasture mixtures. It prefers dry uplands and thrives in poor, shallow, gravelly soils.

Price: 47c per lb.; $46.00 per 100 lbs.

Hard Fescue (Festuca Duriscula)

More dwarf than Sheep's Fescue, but useful in pasture mixtures for dry and inferior soils; also foliage forms in large clusters, is very hardy, and thrives in dry, exposed sections.

Price: 59c per lb.; $58.00 per 100 lbs.

Red, or Creeping Fescue (Festuca Rubra)

A creeping rooted species, forming a close and lasting turf, resisting drought and thriving on inferior soils, gravelly banks and exposed hillsides.

Price: 36c per lb.; $35.00 per 100 lbs.

ITALIAN RYE GRASS (Lolium Italicum)

Italian Rye Grass is reputed to be a biennial, but on the Pacific Coast it lives almost indefinitely, and is one of our most valuable pasture grasses, as it produces green feed late in the season after other grasses are past their prime. It does well on almost any soil, will furnish more green pasture in midsummer than any other grass. Sow at the rate of thirty to sixty pounds per acre when used alone, or in a ratio of ten to one

Price: 45c per lb.; $44.00 per 100 lbs.

Calendula (Orchard Grass) (Dactylis Glomerata)

Orchard Grass, or Cock's Foot, is one of our most useful grasses. It comes very early in spring, furnishing pasture earlier than other grasses. It makes good hay if cut as soon as it enters bloom; later it becomes hard and woody. It is especially valuable, mixed with other grasses and clovers, for pastures and for sowing on logged-off land. It is very hardy, and thrives in shady places where other grasses will not grow, but is not suitable for lawns. Being a bunch grass, it is best mixed with other grasses when used alone, sowing forty to sixty pounds per acre.

Price: 24c per lb.; $23.00 per 100 lbs.

Velvet Grass, or Mesquite (Hocula Lanata)

Velvet Grass, also known as Mesquite and Meadow Soft Grass, is of little value except for pastures on light, sandy, or marshy soils where other grasses will not grow. It has little forage value, is not relished by stock, and on account of its spreading habit is rather difficult to eradicate.

Price: 21c per lb.; $20.00 per 100 lbs.

MEADOW FESCUE (Festuca Pratensis)

Also known as English Blue Grass. One of the best of permanent meadow and pasture grasses. It is very hardy, and succeeds in almost all soils, but does best on moist, rich soils. It comes up early in spring and again in fall, and should form a part of all pasture and hay mixtures.

Price: 18c per lb.; $17.50 per 100 lbs.

SUDAN GRASS (Andropogon Sorghum)

A great drought resisting hay and forage crop, especially suitable for hot, dry sections but grown quite successfully west of the Cascade Mountains. In appearance it resembles Johnson Grass but does not have the aggressive rootstocks, starchy leaves, hardy, it lasts almost as long, and its broad leaves, is an annual, and will not become a weed. As it is an annual, it must be seeded every year, like Sorghum or Millet.

Price: 15c per lb.; $14.00 per 100 lbs.

PASTURE and HAY MIXTURES

The Most Suitable Combinations in Correct Proportions for Best Results

These Pasture Mixtures contain the correct early, medium and late grasses to supply pasture continuously during the long season; also bunch, deep rooting, and creeping grasses to form a good sod. Mixtures are composed of tall-growing grasses which will mature about the same time, and will produce the maximum amount of hay of the best quality.

No. 1 Pasture Mixture

Especially prepared for wet bottom-lands. It contains Meadow Fescue, Red Top, Alsike, English Rye Grass, Bent Grass, Blue Grass, Red Clover, Italian Rye Grass, and Orchard Grass.

Price: Pound, 20c; 10 lbs., 15c per lb.; 50 lbs., 15c per lb.; 100 lbs., $1.40.

No. 2 Pasture Mixture

For dry up-lands, and especially useful for sowing on logged-off land. It is composed of White Clover Grass, English Rye Grass, Italian Rye Grass, Canadian Blue Grass, Meadow Fescue, and Ky. Blue Grass.

Hay Mixture

A splendid mixture, producing hay of fine quality and maturing evenly. Composed of Timothy, English Rye Grass, Red Clover, Meadow Fescue, and Canadian Blue Grass.

Prices: Pound, 20c; 10 lbs., 15c per lb.; 50 lbs., 15c per lb.; 100 lbs., $1.40.

Prices are subject to change. See enclosed Supplement, or write for later issues.
**VICTORY OATS**

Excels Others in Yield on Light Soil

On account of oats being one of the most important crops in the Northwest, we have taken great pains to test all the popular varieties, and select those which prove to be best adapted to this locality. These tests show Victory Oats to be way ahead of all others in yield on light soils, although Abundance Oats yield about the same on heavier soil, and they are not of such extremely fine quality as Regenerated Swedish Select.

However, the quality is good, and as productiveness is the most important point with most growers, we highly recommend this variety.

Victory is a very uniform oat; the straw is of medium height and is particularly firm and elastic, making it resistant to lodging. The grain is white with a slight reddish shade, and is smaller than Regenerated Swedish Select.

Our seed is pure, and is grown with special care, in Western Washington, from seed stock imported from Sweden.

**Price:** $3.00 per 100 lbs.; less than sack lots, 4c per lb.; F. O. B. Seattle or Portland.

Prices are subject to change. Write for prices on large quantities.

**ABUNDANCE OATS**

A Splendid New Variety

This is a new variety, recently introduced from Scotland, and has made a splendid showing in our seed fields, yielding equal to Victory Oats on heavy soil. It also ranks with the best in trials at the Washington Agricultural Experiment Station, as shown in Bulletin No. 129. The straw is of medium height, sturdy, and stands erect. It is medium early; has a spreading head; the grain is white and of medium size and weight.

**Price:** $3.00 per 100 lbs.; less than sack lots, 4c per lb.; F. O. B. Seattle or Portland. Subject to change.

See enclosed Supplement, or write for later issues.

**BLACK ALASKA OATS**

A Very Superior, Hardy Black Oat

A hardy black oat, with spreading head, thick, black hull, and large, plum, dark colored kernels. The straw is large and strong, not liable to lodge, stools freely, is a heavy yielder, and is splendid to sow with vetch or field peas to support the vines. It is sometimes grown in fall, but is not so hardy as Gray Winter Oats, and is more liable to freeze out during the winter. Our seed is very superior, being grown in Washington from seed of a perfected strain which we imported from Scotland.

**Price:** $3.00 per 100 lbs.; less than sack lots, 4c per lb.; F. O. B. Seattle or Portland. Subject to change.

Write for prices on large quantities.

**GRAY WINTER OATS**

Especially Valuable for Fall Sowing

Gray Winter Oats are very hardy, and are generally used for fall sowing, and are especially useful for sowing with vetch. The straw grows very long, is firm and not liable to lodge. It is a side oat with very compact head. The grain is dark gray, large and plump, and it yields well.

**Price:** $2.00 per 100 lbs.; less than sack lots, 4c per lb.; F. O. B. Seattle or Portland.

**BANNER OATS**

A Popular and Productive Variety

A very popular white oat, with spreading head, introduced from Scotland. The straw is of medium height, and stands up well. The grain is white, with a comparatively small percentage of hull, and is heavier than the average. Experiment Station tests show it to be among the best in yield and quality.

**Price:** $3.00 per 100 lbs.; less than sack lots, 4c per lb.; F. O. B. Seattle or Portland.

Prices are subject to market fluctuations. See enclosed Price List Supplement, or later issues which will be mailed on request. Write for prices on large quantities, stating varieties and quantities wanted.

**TREATMENT OF SEED OATS FOR SMUT.**

Immerse the sacks of seed ten minutes in a solution of one pound of Formalin to forty gallons of water; remove the sack, and drain. Allow the seed to remain in the wet sacks over night. If the seed is not used within forty-eight hours after treatment, it should be spread out to dry to prevent sprouting in the sacks. See Washington State College Agricultural Experiment Station Bulletin No. 129, which will be furnished free by the station, Pullman, Wash., on request.
REGENERATED SWEDISH SELECT OATS

A Splendid Variety; Unequalled in Quality

Swedish Select has long been popular, but the variety deteriorated and most of the seed on the market is very inferior. We procured from Garton Bros., the famous plant breeders of England, a quantity of pure seed of their regenerated strain, and it is from this stock that our seed is grown. It is grown in Washington, and thoroughly acclimated. It makes a very sturdy growth; the straw is of medium height and is extra large, making it less liable to lodge than any other variety. It yields very heavy crops, although hardly equal in that respect to Victory or Abundance. In quality it is by far the best of any oat that we have tested. It has a large spreading head, and the grain is large, plump, and very heavy, weighing forty-eight pounds to the measured bushel. It is one of the very earliest varieties, and on account of its exceptionally fine quality and heavy yield is probably the most valuable variety grown in the great oat growing sections of Washington.

Price, $3.00 per 100 lbs.; less than sack lots, 4c per lb.; F. O. B. Seattle or Portland. Prices are subject to change.

Write for prices on large quantities.

The grain from a single head of Lilly's Hulless Oats.

HULLESS OATS

Something New; Grain Thrashes Out Like Wheat

Hulless Oats are now a novelty in this country, but we believe that when perfected they will become very popular, and may revolutionize oat growing. At present it has two faults which will probably be overcome by selection and breeding. The yield is not so heavy as that of the hulled varieties, although we must take into consideration the fact that the yield is solid grain, with no hulls. It is very liable to smut, and on account of having no hulls to protect it, when treated with a solution strong enough to destroy the smut germs, the germinating qualities of the seed is liable to suffer.

For many purposes, hulls on oats are a great disadvantage, and hulless oats will be much more valuable. This is especially true when used for poultry food. We know the advantages of Hulless Barley, and Hulless Oats will be even more advantageous. While growing, these oats appear the same as other oats, but when thrashed they shell out like wheat. The straw is rather short, but the head is large and bears more kernels than common oats. It is shown by accompanying samples.

Price, 25c per lb. Postage additional.

We make a specialty of growing seed oats. Seed purchased from us may be depended upon.
Lilly's Washington Grown Seed Corn
Choice Selected Ears. Sold on the Cob

It has been demonstrated that corn can be grown successfully in the Northwest, but the soil and cultivation must be right and the seed must be acclimated. Being acclimated is of the utmost importance, more important with corn than with any other seed. We have chosen two varieties, Golden Nugget and Silver King, as being best suited to our climate and conditions, procured thoroughly seed of those varieties, and have grown and acclimated them in Washington.

In order that the farmers may know the type and quality of corn that they are getting, we sell selected ears of these two varieties on the cob. We can also furnish the corn shelled if preferred.

Lilly's Washington Golden Nugget Corn
Our tests prove this to be the best yellow dent corn for the Northwest. The stalks grow to a good height, producing one or two good ears each. The ears are ten to eleven inches long, fourteen to sixteen rowed, and well filled over butts and tips. The cobs are small and the kernels deep, flinty, slightly dented and of a beautiful golden yellow color.

This corn is grown in Washington from thoroughly seed, and is tested for germination. We have grown splendid crops, perfectly matured, proving that it will mature in the Northwest when soil and culture are favorable.

Sold either on the cob or shelled.
SELECTED EARS: 15c each; two for 25c; $1.00 per dozen; $8.00 per 100 ears.
Shelled: 1 lb., 10c; 10 lbs. or more, 60 per lb.; 100 lbs., $5.00.
If shipped by parcel post, postage will be additional. One ear weighs about one pound.

Lilly's Washington Silver King Corn
A new and extremely early variety; the largest and best early white corn, and especially recommended for the Northwest. We have grown two excellent crops from thoroughly seed, and it is thoroughly acclimated.

The stalks generally grow seven to eight feet in height with ears two and one-half feet from the ground. The ears are seven to nine inches long, smooth, straight rowed and of perfect shape, showing careful selection and perfect pedigree.

The kernels are large, pure white, dented and are deeper than any other early white corn. All corn is carefully tested for germination.

SELECTED EARS: 15c each; two for 25c; $1.00 per dozen; $8.00 per 100 ears.
Shelled: 1 lb., 10c; 10 lbs. or more, 60 per lb.; 100 lbs., $5.00.

If shipped by parcel post, postage will be additional. One ear weighs about one pound.

Lilly's Northern Grown Seed Corn

LEARNING IMPROVED. Early yellow dent; long, narrow kernels

IOWA GOLD MINE. A medium early golden-yellow dent corn

PRIDE OF THE NORTH. A splendid quick-growing yellow dent

CHAMPION WHITE PEARL. A large, late, white dent corn

EARLY CANADA. An early yellow flint variety

KING PHILIP. An early red flint corn adapted to the Northwest

SANFORD WHITE FLINT. A reliable, early, large, white flint

MINNESOTA NO. 13. A new, large, early, yellow dent corn

SWEET FODDER CORN. Sweet corn; producing nutritious fodder

RED COB ENSilAGE CORN. A field corn for fodder and ensilage

WHITE RICE POP CORN. The best for popping or for market.

Give corn a good start with a light application of Nitrate of Soda early in the season.
LILLY'S SUN WHEAT

A New Winter Wheat
Especially Adapted to the Northwest

Following our regular policy, we have for several years been experimenting with many varieties of wheat for the purpose of choosing the varieties best suited to conditions in the Northwest. Our tests have proven that Sun Wheat excels all others in yield and quality, especially for the country west of the Cascade Mountains.

Sun Wheat is a remarkable new winter wheat, imported from Southern Sweden, and is the heaviest yielder of them all. It ripens earlier than most other varieties. The grain is plump, of a reddish color, and the weight per measured bushel is above the average. It does well on rather light soil, and is resistant to rust and smut. The heads are compact, firm and uniform; very similar to Club Wheat but much longer. Its stolting habit is especially good. The straw is of medium height, erect and very stiff.

In a comparative test, in adjoining fields and under identical conditions, Sun Wheat yielded 55 bushels and Club Wheat 40 bushels per acre.

The seed is grown for us on contract, from specially selected seed, and is under the direct supervision of our grain expert from the time the land is plowed until the seed is threshed and cleaned.

Price: 1 lb., 10 c; 10 lbs. or more, 4½ c per lb.; 125 lb. sack, $4.05. F. O. B. Seattle or Portland.

MARQUIS WHEAT
A Highly Recommended New Spring Wheat

This new spring wheat is so highly recommended that we have purchased a stock of the seed, although we have not yet given it a thorough trial. It was originated by the Canadian Government Agricultural Department, and is a cross between Fife and Red Calcutta.

The Washington State Agricultural Experiment Station describes it as follows: “Marquis is an early maturing red spring wheat which has been introduced recently from Canada. It may be grown in the place of Bluestem where an early maturing wheat is desirable. It does not shatter easily and stands well. It has a short, plump, very hard kernel and is of good quality.”

Price: 1 lb., 10 c; 10 lbs. or more, 4½ c per lb.; 125 lb. sack, $4.05. F. O. B. Seattle or Portland.

LILLY'S PEDIGREED BLUESTEM WHEAT
Specially Selected Seed

Bluestem has long been the standard and is still unexcelled for the Northwest. East of the mountains it is extensively grown as a spring wheat in the drier sections, but on the coast, where the winters are mild, it is sometimes seeded in fall; and with the exception of Sun Wheat, it appears to be the only really satisfactory wheat for this section. Its popularity is due to its drought resistance, heavy yielding capacity, non-shattering character and high milling value. Our seed is of the finest quality, carefully selected and thoroughly recleaned.

Price: 1 lb., 10 c; 10 lbs. or more, 4½ c per lb.; 125 lb. sack, $3.75. F. O. B. Seattle or Portland.

Prices are subject to change. Current Price List will be mailed on request.

Prices shown in this catalog do not include transportation charges except in the few cases where so specified.
**Lilly's Petkuser Rye**

The Best Winter Rye for the Northwest

After testing all the promising varieties of rye for several years, we are convinced that Petkuser is by far the best suited to the Northwest. Our tests prove conclusively that it outclasses all other varieties in both yield and quality.

Our original seed stock was imported from Sweden, where this variety has proved to be the best in that country, where rye is one of the main crops. From that seed we have grown splendid crops, and now have a good stock of seed which is thoroughly acclimated to the Northwest, and which we are pleased to recommend to our customers.

The heads are long, four rowed, and the kernels are larger than the common rye. The straw is strong and will not lodge under ordinary weather conditions. It yields much heavier than any other variety that we have tested, and it will fill well on soil that is usually considered too rich for rye.

**Price:** Lb., 10c; 10 lbs. or more, 4c per lb.; 50 lbs. or more, 3½c per lb.; per sack, 125 lbs., $3.75; F. O. B. Seattle or Portland.

**Lilly's Russian Winter Rye**

A Standard Variety Which Produces Excellent Results

With the exception of Petkuser Rye, this is the best in yield and quality for grain, grain hay, straw or green forage. Our seed is specially recleaned, and only the largest and heaviest kernels are retained.

Rye is a valuable and hardy crop, providing green forage in late fall and early spring. It matures more quickly than most other crops, and can be made to yield a good crop on soil that is too poor for other cereals. It is splendid to sow with vetch or field peas. In food value it is very similar to wheat and is a very good hog food.

**Price:** Lb., 10c; 10 lbs. or more, 3½c per lb.; 50 lbs. or more, 3c per lb.; per sack, 125 lbs., $3.15; F. O. B. Seattle or Portland.

**Lilly's Emmer, or Speltz**

Produces Good Crops Where Other Grains Fail

Emmer has been grown in this country for several years, but has been commonly called "Speltz," which is in error, as Speltz is an entirely different grain, little known in this country. Emmer is highly recommended by the United States Department of Agriculture in Farmer's Bulletin No. 139, "Emmer, a Grain for the Semi-arid Regions," which may be procured by writing to your congressman, or to U. S. Dept. of Agriculture, Washington, D. C.

It is a species of wheat, resembling two-rowed barley in appearance, and is extremely hardy and drought resisting, making it especially valuable for stock food, either as grain, hay or forage, in dry regions or on poor soils.

It will produce fair crops under almost any condition of soil or climate, but its greatest value lies in its ability to produce a crop in hot, dry localities, and on poor soil, where other grains would fail. Under such adverse conditions it will produce more and better stock food than any other grain. In feeding value it equals barely or rye. When thrashed it retains the hulls, like barley, but the beards are very short, as shown in accompanying cut. It is generally sown in spring, in the same manner as wheat or barley, at the rate of about 100 lbs. per acre.

**Price:** Lb., 10c; 10 lbs. or more, 4½c per lb.; 50 lbs., 4c per lb.; 100 lbs., $3.50; F. O. B. Seattle or Portland.

Prices shown in this catalog are prices in effect at the time of going to press, and are subject to change. Current prices are shown in supplements which we publish as occasion demands, and which will be furnished on request.

Prices do not include transportation charges. If goods are to be shipped to a station at which there is no agent, or by parcel post, remittance must include a sufficient amount to prepay charges.
Thrashes Out Like Wheat. Making It Valuable Stock and Poultry Food

Barley is one of the very best stock foods, either as grain or hay. It is also splendid as a nurse crop for grasses and clover and as a support for vetch and peas. It is a shallow feeder, and requires a mellow, rich soil with fertility near the surface. It is not a crop for poor, sandy, or worn out land, neither does it do well on newly cleared land, but no other crop responds more readily to good soil and thorough cultivation, and the careful farmer who gives a little extra attention to thorough preparation of the soil will be amply repaid for his trouble.

The only objections to barley have been the long, stiff beards, which are objectionable in grain hay, and the hulls, which make the grain less valuable for feeding purposes. These objections are entirely overcome in White Hulless Barley, for it is entirely beardless, as shown in accompany-

WISCONSIN PEDIGREE BARLEY

Best Bearded barley

This barley was introduced by the Wisconsin Agricultural Experiment Station, the originators of the well known Oderbrucker Barley, to which they claim that this is much superior. It has very nearly replaced all other varieties of bearded barley in Wisconsin, the greatest barley growing state in the Union.

The heads are exceedingly long and are uniformly well filled; the straw is strong; the grain is large, plump and heavy, and the experiment station claims that it outyields all other bearded varieties five to six per cent.

Price: Lb., 10c; 10 lbs., 4c per lb.; 100 lbs., $3.00.

Six-Row White Barley

Specially selected reeleaned seed of the common, white, six-rowed, bearded barley which has been most generally grown. It is sometimes sown in fall west of the Cascade Mountains.

Price: $2.50 per 100 lbs.; less than sack lots, 3½c per lb.

VERMONT BEARDLESS BARLEY

Entirely Beardless

This is a highly improved strain of Beardless barley, entirely free from bearded heads, making it very much superior to the bearded varieties for hay. It is also preferable for grain, as it is as easy to handle and thresh as oats.

Vermont Beardless barley is early, and as it is hardy, may be sown early in spring, or it may be sown as late as the first of July. The straw is good, stands up well, and it is a splendid variety to sow with vetch or peas. It is very productive.

Price: Lb., 10c; 10 lbs., 4c per lb.; 100 lbs., $3.25.

Beardless Barley

The ordinary strain of beardless barley, which until recently has been the best obtainable. On account of not being thoroughly perfected by selection, it may produce some bearded heads.

Price: $2.75 per 100 lbs.; less than sack lots, 3½c per lb.

Prices do not include transportation charges, and are subject to change. Write for Price.
Lilly's VETCH

A Valuable Hay, Ensilage, Pasture, Soiling and Fertilizing Crop

The Vetches are among the most valuable leguminous crops that can be grown in the Northwest for hay, ensilage, pasture, soiling, green manure, and for a cover crop for orchards. In food value they are about the same as Alfalfa, are consumed with less waste and are relished by stock. They are of the greatest value as fertilizers. Like Alfalfa, Clover, Peas and other legumes, Vetch has the power of drawing nitrogen from the air and distributing it in the soil. Even though the crop is removed from the land, the soil will be improved; when plowed under, the benefit will be much greater.

The names Spring Vetch and Winter Vetch are misleading. Spring Vetch is the variety used almost exclusively west of the Cascade Mountains, and in other mild, cool, moist climates, for either spring or fall sowing. Winter Vetch is used east of the Cascades and in climates where the winters are severe and the summers hot and dry, for either fall or spring sowing, although they are generally sown in fall.

Lilly's Common or Spring Vetch
(Vicia Sativa)
For Spring or Fall West of Cascades

Common Vetch is perfectly adapted to conditions west of the Cascade Mountains; where it stands the winters admirably, and is generally sown in fall.

It is an annual legume of great value as a nitrogen gatherer, as a green manure, and as a soiling, hay and pasture plant. When sown in early fall it is a splendid cover crop for orchards.

It makes excellent ensilage, and dairy cattle prefer the hay to that of Red Clover. The yield of cured hay is from one and one-half to four tons per acre.

Common Vetch sown early in September should be ready for feeding green about the middle of April or first of May. It may be sown as late as the middle of November and should be ready for feeding by the first of June. When sown early in spring it should be ready for feeding late in June.

Common Vetch is generally sown at the rate of sixty to ninety pounds per acre, with about fifty pounds of oats, wheat, rye or barley to support the vines.

Price, $5.50 per 100 lbs.; less than sack lots, 7c per lb.

Lilly's Hairy or Winter Vetch
(Vicia Villosa)
For Spring or Fall East of Cascades

Winter, Sand or Hairy Vetch is another annual legume, similar to Common Vetch and valuable for the same purposes, but it is suitable for climates where the winters are more severe and the summers are hotter and drier. It is the variety used east of the Cascades, generally for fall sowing, but it may also be sown in spring.

It makes splendid hay, ensilage, pasture, green feed, and is of special value as a fertilizer.

It is used as a cover crop for orchards, prevents washing of the soil during the winter, and when plowed under in spring makes one of the very best fertilizers, furnishing nitrogen and humus, both of which are needed by the soils in that section. Nitrogen is the most expensive fertilizing element, and is the element most lacking.

The seed of Hairy Vetch is smaller than Common Vetch, and thirty pounds is sufficient to sow an acre. With it should be sown about sixty pounds of wheat or rye to keep the plants off the ground.

Price, $17.00 per 100 lbs.; less than sack lots, 20c per lb.

Prices shown in this catalog are subject to change. See enclosed Supplement, or later issues.
Lilly's FIELD PEAS
A Valuable Grain, Hay, Ensilage and Fertilizing Crop for the Northwest Takes the Place of Corn for Hog Raising

SOIL and weather conditions in the Northwest, especially west of the Cascade Mountains, are ideal for growing peas, and field peas are one of our most valuable crops for either grain, hay, ensilage or soiling.

The grain is a splendid food for hogs, and makes hog-raising possible in this section where it is difficult to mature corn properly. Pea-fed pork is unexcelled. Peas are also the most satisfactory crop for "hogg ing down." The grain is a standard food for pigeons, and pea meal is good in mash foods for poultry.

The hay and ensilage are very nutritious and are relished by most all stock, dairy cows in particular. They are excellent as pasture or as green food for growing pigs and other stock.

Peas do best when sown very early in spring. They are sometimes sown in the fall west of the Cascades. When sown early they will mature in July, in time to plant the ground to some other crop. They are usually drilled or sown broadcast at the rate of one hundred pounds per acre, together with about one hundred pounds of oats, wheat, rye or barley to support the vines. They produce twenty-five to thirty bushels of grain, or two to four tons of hay per acre. Like clover and alfalfa, they are legumes, and are very valuable as a fertilizer.

Canadian Field Peas
The Yellow Canadian is the most popular variety for all purposes. It is hardy, early and productive. Our seed is grown especially for us, is carefully recleaned, and only the largest and plumpest seed is retained.

Price (subject to change): $6.00 per 100 lbs. Less than sack lots, 7c per lb.

Green Field Peas
The seed is larger than the Canadian Field Peas, and they have a bluish color, but are very similar in all other respects.

Price (subject to change): $7.00 per 100 lbs. Less than sack lots, 8c per lb.

Whip-Poor-Will Cow Peas
Cow Peas are grown extensively in the south for fodder and to plow under for fertilizer. They may be grown in Eastern Washington and Eastern Oregon, but should not be sown until the ground becomes thoroughly warmed in spring. They cannot be grown successfully west of the Cascade Mountains.

Price (subject to change): $8.00 per 100 lbs. Less than sack lots, 9c per lb.

Farmogerm will supply the bacteria necessary to produce good crops of peas or other legumes.

Prices shown in this catalog are subject to change. Write for current Supplement.
**Lilly's Millet**

A Valuable Catch Crop for Hay and Forage

Millet is a quick-growing annual, and is mostly useful as a catch crop for hay. It may be sown as late as the last of July, after some early crop has been removed; or it may be sown in spring, after danger of frost is past, and harvested in time for a fall sown crop.

For hay it should be sown at the rate of about thirty pounds per acre; for seed twelve to fifteen pounds. It produces two to five tons per acre of very nutritious hay.

**German or Golden Millet**

A medium early variety, growing four to five feet high and making a very good quality of hay or forage. It will thrive in almost any soil or climate, and sometimes produces as much as five tons of hay or seventy bushels of seed per acre.

*Price, $8.50 per 100 lbs.; less than sack lots 10c per lb.*

**Hungarian Millet**

This is sometimes called Hungarian Grass. It grows about three feet high, with slender stems and abundant leaves, and produces two or three tons of excellent hay per acre. It is a week earlier than German Millet, and requires less moisture.

*Price, $8.50 per 100 lbs.; less than sack lots, 10c per lb.*

**Siberian Millet**

A comparatively new variety, imported from Russia; earlier than either German or Hungarian, and very hardy, withstanding more heat and drought than any other variety. It makes a rank growth, with abundance of leaves, and produces immense crops of excellent hay.

*Price, $8.50 per 100 lbs.; less than sack lots, 10c per lb.*

**Japanese Barnyard Millet**

Grows six feet or more in height and produces immense crops of splendid hay, forage or ensilage. It does well in all climates and soils. Less seed is required than of other varieties.

*Price, $12.50 per 100 lbs.; less than sack lots, 14c per lb.*

**Feterita**

A non-saccharine sorghum of special value in the dry farming sections. It is similar to Kaffir Corn, but matures four or three weeks earlier. It makes excellent fodder or produces a good yield of grain.

*Price, $10.00 per 100 lbs.; less than sack lots, 10c per lb.*

**Kaffir Corn**

A splendid forage plant for the country east of the Cascades, where it produces large quantities of seed or excellent fodder, but it is of little value on the coast.

*Price, $3.00 per 100 lbs.; less than sack lots, 5c per lb.*

**Broom Corn**

Another non-saccharine cane, grown for seed, fodder and for manufacturing brooms, under the same conditions as Kaffir Corn.

*Price, $6.00 per 100 lbs.; less than sack lots, 10c per lb.*

**Sunflower**

The seed is excellent poultry food when mixed with grains, and should be more generally grown by poultrymen. *Price, 1 lb., 15c; 10 lbs., 10c per lb.*

Prices do not include postage. If seed is to be shipped by parcel post, postage will be additional.
Lilly's Thousand Headed Kale
Supplies Green Food for Cows, Sheep, Hogs and Poultry During Winter

Thousand Headed Kale, or Cow Kale, as it is sometimes called, is one of the most useful crops for the Pacific Coast. It belongs to the cabbage family, is succulent and nutritious, and is unequaled as green food for stock, especially poultry and cows. West of the Cascade Mountains it is left in the field all winter and cut as required for feeding.

The seed is generally sown in drills three feet apart early in spring, and the plants transplanted when six to eighteen inches high. They may be transplanted to ground from which an early harvested crop has been removed, providing sufficient moisture can be depended upon. One pound of seed will produce sufficient plants for one acre. The plants should be set three feet apart each way. They grow about four feet high, with a wide spread of leaves, and a single plant often weighs 30 to 40 pounds.

For summer feeding, the seed may be sown in fall and the plants transplanted in spring, but it seldom yields as heavy as that grown for fall and winter feeding. Like cabbage, kale requires rich soil and thorough cultivation. Under favorable conditions it will sometimes yield as high as sixty tons of green feed per acre.

It is not only an economical food, but by supplying succulent green food will keep stock in perfect health. It solves perfectly the difficult problem of supplying green food for poultry. Several good articles in regard to the culture and uses of kale are contained in the Crop Book, which we will furnish free with any order if requested. **Price: Oz., 10c; ¼ lb., 20c; ½ lb., 35c; 1 lb., 50c; ½ bushel, $1.00. Postage additional.**

Lilly's Marrow Cabbage
Chou Moellier
White Stemmed Marrow Kale

Marrow Cabbage is a valuable dairy and poultry food, very similar to Thousand Headed Kale, but even more prolific. The plants average four to six feet in height, with stalks five to six inches in diameter, and weigh fourteen to twenty pounds. The stalks are edible and are relished by cows. The lower leaves are broken off and fed as they mature.

The plant is not so hardy as Thousand Headed Kale, but is most valuable for green feed in fall and early winter. The culture is the same as for kale and cabbage. One pound of seed will produce plants for one acre. **Price: Oz., 10c; ½ lb., $1.00.**

Lilly's Dwarf Essex Rape
Summer and Fall Forage or Pasture

Dwarf Essex Rape is a valuable forage and pasture crop for stock, especially sheep and hogs. It is particularly useful when other green food is scarce during the dry season in summer and fall. It is splendid for cattle, but must be fed judiciously to avoid tainting the milk.

It may be sown any time from early spring until late summer after an early harvested crop is removed, and will be ready for pasturing or cutting in six or eight weeks. If not cut close it will sprout up again in fall, and as it will stand considerable frost, will furnish green feed for into the winter. It thrives best in cool weather, and is especially adapted to our climate on the Pacific Coast.

It will thrive on soil suitable for cabbage or turnips, and requires thorough preparation of the soil. It may be sown broadcast at the rate of about five pounds per acre, but best results are obtained by sowing in drills and cultivating. Cultural directions are contained in the Crop Book.

**Price: ½ lb., 25c; 1 lb., 50c; ½ bushel, 75c; 1 bushel, $1.00. Postage additional.**

Lilly's Poultry Foods
Are Made For Special Purposes
And Produce Definite Results

**Lily's SEEDS are tested for purity and germination. They grow if cultural conditions are right.**
**DANISH SLUDSTRUP MANGEL WURZEL**

**Stock Beets Are Valuable Winter Feed for Stock and Poultry**

Mangels, or Stock Beets, yield immense crops of nutritious, succulent winter food for stock and poultry, and our cool, moist climate on the Pacific Coast is especially adapted to their growth. Danish Sludstrup is a splendid new variety, and is undoubtedly the best mangel grown. Our seed was procured from the originator in Denmark, where the variety has been awarded a first-class certificate by the Danish Government. The Danish Government has done much to improve the quality of farm and garden products, and their approval of a variety is evidence of its superiority. Sludstrup is a long mangel, smoother than others, uniform in shape, of immense size, and the yield is remarkable. It is of a reddish yellow color, grows well above ground and is easy to harvest, and chemical analysis shows it to excel all other varieties in food value. Pkt., 10c; ½ lb, 40c; 1 lb, 80c. Postage additional. Write for prices on larger quantities.

**GOLDEN GIANT MANGEL**

An excellent variety, of immense size, uniform shape, and very productive. The flesh is light yellow, fine grained, and very rich. It is half-long, easily pulled, and a good keeper. Pkt., 10c; ½ lb, 40c; 1 lb, 70c

**ROYAL RED MANGEL**

The roots are very large, uniformly straight, well formed and solid; tops small; color deep red. It produces immense tonnage, roots weighing twenty pounds being not uncommon. Pkt., 10c; ½ lb, 30c; 1 lb, 50c

**Giant Intermediate or Gate Post Mangel**

In shape it is intermediate between the long and globe-shaped varieties. The roots are large: neck small and short; flesh nearly white, sweet and tender. A big cropper. Pkt., 10c; ½ lb, 40c; 1 lb, 70c

**HALF SUGAR MANGEL**

Combines the size of the mangel with the great food value of the sugar beet. The flesh is white, firm, crisp, and is greedily eaten by stock. Pkt., 10c; ½ lb, 40c; 1 lb, 70c

**Long Red Mangel**

A large red mangel, producing immense crops. The flesh is white shaded with red. Grows much above ground, and is easy to harvest. Pkt., 10c; ½ lb, 30c; 1 lb, 50c

**GOLDEN TANKARD MANGEL**

A popular, tankard shaped, stock beet. Large size; flesh yellow; nutritious and well liked by stock. Will grow in shallow soil. Pkt., 10c; ½ lb, 35c; 1 lb, 60c

**KLEIN WANZLEBEN SUGAR BEET**

The variety most generally grown for sugar. Very rich in food values, but not so productive as the mangels. Splendid food for dairy cows. Pkt., 10c; ½ lb, 30c; 1 lb, 50c

Write for prices on larger quantities. These prices do not include postage.
Lilly's

KING OF SWEDES
RUTA BAGA or SWEDISH TURNIP

A Splendid Variety for Stock Food or Table Use

Ruta Bagas are grown and used similar to turnips, but require a longer season for growth and are even more valuable for stock food; they are also preferred by many for table use. Lilly’s King of Swedes is an ideal yellow fleshed rutabaga. The flesh is sweet, fine grained, juicy, tender, solid, and the color is bright yellow, very attractive, making it especially desirable for table use. Its large size, productiveness, hardiness and splendid keeping qualities make it the most desirable variety for winter feed for stock.

Ounce, 10c; ½ lb, 20c; 1 lb, 55c. Postage additional.

American Purple-Top Improved

An excellent variety for either table use or stock. The flesh is yellow, solid and sweet. It is of nearly globular shape, very large, immensely productive, and a good keeper.

Ounce, 10c; ½ lb, 20c; 1 lb, 55c. Postage additional.

Monarch, or Tankard Ruta Baga

The roots are very large and are tankard shaped, with small neck and tops. The color is purplish-red above ground, yellow below. The flesh is yellow, fine grained, and sweet. Very productive and a good keeper.

Ounce, 10c; ½ lb, 20c; 1 lb, 55c. Postage additional.

Write for prices on larger quantities. Cultural suggestions are contained in The Crop Book, which we will give with any order if requested.

The planting and cultivation of root crops, as well as garden vegetables, is made easy and pleasant, and the expense is reduced, by the use of the Iron Age garden implements listed elsewhere in this catalog. They do away with the back-breaking labor, do the work much more quickly, and do it better. They will more than pay for themselves the first season.

The poorest soil may be made productive. No soil will continue productive indefinitely if not fertilized.

FERTILIZERS

will increase the quantity and improve the quality of the crop at a very slight difference in cost. The difference in crop is practically all profit.

The Best Variety for Stock Feeding

Lilly’s Select Stock Mastodon Carrot is undoubtedly the best variety for stock feeding. It is immensely productive, and on account of being half-long is much easier to harvest than the long varieties. The roots are seven to nine inches long, reasonably smooth, very heavy at the shoulder, tapering regularly to a point. The color is creamy white. The flesh is white, solid, crisp, and of excellent quality for stock feeding. Not recommended for table use.

Carrots require rich, well tilled soil, and under favorable conditions often yield as much as twenty-five to thirty tons per acre. They are splendid stock food, and should be more generally grown for that purpose.

Ounce, 10c; ½ lb, 30c; 1 lb, 80c. Postage additional. Write for prices on large quantities.

Study your soil, and feed it systematically; it is the source of wealth.
The problem of fertility is an important one to the farmer and gardener, and is one which requires exact experience and fast rules can be laid down for fertilizing, for soils differ so greatly. The soil in different parts of one farm, or even in one field, may be entirely different, and require different treatment. The farm should not be considered just so much land on which to plant seeds and harvest such crops as it happens to produce. There is even more opportunity for the farmer to care for and feed his soil to get best results than there is for the careful dairyman to care for and feed his cows to produce the greatest possible milk yield. The same conditions prevail. Both should be kept in the pink of condition physically, and fed the correct foods in sufficient quantities to produce desired results.

Most soils naturally contain all of the necessary ingredients for fertility, but one or more of the ingredients may be in insufficient quantities or unavailable form; or the soil may not be in good physical condition; or, from continuous cropping, one or more of the ingredients may have become exhausted. In any case the land may be made productive, and it is not necessary to continue to waste time, labor and expense producing inferior crops. It costs practically as much to produce a poor crop as a good one. Profits depend upon the amount and quality of the crop.

Almost any soil, if properly treated, may be made fertile; no soil is so fertile that it will not become exhausted if cropped year after year without the replacement of the plant foods which are removed by the crops.

To be fertile, soil must be in good physical condition, contain the correct amount of moisture, and must contain a sufficient amount of nitrogen, phosphoric acid, and potash, and they must be in available form. A chemical analysis is of little use to determine what is needed, to make a soil fertile. The only way to ascertain what fertilizer will produce best results at least expense is by experimenting with various fertilizers, in various combinations, on small areas, and noting the effects. In the absence of information gained by experience, it is always safe to provide sufficient of all three of the vital fertilizing elements, but that may not be the most economical way, for it may be that only one or two are required. For this purpose we provide our complete mixed fertilizers, which contain all the vital ingredients in the best form, and correct proportions for average soils, and are bound to produce good results if soil conditions are right. These fertilizers are effective because the soil is in proper condition. If the soil is sour, the acid must be neutralized by applying ground lime rock or air-slaked lime before fertilizers would have any beneficial effect. If it lacks humus, or decaying vegetable matter, it must be supplied by plowing under stable manure, sod, or a crop of clover, vetch, peas, or other vegetable matter. The land may be wet, in which case it must be drained before fertilizers will make it produce satisfactory crops.

The form of fertilizer to apply depends upon which is available, which will produce best results, and which is the most economical. Few farms, except stock farms where food is purchased in large quantities, produce enough manure to replace the plant foods which are removed from the soil, for every pound of produce sold from the farm contains a certain amount of those ingredients. Stable manure is not correctly balanced for most soils, for it contains a surplus of nitrogen, and should be balanced by adding phosphoric acid and potash. Stable manure also contains large quantities of weed seeds which are liable to cause trouble; also, the cost of hauling and applying is often excessive. One hundred pounds of complete mixed fertilizer contains more fertilizing ingredients than a ton of manure. Plowing under green crops and rotation of crops are good as far as they go, but are not sufficient alone. A combination of all methods is best. Commercial fertilizers have several distinct advantages. They are concentrated; five hundred to one thousand pounds is sufficient for an acre, and will supply more plant food than a heavy application of manure. They contain no weed seeds. The analysis is known, and the required plant food can be added to the soil without waste of materials that are not required. Our fertilizers bear tags showing the guaranteed analysis, as required by law, and in our mixed fertilizers that analysis is made up of materials that will produce desired results.

Your soil can be made more productive. Why be satisfied with crops which hardly pay expenses?
Lilly’s LAWN DRESSING
Practically Odorless, Pleasant to Apply; Makes Luxuriant Rich Green Lawns
Guaranteed Analysis: Nitrogen 6%, Phosphoric Acid 9%.

Continual mowing of lawns and removing the clippings soon exhausts the soil, and to maintain a good lawn it is necessary to renew the fertility at frequent intervals. Manure is very objectionable for this purpose on account of its unsightliness, disagreeable odor, being tracked into the house, and especially on account of the weed seeds which it contains.

Lilly’s Lawn Dressing is a clean, dry powder, practically odorless, inoffensive in every way, entirely free from weed seeds, easy to apply, and invisible after the lawn has been sprinkled. One hundred pounds is sufficient for about twenty-five hundred square feet of old lawn, or for one thousand square feet of new lawn, and contains more fertilizing elements than a ton of manure. It is best applied in several light applications during the summer, sprinkling the lawn thoroughly after each application, and will do wonders in keeping the lawn fresh and green. It is applied by simply scattering broadcast over the lawn. When your lawn becomes brown or spotted, apply Lilly’s Lawn Dressing and you will be pleased with the result.

It is also suitable for flower gardens, rose bushes, shrubbery, house plants, etc. Packed in 25-lb. and 100-lb. bags only.

Price 25 lbs., 85c; 100 lbs., $2.75; F. O. B. Seattle or Portland

Lilly’s CONCENTRATED FERTILIZER
A GENERAL FERTILIZER
For House Plants, Flower Gardens, Roses, Shrubbery, Etc.
Guaranteed Analysis: Nitrogen 5%, Phosphoric Acid 11%.

This is a real food for plants, not a stimulant that will produce wonderful temporary results the after-effect of which will be harmful. It is composed of the most suitable materials in the correct proportions for a general fertilizer around the home. It is especially beneficial for flower gardens, house plants, rose bushes, shrubbery, etc., but it may also be used on lawns and vegetable gardens when only small quantities are required and it is not convenient to provide the special fertilizers. It is a clean, fine, dry powder, easy to apply, and without any disagreeable odor. It is usually applied dry, and raked into the soil, at the rate of about one pound to each square yard. Although heavier applications would be in no way harmful, it may be shipped by parcel post.

Prices: 5 lbs., 25c; 25 lbs., 85c; 100 lbs., $2.75

There is neither pleasure nor profit in growing poor, weak, sickly plants.
FRUIT, HOP AND VEGETABLE FERTILIZER

Increases Quantity and Improves the Quality of Fruits and Vegetables

Guaranteed Analysis: Nitrogen 5%, Phosphoric Acid 10%

This is a high grade, highly concentrated fertilizer prepared especially for vegetable gardens, orchards, small fruits, and for hops. It is in the form of a powder, free from objectionable odor, and is composed of the most suitable materials in the correct proportions to be of the greatest benefit. The materials composing commercial fertilizers are of the utmost importance. It would be a simple matter to make a fertilizer analyzing 5% nitrogen and 10% phosphoric acid if that was the only object, but our fertilizers must contain the materials that will accomplish the best results. There are many forms of nitrogen and phosphoric acid used in fertilizers; for instance, the best form of phosphoric acid is found in the form of bone meal, and for that reason bone meal forms the base of our fertilizers, but that form is slow acting and we add phosphoric acid in other quicker acting forms, so that a part of the fertilizer will be available almost immediately while the balance will become available only as fast as it is required by the plants, and the benefit will be lasting.

One hundred pounds of Lilly's Fruit, Hop and Vegetable Fertilizer contains more plant food than a ton of stable manure, and is usually cheaper, especially when labor is considered. It is easy to apply, and is in no way offensive. On vegetables, etc., it is scattered broadcast or in the hills or rows before the seed is sown, and harrowed or raked into the soil. For trees and bushes it is scattered around the plants and worked into the soil by cultivation.

Price, 25 lbs., 85c; 100 lbs., $2.60; ton, $46.00; F. O. B. Seattle or Portland.

Lilly's POTATO FERTILIZER

For Potatoes, Beets, Mangels, Turnips, Carrots and All Other Root Crops

Guaranteed Analysis: Nitrogen 4%, Phosphoric Acid 10%

For all root crops such as potatoes, beets, mangels, carrots, turnips, ruta bagas, etc., Lilly's Potato Fertilizer is a profitable investment. A fertilizer for these crops must contain nitrogen in such forms that it will be available to give the plants a good start in the earlier stages of growth, but it must not be too effective in the advanced stages, for it would tend to grow luxuriant tops at the expense of roots. It would be difficult to make a formula that would be more suitable for this purpose. Being composed entirely of chemicals and animal matter it contains no weed seeds, which are so abundant in stable manure; neither does it breed scab, as manure is very liable to do.

Price, 25 lbs., 85c; 100 lbs., $2.20; ton, $46.00; F. O. B. Seattle or Portland.

Prices shown in this catalog are subject to change. See enclosed Supplement, or later issues.
LILLY'S

NITRATE OF LIME

Guaranteed Analysis: Nitrogen 13%.

Nitrate of Lime is another quick acting nitrogenous fertilizer, made by electrically combining nitrogen from the air with lime. It contains the same amount of Nitrogen as Nitrate of Soda, and the manner of using and benefits derived are the same. The article in the Crop Book in regard to the use of Nitrate of Soda on garden vegetables will also apply to Nitrate of Lime. We can furnish it only in full barrel lots, about 250 lbs., for the reason that after the barrel is opened it draws moisture.

Price: Barrel (about 250 lbs.), $9.65; ton, $77.00; F. O. B. Seattle or Portland.

Land Plaster, or Gypsum

Land Plaster is not really a fertilizer, as it contains no plant food, but it causes a chemical change in the soil, releasing the potash which is already there in unavailable form, and is very beneficial to clover, alfalfa, peas, beans and other legumes. It is sown broadcast at the rate of one hundred to five hundred pounds per acre.

Price: 100-lb. sack, 80c; ton, $14.00; F. O. B. Seattle or Portland.

Prices shown in this catalog are prices in effect at time of going to press, and are subject to change. For current prices see enclosed Supplement or later issues which will be mailed on request.

Potash Fertilizers

There is no Sulphate of Potash, Muriate of Potash, or Kainit to be had in this country at the time this catalog goes to press, and it is not likely that there will be any until the war is ended, as all Potash comes from Germany. If we are able to procure any of these fertilizers during the season they will be listed in supplements which we will be pleased to mail on request.

LILLY'S

NITRATE OF SODA

Guaranteed Analysis: Nitrogen 13%.

Nitrate of Soda is a very valuable fertilizer when correctly used. It is quick in action, the effect will be noticeable within a very few days, and for that reason it is best used as a top-dressing after the plants are up. If applied before the seed is sown, a part of it would be lost before the plants were ready to use it.

Best results are obtained by two or three light applications, about 150 lbs. per acre each, early in the growing season. If applied in larger quantities the excess above what the plants are able to utilize will be wasted. If applied too late in the season it is liable to cause excessive growth of tops and foliage at the expense of vegetables, fruit or grain.

Its greatest benefit is as a stimulant to give the plants a vigorous start early in the season, and when so used the final results are wonderful. The results of experiments with Nitrate of Soda on garden crops are given in U. S. Dept. of Agriculture Bulletin No. 162, extracts from which appear in our Crop Book. It is just as beneficial on farm crops such as corn, potatoes, etc. It is especially valuable on garden crops such as lettuce, radishes and celery, the quality of which depends upon being grown quickly.

It should be applied at the rate of two hundred to five hundred pounds per acre, preferably in several light applications at intervals of two or three weeks, and may be scattered around the plants, dry, and raked in or it may be dissolved in water. It should not be applied after the plants have neared maturity, for it will cause them to continue to grow, and retard maturity.

Price: Sack lots, 200 lbs., $7.50; ton, $75.00. Less than sack lots, 5c per lb.; 50 lbs. or more, 4½c per lb.; F. O. B. Seattle or Portland.
BONE MEAL
GUARANTEED ANALYSIS:
Nitrogen 2½ to 3½ % ;
Phosphoric Acid 18 to 22 %.

Bone Meal is a splendid fertilizer and for many purposes is the best and cheapest form of nitrogen and phosphoric acid. It forms the base of all the best mixed fertilizers. It is slow in action and there is much danger to the growing plant when used in extremely small quantities without danger of burning the plants; neither is there any loss from leaching, and an ideal lawn or rose bed is made by mixing large quantities of Bone Meal with the soil.

It is also an excellent top-dressing for lawns, flower beds, etc., and is used extensively in greenhouses, hot-beds, nurseries, and for forming soil for potted plants.

Our Bone Meal is made from fresh bones that have not lost any of their value. It is a nice, clean product with no offensive odor. The amount to apply will depend upon the purpose for which it is to be used.

Price: 10 lbs., 35¢; 100 lbs., $2.25; ton, $43.00; P. O. B. Seattle or Portland.

Dried Blood
GUARANTEED ANALYSIS:
Nitrogen 12 %.

A very effective and quick acting form of nitrogen, generally used as a top-dressing. It must be used with care, but when properly used is a very valuable fertilizer. Like Nitrate of Soda, it is best used in several light applications. It is pure slaughter-house blood, dried and finely ground. Packed in 100-lb. sacks only.

Price: $3.00 per 100 lbs.; $56.00 per ton.

Fish Guano
GUARANTEED ANALYSIS:
Nitrogen 8 %;
Phosphoric Acid 6 %.

High in nitrogen and phosphoric acid in quickly available form, and will produce good results on any crop where a quick growth or a large growth of foliage is desired. It is splendid for lawns, but the odor is rather objectionable. It may be worked into the soil at the time the seed is planted, but as it is a quick acting fertilizer, it is more useful as a top-dressing. Applied at the rate of 500 to 1,000 lbs. per acre.

Price: 100 lbs., $2.50; ton, $47.50.

BLOOD AND BONE
GUARANTEED ANALYSIS:
Nitrogen 6 %; Phosphoric Acid 10 %.

An animal fertilizer rich in nitrogen and phosphoric acid and having additional value on account of a certain warmth and vitality which it imparts to the soil. It is a quick acting fertilizer, and for that reason it is for some purposes more valuable than Bone Meal, although the effect is not so lasting. It should not be applied a great length of time before the seed is planted, and is most useful as a top-dressing. It is usually applied at the rate of 500 to 1,000 lbs. per acre.

Price: 100 lbs., $2.25; ton, $42.00.

Superphosphate
GUARANTEED ANALYSIS:
Phosphoric Acid 17 %.

This is what is known as Acid Phosphate, being phosphate rock treated with acid to make the phosphoric acid available. While the phosphoric acid in this is not so valuable as that in Bone Meal, it is more quickly available and in some cases more useful.

Superphosphate is recommended as a top-dressing for grass lands and for grains. It is generally used at the rate of 500 to 1,000 lbs. per acre. Packed in 125-lb. sacks.

Price: Per sack, 125 lbs., $1.75; ton, $26.00.

Phosphate Rock

This is raw phosphate rock finely ground. It is slower acting than Superphosphate, and by some manufacturers is recommended as the most economical form of phosphoric acid.

Price: 100 lbs., $1.25; ton, $22.50.

Ground Lime Rock

This is the best form of lime for sweetening sour soil. It is fully as effective as air-slaked lime, does not burn the humus in the soil, is more convenient and is less expensive. In preceding pages is an article, "Lime for Correcting Acidity in the Soil," written by Prof. Stockey, of the Washington State Agricultural Experiment Station.

A large proportion of the land west of the Cascade Mountains is very acid, and until the acid is neutralized with lime, fertilizers will be of little benefit. For ordinary cases, a ton of Ground Lime Rock per acre will be sufficient; in case of extreme acidity larger quantities will be required. Packed in 200-lb. sacks only.

Price: Per 200-lb. sack, $1.40; ton, $22.00.

We can make specially attractive prices on fertilizers in carload lots. Write for prices.
The Standard Inoculation

FARMOGERM
High-Bred Nitrogen Gathering Bacteria.

Supplies the Necessary Bacteria to Grow
CLOVER, ALFALFA, PEAS, BEANS, VETCH
AND OTHER LEGUMES

If your soil will not produce good crops of any of the legumes, it is probably on account of the absence of the nitrogen-gathering bacteria necessary for the production of leguminous plants, such as the clovers, alfalfa, peas, vetch, beans, etc. If the bacteria is in the soil in sufficient quantities there will be found on the roots of the plants small lumps or swellings like those shown in accompanying cut of vetch root. These lumps are nitrogen-gathering nodules, and contain nitrogen which, in addition to producing a bumper crop, makes the legumes such splendid fertilizers for future crops. If the bacteria are not present in the soil, Farmogerm will supply them.

What Farmogerm Is

Farmogerm is a pure culture, or growth of nitrogen-fixing bacteria that have been selected and bred up to transform large amounts of nitrogen from the air into soluble nitrates. These bacteria are grown in a jelly, or food, in which they remain active for long periods of time, and sent out in a bottle which admits the necessary supply of pure air, yet keeps out destructive contaminations.

What Farmogerm Will Do

Unless the soil is very acid or wet, Farmogerm will—
1. Increase the yield and quality of legume crops, giving quicker growth and earlier maturity.
2. Increase the food value of legumes.
3. Make legumes grow in new localities where they cannot otherwise be grown successfully.
4. Supply nitrates to other crops growing with the inoculated legume crop.
5. Enrich the soil for future crops.

Increased crops are a well established certainty in all instances where inoculations are used together with proper culture methods. Not only is the crop increased in weight, but in its richness.

Fertilizer values of well inoculated legumes are well known. A crop of peas, vetch, clover, alfalfa or cow peas, either harvested or plowed under, distributes a great amount of nitrogen in the soil, and is equal or superior to a heavy application of manure.

Inoculation of legume seeds with Farmogerm is a simple process; no fuss; no bother. Just moisten the seed with Farmogerm, pure cultures, allow them to dry, then plant. Seeds for twenty acres can be treated in a few minutes, and the results will surprise you.

Those who have tried to grow alfalfa, and failed, will probably be able to get a good stand by the use of Farmogerm.

When planting any legume, unless you have proved that you can grow record-breaking crops without it, it will pay to insure the crop by inoculating the seed with Farmogerm. It is cheap insurance.

Farmogerm is beneficial to legume crops only. We can furnish it for Alfalfa, Red Clover, Alsike Clover, White Clover, Sweet or Bokhara Clover, Garden Peas, Field Peas, Sweet Peas, Cow Peas, Beans and Vetch. Farmogerm for one of these crops would be of no use for any other.

When ordering, be sure to state which legume the Farmogerm is to be used for.

NEW REDUCED PRICES

One-Eighth Acre Size (For Garden Peas, Beans, and Sweet Peas, only) $0.25
One-Quarter Acre Size .50
One Acre Size 1.50
Five-Acre Size 5.00

Postpaid

Write for prices on larger quantities.

Write for pamphlets describing Farmogerm, its uses and benefits.
Lilly's Poultry Supplies

Poultry Foods Which Produce Results, and Utensils Which Are Practical

Lilly's Poultry Foods have for many years been the standard which others have endeavored to copy. However, they have not been successful for the reason that they have manufactured them as a side-issue of another business, to use by-products and waste materials from their mills. We are pioneers in this business, and since 1885 have made a specialty of poultry foods. We have specialists who understand requirements, food values, and effects, and who select the ingredients of these foods with a definite purpose in view. Everything in our poultry foods is there for a reason, not simply to dispose of the material.

On account of the immense quantities handled, we are able to purchase suitable grains, seeds, etc., to better advantage; also to reduce the cost of milling and handling to the minimum. This is the reason that we can supply real food at prices to compete with other so-called foods which are made up largely of mill waste, and have little food value.

Knowing that no one or two foods could produce all of the various results required by poultrymen, we originated the idea of supplying a special food for each purpose. These proved so advantageous that others have imitated them, even copying our names and packages, but, so far as we have heard, they have not been able to produce even a fair imitation of the results.

Realizing that our business depends upon the prosperity of the poultrymen, we have always done everything that we could to assist them. We employ a poultry expert who is always glad to give information or advice. A letter addressed to the manager of our poultry department will get prompt and careful attention. When you are in the city we will be pleased to have you call upon us. Our store is centrally located, on Pioneer Square, and we are always glad to serve you in any way possible.

The success of Lilly's Poultry Foods proves the value of special foods for special purposes.
The Successful Raising of Good Chicks Depends Upon Correct Feeding

In choosing a ration for baby chicks, we must remember that they are infants and that their digestive organs are extremely delicate. We cannot expect them to thrive upon foods which are unsuitable. The food must be easily digested, must not contain anything that will be irritating, and must contain the correct elements to build bone, muscle, blood and feathers without forcing or fattening.

With modern methods of raising chicks in large numbers it is quite essential that the method of feeding be simplified to reduce labor and expense. To accomplish this, poultrymen have generally adopted mash foods in connection with grain foods.

Lilly's Holly Chick Food and Lilly's High Protein Mash are prepared with these facts uppermost in mind. They are intended to be fed in conjunction, and the combination, with the addition of succulent green food, chick size Crystal Grit, and plenty of fresh water, makes a complete balanced ration properly constituted to produce best results in developing young chicks. No other suitable ration can be found among the many other rations on the market today.

Holly Chick Food is the grain portion of the ration. Until the chicks learn to hunt for it, it should be fed in a shallow dish; later it should be scattered in a litter where they will scratch for it like their little live dependents. It should be fed three or four times a day. The quantity will depend upon how much they will eat. They should have all that they will eat up clean. They will not eat more than is good for them if it is scattered in a deep litter and they are supplied with green food and grit.

High Protein Chick Mash is usually fed dry in a hopper or trough placed where the chicks will have access to it at all times during the day. If fed the dry mash from the beginning they will eat it readily. If changed from other food to dry mash later, after they have formed their habits, it may take a few days for them to become accustomed to it. They will not eat too much if properly fed, it may be moistened with water or milk, but it must be moistened only enough to make it crumbly. It must not be wet or sticky, and must not be sour or musty. This food contains sufficient animal matter, and it is not necessary to supply additional meat.

These foods should be supplied from the time the chicks are first fed, when they are thirty-six to forty-eight hours old, until they are five or six weeks old, when they should be changed to Growing Food and Growing Mash.

The raising of chicks is a simple matter when this system is followed, and, if other conditions are right, a wise large mass of chicks will be raised to some profit. Much depends upon the care and feeding of chicks during the first six weeks of their lives. If they become stunted or weakened by incorrect feeding, faulty brooding, damp, filthy or draughty quarters, or by lice or mites, they are not worth raising. To be profitable, they must be properly hatched, from good stock, and must be kept healthy and growing without a check. Lice and mites must not be tolerated. The house must be clean, dry, light, airy, and without draughts. The chicks should be kept active by being compelled to scratch in a deep litter for their grain mash. They should be supplied an abundance of green food such as lettuce, cabbage, chard, kale, etc. Water should be renewed frequently, and not allowed to become warm and dirty.

HOLLY CHICK FOOD

The Test of Time and Results Has Proved Its Value

Holly Chick Food is well and favorably known by poultrymen all over the Pacific Coast. It is the original dry grain chick food, the foundation of our success in manufacturing mixed poultry food, and the standard with which other chick foods are compared. It is composed of a great variety of sound grains and seeds cut to the correct size for little chicks, and contains the correct elements in right proportions to form an ideal complete ration when fed in conjunction with High Protein Chick Mash.

Holly Chick Food is packed in 5 lb., 10 lb., 25 lb., 50 lb., and 100 lb. packages. It is for sale by dealers, or may be ordered from us direct.

For prices see enclosed supplement, or later issues which will be mailed on request.

HOLLY'S HIGH PROTEIN CHICK MASH

An Ideal Meal Food for Chicks

High Protein Chick Mash is carefully prepared from suitable ground grains and animal matter correctly balanced for the requirements of tender baby chicks. This and Holly Chick Food form a complete ration, including meat food, upon which chicks thrive and grow like a sturdy and healthy growth. It is not only the most suitable food for chicks; it is also the most convenient and a great labor-saver. It is only necessary to fill the hopper and the chicks will help themselves liberally, but will not eat too much if green food is supplied. It may be moistened with water or milk if preferred.

We are unable to publish close prices which will be good during the entire year. See enclosed supplement, or write for prices.

If your dealer does not have Lilly's Poultry Foods, order direct from us. Be sure that the sacks are branded "Lillys"
DEVELOPING FOOD

The Chicks' Future Depends Upon Vigorous and Continuous Growth

A critical time in the life of the chicks begins when they are five to six weeks old. It is a time when care must be taken that there is no check in their growth at this time. They must be kept growing steadily. Any set-back will do damage from which they will never entirely recover.

They have now outgrown Chick Food, and it is no longer a profitable feed, but they are not old enough for an adult ration. It is for this stage that we have Lilly's Growing Food and Lilly's High Protein Growing Mash. These are to be fed in conjunction, and the combination will produce broilers or laying pullets in the least possible time and at minimum expense. Practical poultrymen know the importance of this, and that their profits depend upon it.

Lilly's Growing Food should be fed at least once each day, preferably later in the afternoon. It should be scattered in a deep litter, to force the chicks to scratch industriously, for they need the exercise. They should have all that they will eat up clean. They will not eat much that is good for them if they have to scratch for it and are supplied with green food.

Lilly's Growing Mash is a meal food, and is intended to be fed in a hopper placed where the chicks can help themselves at will times during the day. Some prefer to moisten it slightly with water or milk, but it must not be made sticky, only moist enough to make it crumbly when pressed between the hands.

This combination contains all of the animal matter and other elements necessary or beneficial for growth of chickens, with the exception of green food, grit and water. An abundance of succulent green food, such as lettuce, cabbage, kale, mangels, etc., should be supplied, for in addition to being necessary for health, it is usually cheap food. The chicks should always have access to a hopper filled with Lilly's Crystal Grit; sand or gravel will not take the place of hard, sharp grit. Plenty of pure, clean, fresh water is essential. Impure water is the cause of a large part of the disease of poultry.

Feed liberally; chicks cannot develop properly if fed only enough to exist upon. There is no danger of over-feeding if they have plenty of green food, precumus, the possibility of over-feeding must be exercised, and troubles are multiplied, but they should not be closely confined.

Young growing stock must have plenty of room, both in house and range. The house must be light, clean, and dry. Lice and mites must not be allowed to gain a foothold; they are the ultimate's worst enemy. Use plenty of whitewash and lice killer. Cull out all weak, deformed and undesirable chicks; poor stock is ruinous raising.

This ration should be continued until the pullets are ready to commence laying, when it should be changed to Scratch Food and Egg Mash.

GROWING FOOD

A Mixed Grain Food to Force Activity and Exercise

Lilly's Growing Food is a mixed scratching ration composed of the proper grains and seeds in the correct proportions to be converted into bone and flesh in the shortest possible time, and consequently with the least expense. When scattered in the litter the growing chicks will scratch for it eagerly, and that exercise, together with plenty of green food, pre-cumus, the possibility of over-feeding, as all that they will eat will be completely digested. The more they eat, the quicker and greater the profits.

Lilly's Growing Food is to be fed in conjunction with Lilly's High Protein Growing Mash, and the combination, with the addition of green food, grit and water, forms a complete ration. If the Growing Mash is not fed, meat food in some form should be supplied. To cockerels which are to be marketed for broilers, Lilly's Forcing Food should be used instead of Growing Mash, after they have been separated from the pullets.

Prices are subject to fluctuations of grain and seed markets. See enclosed supplement, or later issues. We will please to quote lowest possible quantity prices.

HIGH PROTEIN GROWING MASH

A Meal Food for Healthy Growth

Modern methods of poultry keeping demand dry mash. In addition to being labor savers and the most economical method of feeding, they make it possible to obtain correctly balanced rations and they supply a needed variety of foods. We would not advise feeding a meal food alone, but it is highly advantageous when fed in conjunction with a grain scratching food.

Lilly's High Protein Growing Mash is carefully prepared from ground grains and seeds with the correct ratio of protein and carbohydrates when fed as a companion feed with Lilly's Growing Food and the addition of green food, grit and water to form a complete ration, and to produce a rapid and sturdy growth without forcing. It should be kept where the chicks will have access to it at all times. It is usually fed dry, in a hopper, but may be moistened if preferred. This ration should be continued until the pullets are ready to begin laying.

For prices, see enclosed supplement, or write for later issues.

No one food can produce various results economically. We make a food for every purpose.
GRAIN FOOD FOR POULTRY

A Grain Scratching Food is Essential to Promote Activity and Health

Wheat is a good food for poultry; so also is corn, oats, rye, buckwheat, kaffir corn, sunflower, millet, etc., but none of them will give good results if fed exclusively. No one grain is correctly balanced to supply all that is required by a laying hen. Best results are obtained by feeding a variety of grains in the right proportions; and even then supplementary meat and high protein foods are necessary to form properly balanced rations.

Poultry need variety and exercise as much as humans do. A mixed grain ration supplies variety, and, by being fed in a deep litter, furnishes exercise. A busy hen is a happy hen, and no music is sweeter to the ear of a poultryman than the song of a hen, for it indicates profits. The only practical way to make a hen active is to make her scratch for her living. Lilly's Scratch Food, as its name implies, is made for that purpose. When it is scattered in a litter the hens will scratch for it industriously until the last grain is found.

The litter should consist of straw, hay, chaff, or other suitable material, and should be deep enough to make the hens considerable work. It should be in a clean, dry place, and should be changed often enough to keep it clean. Scratch food is usually fed once each day, late in the afternoon, early enough for the hens to find all of it before dark. They should have all that they will eat, but there should be none left.

Scratch Food alone is not a complete ration. It is intended to be fed in conjunction with High Protein Egg Mash or Common Sense Egg Food. It is also necessary to supply green food, grit, shell and water. This combination forms a complete ration.

Lilly's Scratch Food
The Standard Grain Ration for Poultry

Lilly's Scratch Food is the original scratch food which others have endeavored to copy. We have been making it a dozen years, during which time it has gained a reputation which we cannot afford to lose. Some scratch foods are made of inferior grains, screenings, and mill waste, without regard to food value or forming a balanced ration. Lilly's Scratch Food is made of good grains in correct proportions; not such grains as we happen to have in stock and cannot use for other purposes, or grains that happen to be cheapest, but good sound grains best suited for the purpose.

It contains no grit, shell, or other cheap material which can be purchased and fed separately more economically; neither does it contain any waste material. It is all food, and good food.

For prices, see enclosed price list supplement, or later issues which will be mailed on request.

Lilly's Cackle Food
A Grain Scratch Food to Reduce the High Cost of Living

This is a scratch food made to meet the demands of some poultrymen for a cheaper food. The price of grains and seeds has been extremely high, and, as we refuse to cheapen Lilly's Scratch Food by changing the formula, we are making a grain food which can be varied with conditions. The ingredients are not always the same, but it is always composed of grains which are suitable for poultry food, and those grains are always sound and sweet.

For prices, see enclosed supplement, or write for later supplement.

Lilly's Poultry Foods are for sale by dealers, or may be ordered direct from us.
EGG PRODUCING FOODS

Profitable Egg Production Depends Upon Correct Feeding

Breeding and selection have done much to increase egg production, but feeding does more. No hen, regardless of how well bred, of what strain or what breed, ever produced a great egg yield on an insufficient or unsuitable diet. A hen is an egg factory, and to manufacture eggs she must be supplied with suitable materials in sufficient quantities.

This is our object in furnishing special foods for various purposes. A food that is excellent for one purpose may have little value for another purpose. Chick Food, Growing Food or Fattening Food would not produce eggs satisfactorily, for they do not contain the correct elements in the right proportions for that purpose. They are made for other purposes.

We make two brands of egg food; one being the old original Common Sense Egg Food which has been the staple mash food among poultrymen for many years. It is in every way excellent for general feeding, for breeding pens, and for normal egg yield.

The other is High Protein Egg Mash, which is intended for those who make a specialty of market eggs, and wish to get the maximum number of eggs which their hens are capable of producing.

Both of these mash foods are intended to be fed in conjunction with Lilly's Scratch Food. Neither of them alone is a complete ration, but either of them combined with Scratch Food, green food, grit, shell, and water forms a complete balanced ration, supplying all of the elements necessary or beneficial for producing eggs and at the same time keeping the fowls in perfect health and the best of condition. They are generally fed dry, in hoppers placed where the hens will have access to them at all times during the day.

It may be better, although more labor, to moisten the mash with water or milk. They must not be made wet enough to make them sticky; just enough to make them crumbly when pressed between the hands. Excellent results are obtained by mixing them with Alfalfa Leaves and Blossoms which have been scalded with boiling water, covered with a blanket, and allowed to steam for a few hours or over night.

Lilly's High Protein Egg Mash

For Maximum Egg Production

Lilly's High Protein Egg Mash is a meal food composed of ground grain, seeds, and meat for the purpose of producing an abundant egg yield. It is the limit in protein content, the ratio being 1 to 3.4. It contains no condiments or other harmful ingredients, but is extremely high in animal foods. It is intended strictly as an egg producer. It is intended to be fed in conjunction with Scratch Food, and the combination together with green food, grit, shell, and water forms a complete ration. No additional meal scraps or other meat food should be supplied when feeding this mash.

We cannot quote prices that will apply all the year. See enclosed supplement, or later issues.

Lilly's Poultry Foods Are Standard

Lilly's Common Sense Egg Food is another dry mash food composed of ground grains and animal matter in correct proportions to supply the material to make muscle, feathers and eggs. It is not a forcing food, but will produce a normal egg yield, and is ideal for breeding stock, producing eggs from which strong, vigorous chicks may be hatched. It contains sufficient meat food, and when combined with Scratch Food, grit, shell, green food and water forms a complete ration. It is packed in 100-lb. sacks only.

On account of fluctuations in prices of grains, we cannot publish prices which will apply all the year. See enclosed supplement.

If your dealer does not have Lilly's Poultry Foods, order direct from us. See that they are branded Lilly's.
PREPARING POULTRY FOR MARKET

An Opportunity for Considerable Profit that is Neglected in the Northwest

There is a general opinion among poultrymen that it does not pay to produce fine table poultry in this part of the country; but that is only partly true. We would not advise entering into a strictly market poultry business, but every utility poultryman has young cockerels and old hens to dispose of, and they should be made to produce profits. Much is lost by marketing poultry in poor condition. Bone, muscle and feathers are the most expensive parts of a bird; when these have been produced, flesh may be added at small expense by correct feeding.

At least two weeks before the birds are to be marketed they should be confined in crates or pens where exercise will be very limited. The food to which they have been accustomed should be gradually changed to a fattening food, and the quantity increased until they are getting all that they will eat. The more that they can be induced to eat the greater will be the profit. Food that is ideal for growth of bone and muscle, or production of eggs, is not at all satisfactory as a fattening diet. The fattening food should consist of a mixture of grains of a carbo-

aceous nature, mixed, and ground to a fine meal. This meal should be made into a soft mash; mixed with butter-milk or water. The birds must have plenty of fresh air, and the houses must be free from lice. Within two or three weeks the birds should gain about twenty-five per cent in weight, and on account of better quality will bring a better price per pound.

If the birds are to be marketed alive, they should be shipped in clean, attractive crates with straw or chaff in the bottom, and gotten to market as quickly as possible. If they are to be shipped dressed, they should not be fed for one day before killing, but should have water.

The best method of killing is by sticking in the roof of the mouth. All poultry should be dry picked, as they make a better appearance and bring better prices. If they are for cold storage, they should not be drawn, and there should not be a break or cut in skin or body. For further information on this subject we recommend the book "Profitable Poultry Keeping," listed in this catalog.

LILLY'S FATTENING FOOD

Converts into Meat Quickly and Profitably

Lilly's Fattening Food is a mash food consisting of the correct materials in the right proportions to produce the greatest amount of flesh in the shortest possible time, and at the same time keep the birds in perfect health. It is to be fed in the form of a soft mash, mixed with butter-milk if available, otherwise water will do. No Scratch Food is necessary during the fattening period. Green food, grit, and water must be supplied. Lilly's Fattening Food is intended for the sole and only purpose of fattening poultry, and would be entirely unsuitable for growing chicks or for egg production. It is packed in 100-lb. sacks only. For sale by dealers, or may be ordered direct from us. Be sure that it is branded "Lilly's"

On account of fluctuations in prices of grains, etc., we cannot quote close prices which will be good all the year. See enclosed Price List Supplement, or write for later issue.

LILLY'S HOLLY PIGEON FOOD

A Balanced Grain and Seed Ration for Pigeons

Lilly's Holly Pigeon Food is a carefully prepared balanced food for pigeons, and is composed of the various grains and seeds that pigeons thrive upon. We are careful to use none but good sound grains which are well aged, for new grain is very liable to cause trouble.

This food contains no grit, shell, charcoal, or salt, and those materials, together with water and occasionally a little finely chopped green food, should be provided separately in suitable receptacles which will insure cleanliness. This combination forms a complete ration for pigeons, and no other additions are necessary.

For prices see enclosed supplement, or write for later issue.

No one food is suitable for all purposes. We manufacture a food for each purpose.
MEAT SCRAPs
The Highest Grade That Can Be Procured

Under natural conditions, with free range, poultry will find bugs and worms, but when confined they must be provided with animal matter in some form. The most convenient and usually the cheapest form is a good grade of meat scraps. Lilly's Meat Scraps is the best grade of commercial meat scraps that it is possible to procure. It is prepared for us by a packing house that we have done business with for many years, and in which we have full confidence. Every shipment is carefully inspected before being packed in sacks branded “Lilly’s.”

It is the highest in protein, minimum fifty-five per cent; lowest in fat, one-half of one per cent. Raw beef contains only twenty-one per cent protein. It is made of fresh, clean meat trimmings, is thoroughly cooked, and the grease and water are extricated under tremendous pressure. It will keep indefinitely if stored in a dry place. This is important, for tainted meat is extremely dangerous. There are cheaper brands on the market, but care should be exercised in purchasing meat scraps, for there is a vast difference in their value. Some are composed largely of waste materials, some have little food value, and some are positively harmful and unfit to be fed to poultry. We have handled hundreds of carloads of this brand, and know that it is good.

Price (subject to change): 10 lbs., 50c; 25 lbs., $1.20; 100 lbs., $4.00; F. O. B. Seattle or Portland.

Darling’s High Protein Meat Scraps
An Old and Reliable Brand

Darling & Co. was the first to manufacture a high grade of meat scraps for poultry, and among the few who have maintained their high standard of excellence regardless of the scarcity and high price of meat. We have handled thousands of carloads of this brand over the years, and have found them uniformly good. Many of our old customers will have no other. Guaranteed analysis, 55% protein. Packed in 100-lb. sacks only.

Price (subject to change): $4.00 per 100 lbs.

BLOOD MEAL
79 Per Cent Protein; 3 Per Cent Fat

Blood Meal is richer in protein content than any of the other foods used for poultry, and, being so extremely high, it is necessary to use great care in feeding it. It should not be fed oftener than three times per week, and the quantity for mature fowls should not exceed four per cent of the total feed; for chicks it should not exceed two per cent. It is used mostly for mixing with mash foods to balance the ration, and is admirably adapted for that purpose. It is pure slaughter-house blood, dried and ground.

Price (subject to change): 10 lbs., 50c; 100 lbs., $3.75; F. O. B. Seattle or Portland.

FISH MEAT MEAL
High in Protein and Low in Cost

Fish Meat Meal is an excellent and economical meat food for poultry. The early prejudices have been overcome by a process which removes from the fish all the ingredients which were objectionable. It is used by many of the most prominent poultrymen and is endorsed by the experiment stations. Lilly’s Fish Meat Meal is a clean, wholesome product, very high in protein, considerably higher than most meat scrap, the protein is in available form, and the price is very reasonable.

Price (subject to change): 10 lbs., 40c; 100 lbs., $3.25; F. O. B. Seattle or Portland.

ALFALFA LEAVES AND BLOSSOMS
An Economical Food for Poultry and Stock

Alfalfa is a splendid food for poultry, as well as stock. It is very high in food values and the protein content is greater than in some grains. As the cost is low, it is one of the most economical of egg producers. It cannot be used as the basis of a poultry ration, but is valuable as an adjunct.

Lilly’s Alfalfa Leaves and Blossoms is made from the leaves and blossoms only, and as they contain more protein than the stems, the food value is greater. As it contains no stems, there is no coarse indigestible fiber. There is no waste; it is all food. It is equally good for stock.

It is usually mixed with mash food, either dry or molassed. Best results are obtained by soaking it with a small quantity of boiling water, covering it with a blanket, allowing it to steam for several hours, and then mixing it with mash food.

Price (subject to change): 10 lbs., 25c; 25 lbs., 55c; 50 lbs., $1.00; 100 lbs., $2.00; F. O. B. Seattle or Portland.

POULTRY OATS
Oats, sprouted or otherwise, are excellent food for poultry, but ordinary feed oats are usually unfit for this purpose, being light, containing too much coarse hull and fiber, and having poor germinating qualities. This is a special grade; short, plump, heavy and without beards.

Price (subject to change): $2.25 per 100 lbs.

We make a specialty of poultry foods. Our goods are standard and can be depended upon.
**Lilly's Granulated Bone**

An Egg, Bone, Muscle and Feather Producing Food

Bone is a great egg producer; it also makes bone, muscle, feathers, horn, hoof, and hooves a desirable food for poultry. Fresh green bone is best, provided that it is perfectly fresh and there is no tainted meat clinging to it, but few poultrymen can procure a sufficient quantity of green bone advantageously, and it is a task to cut it even when a bone cutter is available. Green bone cannot be kept longer than a few days, and for that reason cannot be handled commercially.

Lilly's Granulated Bone comes as near being green bone as can be kept without becoming moldy. It is made from fresh, clean, slaughter-house bones, steam cured, ground and screened to the correct size. The moisture is extracted, leaving the phosphates, lime, protein and fats. It will keep indefinitely if stored in a dry place. It may be fed either in a hopper or mixed with other foods. It is usually fed at the rate of ten to fifteen per cent of the total feed, and may be fed every day.

It is made in two sizes: Fine Granulated Bone for young stock and for mixing with mash foods; and Coarse Granulated Bone for feeding in hoppers or mixing with grain foods for mature fowls. If the order does not specify size we ship Coarse Granulated Bone.

**Price:** 10 lbs., 40c; 25 lbs., 75c; 100 lbs., $2.75; F. O. B. Seattle or Portland. Subject to change.

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**Lilly's No. 2 Granulated Bone**

This is a second grade granulated bone, made from the discolored bones which if mixed with the first grade would render it less attractive. It is made in the same manner and is used for the same purposes. It is made in two sizes, the same as the first grade, but is packed in 100-lb. sacks only.

**Price:** $2.25 per 100 lbs.

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**Lilly's Granulated Oyster Shell**

Made From Best Eastern Oyster Shell

Lime is essential for hens to form egg shells, and must be supplied in some form. The best and only really satisfactory form of lime for this purpose is found in oyster and clam shells, both of which have a composition very similar to egg shells, making them superior to any other material.

Lilly's Granulated Oyster Shell is made from the best eastern oyster shell, which is thicker and harder than the western oyster and clam shell, and by many poultrymen is considered better. We furnish it in two sizes: Coarse Granulated Shell for feeding in hoppers and mixing with grain foods, and Fine Granulated Shell for mixing with mash foods and for pigeons. If the order does not specify size, we ship Coarse Granulated Oyster Shell.

Shell does not in any way take the place of grit; neither is there any kind of grit that is suitable for both shell and grit.

**Price:** 10 lbs., 20c; 25 lbs., 35c; 100 lbs., $1.10; F. O. B. Seattle or Portland. Subject to change.

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**Lilly's Star Poultry Shell**

This is made from western oyster and clam shells which, although excellent for the purpose, make a less attractive appearance than the eastern oyster shell. It is good, clean shell, carefully prepared and crushed to the proper size for poultry. Packed in 100-lb. sacks only.

**Price:** 85c per 100 lbs.

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**Lilly's Crystal Grit**

An Essential Adjunct of the Poultry Ration

Grit is as essential as food for poultry; it takes the place of teeth for masticating food. The value of poultry grit is variable; some of it is soft and worthless. Gravel and sand are of little use as grit, as they are not sharp and hard enough.

Lilly's Crystal Grit is as hard as flint, clean and of uniform size, and is the best possible material for the purpose. It is pure granite rock, ground and screened to the proper size, and being inlaid with mica, edges remain sharp as long as a particle remains in the gizzard.

Grit should be kept before the birds at all times, and is best served in the grit and shell boxes listed elsewhere in this catalog. It is made in three sizes: No. 1 for chicks and young ducks; No. 2 for growing chicks, small hens and ducks; No. 3 for large hens, turkeys, and geese. When size is not specified we ship No. 3.

**Price:** 10 lbs., 15c; 100 lbs., 75c; F. O. B. Seattle or Portland.

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**Lilly's Poultry Foods** are for sale by dealers or may be ordered direct from us.
A Regulator and Stimulant; Not an Egg Forcier

We do not advise the indiscriminate and constant use of any form of tonic. There are times, however, when the flock may be benefited to a wonderful extent by the correct use of a properly prepared tonic. During cold, wet weather, or after moulting, the birds are very often in need of a stimulant.

Lilly's Poultry Tonic is intended for use at such times. It stimulates the appetite and aids digestion, enabling the hen to get the full benefit of her food and convert it into eggs. By regulating the blood, liver and digestive organs, it imparts warmth to the body and healthy activity to all of the organs. By keeping the system in a vigorous, healthy condition, it wards off disease.

It is best fed mixed with the mash food at the rate of two heaping tablespoonfuls to every twelve hens or thirty to forty chicks. In cold, damp weather the amount may be doubled. There is nothing about this tonic harmful, except that it is too stimulating to form a regular part of the diet. We recommend it only when the birds are in need of a stimulant.

Price: Small Package (about 1 1/4 lbs.), 25c; Large Package (about 3 3/4 lbs.), 50c. Postage additional.

Poultry Pepper

It Stimulates the Ovaries

Poultry Pepper is very stimulating, and should be used with discretion, but may often be used to advantage and results obtained that could not be had from any other source. In cold, wet weather it gives tone to the system, puts vim and snap into the birds, and is a great help to egg production.

Lilly's Poultry Pepper is pure cayenne pepper finely ground. It is best fed with the mash food at the rate of one tablespoonful to each ten hens.

Price: Carton (about 3/4 lb.), 25c.

Poultry Mustard

An Aid to Digestion

Mustard is a valuable condiment for poultry and stock. It is a great aid to digestion, is very heating and a splendid stimulant in bad weather. Lilly's Poultry Mustard is milled from a high grade of mustard seed, and is pure and fresh. A teaspoonful to each six to ten birds over two months old, mixed with mash food, will often be very beneficial. It should not be fed to chicks less than two or three months old.

Price: Carton (about 3/4 lb.), 25c.

Granulated Charcoal

For Poultry, Hogs and Other Stock

Lilly's Granulated Charcoal is made from eastern willow specially prepared for poultry and stock. It is screened to two sizes: Coarse Granulated Charcoal for hens, hogs, etc., and Fine Granulated Charcoal for chicks and other young poultry, and for mixing with mash foods if desired.

Charcoal is valuable as a regulator, purifier, aid to digestion, and a preventive of bowel trouble and sour crop, for both young and old poultry. It is equally valuable for hogs and other stock.

All poultry should be supplied with fresh, dry charcoal at all times; preferably in a hopper where they may have access to it at any time. It is important that the charcoal be perfectly dry and clean.

Price: Carton (about 3 lbs.), 25c; 50 lbs., $1.25; 100 lbs., $2.50.

Prices are F. O. B. Seattle or Portland. If goods are to be shipped by parcel post, or to a station at which there is no agent, a sufficient amount must be remitted to pay transportation charges.

Holly Pigeon Food

A Balanced Grain and Seed Ration for Pigeons

This is a combination of the best reclassed seeds of the correct varieties and in the proper proportions to insure health, and thus perfect song, of canaries and other cage birds. The proportions are of the utmost importance. Many bird seed mixtures are not correctly balanced, and for that reason are entirely unsatisfactory. A package of Bird Gravel and a piece of Cuttle Bone are included in each package.

Price: Package (about 1 lb.), 10c. Postage additional.
**LILLY'S LICE AND MITE LIQUID**

**EFFICIENCY GUARANTEED**

**Disposes of the Poultrman's Greatest Enemy**

Are your poultry houses infested with mites? If not you are more fortunate than most poultrmen. But, are you sure? Are your hens laying well? Are they healthy and full of life? Are their eyes bright, combs red, and feathers glossy? We receive many inquiries for drugs to dope poultry for some disease such as cholera when investigation proves that there is nothing the matter with the birds except mites or lice. Some take it for granted that because they see no mites, there are none; others consider them a necessary evil, and believe that they must make the best of an unfortunate condition. Many of the failures in the poultry business are due directly to mites and lice, and I now wish poultry-farmer to understand that these pests are more prevalent and require closer watching than any disease, and by debilitating the birds, are the cause of most disease.

Mites, the greatest drain on the poultrman's profits, are not necessary, and should not be tolerated. Lilly's Lice and Mite Liquid is guaranteed to destroy them if used according to directions. It is ready for use and does not require diluting. It is best applied with a small spray pump, and should be sprayed on roosts, dropping boards, nests, and all places where mites can hide, giving special attention to cracks and corners. It must not be applied directly on the birds. It should be applied at frequent intervals, to kill the young as fast as they hatch. It should be used as a preventive: don't wait until the insects get a start.

Quart, 35c; Half-gallon, 60c; Gallon, $1.00; Five Gallons, $3.50.

**LILLY'S LICE POWDER**

**Effectual Where Liquid Cannot be Applied**

We recommend the use of Lilly's Lice and Mite Liquid wherever it is practical, but in some cases, such as for setting hens, young chicks, exhibition birds, etc., the liquid cannot be used, and Lilly's Lice Powder is the best substitute. Before a hen is set, she should be held up by the legs and dusted thoroughly. The nest should also be dusted. This will avoid three weeks' torture for the hen, she will not desert her nest, and the chicks will not inherit lice. Brooders and houses where chicks are kept should be dusted frequently. It is also valuable for exterminating insects on dogs, cats, and other animals, also on plants.

Price: Carton (about 1 lb.), 25c.

**LILLY'S LICE OINTMENT**

**Effectually Destroys Head Lice on Little Chicks**

Young chicks are very subject to head lice. These parasites attach themselves to the young and tender birds at the base of the skull, and are responsible for much mortality among chicks. Lice Powder is useless to dislodge them, for they sink their heads deep into the birds.

Price, 25c. Postage additional.

**LILLY'S Roup Remedy**

Roup is the most common and most easily contracted of all diseases among poultry. It is a germ disease and the source is usually a cold. If colds are attended to promptly they can be easily cured, but if neglected they are liable to develop into roup. The symptoms of roup are froth and mucus in the corners of the eyes, sneezing, and a watery discharge from the eyes and nose. When the head swells, eyes bulge out, cheesy masses form in the throat, mouth and beneath the eyelids, and there is a bad odor, the disease is known as phthisic roup. It is highly contagious. Lilly's Roup Remedy prevents and cures Roup, Blackhead, White Comb, Canker, Sore Head, and other bacteria diseases.

Price, 25c. Postage additional.

**LILLY'S CHOLERA REMEDY**

Fortunately, cholera is not prevalent in this section. There is, however, a form of diarrhoea that resembles cholera, and is often fatal. Lilly's Cholera Remedy should be used in all cases of diarrhoea. It is valuable for indigestion, constipation, and all bowel troubles in adult fowls. It should not be used for young chicks.

Price, 25c. Postage additional.

With sanitary conditions and Lily's Poultry Foods drugs are seldom necessary.
PACIFIC COAST IDEAL INCUBATORS
Constructcd Especially for Pacific Coast Conditions

Our experience during the several years that we have handled the Pacific Coast Ideal Incubators has proved conclusively that it is the best incubator on the market, especially for Pacific Coast conditions. We have handled many of the best makes, most of them much higher in price, but none of them have given such universal satisfaction as the Pacific Coast Ideal. Considering the great number that are in use, and the inexperience of many of the users, the percentage of complaints has been extremely small. Its simplicity in operation has made it a great favorite among those who have had little or no experience, as well as poultrymen in general.

It is constructed especially for Pacific Coast conditions, after a careful study of all the factors that make this section different in regard to incubation.

The Pacific Coast Ideal Incubator is hot water-heatl) by a copper heating system that cannot get out of order. It requires little attention other than filling the lamp once each day and turning the eggs. Each machine is supplied with full directions for operation, thermometer, egg tester, and is in every way complete.

If you are interested in incubators, we will mail you the Ideal catalog, explaining details of construction and principles of heating and ventilating of these machines.

No. 3 Pacific Coast IDEAL Hot Water Incubator

This size is suitable for the larger breeders and is also popular with beginners as it allows for expansion; it will hatch a small number of eggs equally as well as full capacity, and the expense of running is little more than for the smaller machines.

Construction and material is the same in all sizes, and is of the best. The walls are over two inches thick, thoroughly insulated, and consist of three separate and distinct walls with air space between, 1 inch thick, with two thicknesses of glass with dead air space between. It is hot-water heated. The heater is a tubular copper tank extending around the entire egg chamber, and so constructed that the circulation of water is perfect,insuring an even temperature in all parts of the egg chamber. The regulator and thermometer are of the best.

Capacity, 240 hen eggs; or duck, goose, or turkey eggs in proportion to size. Floor space, 30\(\times\)42 inches. Height, 32\(\frac{1}{4}\) inches. Shipping weight 135 lbs.

Price, $18.00, F. O. B. Seattle, Portland, San Francisco, or Los Angeles.

No. 2 Pacific Coast IDEAL Hot Water Incubator

This medium size machine is popular with all classes of poultrymen. It is small enough for the beginner, and many of the more extensive poultrymen prefer several small machines rather than one large machine. The construction and material is the same as in the larger machine.

All sizes of the Pacific Coast Ideal Incubators have proved most satisfactory for the hatching of duck, goose, and turkey eggs. The hot water system is best for all incubation, and is especially desirable for duck, goose, and turkey eggs.

Capacity, 120 hen eggs; or duck, goose or turkey eggs in proportion to size. Floor space, 24\(\frac{1}{4}\)\(\times\)30 inches. Height, 32\(\frac{1}{4}\) inches. Shipping weight, 90 lbs.

Price, $12.50, F. O. B. Seattle, Portland, San Francisco, or Los Angeles.

No. 1 Pacific Coast IDEAL Hot Water Incubator

This size is used mostly by the small breeders, but is used by some of the larger poultrymen to set at the same time with larger incubators, transferring the eggs to the larger machines when they hatch. The eggs are never cycled out. It differs from the others only in size, and is perfectly reliable in every way. This low-priced high-grade incubator makes it possible for those who have only a small flock, or who otherwise depend upon hens for hatching, to secure chicks earlier than would be possible with hens. The early hatched chicks are the most profitable.

Capacity, 60 hen eggs; or duck, goose, or turkey eggs in proportion to size. Floor space, 20\(\times\)24 inches. Height, 30\(\frac{3}{4}\) inches. Shipping weight, 65 lbs.

Price, $9.00, F. O. B. Seattle, Portland, San Francisco, or Los Angeles.

The Ideal Catalog explains how the Ideal differs from other incubators; why the heating and ventilating system is superior; why it is so simple and easily operated; why it hatches a larger percentage of chicks; why the chicks are as strong and sturdy as hen-hatched chicks; and how these high-grade incubators can be sold at such low prices. We will mail it to you if you wish it.
MODEL COAL BURNING HOVER

A Simple, Portable Brooder House Stove
More Economical Than Oil

The equipment for brooding large flocks of chicks has been in a state of evolution for the past decade. Each year has brought decided improvements in large capacity stoves. There has, however, been a number of objections in the majority of cases; among them high prices of the stoves, and especially, high cost of operation. In the case of the distillate burning stoves there is an objection on account of inconvenience of operation and in getting fuel.

We believe that the Model Coal Burning Hover is as near perfection in brooding equipment as it is possible to have. The original cost is very reasonable, and the cost of operation is only 2c to 5c per day. It may be used for as few as fifty chicks, or up to fifteen hundred if desired. It is a protected stove for all classes of poultrymen.

INTERNATIONAL SANITARY HOVER

The Most Practical and Satisfactory Brooder

The International Sanitary Hover is the pioneer in all-metal circular brooders, and has practically had the field to itself for five or six years. Recently, however, there has been a flood of cheap imitations, some fair, mostly poor. The International is the only hover that has the lamp contained in the interior, which makes it a complete hover that may be moved from place to place without any carpentry or other construction work. It burns ordinary kerosene oil, is easy to operate, and the flame can be seen without removing the lamp from the hover.

This hover is made entirely of metal, except the curtains, eliminating danger of fire. It is entirely circular and has no corners for chicks to crowd into. The lamp holder can be lifted out through the top by a person standing up, making it unnecessary for the operator to get down on his knees to tend the lamp. No carpenter work is required in connection with it; no cutting of holes or building of platforms. It can be moved from place to place without so much as drawing a nail or disconnecting a pipe. Being made of metal, it is vermin-proof as well as fire-proof.

It will care for one hundred to one hundred and fifty chicks, and has nearly two hundred square inches more hovering space than any similar hover. Gases and fumes from the lamp cannot possibly get into the hovering space. It is not a center-heat hover; it is warmest near the curtain. This causes the chicks to distribute themselves around the edge of the curtain, where they have plenty of room and fresh air as well as warmth. Price, $8.50.

Lilly's POULTRY FOODS are strictly reliable and can be depended upon to produce best results.
CERTIFIED INCUBATOR THERMOMETER

This is the most accurate Incubator thermometer made. After it has been thoroughly tested the scale is engraved on the glass tube and a certificate showing the number and test of that particular thermometer accompanies each thermometer as a guarantee of accuracy. It may be used in any incubator, and may be suspended on a wire or laid directly on the eggs.

No. 1207. $1.00 each; $10.00 doz.; postpaid.

Standard Incubator Thermometer

The Standard Incubator thermometer is most generally used, is thoroughly tested and entirely dependable. It is made by the Chas. Wilder Co., which is a guarantee of accuracy. This thermometer may be used in any style of incubator, and may be suspended on a wire, reclined on a base which accompanies some incubators, or laid on the eggs.

No. 1064. 75c each; $7.50 per doz.; postpaid.

Standard Brooder Thermometer

This is the most generally used type of brooder thermometer. It has a metal scale on a wooden base which fits round hole in top of hover. The bulb is protected by a metal shield. Thoroughly reliable.

No. 1316. $1.50 each; $15.00 doz.; postpaid. Extra Wicks, 10c each; $1.00 doz.; postpaid.

Never-Smoke Brooder Lamp

The Never-Smoke Lamp is made especially for brooders not having a sleeve for chimney to fit into, or other places where it is not practical to use a chimney. The Never-Smoke Burner does not require a chimney. The construction is such that it gives a large amount of heat with a minimum consumption of oil. There is a reservoir on top of the fount to be filled with water. Diameter of font is six inches, height including burner is eight inches. Size No. 2 only.

No. 1011. Never-Smoke Lamp complete. $1.10 each; $11.00 doz.; postpaid
No. 1315. Never-Smoke Fount complete. .60 each; 6.00 doz.; postpaid
No. 1325. Never-Smoke Fount. .50 each; 5.00 doz.; postpaid

Incubator and Brooder Lamps

No. 1300. No. 1 Incubator and Brooder Lamp complete. Diameter of fount 6 in.; depth of fount 2½ in.; height including chimney 9 in. $0.75 each; $7.50 doz.; postpaid
No. 1301. No. 2 Incubator and Brooder Lamp complete. Diameter of fount 7 in.; depth of fount 2½ in.; height including chimney 10 in. $0.90 each; $9.00 doz.; postpaid
No. 1302. No. 3 Incubator and Brooder Lamp complete. Diameter of fount 8½ in.; depth of fount 2½ in.; height including chimney 12 in. $1.10 each; $11.00 doz.; postpaid

Barbee Wire Nests

Wire nests are sanitary, there being no place for mites. They may be hung on the wall, and are easily taken down for cleaning. Weight 5 lbs. per dozen.

No. 107. 10c each; $1.00 dozen. Postage additional.

Egg Tester

Simple, convenient, practical and cheap. It may be used on any lamp with a No. 2 burner, or over an electric light or candle. No. 1007. 30c each, postpaid.

China Nest Eggs

No. 1019. Weight 3 lbs. per dozen. Two for 25; 25c per dozen. $2.50 per gross. Postage additional.

Northwestern Egg Boxes

The Northwestern is the strongest and best market egg box, and is not to be confused with the cheap, flimsy carton commonly used. It is for delivering eggs to market and to local customers in a convenient and attractive manner, and is not for shipping by parcel post or express. It is made of one piece of cardboard, with fillers, and folds flat when not in use. Weight, dozen, 1½ lbs.; 100, 18¼ lbs.

No. 1016. Dozen, 15c; 100, $1.00; 500, $3.50; 1,000, $6.50.
LILLY'S DRY MASH HOPPER

This hopper is for use with the dry mash system of feeding, and is to be filled with any dry food and hung or stood where the fowls will have access to it at all times. It holds about thirty pounds of dry mash food, only a small portion of which is exposed, the balance becoming accessible as required. It is made of heavy galvanized iron, with an inclined back which forces the food forward and prevents clogging: also a bib, or apron, which prevents any waste. This system of feeding is a great convenience and a saver of time and labor. This hopper will pay for itself in a very short time by eliminating waste. Weight, 5½ lbs.

No. 1006. Dry Mash Hopper, $1.00 each; $10.00 per dozen.

LILLY'S WALL FOUNTS

Cleanliness is a very important matter in the poultry business, and clean, cool water is essential. It is difficult for dirt to enter this, the most popular style of water fount. The back is flattened so that it will hang flat against the wall, or it may be stood on the ground.

It is easily cleaned by placing gravel and water in it and shaking it. Made of heavy galvanized iron. The small sizes are for chicks and pigeons.

No. 1210. One Quart. Weight, ½ lb. 30c ea.; 3.00 doz.
No. 1212. Two Quart. Weight, 1 lb. 40c ea.; 4.00 doz.
No. 1240. Three Quart. Weight, 1½ lbs. 50c ea.; 5.00 doz.
No. 1041. Eight Quart. Weight, 2½ lbs. 60c ea.; 6.00 doz.

LILLY'S GRIT AND SHELL HOPPERS

These hoppers are indispensable for feeding grit, shell, bone, meal scrap, charcoal, etc. They are well made of heavy galvanized iron, and with ordinary use will last for years. They have three compartments and holds about fifteen pounds. The larger size has two compartments and holds about eight pounds.

No. 1009. Large, Two Compartments. Weight, 3½ lbs.; 80c ea.; $8.00 doz.
No. 1042. Small, Three Compartments. Weight, 3½ lbs.; 60c ea.; $6.00 doz.

LILLY'S COMBINATION CHICK SERVER

Of all the various styles of chick servers, this is the only one that we know of that will serve both food and water satisfactorily. The reservoir is set in the lower notch for water. When set in the upper notch it will serve any kind of dry food from fine meal to whole grain. This server is complete. No glass jar to be supplied additional. Weight, ½ lb.; 12 doz. lbs.

No. 1006. Chick Server, 20c ea.; $2.00 per doz.

Prices shown in this catalog do not include transportation charges except when so specified. If goods are to be shipped by parcel post, or to a station at which there is no agent, a sufficient amount must be remitted to prepay charges.

HUMPHREY GREEN BONE CUTTER

The Humphrey Green Bone Cutters are standard, and are so well and favorably known that little introduction is necessary. It is sufficient to say that the Humphrey is the peer of any bone cutter manufactured. The manufacturer's guarantee, backed by us, is so broad that the customer is fully protected. To get these machines at minimum cost, we purchased an immense stock which we are offering at greatly reduced prices. If you wish it, we will mail you the Humphrey Catalog, describing these bone cutters.

No. 1 Humphrey Green Bone Cutter. Hand power. Hopper 4½x5 inches. Four knives. Shipping weight, 120 lbs....$12.00

Humphrey Dry Bone and Shell Mill

A useful machine to have around the house or ranch for cracking small quantities of grain or grinding bone, shell, charcoal, etc., for poultry food. The grinding parts are made of hard white iron, and will last for years. Shipping weight, 32 lbs.

Price. $4.00.

LILLY'S LICE LIQUID is guaranteed to keep poultry houses free from lice and mites if used according to directions.
DOUBLE CLINCH LEG BANDS

One of the most popular leg bands on the market. Made of aluminum. Has an exceptionally strong fastening, consisting of two clinches which close down over the end of the band. Numbered 1 to 500. Made in eight sizes, including two sizes for pigeons. Be sure to state size wanted.

No. 1206. Double Clinch Leg Bands, No. 1 Pigeon, No. 2 Pigeon, No. 1, 2, 3, 4, 5, or 6; package of 25, 30c; package of 100, 75c; postpaid.

Smith Sealed Leg Bands

The most secure leg band made. It is fastened with a soft rivet, and cannot be removed without being destroyed. No two bands bear the same number. Be sure to state size wanted when ordering. Not made in pigeon sizes. To apply these bands the No. 1021 Sealing Plier is required.

No. 1020. Smith Sealed Leg Bands, No. 1, 2, 3, 4, 5, or 6; 25, 35c; 100, $1.25.
No. 1021. Sealing Plier for sealing Smith Sealed Leg Bands, 50c; postpaid.

Leader Adjustable Leg Bands

These may be adjusted to any size required, are made of aluminum, and are fastened very securely. To apply, the end is cut off to the correct length and they are then adjusted as shown in accompanying cut. Made in two sizes; No. 1 for small hens; No. 2 for males, large hens, ducks, geese, and turkeys. Be sure to state size required when ordering.

No. 1205. Leader Adjustable Leg Bands, No. 1 or No. 2, 25, 30c; 100, 75c.

Climax Leg Bands

The original spring wire and clasp leg band. The spring-brass rings are so bent that the tag acts as a clasp. Especially useful for hens with feathered legs. Sizes No. 2, 3, and 4, only.

No. 1024. Climax Leg Bands, No. 2, 3, or 4, 25, 25c; 100, 60c; postpaid.

Open Chick Bands

Used as temporary bands on little chicks until they are large enough to be properly banded. Made of aluminum. Sizes, No. 1 for small chicks, No. 2 for large chicks.

No. 1096. Open Chick Leg Bands, No. 1 or No. 2, 25, 25c; 100, 60c.

Seamless Pigeon Bands

A solid aluminum band to be applied on squabs by inserting the foot through the ring. Cannot be applied on adult pigeons. One size only.

No. 1091. Seamless Pigeon Bands, 25, 30c; 100, 75c.

Pettey’s Poultry Punch

For marking little chicks by punching holes in various arrangements between the toes. It is light, strong, cuts clean, and fits between the chick’s toes without bruising.

No. 1022. Pettey’s Poultry Punch, 25c, postpaid.

Pilling Special Caponizing Set

Caponizing is being more extensively practiced by Northwestern poultrymen each year, and a good market for capons is being developed in this section.

This improved set of instruments is made for the operator who caponizes large numbers of birds. The set includes Cutting Knife, Spreader, Forceps, Film Hook, Pliers, Probe, and Cords with Hooks. The instruments are splendidly finished. Complete instructions are included.

No. 1025. Special Caponizing Set, $4.00, postpaid.

Goods listed on this page will be shipped by parcel post, postpaid, at prices shown.
**Lilly’s BUT-ER-FAT FEED**

A Reliable Dairy Food Producing the Maximum of Milk at Minimum Cost

It is just two years since But-er-fat was introduced to the dairy industry of the Northwest, and the results of these two years have verified our contention that a good, honest, milk producing mill feed would find a ready demand among dairymen. It has taken considerable effort to break down the prejudice existing against mill feed, brought about by inferior and poorly constituted so-called dairy foods, but the popularity of But-er-fat proves that this prejudice has been overcome.

But-er-fat is manufactured from straight mill products, and is built up to a constituted food value; that is to say, that although we may have cause to vary the contents, the ratio of protein, carbohydrates and fats remains the same, and it is uniformly a high-grade food and will produce best possible results. This enables us to use products available from time to time, and thereby furnish a strictly reliable and efficient dairy food at minimum cost.

Price, subject to change, $1.35 per 90 lb. sack. Write for prices on ton lots.

**Lilly’s ALFALFA MEAL**

Lilly’s Alfalfa Meal is prepared especially for us from best grade alfalfa, klin dried and ground to a coarse meal. It is very high in protein, about the same as bran, and is a splendid adjunct to the grain food. It may be fed either dry or moistened with water, alone or mixed with other food. Splendid results are obtained by scalding it with boiling water, covering it with a blanket and allowing it to steam for several hours, then mixing it with But-er-fat or other meal food.

Price, subject to change, $1.40 per 100 lbs. Write for prices on large quantities, or see latest supplement.

**Lilly’s GROUND BARLEY**

Dairymen know the value of ground barley in the ration. It is high in milk producing elements, and is especially valuable where corn is not available, for it is an excellent substitute. Lilly’s Ground Barley is good, sound barley ground to meal. It should be fed to cows in conjunction with shorts, bran, or other mill products. There is nothing better than ground barley for fattening hogs, especially when fed with skim milk.

Prices fluctuate with cost of grain. See latest Price List Supplement, which will be mailed on request.

**HOG FEED**

From time to time we have mill products which are not of sufficient high quality to go into standard brands of foods. From these products we make hog feed. Prices vary according to food values. Hog breeders can generally get good hog feed cheap by writing to us for prices.

Prices shown in this catalog are subject to change. Supplement will be mailed on request.

**Lilly’s ALL-GRAIN CHOP**

For fifteen years Lilly’s All Grain Chop has been the standard. It is used by horsemen who have used it steadily since we first commenced to make it. Only the best oats, barley and corn goes into our chop, for we know that to keep a horse working he must be fed well. It does not pay to economize by feeding poor chop.

Write for prices, or see latest supplement.

**OIL CAKE MEAL**

Oil Cake Meal is another high concentrate food, and is a valuable adjunct to any farm ration for cattle, horses, sheep and poultry. It should be fed with discretion, for it is easy to over feed any food that is high in proteins. It makes a sleek coat and is slightly laxative. It is a valuable adjunct to the ration for all farm animals. To hogs it should be fed at the rate of four to sixteen ounces per day, according to size and age. For cattle and horses eight to sixteen ounces per day is sufficient. It should be mixed with other foods.

Price, subject to change, $2.45 per 100 lbs.
Calf Meal makes it profitable for the dairyman to raise calves instead of killing them at birth, as is too commonly done. It does not pay to raise calves on whole milk, but by feeding Calf Meal they can be raised at a cost less than one-third that of raising them on whole milk.

The dairyman, to insure success, must raise his own cows from stock which has proved its worth, rather than buy cows at exorbitant prices and take chances on their proving dear at any price.

Calves eat Lilly's Calf Meal with great relish, and thrive upon it even better than upon whole milk. If fed in a sanitary manner they will not be troubled with scour or constipation, most serious difficulties when feeding milk.

Lilly's Calf Meal is made from the best materials, correctly blended, thoroughly cooked, and the food value is practically the same as whole milk; 25% to 27% protein, 45% to 50% carbohydrates. One pound of Lilly's Calf Meal makes one gallon of milk substitute fully equal to whole milk for raising calves.

The use of Calf Meal has become very general and is increasing rapidly. We have handled many carloads of it each year, but until recently it has been imported from the east. Although the eastern product is a good food and perfectly satisfactory in every other way, high freight rates made the cost almost prohibitive, and it could not always be supplied in perfectly fresh condition.

We have experimented and tested various compounds for many years, so that we know, how to make a Calf Meal fully equal to the best.

In our new plant we have installed a complete equipment of special machinery and cookers for grinding, mixing, blending, and cooking Calf Meal thoroughly uniformly and economically. The result is that we are able to offer the dairyman a Calf Meal of the very highest quality at a greatly reduced price.

The preparing and feeding of Calf Meal is a simple matter, and properly raising calves on Calf Meal is not nearly so annoying as some may suppose.

Teaching the calf to eat is not at all difficult, especially if it has not been allowed access to the cow. Be gentle and patient; coax the calf to drink; do not try to force it.

Place three fingers in the calf's mouth, lower them into the food and gradually withdraw them when the calf is drinking freely.

This will have to be repeated only a few times.

During the first five days the calf should be fed its mother's milk only and should have about one quart four times each day, gradually increasing to two quarts at the end of the fifth day.

After the calf is five days old add about two tablespoonfuls of Lilly's Calf Meal to the milk at each feed, gradually increasing the Calf Meal and decreasing the milk so that at the time the calf is two weeks old each of the four feeds per day will consist of about one-half pint (1/2 lb.) of Calf Meal, one quart of whole milk and one quart of boiling water.

Continue to decrease the quantity of milk and increase the Calf Meal until when the calf is four weeks old each feed, which may have been reduced to three per day, will consist of about one pint of Calf Meal and three pints of boiling water, the milk having been eliminated.

This feed should be continued until the calf is three months old, or more, according to the supply of other foods and its ability to thrive upon them.

The Calf Meal should first be scalded with boiling water, stirring to keep it smooth and free from lumps, and then the required amount of boiling water added.

It should be fed at as nearly blood heat (98 degrees) as possible. If skim milk is fed instead of whole milk, increase the quantity, and be sure that it is perfectly sweet.

Fresh water and a lump of rock salt should be supplied from the start.

For sale by dealers or supplied by us direct.
25 lbs., $1.00; 50 lbs., $1.85; 100 lbs., $3.50; F. O. B. Seattle or Portland.

For further information, write for a copy of Lilly's Calf Meal Booklet.
Steam Dried Beet Pulp

Beet Pulp has become a staple food for stock and poultry. It is a great producer of milk and eggs when judiciously fed in connection with other foods. The analysis of beet pulp does not show very high when compared with some other foods, but it has a particular value in the fact that it may be quickly converted into a moist green food by simply soaking it. It has great digestive values, and feeders claim it will condition animals splendidly, especially when green food is not obtainable. For cattle it is soaked, either alone or with milk feed. For poultry it is best soaked with hot water over night and mixed with the morning feed.

Price, subject to change: $1.75 per 100 lbs.

Soy Bean Meal

Soy Bean Meal averages 40% protein, and should be a part of the food fed on every farm in this section, for nothing we can offer will show a higher food value in proportion to its cost.

The Soy Bean is an Oriental bean with great nitrogen content. In Japan and Manchuria it forms a considerable part of the food for both humans and farm animals. It comes to us in the form of large cakes, which we grind and grade into all sizes from large nubbins for sheep feeding to fine meal for mixing in mash. Sheep men should write for prices on carload lots for fall feeding. We import direct from the Orient, and are in position to quote very close prices.

Price, subject to change: $2.25 per 100 lbs.
Write for prices on large quantities.

Prices shown in this catalog are subject to change.
Fly Liquid

Comfort for Stock; Profit for the Owner

If dairymen could realize the enormous losses caused by flies, they would exert every effort to exterminate the pests. Nothing is more loathsome and filthy than the common fly; nothing is sacred to his germ-laden feet an antenae. Even the most tender-hearted will have no regrets for the destruction of the fly, for no one has been able to discover any service that it has rendered mankind. He unmercifully robs the dairymen and stockmen of great amounts of money, for cows cannot secrete milk, and beef stock cannot put on flesh while fighting flies. Horses and other stock are less efficient and its costs more to keep them in condition when annoyed by flies. They are a nuisance to the housewife, and much sickness may be traced directly to them.

Most of the fly troubles can be overcome by the use of Lilly's Fly Liquid. If sprayed on cows and other stock once or twice a day, flies will not annoy them. By spraying screens, stable floors, manure piles, garbage cans, and other places where flies congregate, they will be eliminated and breeding curtailed.

Lilly's Fly Liquid is easily applied with one of the inexpensive hand sprayers, Holly or Brandt Continuous, listed in the spray section of this catalog. In the absence of a suitable sprayer it may be rubbed on with a cloth. The liquid is ready to use, and is not to be diluted.

Lilly's Cow Conditioner

A Regulator for Cattle

A tonic and regulator which keeps the cow in perfect physical condition, reducing to the minimum the percentage of undigested food, from which the cow would receive no benefit. It is intended for cattle only, is not a cure-all and should not be given to other stock. By improving the health and vitality of the cow the milk yield is increased and such ailments as abortion, barrenness, milk fever, retained afterbirth, scours, etc., are prevented. It is equally valuable for calves, making them vigorous, strong and healthy; it will put vim in the bull, and will aid in fattening beef stock. If you are not entirely satisfied with the results we will refund your money.

Price: Small Carton (about 1 1/2 lbs.), 25c; Large Carton (about 3 1/2 lbs.), 50c; P. O. B. Seattle or Portland.

Lilly's Stock Tone

A Conditioner for Horses, Hogs and Sheep

The use of a stock tonic is not to be considered drugging. It is to take the place of herbs and medicinal properties that would be obtained in the pasture if they were allowed to graze naturally. Under the unnatural conditions in which stock is usually kept a regulator is quite essential.

Two tablespoonfuls of Lilly's Stock Tone each day will keep a horse in perfect health, acting as a preventative against disease. When the horse needs building up, a few doses will give him new life, tone up the system, carry off the waste matter, promote healthy secretion, regulate the kidneys, give him a glossy coat and bright eyes, and put vim into him. It is especially valuable for hogs and sheep, and by keeping them in good condition will prevent disease and lessen the cost of fattening.

Price: Small Carton (about 1 1/2 lbs.), 25c; Large Carton (about 3 1/2 lbs.) 50c. Postage additional.

Lilly's Ground Flax Seed

Flax seed has been a favorite conditioner among horse men from time immemorial, and is without question one of the safest and most satisfactory conditioners procurable. When used for horses it makes the coat glossy and helps to put flesh on.

Lilly's Ground Flax Seed is pure flax seed ground without removing the oil. The amount to be used will vary according to the size of the animal, but generally four to eight ounces two or three times a week will keep the animal in excellent shape.

Price: 8c per lb.; $7.00 per 100 lbs.; P. O. B. Seattle or Portland. Subject to change.

Calf Meal makes it possible to raise good calves at small expense. Write for booklet.
We will mail you the Vreeland Chemical Co.'s

**ELECTRO BORDO-PULP**

This is a scientific compound of copper sulphate (blue vitrol) and high grade lime for use as a fungicide only. It is a Bordeaux Mixture in a concentrated form. Although Soluble Sulphur Compound is superior for most purposes, for controlling fungi on some kinds of vegetation such as potatoes, melons, cucumbers, beans, grapes, etc., Electro Bordo-Pulp is preferable.

One of the serious drawbacks which has brought Bordeaux Mixture into disfavor, especially among fruit growers, is that it is liable to cause russetting of the fruit. In Electro Bordo-Pulp all excess of caustic lime is removed and this russetting is reduced to a minimum.

It cannot be shipped by parcel post.

1-lb. Jar

**$0.40**

10-lb. Kit

**2.75**

**Electro Kerosene Emulsion**

For spraying plant lice, scale, leaf hoppers, etc. It is readily soluble in water, and is ready for use by simply adding the proper amount of water. Directions for use accompany each package.

1-Gallon Can

**$1.00**

**ELECTRO ARSENATE OF LEAD POWDER**

**Best Form for Liquid or Dust Spray**

Electro Arsenate of Lead Powder is different from any other arsenate of lead. It is not a paste that has been dried and ground; it is a precipitate, and is so fine that it will mix with water readily, will not lump, and when used as a dry spray will stick to the dry leaves. It is the strongest and most effective, as well as the safest and easiest to use.

By a special process there is combined properly with lead 32% to 33% per cent arsenic oxide with less than one-half of one per cent free arsenic. Arsenic oxide is the active agent; free arsenic will injure the foliage if in excess. This gives a killing strength much greater than that of other brands, and consequently much less is required to do the work.

This is the original form of dry arsenate of lead suitable for both wet spraying and dusting, and the only form that is not granular or crystalline.

Being dry, you do not pay freight charges on the forty to sixty per cent of water which all paste forms contain.

It is indestructible; age does not impair its value. Everyone familiar with spraying knows the annoyance of using old pastes, and that the lumps that remain in the tank are useless. This annoyance does not exist with Electro Arsenate of Lead Powder. It is always in fine mechanical condition, does not lump, is free from granulation or grit, and there is no waste.

**PRICES**

3/4-lb. Carton

**$0.25**

1-lb. Carton

**$0.40**

10-lb. Drum

**$3.00**

25-lb. Drum

**$6.75**

50-lb. Drum

**$13.00**

100-lb. Drum

**$24.00**

P. O. B. Seattle or Portland.

**F. O. B. Seattle or Portland.**

**ELECTRO BORDO-LEAD**

A combination of Electro Bordo-Pulp and Arsenate of Lead in proper proportions, and especially adapted for combining spray for grapes, ground crops, etc. Ten pounds of this mixture in fifty gallons of water is equivalent to five pounds of twenty per cent arsenate of lead, and in Bordeaux to the 4-1-50 formula.

The statements in regard to Bordo-Pulp are also true of the Bordeaux part of this mixture. It is a very desirable combined insecticide and fungicide ready for use requiring only the addition of water. As it is poison, it cannot be shipped by parcel post.

1-lb. Jar

.. **$0.50**

10-lb. Kit

.. **3.50**

**Electro Insecticide Soap**

This is a whale-oil soap specially prepared, and does not contain free alkali. This is a very important item, as the presence of free alkali means severe injury to foliage and fruit. It is valuable as a spray for plant lice and soft-bodied larvae. It is to be dissolved in hot water and diluted at the rate of one pound of soap to five to seven gallons of water for plant lice. For scale insects dilute with four gallons of water.

1-lb. Package

.. **$0.20**

10-lb. Kit

.. **$1.80**

100-lb. Keg

.. **$13.00**

Arsenate of Lead or other poisons cannot be shipped by parcel post.
Soluble Sulphur Compound is the old standard sulphur spray with the water left out, making it more convenient to handle and reducing freight charges. It is a dry powder; easily dissolved in either cold or hot water. It is used in the same way as lime-sulphur solution, is fully as effective in every way and superior in most ways. There is no sediment; no grit to wear out pumps and clog nozzles; no freezing; no crystallization; no leakage; no loss. If the can is kept tightly closed it will keep indefinitely, and any that is left over at the end of the season can be used the next year.

A one hundred pound drum of Soluble Sulphur is equal to a six hundred pound barrel of lime-sulphur solution, saving five hundred pounds freight charges, hauling and handling.

Soluble Sulphur Compound is powdered by a fusion process, not by boiling, whereby sulphur is combined with soda ash, a true solvent. The result is a perfectly soluble compound high in sulphur as polysulphides. This compound is analogous in chemical form to the calcium polysulphides of a high-grade Lime-sulphur solution.

The sodium polysulphides are superior, for soda is used extensively in the manufacture of soaps because of its grease cutting property. As used in forming Soluble Sulphur Compound this grease cutting characteristic reinforces the primary insecticidal value of the sulphur, forming a superior insecticide and fungicide surpassing either material alone, or other combinations such as lime-sulphur.

Soluble Sulphur Compound is used for the same purposes and in the same manner as lime-sulphur solution. Where one gallon of thirty-three degree lime-sulphur solution would be used, one pound of Soluble Sulphur Compound are used instead. It is simply sifted into the tank of water while being stirred. It dissolves readily, and after being stirred a few moments will remain in solution an indefinite time. It should be mixed with a large volume of water only, and should not be mixed with a small quantity of water before being placed in the tank.

For estimating the amount required, those who have used lime-sulphur solution should order a one-hundred-pound drum of Soluble Sulphur instead of each fifty-gallon barrel of lime sulphur solution used in the past. For average use, one hundred pounds of Soluble Sulphur Compound will be sufficient for one application on two acres of orchard.

When Soluble Sulphur Compound is used as a summer spray, our directions for using for that purpose should be followed very closely.

Complete instructions for using Soluble Sulphur are enclosed in packages. We will be glad to mail our Spray Bulletin, free, on request.

Soluble Sulphur Compound is manufactured on the Pacific Coast by The Chas. H. Lilly Co. under Niagara Sprayer Co. patents.

Lilly's Lime and Sulphur Solution

Best of the Old Style Sulphur Sprays

For those who still prefer the old style sulphur spray we can furnish Lilly's Lime and Sulphur Solution. It has been used by the orchardists of the Northwest for many years, and has long been the standard sulphur spray. We recommend Lilly's Soluble Sulphur Compound as being just as effective, more convenient and less expensive.

It is a clear, cherry-red solution, free from sediment, and tests 23 degrees Baumé, which is as concentrated as it is possible to make a lime and sulphur solution which will remain in solution.

Five Gallon Can .................................. $1.75
Barrel (about fifty gallons) .................. 11.00

F. O. B. Seattle or Portland.

Be sure that the brand "Lilly's" appears on the package.
A chemical compound which, when applied as a lawn dressing, burns up broad leaved weeds such as dandelion, daisy, plantain, dock, sorrel, chickweed, etc. One application will usually check these growing weeds. It is not only harmless to the narrow leaved grasses, but acts as a splendid fertilizer.

Price: $1.50; 25 lbs., $2.00; 50 lbs., $3.50; 100 lbs., $6.00.

NIKOTEE N

A refined nicotine liquid insecticide for fumigating and spraying. It is a very powerful solution, 30% chemically pure nicotine, and will kill all insects affected by tobacco. Among the insects most susceptible to nicotine poisoning are Aphids or Plant Lice, Thrip, Apple Aphids, Black Peach Aphids, Currant Leaf Hopper, Rose Leaf Hopper and Melon Louse.

It is colorless and stainless, and when properly applied cannot harm plants, shrubs, fruit trees, etc. In greenhouses and conservatories it is vaporized by painting on steam pipes or by blowing live steam through a solution containing Nikoteen. By this method fumigation costs 4 cts. for each six hundred square feet of floor space. For most outdoor work, and sometimes under glass, it is applied by spraying. Write for circulars.

Cannot be shipped by parcel post.

Price: 8-lb. bottle, $10.00; 4-lb. bottle, $5.00; 1-lb. bottle, $1.50; ½-lb., 85c; ¼ oz., 40c.

APHIS PUNK

Nikotene Tobacco Paper

A nicotine fungicide for use in greenhouses and other places where the fumes can be confined. It is composed principally of nicotine, wood pulp and chemicals that assist and control the burning of the pulp and the vaporizing of the nicotine. It is uniform and effective.

Write for circulars. It may be shipped by parcel post.

Can of 12 sheets. Weight 1 lb. .................. $0.60
Can of 12 cans. Weight 8 lbs. .................. 6.50

Sulpho - Tobacco Soap

destroys insects on plants, shrubbery, vines, small trees and trees; also on animals, and is valuable as an exterminator of moths, carpet bugs, etc. One cake makes 1½ gallons of soap solution. May be shipped by parcel post. Postage additional.

3 oz. cake .................. 10c

Quassia Chips

For destruction of plant lice on cabbage, cauliflower, fruit trees, etc.

1 lb., 10c; 10 lbs., 70c per lb.

Sulphur

Fine ground sulphur for spraying and fumigating. Write for prices.

TOBACCO AND SOAP COMPOUND

A tobacco and soap compound for the destruction of Aphids and other Plant Lice. Especially useful on rose bushes and house plants. One bottle makes three gallons of spray. Cannot be shipped by parcel post.

Price: 7-oz. bottle .................. 25c

LILLY'S TREE SOAP

A soap compound for destroying Green Aphis, Woolly Aphis, Hop Aphis, Oyster Shell Scale, Codling Moth, Canker Worm, Caterpillars, and for preventing fungus diseases. Especially adapted for rose bushes. May be shipped by parcel post. Postage additional.

Price: 1-lb. cake .................. 15c

BLACK LEAF 40

A concentrated solution of nicotine sulphate guaranteed to contain forty per cent nicotine. It is highly recommended for the destruction of Aphids and other soft bodied sucking insects. Also an excellent dip for animal parasites, such as scab and lice on sheep and cattle, sheep ticks, etc.

This is the best and most convenient form of tobacco spray. It is uniform in strength, and by adding a correct amount of water there is no danger of making it too strong as to be harmful or so weak as to be useless. Directions for using accompany each can. Being a poison, it cannot be shipped by parcel post.

1 oz. Makes about 6 gals. spray. ........... $ 0.25
½ lb. Makes 40 to 150 gals. spray .......... 1.75
2 lbs. Makes 160 to 600 gals. spray ...... 2.50
10 lbs. Makes 800 to 3000 gals. spray ... 10.75

Fumigating Tobacco Powder

A finely ground tobacco powder for burning in greenhouses and other places where the fumes can be confined.

100 lbs., $5.00; less than sack lots, 7½c lb.

Dusting Tobacco Powder

For using as a dust spray for Aphids and other soft bodied insects outdoors or where fumes cannot be confined.

100 lb. sack, $5.00; less than sack lots, 7½c per lb.

Fish Oil Soap

Used as a wash during the summer. Destroys Aphis and other insects and prevents the spread of scales and fungus.

50 lb. box, $3.25; less than box lots, 10c per lb.

Bluestone

Copper sulphate, for spraying. Prices fluctuate. Write for prices.

AUTO-SPRAY No. 5

Knapsack Sprayer or Bucket Pump for General Spraying or Whitewashing

This is a splendid outfit for general spraying and for whitewashing. It may be used either as a bucket pump, barrel pump, or in connection with tank, as shown in above cut, as a knapsack sprayer. It is furnished either with or without the tank. With the tank it is especially useful for whitewashing poultry houses, as there is no bucket to move around.

Auto-Spray No. 5, pump, hose, nozzle, and strainer, complete. Shipping weight 4 lbs.............. $4.50

Galvanized Iron Knapsack Reservoir. Shipping weight 7½ lbs. Additional 3.00

Curved Extension. Shipping weight 1 lb. Additional .50

Prices do not include transportation charges except when so stated.
IDEAL SPRAY OUTFIT
EASY TO OPERATE
Handiest and Most Efficient for General Spraying and Whitewashing

This is the best and most convenient outfit for general spraying and whitewashing. It is light, compact, easy to operate and convenient to handle. The tank holds fifteen gallons, and is mounted in such a way that the liquid will not slop or spill. It has the largest air chamber of any spray pump of similar size, enabling the operator to keep a uniform pressure at the nozzle. A pressure of 150 pounds is easily maintained. The pump barrel is 1½ inches in diameter and 7 inches long. The plunger is made of brass.

The packing may be tightened without removing. The valves are ½ inch bronze balls. Both valves are removable.

The outfit is complete, and includes the following equipment: 19 ft. ½ in. pressure hose, 8 ft. pipe extension in two pieces, Ideal nozzle, brass shut-off cock.

Price, $20.00.

PERFECTION SPRAYER

A compressed air sprayer without the faults so common in many knapsack sprayers. In addition to handling the usual spray solutions, it will handle whitewash, water paints, Bordeaux mixture, etc. It is made of extra heavy galvanized steel, lock seamed at corners to heavy convex heads; stronger than others in construction; powerful in action. The tank is 7½ x 20 inches, and holds three gallons of liquid. Weight, empty, 9 lbs.

Price, $5.00.

MODOC SPRAY PUMP

This is the best, strongest, and most powerful bucket pump on the market. It is made entirely of brass, except the handle and stirrup, which are malleable iron. The cylinder is extra large and is made of seamless brass tubing. The plunger is hollow, forming an air chamber. The valves are bronze balls. It is equipped with three feet of half-inch spray hose and interchangeable nozzle which when reversed will spray whitewash or Bordeaux mixture. Weight 5½ lbs.

Price, $3.00.

Little Giant Pump

A splendid bucket pump for any kind of spraying except whitewash. It is made of brass. Furnished with two nozzles. Makes a continuous spray or throws a solid stream fifty feet. Weight 6 lbs.

Price, $2.50.

NO. 3-B

AUTO SPRAY

Whitewash Sprayer

Especially designed for whitewashing, but equally valuable for any other kind of spraying, and one of the best general purpose sprayers on the market. The heavy galvanized steel tank holds eight gallons of solution. The pump is made of brass and is very powerful. Equipped with 8 ft. spray hose, 8 ft. extension, stop-cock, and Perpetual nozzle.

Shipping weight 40 lbs.

Price, $10.50. No. 3-B

Lilly's Soluble Sulphur Compound

is the best and cheapest form of Sulphur spray

Little Giant

Electro Arsenate of Lead Powder has many advantages over the paste forms.
JUNIOR SPRAY PUMP

This pump is to be used with a bucket or barrel, and may be inserted through thebung hole in a barrel. It holds itself down and works anywhere and everywhere. The brass suction working within a brass cylinder, with brass valves, does away entirely with packing. All parts except handle and hose are solid brass. Will throw three sizes of solid continuous streams and two sizes of fine round spray. Weight 4 lbs.

MISTRY JR. SPRAY NOZZLE

A very superior nozzle for general spraying. It has no projecting parts to catch on limbs, and produces a perfect mist covering a wide area. It is made of brass and aluminum, with removable hardened steel discs. Two steel discs are furnished with each nozzle, one for coarse and one for fine spray. Furnished with either straight or angle neck.

No. 107. Straight 75c
No. 108. Angle Neck 75c

Vermorel Nozzles

Made of brass and fitted with a steel disc and a disgorger with which they are easily cleaned. Furnished either single, like cut, or double.

No. 26. 1 Point Vermorel Nozzle 1.00
No. 27. 2 Point Vermorel Nozzle 1.25

Bordeaux Nozzle

The best nozzle for spraying Bordeaux mixture or whitewash. Makes a flat spray or a solid round stream.

No. 965 75c

FLORADORA Insect Powder Gun

For dusting plants, shrubbery, animals or fowls with any kind of powder. It is extra large, holding one-half pound of powder.

No. 1071 50c

WHIRLWIND Insect Powder Gun

For the same purposes as the Floradora, but not so large. Holds one-quarter pound of powder.

No. 1040 50c

LICE LIQUID eliminates lice and mites from poultry houses.
MASTER’S PLANT SETTER

One man with one of these plant setters will set, fertilize and water more plants than three men can set by hand, and will do it easily, without stooping. Every plant is well set and securely rooted by absorption, nature’s way, so that it has a chance to grow. The machine is durably constructed, and is entirely practical. Shipping weight, 5 lbs.

Price, $4.00.

Acme Rotary Automatic Corn Planter

This planter is absolutely dependable, accurate and easy working. It counts the kernels. It does not miss a hill. It picks up just the number of kernels that it is set for, and it plants them right. The machine is easy to carry and use; it hangs right. Can be used with either hand without changing.

Price, $1.75.

Acme Corn Planter

A two-handled corn planter; light, durable, well made and accurate. It is operated by bringing together and separating the handles. Thoroughly reliable.

Price, $1.00.

EUREKA

Tubular Potato Planter

This is the original tubular potato planter, and is the most satisfactory in every way. It plants any size seed, any number of pieces, and at an adjustable uniform depth. The operator stands upright, drops the seed in top of tube, steps on hopper to force planter into the ground, and tips planter forward to trip it.

Price, $1.40.

ACME

Hand Potato Planter

This planter works on the same principle as the Eureka, but has no tube, and the planter must be raised and the seed dropped into the hopper. Weight, 3 lbs.

Price, $1.00.

Little Giant Broadcast Seeder

The best little broadcast seeder for the price. It is light, strong, accurate, and does the work much easier and better than can be done by hand. Weight 3½ lbs.

Price, $1.90.

Cahoon Broadcast Seeder

The most accurate and durable hand broadcast seed sower. Sows grass, clover and grain seeds evenly and rapidly. Strongly made of steel, iron and brass, and will last a lifetime. Every machine is fully warranted. Weight 6 lbs.

Price, $3.50.

PRUNING SHEARS

At Bargain Prices

Here is an opportunity to get a high-grade pruning shear at low price. We will not handle them in future, and to dispose of our stock are offering them at much less than cost. They are the same shears that we have been selling at about twice the price. Our stock is limited; order early.

LILLY’S NO. 2 PRUNING SHEAR. An especially good shear; made of the best material; strong and durable. Every shear is carefully tested. Pitted with adjustable nut and brass springs. Length 8¾ inches. Regular price $1.50

Price, $1.85

LILLY’S NO. 3 PRUNING SHEAR. The same pattern as the No. 2, but material and workmanship are not quite so good. Length 8¾ inches. Regular price $1.50

Price, 1.00

LILLY’S NO. 4 PRUNING SHEAR. This is a cheaper pruner, but is good for ordinary light work. Length 8¼ inches. Regular price 80c

Price, $0.50

Prices do not include transportation charges. If shipped by parcel post, postage is additional.
Official Rat Trap

Certain death to rats; catches them every time. Rats nibble upward, and for that reason other traps often fail to catch them. This is released by either upward or downward pressure, and is sure to catch them.

Price, 25c each; $2.00 per doz.

Official Mouse Trap

This is the same as the Official Rat Trap except that it is smaller.

Price, 10c each; $1.00 per doz.

REDDICK MOLE TRAP

This is the surest, strongest, simplest and safest mole trap. When set over a regular runway the mole is bound to be caught the next time he goes through. It is set by simply pulling up the plunger rod. Made of heavy cold rolled steel, galvanized.

Weight 2½ lbs. 75c.

OUT O‘SIGHT MOLE TRAP

This mole trap is neat and effective. Not unsightly on the lawn. No mole can pass under it and live. Weight 1½ lbs. 75c.

Hot-Bed Thermometer

A reliable thermometer encased in wood, with a brass point, to be inserted in earth in hot-bed or mushroom bed. Weight 3 oz.

Price, 25c each; $2.50 per doz.

No. 1068..........................$2.00

Self-Registering Thermometer

This thermometer may be used as a check on the night-watchman or to keep tab on the weather during the night. It registers both the coldest and warmest temperature during any given time. Weight 7 oz.

Price, 75c each; $4.50 per doz.

No. 1067..........................$2.00

Neponset Paper Pots

Made of heavy waxed paper. Splendid for handling and shipping plants. Unbreakable, light and economical.

Size Wt. per 1000 Price 100 1000

2½ inch 15 lbs. $0.40 $3.00
2½ inch 18 lbs. .50 3.50
3 inch 28 lbs. .75 5.50
4 inch 38 lbs. 1.25 10.00

Bamboo Plant Stakes

Small bamboo rods, six feet long. Weight about 12 lbs. per 100.

Price, doz., 25c; 100, 75c; 1000, $6.00.

Grafting Wax

Our own make; very superior quality. Packed in one pound packages only.

Price, pound, 25c.

Raffia

Natural color raffia; for nursery work and for making baskets. A full ball weighs about 225 lbs.

Price, pound, 30c; 10 lbs. or more, 21c per lb.; bale, 18c per lb.
IRON AGE GARDEN IMPLEMENTS

More and Better Work With Less Labor

With these implements ten times more work can be done than in the old back-breaking way, and it will be done better. With the various attachments many combinations may be made. With them furrows may be opened, seed sown in either hills or drills, covered and rolled; the plants may be hoed, cultivated, raked, or ridged, either astride or between the rows. If unable to purchase a complete equipment at one time, one of the lesser combinations may be purchased and additional attachments added at any time.

No. 6 IRON AGE Double and Single Wheel Hoe Hill and Drill Seeder

This combines several distinct and thoroughly practical implements which can be changed from one to another in a very few minutes. As a seeder it will sow practically any kind of seed, including beet and chicory, in either drills or hills. It is changed from a drill to a hill seeder by simply moving a lever. It may be used with one wheel as a drill or to cultivate between rows, or with two wheels to cultivate astride the rows. The seeder attachment is easily removed, and it is then the same as the No. 1 Double and Single Wheel Hoe. Equipment includes Fig. 146 Hill and Drill Seeder Attachment, two Hoes, two Plows, two Rakes, and four Cultivator Teeth, as shown in accompanying cut. 57 lbs. Price, $14.50

No. 7 IRON AGE Hill and Drill Seeder. This is the same as No. 6 without Hoes, Plows, Rakes, or Cultivator Teeth. Those attachments may be added to it at any time, if desired, at prices shown on next page. Price, $11.00

No. 14 IRON AGE Hill and Drill Seeder with Hoes and Teeth. The same as No. 7 with two Hoes and four Cultivator Teeth added. In other words, it is the same as No. 6 without Rakes and Plows. Price, $12.80

No. 4 IRON AGE Drill Seeder and Double and Single Wheel Hoe

This differs from the No. 6 only in the seeder attachment, which sows the seed in drills only, lacking the hill dropping device and having a different opening plow. With the seeder attachment removed it is a No. 1 Double and Single Wheel Hoe. It is equipped with a Fig. 133 Drill Seeder, two Hoes, two Plows, two Rakes, and four Cultivator Teeth.

Price, $13.35

No. 5 IRON AGE Drill Seeder. The same as No. 4 without Hoes, Plows, Rakes or Cultivator Teeth.

Price, $9.95

No. 40 IRON AGE Drill Seeder with Hoes and Cultivator Teeth. The same as No. 4 without Plows and Rakes.

Price, $11.70

No. 1 IRON AGE Double and Single Wheel Hoe

May be used with one wheel to work between the rows, or with two wheels to work on both sides of the row. It is equipped ith two Hoes, two Plows, two Rakes, and four Cultivator Teeth, and is the same as No. 6 and No. 4 without seeder attachments. Fig. 146 Hill and Drill Seeder Attachment, or Fig. 133 Drill Seeder Attachment, may be added at any time.

No. 3 IRON AGE Double and Single Wheel Hoe. Has Hoes only. Same as No. 1 without Plows, Rakes, and Cultivator Teeth.

Price, $6.00

No. 13 IRON AGE Double and Single Wheel Hoe. Equipped with two Hoes and four Cultivator Teeth. The same as No. 1 without Plows and Rakes.

Price, $6.75

No. 27 IRON AGE Double and Single Wheel Garden Disc Cultivator

The same as No. 1 except that it has no Hoes or Rakes, but is equipped with Fig. 265 Garden Disc Cultivating Attachment, two Plows and four Cultivator Teeth.

Price, $9.00

No. 15 IRON AGE Hill and Drill Seeder and Single Wheel Hoe

This single wheel implement differs from No. 6 only in the construction of the frame and in having only one wheel; it cannot be worked astride the rows. The seeder attachment is the same. Equipped with Fig. 134 Hill and Drill Seeder, Hill Fig. 82 Landside Plow, two Hoes, two Rakes, and three Cultivator Teeth. Shipping weight 45 lbs.

Price, $13.25

No. 16 IRON AGE Hill and Drill Seeder. The same as No. 15 without Plow, Hoes, Rakes, and Cultivator Teeth. For those who do not care for the combination implement, this is the ideal seeder. Cultivating attachments may be added at any time if desired.

Price, $10.25

Write to us for the Iron Age Catalog describing these implements more fully.
No. 17 IRON AGE Drill Seeder and Single Wheel Hoe

This differs from No. 15 only in the seeder attachment, which sows the seed in continuous drills only. It is equipped with one Landside Plow, two Hoes, and three Cultivator Teeth. Shipping weight 45 lbs.

Price, $12.00

No. 18 IRON AGE Drill Seeder. No. 17 without cultivating attachments.

Price, $9.15

No. 18-B IRON AGE Drill Seeder. The same as No. 18 except that it is equipped with Fig. 145 Opening Plow for drilling onion seed to produce onion sets.

Price, $9.65

No. 20 IRON AGE Single Wheel Hoe

The same as No. 17 and No. 18 without seeder attachment. Equipped with one Landside Plow, two Hoes, and three Cultivator Teeth. Shipping weight 28 lbs.

Price, $7.30

No. 21 IRON AGE Single Wheel Hoe. Same as No. 20 without Plow, Rakes, and Cultivator Teeth. Equipped with Hoes only.

Price, $6.65

No. 23 IRON AGE Garden Disc Cultivator. Same as No. 20 except that it has no Hoes or Rakes, but is equipped with Fig. 369 Garden Disc Cultivator Attachment, one Landside Plow, and three Cultivator Teeth.

Price, $7.65

No. 19-C IRON AGE Cultivator and Plow

This low priced implement is very effective, and on account of the high wheel is preferred by many gardeners. The wheel is twenty-four inches in diameter. It is equipped with one Landside Plow, one Scuffle Hoe, two Cultivating Teeth, and one set of three Cultivator Teeth on a bracket. Shipping weight 22 lbs.

Price, $4.40

No. 22 IRON AGE Fertilizer Distributor, Hill and Drill Seeder

This implement sows seed accurately, either in hills or drills, and at the same time distributes commercial fertilizer either in line with the seed or on one or both sides of the drill. Neither the seeder or fertilizer attachments are interchangeable with the other implements, and no cultivating attachments can be used with this implement. Shipping weight 65 lbs.

Price, $20.50

ATTACHMENTS

For IRON AGE Implements

Fig. 134 Hill and Drill Seeder Attachment. Can be used with implements No. 6, No. 7, No. 14, No. 4, No. 5, No. 40, No. 1, No. 3, No. 13, No. 27, No. 15, No. 17, No. 18, No. 20, No. 21, or No. 29.

Price, $6.00

Fig. 13 Drill Seeder Attachment. Sows seed in continuous drills only. It supplied with the No. 4 implement. May be used with any of the implements named above for Fig. 134.

Price, $5.00

Fig. 145 Opening Plow for Sowing Onion Seed for Sets. May be used with seeder No. 6, No. 7, No. 15, No. 16, and No. 22.

Price, $0.50

Fig. 184 Fertilizer Distributor Attachment. May be attached to the single wheel frame of the No. 15, No. 16, No. 17, No. 18, No. 20, No. 21, or No. 28 implements. Cannot be used at the same time the seeder with Fig. 132 Drill Seeder Attachment.

Price, $2.33

Fig. 369 Garden Disc Cultivating Attachment. Furnished with the No. 27 and No. 28 implements. May be used with any of the double wheel or single wheel cultivators.

Price, $7.65

Fig. 170 Double Moldboard Plow. Has adjustable wings to open furrows of various widths.

Price, $1.60

Fig. 169 Combined Disc and Fender Attachment. Used to work close to small plants, or as fenders in combination with cultivator teeth.

Price, $1.25

Fig. 92 Landside Plow. Furnished with the single wheel cultivators, and may be used with the double wheel cultivators by using Fig. 112.

Price, $1.05

Fig. 216 Special Fender Side Hoes. Used in place of the regular hoes on any Iron Age Wheel Hoe.

Price, $1.60

Fig. 236 Hilling Attachment. May be used with the double wheel hoes.

Price, $1.25

Fig. 216 Double Weeder Attachment. For destroying weeds in hard crust. For use with double wheel hoes, but may be used with single wheel hoes.

Price, $1.25

Fig. 112 Center Tooth Attachment. Used with No. 1 Hoe when using one wheel.

Price, $0.65

No. 33 Onion Set Gatherer. Used on any of the double or single wheel hoes.

Price, $0.55

C26 Left Hand Flow

Price, $.50

C-30 Right Hand Flow

Price, $.50

C-29 Rake

Price, $.50

30-A Cultivator Tooth

Price, $.20

C-19 Right Hand Side Hoe

Price, $.50

C-20 Left Hand Side Hoe

Price, $.50

The IRON AGE Catalog explains the various combinations and uses of these implements.
THE G. B. LEWIS CO.

BEE SUPPLIES

The Line That is Nearest Perfect in Workmanship and Material

We are fortunate in having the Pacific Coast agency for the celebrated G. B. Lewis Co. Bee Supplies, which are known by beekeepers to be the standard of perfection in bee hives, sections, etc. The G. B. Lewis Co. has been manufacturing bee supplies for more than forty years, have the business systematized to a nicety, and have earned the reputation of turning out the best and most uniform line of bee supplies.

Their goods are made from the best materials and the workmanship is perfect. The hives, supers, etc., are made from clear eastern white pine, which appears to be the only material suitable for that purpose. The sections are made from Wisconsin basswood, are white, highly polished, without flaw, and are perfectly uniform. All parts are exact in size, with perfect joints, and no difficulty is ever experienced in putting them together. Every part fits perfectly.

These goods are fully guaranteed by both manufacturer and ourselves, and if they are not found to be strictly as advertised, and entirely satisfactory in every way, they may be returned to us.

Hives, supers, etc., are packed in bundles of five, in the flat; hence, prices are shown for lots of five and we can furnish them at those prices in lots of five and multiples of five only. When they are ordered in lots of less than five they will be nailed up and the price shown for one will apply.

Prices shown are for goods f. o. b. Seattle or Portland. If they are to be shipped by parcel post, or by freight or express to a station at which there is no agent, remittance must include a sufficient amount to prepay transportation charges. To enable you to figure amount to prepay charges, we have shown shipping weight of the various articles. In case too much is remitted, the balance will be refunded promptly.

Bee-keeping is a profitable and pleasant occupation, and there are few of our customers who could not advantageously keep a few colonies, at least, and thus supply their tables with one of the most delicious and healthful foods, in addition to deriving considerable profit from the sale of surplus honey.

The work is light, easy, and there is a fascination about it that makes it worth while even if no pecuniary profits were derived. Any person who is a lover of nature will be delighted with the intelligence displayed in the everyday life of a colony of bees. A study of their little world discloses system, government, social economy, industry and perseverance that we humans would do well to copy.

Many have not entered into the business on account of a fear of stings, but that is a fallacy. Bees are really gentle little things, and use their stings only for defense.

To obtain satisfactory results from bees, proper appliances and fixtures must be provided, and the best of these appliances will be found to be the most economical in the end.

If bee supplies are required in very large quantities, please advise articles and quantities wanted and we will quote lowest possible quantity prices.
DOVETAILED HIVES FOR COMB HONEY

One and One-Half and Two-Story Hives

The Dovetailed Hive as shown above is the Standard Comb Honey Hive. It is furnished in two sizes, eight-frame and ten-frame. If you are beginning to equip a new apiary we recommend the ten-frame.

The above illustrates a 1½ story hive; when two supers are included it is then a 2 story hive for comb honey.

The Bottom as regularly furnished is reversible, so that it can be used either side up, one side forming a ¾-inch entrance and the other a 7/8-inch entrance for the bees.

The Body or brood chamber is equipped with the Hoffman self-spacing brood frames, eight with the eight-frame hive and ten with the ten-frame hive.

A Division Board is furnished with each eight-frame body, as it is required to fill the space properly when all eight frames are in place. In the ten-frame size, however, it is not furnished, as the ten frames in place fill the space. When a division board is required in a ten-frame hive for the purpose of reducing brood space it can be ordered extra, as listed elsewhere in this catalog.

The Super shown with the above hive is the style most commonly used and is the one always furnished unless you specify otherwise. It takes the regular 4½x4½x17½ bee-way sections and slotted section holders.

The Separators are the slotted sawed wood style. Equipment includes a follower and springs for squeezing the sections up tight.

The eight-frame size holds twenty-four sections and the ten-frame twenty-eight sections.

As stated, the above super, which is called the No. 1 or regular, is the one most commonly used, but some prefer one of the other styles, which will be furnished at a small additional cost.

The Cover is called the Excelsior style. It is a good substantial cover, flat on the under side and gable roof shape on the top.

The best books and journals on bee-keeping are listed in the Books section of this catalog.
DOVETAILED SUPERS FOR COMB HONEY

No. 1, or Regular Super
FOR 4½ x 4½ x 1½ BEEWAY SECTIONS
This is the same as is shown with the 1½ Story Hive on the preceding page and is the style most commonly used. We always furnish this style unless one of the other styles are specified.
It takes the regular 4½ x 4½ x 1½ beeway sections, slotted section holders, slotted sawed separators, and a follower and springs for squeezing the sections tight. The eight-frame size holds twenty-four sections, and the ten-frame twenty-eight sections.

No. 2, or Plain Super
For 4½ x 4½ x 1½ PLAIN SECTIONS
This super is preferred by some bee-keepers who claim that they get more even and better filled sections. It is the same size as the No. 1, and holds the same number of sections. The difference is in the inside furniture, being equipped with the fence style separator and plain section holders. These section holders take the plain or no bee-way sections, the cleats on the fences taking the place of bee-ways.
The eight-frame size is equipped with six section holders, seven fences and springs, and will hold twenty-four sections. The ten-frame size is equipped with seven section holders, eight fence separators, springs and follow., and will hold twenty-eight sections.

No. 4, or 4x5 Super
FOR 4x5 1¾ PLAIN SECTIONS
Another style equipped for the plain or no beeway sections. It is a trifle deeper than the No. 1 Super, and takes the 4½ x 1½ sections standing on end.
Those who favor this style claim that the section shows a greater surface of honey.
The eight-frame size is equipped with six plain section holders, seven fence separators, springs and a thick follower, and will hold twenty-four sections.
The ten-frame size is equipped with eight plain section holders, nine fence separators, springs, and will hold thirty-two sections.

No. 3, or Ideal Super
FOR 3½ x 5 x 1½ PLAIN SECTIONS
The No. 3 or Ideal Super is practically the same as the No. 4 except that it is arranged for the 3½ x 5 x 1½ plain sections, the eight-frame size holding thirty sections and the ten-frame size thirty-five sections.

PRICE LIST: NO. 1 OR REGULAR SUPER

<table>
<thead>
<tr>
<th>No Sections or Fdn.</th>
<th>1 Supers</th>
<th>5 Supers</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 Frame</td>
<td>$0.85</td>
<td>$2.85</td>
<td>35 lbs.</td>
</tr>
<tr>
<td>10 Frame</td>
<td>$0.90</td>
<td>3.10</td>
<td>35 lbs.</td>
</tr>
<tr>
<td>With Sections and Fdn.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 Frame</td>
<td>1.15</td>
<td>4.00</td>
<td>37 lbs.</td>
</tr>
<tr>
<td>10 Frame</td>
<td>1.25</td>
<td>4.40</td>
<td>38 lbs.</td>
</tr>
</tbody>
</table>

PRICE LIST: NO. 2, NO. 4, AND NO. 3 SUPERS

<table>
<thead>
<tr>
<th>No Sections or Fdn.</th>
<th>1 Supers</th>
<th>5 Supers</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 Frame</td>
<td>$0.90</td>
<td>$3.05</td>
<td>37 lbs.</td>
</tr>
<tr>
<td>10 Frame</td>
<td>.95</td>
<td>3.40</td>
<td>40 lbs.</td>
</tr>
<tr>
<td>With Sections and Fdn.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 Frame</td>
<td>1.20</td>
<td>4.25</td>
<td>39 lbs.</td>
</tr>
<tr>
<td>10 Frame</td>
<td>1.30</td>
<td>4.65</td>
<td>42 lbs.</td>
</tr>
</tbody>
</table>

EMPTY SUPERS: ANY OF ABOVE STYLES

<table>
<thead>
<tr>
<th>Outside shell only, without any inside fixtures.</th>
<th>1 Supers</th>
<th>5 Supers</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 Frame</td>
<td>$0.45</td>
<td>$1.60</td>
<td>20 lbs.</td>
</tr>
<tr>
<td>10 Frame</td>
<td>.50</td>
<td>1.65</td>
<td>20 lbs.</td>
</tr>
</tbody>
</table>

Hives, Supers, etc., are packed in bundles of five, knocked down.
COVERS FOR DOVETAILED HIVES

**Excelsior Cover**

The Excelsior is the cover regularly furnished with the Dovetailed Hive, and is the style we always ship unless the order specifies one of the other styles. It is a combination of a flat and gable cover, being flat on the under side and slanting like a gable on the top.

**Colorado Cover**

This cover has a rim which allows it to drop partly over the top edge of the hive, effectually keeping out rain and snow. The rim also allows for an air space of about two inches which is desirable in arid sections, preventing the intense heat of the sun’s rays from heating the super.

It is intended to be used in connection with an inner cover, which is provided with a hole for a Porter Bee Escape, so that it can be used as a bee escape board.

**Ventilated Gable Cover**

This style is preferred by some who wish a double cover, and is very desirable in extremely warm climates with little or no shade.

It is constructed of 3/4-inch boards, the ends of which slide into grooves in the end cleats. As there is an open space in the two side edges between the top and bottom boards, constant circulation of air is permitted. If desired, this style is furnished instead of the Excelsior without extra charge.

**Metal Roof Cover**

One of the latest designs, and rapidly gaining favor with many bee-keepers. It has all the advantages of the Colorado Cover and is lighter and flat on top. It is strong, simple, and the top is covered with metal roofing, making it absolutely tight. It is used in connection with an inner cover, the same as the Colorado Cover.

**PRICE LIST: COVERS FOR DOVETAILED HIVES**

<table>
<thead>
<tr>
<th>Style and Size</th>
<th>1 Cover</th>
<th>5 Covers</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 Frame Excelsior</td>
<td>$ .55</td>
<td>$2.15</td>
<td>26 lbs.</td>
</tr>
<tr>
<td>10 Frame Excelsior</td>
<td>.60</td>
<td>2.30</td>
<td>27 lbs.</td>
</tr>
<tr>
<td>8 Frame Ventilated Gable</td>
<td>.55</td>
<td>2.15</td>
<td>25 lbs.</td>
</tr>
<tr>
<td>10 Frame Ventilated Gable</td>
<td>.60</td>
<td>2.30</td>
<td>27 lbs.</td>
</tr>
<tr>
<td>8 Frame Colorado, Inner Cover</td>
<td>.75</td>
<td>3.15</td>
<td>40 lbs.</td>
</tr>
<tr>
<td>10 Frame Colorado, Inner Cover</td>
<td>.80</td>
<td>3.30</td>
<td>42 lbs.</td>
</tr>
<tr>
<td>8 Frame Metal Roof, Inner Cover</td>
<td>.80</td>
<td>3.40</td>
<td>38 lbs.</td>
</tr>
<tr>
<td>10 Frame Metal Roof, Inner Cover</td>
<td>.85</td>
<td>3.55</td>
<td>40 lbs.</td>
</tr>
</tbody>
</table>

Colorado and Metal Roof without Inner Cover, deduct 14c.

We handle only one grade of hives: The G. B. Lewis Co. eastern white pine; the best.
HIVE BODIES, BOTTOMS AND STANDS

One-Story Dovetailed Hives

This is the same as the four styles 1½ and 2 Story Hive for Comb Honey, and includes the same equipment, with the exception that no super is included. It consists of a Dovetailed Body or Brood Chamber with Hoffman self-spacing brood frames, an Excelsior Cover, and a Reversible Bottom. It is also the same as a 1 Story Hive for Extracted Honey.

Including Dovetailed Body, Excelsior Cover, Reversible Bottom, and Hoffman Self-Spacing Brood Frames.

<table>
<thead>
<tr>
<th>1 Story, 8 Frame. Without Foundation Starters</th>
<th>1 Story, 10 Frame. Without Foundation Starters</th>
<th>1 Story, 8 Frame. Including Foundation for One-Inch Starters</th>
<th>1 Story, 10 Frame. Including Foundation for One-Inch Starters</th>
</tr>
</thead>
<tbody>
<tr>
<td>$2.30</td>
<td>$2.35</td>
<td>$2.40</td>
<td>$2.45</td>
</tr>
<tr>
<td>Weight 108 lbs.</td>
<td>Weight 116 lbs.</td>
<td>Weight 110 lbs.</td>
<td>Weight 118 lbs.</td>
</tr>
</tbody>
</table>

Dovetailed Bodies or Brood Chambers

<table>
<thead>
<tr>
<th>With Brood Frames, Division Board and Metal Rabbets.</th>
<th>1 Body</th>
<th>5 Bodies</th>
<th>Weight 66 lbs.</th>
<th>71 lbs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 Frame</td>
<td>$1.30</td>
<td>$4.75</td>
<td>$4.90</td>
<td></td>
</tr>
<tr>
<td>10 Frame</td>
<td>1.30</td>
<td>4.90</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sides, Ends and Metal Rabbets only. No Brood Frames or Division Boards.

| 8 Frame                                             | .75    | 2.95    | 35 lbs.        |         |
| 10 Frame                                            | .80    | 3.10    |                |         |

Reversible Bottom

The Reversible Bottom is the regular style furnished with the Dovetailed Hives. It is constructed of 3/8-inch material, and arranged so that it may be used either side up. One side provides a 3/4-inch entrance and the other a 3/8-inch entrance. It is the best and simplest.

<table>
<thead>
<tr>
<th>1 Bottom</th>
<th>5 Bottoms</th>
<th>Weight 23 lbs.</th>
<th>27 lbs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 Frame Hive Bottom</td>
<td>.45</td>
<td>$1.65</td>
<td>23 lbs.</td>
</tr>
<tr>
<td>10 Frame Hive Bottom</td>
<td>.50</td>
<td>1.75</td>
<td>27 lbs.</td>
</tr>
</tbody>
</table>

Hive Stand

Hives should never, under any circumstances, be set directly on the ground. The dampness, besides being detrimental to the bees, rots the bottom boards. This stand is serviceable, low-priced, and is the best arrangement for keeping hives off the ground.

<table>
<thead>
<tr>
<th>1 Stand</th>
<th>5 Stands</th>
<th>Weight 30 lbs.</th>
<th>35 lbs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 Frame Hive Stand</td>
<td>$ .30</td>
<td>$1.05</td>
<td>30 lbs.</td>
</tr>
<tr>
<td>10 Frame Hive Stands</td>
<td>.30</td>
<td>1.05</td>
<td>35 lbs.</td>
</tr>
</tbody>
</table>

Hives, Supers, Covers, etc., are packed in bundles of five, in the flat. The price of five will apply on bundles of five or multiples of five. When one only, or less than five, is ordered, it will be nailed up, and the price shown for one will apply.
DOVETAIRED HIVES FOR EXTRACTED HONEY

Extracting Hives with Two Regular Bodies

This is the most popular and the most practical hive for the production of extracted honey. As shown above, it consists of two full-sized bodies with brood frames for each.

It consists of two regular Dovetailed Bodies equipped with Hoffman Self-Spacing Brood Frames, Excelsior Cover and Reversible Bottom.

If desired, we also furnish it with Foundation for one-inch starters, as listed opposite, but most bee-keepers prefer to purchase the foundation separately.

### Extracting Hives with Shallow Extracting Supers

This style has Shallow Extracting Supers, 5¾ inches deep, equipped with Shallow Extracting Frames 5¾ inches deep, and is adapted to localities where the honey flow is short and colonies of moderate strength.

#### SHALLOW EXTRACTING SUPERS

<table>
<thead>
<tr>
<th>With Shallow Frames and Follower. Without Starters.</th>
<th>1 Super</th>
<th>5 Supers</th>
<th>Weight 5 Supers</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 Frame Super</td>
<td>$ .85</td>
<td>$2.95</td>
<td>35 lbs.</td>
</tr>
<tr>
<td>10 Frame Super</td>
<td>.95</td>
<td>3.35</td>
<td>42 lbs.</td>
</tr>
<tr>
<td>With Found’n Starters.</td>
<td>.95</td>
<td>3.30</td>
<td>36 lbs.</td>
</tr>
<tr>
<td>8 Frame Super</td>
<td>1.00</td>
<td>3.70</td>
<td>43 lbs.</td>
</tr>
</tbody>
</table>

#### EMPTY SHALLOW EXTRACTING SUPERS

<table>
<thead>
<tr>
<th>Outside shell only. Without Frames or Follower.</th>
<th>1 Super</th>
<th>5 Supers</th>
<th>Weight 5 Supers</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 Frame Empty Super</td>
<td>$ .45</td>
<td>$1.60</td>
<td>20 lbs.</td>
</tr>
<tr>
<td>10 Frame Empty Super</td>
<td>.50</td>
<td>1.65</td>
<td>20 lbs.</td>
</tr>
</tbody>
</table>

### HIVES WITH TWO DEEP BODIES

<table>
<thead>
<tr>
<th>Without Fndn. Start’rs.</th>
<th>1 Hives</th>
<th>5 Hives</th>
<th>Weight 5 Hives</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Story, 8 Frame Hive</td>
<td>$3.60</td>
<td>$13.05</td>
<td>174 lbs.</td>
</tr>
<tr>
<td>2 Story, 10 Frame Hive</td>
<td>3.65</td>
<td>13.70</td>
<td>187 lbs.</td>
</tr>
<tr>
<td>With Found’n Starters.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Story, 8 Frame Hive</td>
<td>3.85</td>
<td>13.75</td>
<td>175 lbs.</td>
</tr>
<tr>
<td>2 Story, 10 Frame Hive</td>
<td>3.95</td>
<td>14.35</td>
<td>188 lbs.</td>
</tr>
</tbody>
</table>

### HIVES WITH SHALLOW EXTRACTING SUPERS

<table>
<thead>
<tr>
<th>Without Fndn. Start’rs.</th>
<th>1 Hives</th>
<th>1 Hives</th>
<th>Weight 5 Hives</th>
</tr>
</thead>
<tbody>
<tr>
<td>1½ Story, 8 Frame Hive</td>
<td>$3.20</td>
<td>$11.25</td>
<td>143 lbs.</td>
</tr>
<tr>
<td>1½ Story, 10 Frame Hive</td>
<td>3.30</td>
<td>12.05</td>
<td>158 lbs.</td>
</tr>
<tr>
<td>2 Story, 8 Frame Hive</td>
<td>4.00</td>
<td>14.20</td>
<td>178 lbs.</td>
</tr>
<tr>
<td>2 Story, 10 Frame Hive</td>
<td>4.20</td>
<td>15.40</td>
<td>200 lbs.</td>
</tr>
<tr>
<td>With Found’n Starters.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1½ Story, 8 Frame Hive</td>
<td>3.40</td>
<td>11.95</td>
<td>144 lbs.</td>
</tr>
<tr>
<td>1½ Story, 10 Frame Hive</td>
<td>3.50</td>
<td>12.80</td>
<td>159 lbs.</td>
</tr>
<tr>
<td>2 Story, 8 Frame Hive</td>
<td>4.30</td>
<td>15.20</td>
<td>179 lbs.</td>
</tr>
<tr>
<td>2 Story, 10 Frame Hive</td>
<td>4.50</td>
<td>16.40</td>
<td>201 lbs.</td>
</tr>
</tbody>
</table>

A One-Story Hive for Extracted Honey, or a Hive Body for Extracted Honey, is the same as the Hive and Hive Body for Comb Honey.

Hives, Supers, Covers, etc., are packed in bundles of five, in the flat. One, or less than five, will be nailed up.

The price of five Hives, Supers, Cover, etc., will not apply on less than full bundles.
Inside Furniture for Bee Hives

Hoffman Frame
The Hoffman Self-Spacing Frame is the style regularly furnished with the Dovetailed Hive. It is the most popular and undoubtedly the best hanging, self-spacing frame ever designed.

The under side of the thick top bar has a double groove, into one of which the foundation is inserted and into the other a long wedge-shaped strip which holds the foundation securely in place.

Metal-Spaced Frame
This style is being used by some bee-keepers in localities where propolis is very abundant, sticky and hard, causing the wooden projections of Hoffman endbars to split off when frames are pried apart. The stamped metal spacing device shown above overcomes this trouble. This metal spacer is superior to other similar spacers as it has less surface contact.

Price List of Frames

<table>
<thead>
<tr>
<th>Style</th>
<th>In flat</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Spacing Hoffman</td>
<td>.40</td>
<td>$3.50</td>
</tr>
<tr>
<td>Metal Spaced</td>
<td>.50</td>
<td>4.25</td>
</tr>
<tr>
<td>Shallow Extracting</td>
<td>.35</td>
<td>3.00</td>
</tr>
</tbody>
</table>

Shallow Extracting Frame

The above is the extracting frame, 5 3/8 inches deep, used in the Shallow Extracting Super. It has the self-spacing Hoffman end bar and is end spaced with staples in the same way.

Division Boards

One of these boards is included with each Dovetailed Hive, and is used as a follower with the frames. It is not used with the Ten-Frame Hives except in case of weak swarms for reducing brood space. They are also furnished for Shallow Extracting Supers.

Price List: Division Boards

<table>
<thead>
<tr>
<th>Style</th>
<th>1</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Division Boards, in flat</td>
<td>.10</td>
<td>.85</td>
</tr>
<tr>
<td>Division Boards, nailed</td>
<td>.15</td>
<td>1.05</td>
</tr>
<tr>
<td>Shallow Division Boards, flat</td>
<td>.10</td>
<td>.75</td>
</tr>
<tr>
<td>Shallow Division Boards, nail</td>
<td>.15</td>
<td>.95</td>
</tr>
</tbody>
</table>

Super Cover

These are also known as Inner Covers for Colorado and Metal Roof Covers, and as Bee Escape Boards. There is a hole in the center for the insertion of a Porter Bee Escape when desired.

Super Cover, Inner Cover, or Bee Escape Board

<table>
<thead>
<tr>
<th>Style</th>
<th>1</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>In flat</td>
<td>.15</td>
<td>$1.40</td>
</tr>
<tr>
<td>Nailed up</td>
<td>.20</td>
<td>1.60</td>
</tr>
<tr>
<td>Nailed, with Bee Escape</td>
<td>.35</td>
<td>3.00</td>
</tr>
</tbody>
</table>

Followers

For use in No. 1 Supers to squeeze sections tight. Price: 1, 5c; 10, 30c. Weight: 10, 3 lbs.

When ordering goods to be shipped by parcel post, do not fail to remit sufficient to pay postage.
Super Springs
These springs are used for holding sections tight in supers, and are much superior to any wedging device. Weight, 1½ lbs. per 100. Price: 1c each; 80c per 100; $6.50 per 1,000.

Section Slats
Slotted Section Slats are ¼ inch thick, cut same shape as sections, and are same as bottom slat for Section Holders. The Ideal Section Slats are used with No. 3 Super.

Slotted Section Holder
This is the style furnished with the No. 1 or Regular Dovetailed Super for Bee-way Sections.

Plain Section Holder
This is the style furnished with the No. 2 Super for 4½x4½x1⅛ Plain Sections.

No. 4 Section Holder
This style is furnished with the No. 4 Super for 4x5x1¾ Plain Sections.

Slotted Separators
Slotted Separators are furnished with the No. 1 or Regular Dovetailed Supers in connection with the Slotted Section Holders.

Plain Separators
Plain Separators without slots are used in the old style T-tin supers without section holders.

Fence Separators
No. 2 or P Fence. Used in No. 3 or Ideal Super with Plain Section Holders and 4½x4½x1⅛ Plain Sections.

No. 3 or I Fence. Used in No. 2 or Plain Super with Plain Section Slats and 3½x5x1⅛ Plain Sections.

No. 4 or 4x5 Fence. Used in No. 4 or 4x5 Super with Plain Section Holders and 4x5x1¾ Plain Sections.

S Fence. Used with 4½x4½ Plain Sections in Slotted Section Holders.

PRICE LIST

<table>
<thead>
<tr>
<th></th>
<th>10</th>
<th>100</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slotted Section Slats</td>
<td>$ .20</td>
<td>$1.40</td>
<td>15 lbs.</td>
</tr>
<tr>
<td>Ideal Plain Section Slats</td>
<td>.15</td>
<td>1.25</td>
<td>18 lbs.</td>
</tr>
<tr>
<td>Slotted Section Holders</td>
<td>.30</td>
<td>2.60</td>
<td>30 lbs.</td>
</tr>
<tr>
<td>Plain Section Holders</td>
<td>.25</td>
<td>2.30</td>
<td>30 lbs.</td>
</tr>
<tr>
<td>No. 4 Section Holders</td>
<td>.25</td>
<td>2.30</td>
<td>35 lbs.</td>
</tr>
<tr>
<td>Slotted Separators</td>
<td>.15</td>
<td>1.30</td>
<td>8 lbs.</td>
</tr>
<tr>
<td>Plain Separators</td>
<td>.15</td>
<td>1.10</td>
<td>6 lbs.</td>
</tr>
<tr>
<td>Fence Separators, any style</td>
<td>.25</td>
<td>2.40</td>
<td>12 lbs.</td>
</tr>
</tbody>
</table>

Metal Parts for Hives

<table>
<thead>
<tr>
<th></th>
<th>10</th>
<th>100</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tin Rabbets, 12 inch</td>
<td>$ .15</td>
<td>$1.40</td>
<td>7 lbs.</td>
</tr>
<tr>
<td>Tin Rabbets, 14 inch</td>
<td>.15</td>
<td>1.40</td>
<td>8 lbs.</td>
</tr>
<tr>
<td>T-Tins, 13 inch</td>
<td>.15</td>
<td>1.40</td>
<td>7 lbs.</td>
</tr>
<tr>
<td>T-Tins, 15 inch</td>
<td>.20</td>
<td>1.55</td>
<td>8 lbs.</td>
</tr>
<tr>
<td>Flat Tins, 13 inch</td>
<td>.10</td>
<td>.60</td>
<td>3 lbs.</td>
</tr>
<tr>
<td>Flat Tins, 15 inch</td>
<td>.10</td>
<td>.75</td>
<td>4 lbs.</td>
</tr>
</tbody>
</table>

All prices quoted in this catalog, except when otherwise specified, are for goods F. O. B. Seattle or Portland. If goods are to be shipped by parcel post, or by freight to a station where there is no agent, remittance must include amount to prepay charges.

Lewis Hives and Furniture are made right—no rough edges or badly fitting parts.
Queen Excluding Honey Boards
Queen Excluding Honey Boards are used to confine the queen to the brood-chamber, and are very generally used in the production of extracted honey.

Wood and Wire Excluder
We consider this the best Excluder on the market, and it is becoming more popular each year. It is superior to the perforated metal, as it presents smooth, round edges for the worker bees to pass, and the spaces are more exact.

Wood and Zinc Excluder
This is a popular style. It consists of strips of zinc with two rows of holes placed between wood slats, and has a wood rim.

Wood Bound Zinc Excluder
Another style of perforated metal excluder which is used by some bee-keepers, but we do not consider it as good as either of the others.

Unbound Zinc Excluder
This Zinc Excluder is simply a sheet of perforated metal. They are placed directly on top of the frames and allow the bees to pass through the holes directly over the spaces between the frames.

Queen Excluding Zinc
We furnish full sheets and strips of perforated zinc for those who require special excluders and wish to make them themselves.

Full Sheets, 32x96 inches. Weight 7 lbs....$3.60
Cut to order. Per sq. ft. Weight 1/2 lb.... .20
Strips, two rows of holes, 13/16 inches wide, 19 1/2 inches long. Per 100, weight 5 lbs... 2.85

Wire for Frames
When full sheets of foundation are used in brood frames we recommend wiring the frames as shown above. All Hoffman end bars are properly pierced for wire.

1/2-oz. spool No. 30 Tinned Wire, wt. 2 oz.....$ .05
1/4-lb. spool No. 30 Tinned Wire, wt. 6 oz..... .15
1/2-lb. spool No. 30 Tinned Wire, wt. 10 oz..... .25
1-lb. spool No. 30 Tinned Wire, wt. 18 oz..... .35
5-lb. spool No. 30 Tinned Wire, wt. 6 1/2 lbs..... 1.35

Write for special prices on Bee Supplies in large quantities, stating quantity wanted.
TOOLS AND APPLIANCES FOR BEE KEEPERS

Lewis
Section Squeezer
The best device for putting together sections. It is simple, compact, and can be easily adjusted for any size section. It works perfectly and quickly, and for those who have a large quantity of sections to fold there is nothing better.
Weight, 13 lbs. Price $2.75

Handy Section Press
This is the lowest priced section former, and is very useful if you have only a small quantity of sections to fold. It may be attached to a bench, post, or wall.
Weight, 15 oz. Price $0.55

Colorado Section Press
This is a very good section former and one that has been used by many of the largest Colorado bee keepers with entire satisfaction.
It is a foot power machine, and unlike other low-priced devices for this purpose, it is adjustable for any size section.
Weight, 8 1/4 lbs. Price $1.75

Lewis Section Former
This is a simple device for folding sections, the price is low, and for a limited quantity it is the best.
Weight, 9 lbs. Price $1.25

Lewis
Foundation Fastener
This is undoubtedly the best machine on the market for fastening starters in sections. It can be securely fastened to a wall or table, materially assisting in the work and avoiding the danger of overturning the lamp.
As it can be used with any ordinary lamp, no lamp is furnished with it. Weight 7 1/2 lbs. Price $1.25

Rauchfuss
Combined Section Press and Foundation Fastener
For those who prefer a combined machine for folding sections and fastening starters in one handling, we consider this the best on the market.
Weight, 12 lbs. Price $3.00

Parker Fastener
For the small bee-keeper this is a simple and low priced device for fastening 4 1/4x4 1/4 sections.
Weight, 1 lb. Price 40c

Daisy
Foundation Fastener
While this is a very good machine, it is not equal to the Lewis Foundation Fastener. It is furnished with either one of three sizes of plates, for 4 1/4, 3 3/4, or 4-inch sections. Unless size is specified, we furnish the plate for 4 1/4-inch sections. It may be used with any ordinary lamp. We furnish it either with or without lamp.
With Lamp, weight 6 1/2 lbs., price $1.40
Without Lamp, weight 6 lbs., price 1.15
Extra Plates, weight 1 lb., price .20

Van Deusen
Wax-Tube Fastener
A handy tool for fastening foundation to plain top bars. It will feed a fine stream of hot wax between the foundation edge and the wood, cementing them together.
Weight, 5 ounces. Price .25c

Carlin
Foundation Cutter
Very convenient for cutting foundation into any desired size. Weight, 3 oz. Price .20c

Spur Wire Imbedder
A very handy tool for imbedding the wire into the foundation when wire is used in frames in connection with full sheets. Weight, 3 oz. Price .25c

We pay highest market price for bees-wax. Write for quotation.
**Hive Scraper**
A very handy tool for scraping hives, supers, bottom boards, etc.
Weight ½ lb. Price.......................... 20c

**Hive Tool**
Made of nickeled steel. A very useful scraper and pry.
Weight 6 oz. Price.......................... 50c

**German Bee Brush**
A very popular style of bee brush. It is durable and will probably outwear the lower-priced brushes.
Weight 7 ounces. Price.......................... 30c

**Dixie Bee Brush**
The best bee brush on the market. The strands are soft and pliable and the brush is long enough to reach clear across a frame, so that one or two sweeps should clear the comb of bees.
Weight 9 oz. Price.......................... 20c

**Coggshall Bee Brush**
One of the oldest styles, and preferred by some, although we do not consider it as good as either of the others.
Weight 6 oz. Price.......................... 20c

**Bingham Honey Knife**
An improvement over the old Bingham knife, having flanges on the shaft, providing a grip for finger and thumb.
Weight 12 oz. Price.......................... 80c

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**Bingham Bee Smoker**
The best smoker on the market. It includes all new improvements; direct draft, bent cap, wire handles, inverted bellows and soot burning device.
Furnished in four sizes.

**Corneil Smoker**
Another good smoker. It is strong, well made and modern.
Furnished in two sizes.

**Danzenbaker Smoker**
A combination cold and hot blast smoker, popular with many beekeepers.

**Clark Smoker**
A very popular low-priced cold blast smoker; the best for the price.

**PRICE LIST OF BEE SMOKERS**

<table>
<thead>
<tr>
<th>Size</th>
<th>Barrel</th>
<th>Weight</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4 in.</td>
<td>2 lbs.</td>
<td>$1.40</td>
</tr>
<tr>
<td></td>
<td>3½ in.</td>
<td>1½ lbs.</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>3 in.</td>
<td>1¼ lbs.</td>
<td>.90</td>
</tr>
<tr>
<td></td>
<td>2½ in.</td>
<td>1 lb.</td>
<td>.60</td>
</tr>
<tr>
<td></td>
<td>3¼ in.</td>
<td>1¾ lbs.</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>2½ in.</td>
<td>1 lb.</td>
<td>.80</td>
</tr>
<tr>
<td></td>
<td>13/4 lbs.</td>
<td></td>
<td>1.15</td>
</tr>
<tr>
<td></td>
<td>11/4 lbs.</td>
<td></td>
<td>.70</td>
</tr>
</tbody>
</table>

When Bee Supplies are to be shipped by parcel post, remittance must include postage.
Queen and Drone Trap

Alley's Queen and Drone Trap is used during swarming time to prevent the escape of swarms. When the swarm comes out, the queen, being unable to pass the wire queen excluder, passes into the upper compartment through the wire cones. The trap can then be taken off the hive, the hive removed, and the trap placed on another hive in the old location.

In a very short time the swarm will return, when the slide in the trap may be drawn, allowing the queen to pass downward in with the swarm.

The trap can also be used to prevent mismated or undesirable drones from crossing with young queens on their mating flight. The drones, failing to pass the wires, pass upwards through the cones.

Weight 1 lb. Price.......................... 60c

Bee Entrance Guard

To a limited extent this accomplishes the purpose of the Queen and Drone Trap, but has no compartment in which to trap the queen or drones, only confining them to the hive.

Weight 1/2 lb. Price.......................... 25c

Honey House Escape

For use on doors and windows of extracting rooms or other places where bees get in and you wish them to get out without possibility of returning.

Weight 2 oz. Price, 25c each; $2.50 per doz.

Porter Bee Escape

The Bee Escape is placed in the hole for that purpose in the Super Cover or Honey Board, and avoids the necessity of smoking and of shaking heavy supers to get the bees out.

Price, postpaid, 20c each.......................... $1.90 per doz.

BEE ESCAPE WITH HONEY BOARD

Super Cover or Honey Board for either 8-frame or 10-frame hive, nailed up, with Bee Escape.

Weight 2 lbs. each.

Price, 35c each; 10 for.......................... $3.00

Bee Gloves

These gloves have long sleeves and the material is durable and practically sting-proof. Three sizes, large, medium and small.

Weight 9 oz. Price.......................... 60c

Bee Veils

These veils are made of the best material and are very durable. The Globe Veil is the most popular, especially with those who are a little timid, as it has a folding metal frame which holds the net away from the face.

Bee Veil, Mosquito Bar.......................... $ .30
Bee Veil, Cotton.......................... .60
Bee Veil, Cotton with Silk Face.................. .70
Bee Veil, All Silk.......................... 1.00
Globe Bee Veil.......................... 1.00
Extra Net for Globe Bee Veil.................. .70
Bee Hat; flexible rim; fits any head............ .30

Hive Tent

Made of netting. Very convenient for setting over hives when introducing queens, transferring, etc., when robbers are troublesome.

Cannot be shipped by parcel post.

Weight 6 lbs. Price.......................... $3.00

There is profit and pleasure in bee-keeping. If not already interested, investigate it.
Hive Clamps
For fastening together the various parts of hives when they are to be moved. Made of malleable iron. Weight, 10 pairs $1.20. Price, with screws, per pair, 5c; 10 pairs $4.00.

Hive Hooks
Used for the same purposes as the Hive Clamps. Weight, 10 pairs, 1½ lbs. Price, with screws, per pair 5c; 10 pairs $3.00.

Hive Staples
For the same purposes as Hive Clamps and Hive Hooks. Two inches wide, points three-quarters of an inch long. Price, per pound $0.25.

Alexander Feeder
The best and most popular feeder on the market. If desired, it may be left in the hive the entire season, and if there is a dearth of honey a hundred colonies can easily be fed in a few minutes by simply moving the end slide and pouring in the feed. As the feed is given to the bees at the rear of the hive, without opening it, there is no disturbance.

Doolittle Division-Board Feeder
This is also a very popular feeder. It is the same size as a brood frame or division board, and hangs in the brood chamber in the same way. To feed, it is only necessary to move the cover back far enough to expose the opening, through which the feed is poured. The bees are supplied without exposing the cluster, and without using smoke.

Miller Feeder
When feeding is left until the last moment, this style is a good one, for with it 10 to 25 lbs. of feed can be supplied at one time. It is placed inside of the super, on top of the brood frames. It has two compartments for syrup.

Simplicity Feeder
This may be placed at the entrance at night, over the brood frames, or in the brood-nest by removing two of the brood frames.

Boardman Entrance Feeder
A Mason jar, with perforated cap, allows the feed to pass through no faster than the bees can take it. It is furnished without jars but with cap.

Pepper-Box Feeder
This is simply a tin can with perforated cover, which can be filled with feed, inverted, and placed over the frames.

PRICE LIST, BEE FEEDERS

<table>
<thead>
<tr>
<th>Style</th>
<th>Nailed up</th>
<th>In flat</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alexander</td>
<td>$0.30</td>
<td>$0.20</td>
<td>$0.15</td>
</tr>
<tr>
<td>Doolittle</td>
<td>$0.35</td>
<td>$0.25</td>
<td>$0.20</td>
</tr>
<tr>
<td>Miller</td>
<td>$0.45</td>
<td>$0.35</td>
<td>$0.30</td>
</tr>
<tr>
<td>Boardman</td>
<td>$0.25</td>
<td>$0.20</td>
<td>$0.15</td>
</tr>
<tr>
<td>Simplicity</td>
<td>$0.10</td>
<td>$0.05</td>
<td>$0.05</td>
</tr>
<tr>
<td>Pepper-Box</td>
<td>$0.10</td>
<td>$0.05</td>
<td>$0.05</td>
</tr>
<tr>
<td>Pepper-Box, 1qt.</td>
<td>$0.15</td>
<td>$0.10</td>
<td>$0.05</td>
</tr>
</tbody>
</table>

When feeders are ordered in flat, they should be coated inside with hot wax or paraffine after being nailed up.

Manum's Swarm Catcher
The best device for catching a swarm whose queen is at large with the bees. In using it, open the basket, push it up around the swarm of bees, jar them off the limb, and close the cover by raking it against a limb. Half or more of the bees will be caught in the basket; then suspend the basket near the balance and they will cluster on the outside, and may be dumped into the hive. Weight 3½ lbs. Price, without pole $1.35.

If you require Bee Supplies in large quantities, please give us a list of articles and quantities wanted and we will be glad to quote you special prices.

Bokhara, or Sweet Clover, makes excellent bee pasture. We can furnish the best seed.
Benton
Queen Mailing Cage
Used for shipping queens by mail, also for introducing. Full instructions are printed on the cage. Furnished without candy. Weight 1 ounce.
Price, 1, 5c; 10, 35c; 100, $3.00.

Miller Queen Catcher and Introducing Cage
A very handy little arrangement for catching and introducing queens. Weight 1 ounce.
Price... 1, 10c; 10, 90c

Rauchfuss Queen Cage and Cell Protector
This is used in connection with a simple method of raising queens, and can also be used as an introducing cage. Weight 1 ounce.
Price... ...1, 5c; 10, 40c

Dadant Uncapping Can
This consists of two 20-inch galvanized cans, one telescoping into the other. The upper can holds the cappings, and the lower the drippings of honey as they percolate through the screen bottom that supports the cappings.
Weight 56 lbs. Price... $11.00

The G. B. Lewis Co. bee supplies are the best obtainable, and are fully guaranteed. If not found to be strictly as advertised they may be returned and money will be refunded.

No. 5 Novice Honey Extractor
The Novice is intended for the use of those having a small number of colonies. It is as well built as the larger machines, the difference being in the size and that it is non-reversible. It is equipped for two Langstroth, Hoffman or other frames not over 9½ x 18½ inches. To reverse the frames it is necessary to take them out of the baskets, reverse and replace them. Weight 45 lbs. Price... $14.50

No. 15 Cowan Honey Extractor
The Cowan is a reversing machine, and the frames of comb do not have to be taken out to be reversed. The baskets are hung so that they can be turned the other side to by putting the hand down into the can and reversing them while the reel revolves slowly.
These extractors have ball bearings and slip-gear, and are equipped with two baskets. The No. 15 will handle two Langstroth, Hoffman or other frames not over 9½ x 18½ inches, the same as the Novice.
Weight 100 lbs. Price... $20.50

No. 25 Automatic Honey Extractor
The Automatic Reversible is a still heavier and larger machine, and, as the name signifies, all that is necessary to reverse the basket is a slight pressure on the brake, which slows down the reel, when the baskets automatically turn the other side to without noise and without stopping the machine. These machines, like the others, have ball bearings and slip-gears. The No. 25 is equipped for four Langstroth or Hoffman Frames. Diameter of can, 29 inches.
Weight 210 lbs. Price... $43.25

No. 30 Automatic Honey Extractor
The No. 30 Automatic is the same as the No. 25 except that it is larger and will handle six Langstroth or Hoffman Frames. Diameter of can, 34 inches. Weight 300 lbs. Price... $58.25

Comb Bucket
For carrying frames to the extracting house. It is dust proof, and catches all the dust.
Weight 5 lbs. Price... $1.50
Hershiser Wax Press

The Hershiser Wax Press is not only the best wax press on the market, but it is an almost perfect device for extracting wax. It is guaranteed to extract within one per cent of all wax contained in the slumgum placed in it if properly operated. Write for circular fully describing this press.

Weight, 150 lbs. Price......................... $29.50

Doolittle Solar Wax Extractor

A low priced extractor for rendering combs by sun heat during the summer. The solar wax extractors are adapted to melting up burr and brace combs and scrapings, but are not suitable for rendering old combs and scrapings containing dirt. Weight 30 lbs.

Price ........................................ $5.00

Nails

We furnish sufficient nails with all hives and other goods which are shipped in flat, but if required can furnish nails as follows:

FINE, FLAT HEAD, BRIGHT WIRE NAILS

One Pound Packages

<table>
<thead>
<tr>
<th>Length</th>
<th>1 lb.</th>
<th>5 lbs.</th>
<th>10 lbs.</th>
<th>100 lbs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2 inch</td>
<td>.30</td>
<td>$1.25</td>
<td>$2.35</td>
<td>$21.50</td>
</tr>
<tr>
<td>5/8 inch</td>
<td>.25</td>
<td>1.10</td>
<td>2.00</td>
<td>18.00</td>
</tr>
<tr>
<td>3/4 inch</td>
<td>.25</td>
<td>1.00</td>
<td>1.85</td>
<td>15.60</td>
</tr>
<tr>
<td>7/8 inch</td>
<td>.20</td>
<td>.85</td>
<td>1.55</td>
<td>13.10</td>
</tr>
</tbody>
</table>

FINE, FLAT HEAD, CEMENT COATED WIRE NAILS

In Bulk

<table>
<thead>
<tr>
<th>Size</th>
<th>Length</th>
<th>1 lb.</th>
<th>5 lbs.</th>
<th>10 lbs.</th>
<th>50 lbs.</th>
<th>100 lbs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/8 inch</td>
<td>.20</td>
<td>$ .90</td>
<td>$1.75</td>
<td>$13.10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2d</td>
<td>1 inch</td>
<td>.15</td>
<td>.65</td>
<td>1.25</td>
<td>7.60</td>
<td></td>
</tr>
<tr>
<td>3d</td>
<td>1 1/4 inch</td>
<td>.15</td>
<td>.60</td>
<td>1.15</td>
<td>7.25</td>
<td></td>
</tr>
<tr>
<td>4d</td>
<td>1 1/2 inch</td>
<td>.15</td>
<td>.55</td>
<td>1.05</td>
<td>7.10</td>
<td></td>
</tr>
<tr>
<td>6d</td>
<td>2 inch</td>
<td>.15</td>
<td>.55</td>
<td>1.05</td>
<td>7.00</td>
<td></td>
</tr>
<tr>
<td>7d</td>
<td>2 1/4 inch</td>
<td>.15</td>
<td>.55</td>
<td>1.05</td>
<td>6.80</td>
<td></td>
</tr>
<tr>
<td>8d</td>
<td>2 1/2 inch</td>
<td>.15</td>
<td>.55</td>
<td>1.05</td>
<td>6.70</td>
<td></td>
</tr>
</tbody>
</table>

Sections

The Lewis One-Piece Bright Polished Sections are the best that are to be had. They are made of Wisconsin basswood, the best material known for this purpose, and each section in every package of the No. 1 grade is perfect in every respect. Sections of the No. 2 grade have some slight defect, but are better than the No. 1 grade put out by some manufacturers.

STANDARD BEEWAY SECTIONS

The 4 1/4 x 4 1/4 x 1 3/4 is the standard section. We can furnish it in four styles, open one, two, three, or four sides. Unless the order specifies otherwise, we always ship the 4 1/4 x 4 1/4 x 1 3/4 open two sides. We can furnish these in either No. 1 or No. 2 grade.

PLAIN SECTIONS

The following Plain or No Beeway sections are carried in stock: 4 1/4 x 4 1/4 x 1 1/2, 4 1/4 x 1 3/4, and 3 1/4 x 5 x 1 1/2. We can furnish these in the No. 1 grade only.

PRICE LIST OF SECTIONS

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Beewa Sections</th>
<th>Plain Sections</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. 1</td>
<td>No. 2 Weight</td>
<td>No. 1 Weight</td>
</tr>
<tr>
<td>100</td>
<td>$9.50 $ .85</td>
<td>7 lbs. $ 9.50</td>
</tr>
<tr>
<td>500</td>
<td>3.35 3.10</td>
<td>35 lbs. 3.30</td>
</tr>
<tr>
<td>1,000</td>
<td>6.45 5.95</td>
<td>70 lbs. 6.10</td>
</tr>
</tbody>
</table>

If sections are required in quantities greater than one thousand, please write for special prices, stating quantity and style wanted.

Frame Spacing Staples

One pound, 25c; five pounds.......................... $1.00

Prices are F. O. B. Seattle or Portland. If goods are to be shipped by parcel post, or to a station at which there is no agent, remit sufficient to pay transportation.
Safety Shipping Cases

The Safety Shipping Case is something new in the way of a package for comb honey shipment. It is especially adapted for single case shipments or in shipments of less cases than is required to fill a crate or carrier, as these Safety Cases do not require same.

The immunity from damage to honey shipped in these cases over shipments made in the regular cases without carriers will make up for the additional cost of this new case.

The safety feature of this case is provided for by making the inside measurement of each size a trifle larger than the regular, which allows for a sheet of corrugated paper to be placed on top and under the sections, as well as at the two ends of the case and at the back; in other words, the case is completely lined with corrugated paper with the exception of the front. In addition to this corrugated lining feature, a heavy pulpboard Safety Carton is furnished; twenty-four cartons to each case.

These Safety Cartons still further protect the honey against damage, and in addition permits of the retailing of comb honey in a very neat and sanitary manner.

A sheet of strong plain paper is also furnished to go under the bottom corrugated sheet, the same as is furnished with the regular case, and for the same purpose.

These cases are furnished in 24-lb. size only.

PRICE LIST, SAFETY SHIPPING CASES

Safety Shipping Cases complete, in the flat, including nails, 2-inch glass, Safety Cartons, corrugated paper lining and paper for bottom.

<table>
<thead>
<tr>
<th>Size—Sections</th>
<th>10</th>
<th>100</th>
<th>Wt. 100</th>
</tr>
</thead>
<tbody>
<tr>
<td>For 4 1/4 x 4 1/4 x 1 1/2 Sections</td>
<td>$4.00</td>
<td>$37.80</td>
<td>580 lbs.</td>
</tr>
<tr>
<td>For 4 1/4 x 4 1/4 x 1 1/2 Sections</td>
<td>3.90</td>
<td>36.60</td>
<td>560 lbs.</td>
</tr>
<tr>
<td>For 4 x 3 x 1 1/2 Sections</td>
<td>3.90</td>
<td>36.60</td>
<td>560 lbs.</td>
</tr>
</tbody>
</table>

Unless the order specifies otherwise we will ship cases for 4 1/4 x 4 1/4 x 1 1/2 sections.

Safety Cartons

Additional Safety Cartons for use with Safety Shipping Cases; for 4 1/4 x 4 1/4 x 1 1/2, 4 1/4 x 4 1/4 x 1 1/2, or 4 x 3 x 1 1/2 sections, weight 5 lbs. per 120. Price:

120 .................................. $0.50
1200 .................................. 4.70

Regular Shipping Cases

The regular style shipping case, equipped with a sheet of corrugated paper for the bottom of the case and a sheet of strong plain paper to go under the corrugated sheet, so that if there should be any leakage it will be caught and not run through on the other cases.

When shipping a quantity of comb honey in these cases, the cases should be packed in crates or carriers, cushioned with about two inches of straw to absorb the jar when handled.

As the 24-lb. case is most practical, we no longer carry the 12-lb. case, and can furnish the 24-lb. case only.

TWENTY-FOUR POUND SHIPPING CASES

Complete, in the flat, including nails, 2-inch glass, corrugated paper and plain paper.

<table>
<thead>
<tr>
<th>Size—Sections</th>
<th>10</th>
<th>100</th>
<th>Wt. 100</th>
</tr>
</thead>
<tbody>
<tr>
<td>For 3 3/4 x 3 x 3 3/4 Sections</td>
<td>$2.70</td>
<td>$24.60</td>
<td>360 lbs.</td>
</tr>
<tr>
<td>For 3 3/4 x 3 x 3 3/4 Sections</td>
<td>2.55</td>
<td>23.40</td>
<td>340 lbs.</td>
</tr>
<tr>
<td>For 3 3/4 x 3 x 3 3/4 Sections</td>
<td>2.45</td>
<td>22.40</td>
<td>340 lbs.</td>
</tr>
</tbody>
</table>

If the order does not specify size, we always ship cases for 3 3/4 x 3 x 3 3/4 sections.

Five-Gallon Cans (60 lbs.)

This style can is in general use for shipping extracted honey. They are packed in strong re-shipping cases containing two cans each.

Two Cans, including case. Weight 10 lbs. $1.00
Ten Cases, two cans each. Weight 100 lbs. 9.00

One-Gallon Cans (12 lbs.)

One Gallon Square Cans with Screw Tops, packed in re-shipping cases containing one dozen cans.

One Case, containing 1 doz. cans. Wt. 20 lbs. $2.25
Ten Cases, 1 doz. cans each. Wt. 200 lbs. 20.00

We pay highest market price for beeswax. Write for quotation.
Comb Foundation

Considering the start given to a colony of bees by the judicious use of comb foundation, the satisfaction of having nice straight combs to handle, and the power to restrain by its use the overproduction of drones, there is no question in regard to the advisability of using it.

Medium Brood Foundation is recommended for use in brood frames and extracting frames only.

If your object in using brood foundation is only to secure straight combs, and you wish to accomplish that as cheaply as possible, a strip one inch wide and 16 1/2 inches long, securely fastened in the center of the top-bar, will be sufficient. The objection to this plan is that the bees will often build a considerable amount of drone comb, which should be removed and replaced with worker comb.

To overcome this difficulty many bee-keepers use full sheets of foundation, as they are then reasonably sure of securing nice, straight, all-worker comb.

As a set of brood combs will last many years, it is worth while to have them as perfect as possible.

In using full sheets of foundation we advise wiring the frames. Wired combs will not break down in hot weather, when colonies are moved, or when honey is extracted from them.

To obtain satisfactory combs it is absolutely necessary to have the hives stand level sidewise.

Full sheets of Light Brood Foundation should be used only when the frames are wired.

Thin Surplus and Extra Thin Surplus Foundation is used in the production of comb honey and as a starter in the sections. If you wish to use only a narrow starter in the sections we recommend the use of Thin Surplus. If you use a full starter, as shown in Fig. 3, we recommend the use of Extra Thin Surplus.

Fig. 1 shows a section with three-cornered starter at top and a very narrow starter, one-half inch, at the bottom.

Fig. 2 shows another form of starter commonly used, and for which we recommend the use of Thin Surplus Foundation.

Fig. 3 is the one referred to above, and for which Extra Thin Surplus Foundation is recommended. As shown, the section is provided with a narrow bottom starter of about five-eighths of an inch, and a full top starter reaching to within about one-quarter of an inch of the bottom starter. This method is considered the most desirable of any.

If you produce comb honey for market, you will do well to adopt the latter method, as you will thereby secure honey that will bear shipment much better.

Bee-keepers requiring supplies in very large quantities will please write for special prices.

Lewis Observation Hive

A complete bee hive fitted with glass sides through which the life, habits and workings of the busy bee may be observed with safety.

In size and general construction it is the same as our regular One and One-Half Story Eight Frame Dovetailed Hive, complete with Sections, Frames and full sheets of Foundation, set up ready to put the bees in.

The body and super have three sides of glass, with removable panels on sides and back. The entrance is so constructed that the hive may be placed next to a window, allowing the bees to pass in and out without entering the room.

The hive is nicely varnished and fitted with brass trimmings, making it an attractive piece of furniture for any room.

Weight, 47 lbs. Price, complete...................................... $8.45

LANGSTROTH ON THE HONEY BEE
By C. P. Dadant

This has long been recognized as a standard work and one of the best books on bees ever published. In its 575 pages of reading matter and illustrations will be found all the latest information on bee culture.

Price, $1.20, postpaid.
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STOCK AND DAIRYING

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If your neighbor has not a copy of this book, a post card will get it.
### PLANTING TABLE FOR VEGETABLE GARDEN

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<tr>
<th>SEED</th>
<th>Quantity Required</th>
<th>Depth</th>
<th>Dist. Apart</th>
<th>When to Sow</th>
<th>Ready for Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Artichoke, Globe, Seed.</td>
<td>1 oz. for 500 plants</td>
<td>1 in.</td>
<td>1 ft.</td>
<td>Spring</td>
<td>Second summer</td>
</tr>
<tr>
<td>Artichoke, Globe, Plants.</td>
<td>1 oz. for 500 plants</td>
<td>1 in.</td>
<td>3 ft.</td>
<td>Spring</td>
<td>Summer</td>
</tr>
<tr>
<td>Asparagus, Seed</td>
<td>1 oz. for 500 plants</td>
<td>1 in.</td>
<td>3 ft.</td>
<td>Early spring</td>
<td>Late summer</td>
</tr>
<tr>
<td>Asparagus, Plants</td>
<td></td>
<td></td>
<td>1 ft.</td>
<td>Late spring</td>
<td>Blue spring</td>
</tr>
<tr>
<td>Beans, Dwarf</td>
<td>1 lb. to 100 feet</td>
<td>2 in.</td>
<td>2 ft.</td>
<td>Late spring</td>
<td>45 to 65 days</td>
</tr>
<tr>
<td>Beans, Pole</td>
<td>1 lb. to 150 hills</td>
<td>2 in.</td>
<td>3 ft.</td>
<td>Late spring</td>
<td>75 days</td>
</tr>
<tr>
<td>Beets, Table</td>
<td>1 oz. for 2000 pts.</td>
<td>2 in.</td>
<td>2 ft.</td>
<td>Early spring</td>
<td>8 days</td>
</tr>
<tr>
<td>Broccoli</td>
<td>1 oz. for 2000 pts.</td>
<td>2 in.</td>
<td>2 ft.</td>
<td>Early spring</td>
<td>Winter</td>
</tr>
<tr>
<td>Brussels Sprouts</td>
<td>1 oz. for 2000 pts.</td>
<td>2 in.</td>
<td>1 ft.</td>
<td>Early spring</td>
<td>Fall and winter</td>
</tr>
<tr>
<td>Cabbage</td>
<td>1 oz. for 2000 pts.</td>
<td>2 in.</td>
<td>2 ft.</td>
<td>Early spring</td>
<td>30 to 150 days</td>
</tr>
<tr>
<td>Celery</td>
<td>1 oz. for 2000 pts.</td>
<td>2 in.</td>
<td>3 ft.</td>
<td>Early spring</td>
<td>Summer</td>
</tr>
<tr>
<td>Cauliflower</td>
<td>1 oz. for 2000 pts.</td>
<td>2 in.</td>
<td>1 ft.</td>
<td>Early spring</td>
<td>4 months</td>
</tr>
<tr>
<td>Celery</td>
<td>1 oz. for 2000 pts.</td>
<td>2 in.</td>
<td>3 ft.</td>
<td>Late spring</td>
<td>Fall</td>
</tr>
<tr>
<td>Corn, Sweet</td>
<td>1 oz. for 2000 hills</td>
<td>3 in.</td>
<td>1 ft.</td>
<td>Early spring</td>
<td>30 to 100 days</td>
</tr>
<tr>
<td>Corn, Salad</td>
<td>1 oz. for 50 feet</td>
<td>3 in.</td>
<td>1 ft.</td>
<td>Early spring</td>
<td>Summer</td>
</tr>
<tr>
<td>Cress, Peppergrass</td>
<td>1 oz. for 150 feet</td>
<td>3 in.</td>
<td>1 ft.</td>
<td>Spring</td>
<td>100 days</td>
</tr>
<tr>
<td>Cucumber</td>
<td>1 oz. for 100 hills</td>
<td>3 in.</td>
<td>1 ft.</td>
<td>Spring</td>
<td>Summer</td>
</tr>
<tr>
<td>Egg Plant</td>
<td>1 oz. for 2000 pts.</td>
<td>3 in.</td>
<td>1 ft.</td>
<td>Spring</td>
<td>Fall</td>
</tr>
<tr>
<td>Endive, Leaf</td>
<td>1 oz. for 100 feet</td>
<td>3 in.</td>
<td>1 ft.</td>
<td>Spring</td>
<td>45 days</td>
</tr>
<tr>
<td>Horseradish, Roots</td>
<td>1 oz. for 400 feet</td>
<td>4 in.</td>
<td>1 in.</td>
<td>Spring</td>
<td>Summer</td>
</tr>
<tr>
<td>Kale</td>
<td>1 oz. for 200 feet</td>
<td>4 in.</td>
<td>2 ft.</td>
<td>Summer</td>
<td>65 days</td>
</tr>
<tr>
<td>Kohl-Rabi</td>
<td>1 oz. for 300 feet</td>
<td>4 in.</td>
<td>2 ft.</td>
<td>Summer</td>
<td>65 days</td>
</tr>
<tr>
<td>Lettuce</td>
<td>1 oz. for 400 feet</td>
<td>4 in.</td>
<td>2 ft.</td>
<td>Summer</td>
<td>65 days</td>
</tr>
<tr>
<td>Melon, Musk</td>
<td>1 oz. for 60 hills</td>
<td>4 in.</td>
<td>2 ft.</td>
<td>Summer</td>
<td>65 days</td>
</tr>
<tr>
<td>Okra, or Gumbo</td>
<td>1 oz. for 100 feet</td>
<td>4 in.</td>
<td>2 ft.</td>
<td>Summer</td>
<td>65 days</td>
</tr>
<tr>
<td>Onion, Seed</td>
<td>1 oz. for 300 feet</td>
<td>4 in.</td>
<td>2 ft.</td>
<td>Summer</td>
<td>65 days</td>
</tr>
<tr>
<td>Onion, Sets</td>
<td>1 lb. for 40 feet</td>
<td>4 in.</td>
<td>2 ft.</td>
<td>Summer</td>
<td>65 days</td>
</tr>
<tr>
<td>Parsley</td>
<td>1 oz. for 2000 pts.</td>
<td>4 in.</td>
<td>2 ft.</td>
<td>Summer</td>
<td>65 days</td>
</tr>
<tr>
<td>Parsnip</td>
<td>1 oz. for 400 feet</td>
<td>4 in.</td>
<td>2 ft.</td>
<td>Summer</td>
<td>65 days</td>
</tr>
<tr>
<td>Peas</td>
<td>1 oz. for 50 feet</td>
<td>5 in.</td>
<td>1 ft.</td>
<td>Summer</td>
<td>40 days</td>
</tr>
<tr>
<td>Pepper</td>
<td>1 oz. for 1500 pts.</td>
<td>5 in.</td>
<td>1 ft.</td>
<td>Summer</td>
<td>40 days</td>
</tr>
<tr>
<td>Potato, Mammoth Red</td>
<td>1 oz. for 50 feet</td>
<td>6 in.</td>
<td>1 ft.</td>
<td>Summer</td>
<td>40 days</td>
</tr>
<tr>
<td>Radish</td>
<td>1 oz. for 100 feet</td>
<td>6 in.</td>
<td>1 ft.</td>
<td>Summer</td>
<td>40 days</td>
</tr>
<tr>
<td>Rhubarb, Seed</td>
<td>1 oz. for 50 feet</td>
<td>6 in.</td>
<td>1 ft.</td>
<td>Summer</td>
<td>40 days</td>
</tr>
<tr>
<td>Rhubarb, Plants</td>
<td></td>
<td></td>
<td>1 ft.</td>
<td>Summer</td>
<td>40 days</td>
</tr>
<tr>
<td>Ruta Baga</td>
<td>1 oz. for 150 feet</td>
<td>6 in.</td>
<td>1 ft.</td>
<td>Summer</td>
<td>40 days</td>
</tr>
<tr>
<td>Salsify</td>
<td>1 oz. for 50 feet</td>
<td>6 in.</td>
<td>1 ft.</td>
<td>Summer</td>
<td>40 days</td>
</tr>
<tr>
<td>Spinach</td>
<td>1 oz. for 50 feet</td>
<td>6 in.</td>
<td>1 ft.</td>
<td>Summer</td>
<td>40 days</td>
</tr>
<tr>
<td>Squash, Bush</td>
<td>1 oz. for 25 hills</td>
<td>6 in.</td>
<td>1 ft.</td>
<td>Summer</td>
<td>40 days</td>
</tr>
<tr>
<td>Squash, Winter</td>
<td>1 oz. for 12 hills</td>
<td>6 in.</td>
<td>1 ft.</td>
<td>Summer</td>
<td>40 days</td>
</tr>
<tr>
<td>Tomato, Seed</td>
<td>1 oz. for 2000 pts.</td>
<td>6 in.</td>
<td>1 ft.</td>
<td>Summer</td>
<td>40 days</td>
</tr>
<tr>
<td>Turnip</td>
<td>1 oz. for 150 feet</td>
<td>7 in.</td>
<td>1 in.</td>
<td>Spring</td>
<td>Summer</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1 ft.</td>
<td>Spring</td>
<td>150 days</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1 ft.</td>
<td>Spring</td>
<td>Summer</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1 ft.</td>
<td>Spring</td>
<td>60 to 75 days</td>
</tr>
</tbody>
</table>

### QUANTITY OF FARM SEEDS USUALLY SOWN

<table>
<thead>
<tr>
<th>Lbs. Per Acre</th>
<th>Lbs. Per Acre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alfalfa</td>
<td>10 to 20</td>
</tr>
<tr>
<td>Aisike</td>
<td>6 to 10</td>
</tr>
<tr>
<td>Artichokes, Jerusalem</td>
<td>400 to 600</td>
</tr>
<tr>
<td>Barley</td>
<td>100</td>
</tr>
<tr>
<td>Beans, Mangel or Sugar</td>
<td>5 to 6</td>
</tr>
<tr>
<td>Broom Corn</td>
<td>8 to 12</td>
</tr>
<tr>
<td>Buckwheat</td>
<td>40 to 60</td>
</tr>
<tr>
<td>Carrot, Stock</td>
<td>3 to 4</td>
</tr>
<tr>
<td>Clover, Aisike</td>
<td>6 to 10</td>
</tr>
<tr>
<td>Clover, Sweet</td>
<td>20 to 30</td>
</tr>
<tr>
<td>Clover, Red</td>
<td>8 to 15</td>
</tr>
<tr>
<td>Cleto, Mammoth Red</td>
<td>30 to 40</td>
</tr>
<tr>
<td>Clover, Crimson</td>
<td>10 to 15</td>
</tr>
<tr>
<td>Clover, White, for pasture</td>
<td>8 to 10</td>
</tr>
<tr>
<td>Corn, Field</td>
<td>12 to 15</td>
</tr>
<tr>
<td>Corn, Pop</td>
<td>15 to 25</td>
</tr>
<tr>
<td>Corn, Pop</td>
<td>5 to 10</td>
</tr>
<tr>
<td>Emmer, or Speltz</td>
<td>100</td>
</tr>
<tr>
<td>Fertility</td>
<td>50</td>
</tr>
<tr>
<td>Flax, for fibre</td>
<td>30</td>
</tr>
<tr>
<td>Grass, Kentucky Blue, for pasture</td>
<td>20 to 30</td>
</tr>
<tr>
<td>Grass, DeKalb Blue, for pasture</td>
<td>20 to 30</td>
</tr>
<tr>
<td>Grass, Timothy</td>
<td>10 to 20</td>
</tr>
<tr>
<td>Grass, Red Top, Unhulled</td>
<td>30 to 40</td>
</tr>
<tr>
<td>Grass, Red Top, Hulled</td>
<td>10 to 15</td>
</tr>
<tr>
<td>Grass, Red Top, for 10 to 30</td>
<td>50 to 60</td>
</tr>
<tr>
<td>Grass, Italian Rye</td>
<td>30 to 50</td>
</tr>
<tr>
<td>Grass, Orchard</td>
<td>40 to 60</td>
</tr>
<tr>
<td>Grass, Meadow Fescue</td>
<td>25 to 30</td>
</tr>
<tr>
<td>Grass, Brome Grass</td>
<td>30 to 40</td>
</tr>
<tr>
<td>Grass, Crested Dog’s Tail</td>
<td>20 to 30</td>
</tr>
<tr>
<td>Grass, Tall Meadow Oat</td>
<td>25 to 30</td>
</tr>
<tr>
<td>Grass, Velvet, or Mesquite</td>
<td>45 to 50</td>
</tr>
<tr>
<td>Grass, Sheep’s Fescue</td>
<td>35 to 40</td>
</tr>
<tr>
<td>Grass, Fine Leaved Fescue</td>
<td>30</td>
</tr>
<tr>
<td>Grass, Hard Fescue</td>
<td>45 to 50</td>
</tr>
<tr>
<td>Grass, Red or Creeping Fescue</td>
<td>30</td>
</tr>
<tr>
<td>Grass, Pasture Mixtures</td>
<td>30</td>
</tr>
<tr>
<td>Grass, Hay Mixtures</td>
<td>30</td>
</tr>
<tr>
<td>Grass, St. John’s Red</td>
<td>10 to 20</td>
</tr>
<tr>
<td>Grass, Cockscomb</td>
<td>45 to 50</td>
</tr>
<tr>
<td>Hemp</td>
<td>40 to 50</td>
</tr>
<tr>
<td>Kale, Thousand Headed</td>
<td>1 to 2</td>
</tr>
<tr>
<td>Kafir Corn</td>
<td>10 to 15</td>
</tr>
<tr>
<td>Mangel VIne</td>
<td>5 to 6</td>
</tr>
<tr>
<td>Millet</td>
<td>20 to 50</td>
</tr>
<tr>
<td>Oats</td>
<td>75 to 100</td>
</tr>
<tr>
<td>Peas, Field</td>
<td>50 to 100</td>
</tr>
<tr>
<td>Potatoes</td>
<td>60 to 100</td>
</tr>
<tr>
<td>Rape, Dwarf Essex</td>
<td>3 to 5</td>
</tr>
<tr>
<td>Ruta Baga</td>
<td>2 to 3</td>
</tr>
<tr>
<td>Rye, Green</td>
<td>90 to 120</td>
</tr>
<tr>
<td>Soja Beans</td>
<td>20 to 30</td>
</tr>
<tr>
<td>Sorghum, in drills</td>
<td>10</td>
</tr>
<tr>
<td>Turnip, Common or Spring</td>
<td>80 to 100</td>
</tr>
<tr>
<td>Vetch, Hairy or Winter</td>
<td>30 to 60</td>
</tr>
<tr>
<td>Wheat</td>
<td>90 to 120</td>
</tr>
</tbody>
</table>