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1918

JILLY'S SEEDS

POULTRY FOODS
BEE SUPPLIES
FERTILIZERS
SPRAYS

5371

LILLY'S

COMPLETE ANNUAL CATALOG 1918

SEEDS, STOCK FOODS
POULTRY SUPPLIES
BEE SUPPLIES
FERTILIZERS
SPRAY MATERIALS

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.

Our customers in Oregon should mail their orders to The Chas. H. Lilly Co., Portland,
All other orders should be mailed to Seattle.

LILLY'S SEEDS ARE TESTED, and every lot of seed sent out will grow and produce a satisfactory crop if other conditions are right. Each lot of seed that comes into our warehouse is tested for both purity and germination in our laboratory, and is also grown outdoors, under ordinary growing conditions, at our trial grounds. Our trial grounds consist of seven acres conveniently located in Seattle, and our customers are cordially invited to visit them when in the city.

Plant **LILLY'S TESTED SEEDS**, and reduce the probability of a crop failure.

CASH PRIZES

FOR BEST SEED

TIMOTHY

RED CLOVER

ALSIKE

GROWN IN THE NORTHWEST

In order to promote the growing of good seed in the Northwest, which section is admirably adapted for that purpose, we are offering the following prizes for

best one pound samples of Timothy, Red Clover and Alsike seed submitted to us before Nov. 1st, 1918, as follows:

First Prize. Timothy Seed.....	\$25.00
Second Prize. Timothy Seed.....	15.00
Third Prize. Timothy Seed.....	10.00
Fourth Prize. Timothy Seed.....	5.00
First Prize. Red Clover Seed.....	25.00
Second Prize. Red Clover Seed.....	15.00
Third Prize. Red Clover Seed.....	10.00
Fourth Prize. Red Clover Seed.....	5.00
First Prize. Alsike Seed.....	25.00
Second Prize. Alsike Seed.....	15.00
Third Prize. Alsike Seed.....	10.00
Fourth Prize. Alsike Seed.....	5.00

CONDITIONS

The grower is to have produced at least fifty bushels

of seed of the variety and quality submitted.

A fair average one pound sample is to be delivered to us not later than November 1st, 1918, on which date the contest closes.

The seed will be judged by one representative from The Chas. H. Lilly Co. and one each from the State Agricultural Colleges of Washington and Oregon.

The only condition imposed by The Chas. H. Lilly Co. is that we have the privilege of purchasing the seed produced by the contestant at a price equal to that offered by any other dealer.

Samples must be distinctly marked with grower's name and address.

THE CHAS. H. LILLY CO.

SEATTLE, WASH.

LILLY'S SEEDS are the best that can be procured, are re-cleaned with our splendid seed cleaning equipment, and are tested for purity and germination.

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 sheets for all orders. This will avoid delay and chance for error. Additional order sheets will be mailed to you on request.

Write name, address, and shipping instructions in proper spaces very distinctly. We receive many orders with name or address omitted or illegible, and are unable to fill the orders until the purchasers inquire about them.

Please do not write anything on the order sheet except the order and shipping instructions. If it is necessary to write a letter it should be written on another sheet of paper. Please do not tear the order sheet in two. Send the entire sheet whether it is full or not.

We acknowledge receipt of all orders amounting to 25 cents or more. If you do not receive an acknowledgment card promptly it is evidence that the order has not been received by us. In case it is necessary to write to us in regard to an 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.

Remittance in full is required with all orders, thus avoiding unnecessary expense, labor and confusion. Please do not ask us to ship goods C. O. D. or on account, for we would be compelled to decline. Remittance should be made by 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.

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

Discounts and Premiums. It is our policy to furnish only the best goods, at prices as low as is consistent, and those prices are net. We allow no discounts and give no premiums. Premiums must be paid for, indirectly, and usually at a high rate.

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

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 with charges to be collected at destination. 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 with the order to pay transportation charges.

Complaints. Errors are bound to occur occasionally, even in the best regulated business. We make it a point to adjust errors and reasonable complaints promptly and liberally. Likewise, as we endeavor to please our customers, we are always glad to hear from them when they are satisfied with our goods or our services.

PARCEL POST RATES

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

Parcels weighing four ounces or less, containing goods other than books, seeds, cuttings, bulbs, roots, scions, and plants, the rate is one cent for each ounce or fraction thereof, any distance.

On other domestic parcel post matter the following zone rates and weights apply:

Local Zone. Shipments handled by one post office or rural delivery route only: 5c for the first pound and 1c for each additional two pounds. Limit, 20 pounds.

First and Second Zones. To any post office within 150 miles: 5c for first pound and 1c for each additional pound. Limit, 50 pounds.

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

Fourth Zone. More than 300 miles, less than 600 miles: 7c for the first pound, 4c for each additional pound. Limit, 20 pounds.

Fifth Zone. More than 600 miles, less than

1,000 miles: 8c for the first pound, 6c for each additional pound. Limit, 20 pounds.

Sixth Zone. More than 1,000 miles, less than 1,400 miles: 9c for the first pound, 8c for each additional pound. Limit, 20 pounds.

Seventh Zone. More than 1,400 miles, less than 1,800 miles: 11c for the first pound, 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 may be shipped by parcel post is 84 inches in length and greatest girth combined.

Poisons and explosives cannot be shipped by parcel post.

Liquids may be shipped by parcel post when specially packed to comply with requirements.

Eighth Zone rates and weights apply to Alaska, Hawaii, and all American possessions.

Rate to Canada is 12c for each pound or fraction of a pound, and the limit of weight is 4 pounds 6 ounces.

Rate to Mexico is 12c for each pound or fraction of a pound, and the limit of weight is 11 pounds.

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 time, we are enabled to offer them at greatly reduced prices. Additional seeds may, of course, be included in the order at regular prices. Order by assortment number only.

Assortment No. 1

Regular price, 75c.

Assortment price, 50c, postpaid

1 pkt. Crimson Globe Beet, 1 pkt. Golden Halflong Carrot, 1 pkt. Delicious Lettuce, 1 pkt. Palo Alto Parsnip, 1 pkt. Gradus Peas, 1 pkt. Crimson Giant Radish, 1 pkt. Lucullus Swiss Chard, 1 pkt. Snowball Turnip and 1 Crop Book.

Assortment No. 2

Regular price, \$1.55.

Assortment price, \$1.00, postpaid.

1 pkt. Jones' Stringless Wax Beans, 1 pkt. Crimson Globe Beet, 1 pkt. Glory Cabbage, 1 pkt. Golden Halflong Carrot, 1 pkt. Golden Bantam Corn, 1 pkt. Pride of the Pacific Cucumber, 1 pkt. Delicious Lettuce, 1 pkt. Longkeeper Onion, 1 pkt. Palo Alto Parsnip, 1 pkt. Lincoln Peas, 1 pkt. Crimson Giant Radish, 1 pkt. Icicle Radish, 1 pkt. Delicata Squash, 1 pkt. Lucullus Swiss Chard, 1 pkt. Puget Sound Special Tomato, 1 pkt. Snowball Turnip, and 1 Crop Book.

Assortment No. 3

Regular price, \$2.25.

Assortment price, \$1.50, postpaid.

1 pkt. Golden Jersey Wax Beans, 1 pkt. Long-fellow Beans, 1 pkt. Crimson Globe Beet, 1 pkt. Early Jersey Wakefield Cabbage, 1 pkt. Copenhagen Market Cabbage, 1 pkt. Golden Halflong Carrot, 1 pkt. Jack Frost Corn, 1 pkt. Pride of the Pacific Cucumber, 1 pkt. Lilly's Forcing Lettuce, 1 pkt. Wonderful Lettuce, 1 pkt. Improved Rocky Ford Muskmelon, 1 pkt. Sweet as Honey Watermelon, 1 pkt. Longkeeper Onion, 1 pkt. White Queen Onion, 1 pkt. Palo Alto Parsnip, 1 pkt. Washington Wonder Peas, 1 pkt. Thomas Laxton Peas, 1 pkt. Earliest of All Radish, 1 pkt. Icicle Radish, 1 pkt. Delicata Squash, 1 pkt. Lucullus Swiss Chard, 1 pkt. Puget Sound Special Tomato, 1 pkt. Golden Ball Turnip, and 1 Crop Book.

Assortment No. 4

Regular price, \$3.00.

Assortment price, \$2.00, postpaid.

1 pkt. Golden Jersey Wax Beans, 1 pkt. Jones' Stringless Wax Beans, 1 oz. Crimson Globe Beet, 1 pkt. Halflong Beet, 1 pkt. Early Jersey Wakefield Cabbage, 1 pkt. Glory Cabbage, 1 pkt. Golden Bantam Corn, 1 pkt. Pride of the Pacific Cucumber, 1 pkt. Batavian Broad Leaved Endive, 1 pkt. Emerald Isle Kale, 1 pkt. Delicious Lettuce, 1 pkt. Wonderful Lettuce, 1 pkt. Improved Rocky Ford Muskmelon, 1 pkt. Sweet as Honey Watermelon, 1 pkt. Longkeeper Onion, 1 pkt. White Queen Onion, 1 pkt. Palo Alto Parsnip, 1 lb. Lincoln Peas, 1 lb. Gradus Peas, 1 pkt. Crimson Giant Radish, 1 pkt. Earliest of All Radish, 1 pkt. Icicle Radish, 1 pkt. Delicata Squash, 1 pkt. Hubbard Squash, 1 pkt. Lucullus Swiss Chard, 1 pkt. Mammoth Victoria Spinach, 1 pkt. Puget Sound Special Tomato, 1 pkt. Snowball Turnip, and 1 Crop Book.

Assortment No. 5

Regular price, \$3.85.

Assortment price, \$2.50, postpaid.

1 lb. Golden Jersey Wax Beans, 1 pkt. Jones' Stringless Wax Beans, 1/4 lb. Crimson Globe Beet, 1 oz. Half Long Beet, 1 pkt. Early Jersey Wakefield Cabbage, 1 pkt. Glory Cabbage, 1 pkt. Golden Halflong Carrot, 1 pkt. Early Alba Cauliflower, 1 pkt. Vilmorin's Paris Golden Yellow Celery, 1 pkt. Golden Bantam Corn, 1 pkt. Metropolitan Corn, 1 pkt. Pride of the Pacific Cucumber, 1 pkt. Batavian Broad Leaved Endive, 1 pkt. Emerald Isle Kale, 1 pkt. Delicious Lettuce, 1 pkt. Wonderful Lettuce, 1 pkt. Improved Rocky Ford Muskmelon, 1 pkt. Sweet as Honey Watermelon, 1 pkt. Longkeeper Onion, 1 pkt. White Queen Onion, 1 pkt. Palo Alto Parsnip, 1 pkt. Washington Wonder Peas, 1 lb. Thomas Laxton Peas, 1 pkt. Crimson Giant Radish, 1 pkt. Earliest of All Radish, 1 pkt. Icicle Radish, 1 pkt. Delicata Squash, 1 pkt. Hubbard Squash, 1 pkt. Lucullus Swiss Chard, 1 pkt. Mammoth Victoria Spinach, 1 pkt. Puget Sound Special Tomato, 1 pkt. Snowball Turnip, 1 pkt. Golden Ball Turnip, and 1 Crop Book.

A Corner in **Lilly's** Trial Grounds

LILLY'S VEGETABLE SEEDS

BEST FOR THE WEST

Specially Grown and Selected, Tested for Purity and Germination

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.

Columbia Mammoth Asparagus

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 unexcelled in flavor.

Packet, 5c; ounce, 15c; postpaid.

Palmetto Asparagus

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

Packet, 5c; ounce, 15c; postpaid.

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

Large French Green Globe Artichoke

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, and are listed in Farm Seeds Section of this catalog.

Packet, 5c; ounce, 35c; postpaid.

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.

LILLY'S JONES' STRINGLESS WAX BEAN

A Delicious Yellow-Podded, White Seeded Dwarf 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 large 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. **Pkt., 10c; lb., 35c; postage add.**

LILLY'S

GOLDEN JERSEY[®] WAX BEAN

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 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. **Pkt., 10c; lb., 35c; postage additional.**

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; pound, 30c; postage additional.**

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; pound, 30c; postage additional.

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 light golden color. The seeds are small, oblong, and jet black.

Packet, 10c; pound, 30c; postage additional.

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; pound, 30c; postage additional.

Burpee's Stringless Green Pod Bean

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

Packet, 10c; pound, 35c; postage additional.

Dwarf Horticultural Bean

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

Packet, 10c; pound, 35c; postage additional.

If wanted in larger quantities, see price list supplement enclosed herewith, or later issues, which will be mailed on request.

LILLY'S
Golden
Jersey
Wax Bean

LILLY'S LONGFELLOW BEAN

An Unequalled 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, slender, straight, and are a brownish-red color freely splashed with buff. Lilly's Select Stock is sold in sealed packages only.

Packet, 10c; pound, 35c; postage additional.

LILLY'S CARMINE POLE BEAN

The Best Pole Bean for the Northwest

The best and most attractive 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 anthracnose. Sold only in sealed packages.

Packet, 10c; pound, 40c; postage additional.

Kentucky Wonder Bean

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

Packet, 10c; pound, 30c; postage additional.

Lazy 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 it is also excellent for green or dry shell beans.

Packet, 10c; pound, 35c; postage additional.

Horticultural, 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; pound, 30c; postage additional.

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; pound, 40c; postage additional.

White Dutch Runner Bean

Very similar to Scarlet Runner, except that the flowers and dry beans are white. The pods are six to seven inches long and contain five large flat beans resembling Lima beans. For snaps or green shell beans they are excellent, and they are a good substitute for Lima beans in localities where Lima beans cannot be grown successfully. Some seedsmen list them as Lima beans.

Packet, 10c; pound, 40c; postage additional.

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; pound, 35c; postage additional.

King of the Garden or Large White Lima Bean

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 productivity; large, handsome pods and large seeds.

Packet, 10c; pound, 35c; postage additional.

LILLY'S CROP BOOK contains cultural directions for vegetables, flowers and farm crops; furnished free with any order if requested.

Those requiring Beans in large quantities will please write for prices, stating varieties and quantities wanted.

Lady Washington Field Bean

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

Packet, 10c; pound, 25c; postage add.

Small 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; pound, 25c; postage additional.

JILLY'S CRIMSON GLOBE BEET

Best Second Early and 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 top and very small tap-root. The flesh is deep crimson beautifully ringed or zoned, and is 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 grown from the choicest strain, and is sold in sealed packages only.

Packet, 10c; ounce, 20c; postpaid.

Early Egyptian Beet

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

Packet, 5c; ounce, 15c; 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., 15c; 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., 15c; postpaid.

JILLY'S SELECT STOCK

CROSBY'S EGYPTIAN

Finest Extra Early 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., 20c; postpaid.

Half-Long Blood Beet

A splendid winter beet, half-long in shape, making it superior to the old long varieties. It is of fine quality, tender, sweet and free from woody fiber. The roots are deep red, smooth and uniform.

Packet, 5c; ounce, 15c; postpaid.

JILLY'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 large, 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 the following spring.

Packet, 5c; ounce, 15c; postpaid.

If seeds are wanted in larger quantities, write for prices, stating quantities wanted.

**Stock Beets
Mangels
Sugar Beets
are Listed in
Farm Seeds
Section of
this Catalog**

Broccoli

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

Packet, 5c; ounce, 50c; postpaid.

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., 20c; postpaid.

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.

Packet, 10c; ounce, 40c; postpaid.

LILLY'S

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.

Packet, 10c; ounce, 30c; 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.

JILLY'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.

Packet, 10c; ounce, 30c; postpaid

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.

Packet, 5c; ounce, 30c; postpaid.

Charleston Wakefield

The heads are very similar to Early Jersey Wakefield in form, but are larger and a few days later. They are of the same fine quality, and this variety is a favorite with market gardeners.

Packet, 5c; ounce, 30c; postpaid

JILLY'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., 40c; postpaid

JILLY'S ALL SEASONS, OR SUCCESSION

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.

Packet, 10c; ounce, 30c; postpaid.

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.

Packet, 5c; ounce, 30c; postpaid.

Fotter'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.

Packet, 5c; ounce, 30c; postpaid.

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.

Packet, 5c; ounce, 30c; postpaid.

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.

Packet, 5c; ounce, 30c; postpaid.

Red Dutch

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

Packet, 5c; ounce, 30c; postpaid.

Early Flat Dutch

A valuable second early variety producing very large, compact, flattened heads of good quality; sometimes nearly as large as Late Flat Dutch, which they resemble in appearance.

Packet, 5c; ounce, 30c; postpaid.

Premium Late Flat Dutch

One of the most popular late varieties; comparatively slow growing but sure heading. The plants are exceptionally vigorous, with very large, broad, spreading outer leaves. The heads are very large, flat, but deep. An excellent keeper.

Packet, 5c; ounce, 30c; postpaid.

Autumn King

A good late variety requiring a long season for growth. The heads are very large, solid and of good quality. An excellent winter keeper and shipper.

Packet, 5c; ounce, 30c; postpaid.

Drumhead Savoy

The best of the Savoy or crumpled leaved cabbages, producing large, solid heads of the finest quality and with the rich flavor of cauliflower. The plants are strong and vigorous.

Packet, 5c; ounce, 30c; postpaid.

CABBAGE PLANTS

We can furnish cabbage plants in season, March 1st to June 30th. See Plants Section of this catalog.

Prices shown for Cabbage Seed in lots of one pound or less include parcel post charges.

LILLY'S

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 by many it is preferred for stock feeding, for although it is not so 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; thick at the top, tapering to a round, blunt end, with a very small tap-root. The color is a rich orange-red. The flesh is fine 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.

Packet, 10c; ounce, 20c; 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. The mature roots are six to eight inches long, tapering uniformly 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.

Packet, 5c; ounce, 20c; 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.

Packet, 5c; ounce, 20c; 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.

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.

Packet, 5c; ounce, 20c; postpaid.

Oxheart, or Guerande

Especially desirable on shallow or hard soil where longer rooted varieties would not thrive. The tops are small. The mature 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.

Packet, 5c; ounce, 20c; postpaid.

Those requiring seeds in larger quantities than listed in this catalog will please write for special quantity prices, stating varieties and quantities wanted.

Packet, 5c; ounce, 20c; postpaid.

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.

Packet, 5c; ounce, 15c; postpaid.

White Belgian Carrot

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

Packet, 5c; ounce, 15c; postpaid.

MASTODON, Stock Carrot

The most popular white carrot for stock feeding on account 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.

Packet, 10c; ounce, 15c; postpaid.

JILLY'S CROP BOOK
contains cultural di-
rections for vege-
tables, flowers and
farm crops. It
will be given
free with any
order if re-
quested.

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

JILLY'S EARLY ALBA CAULIFLOWER

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 unequalled 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, 85c; 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.

Packet, 25c; ¼ ounce, 85c; postpaid.

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.

Packet, 5c; ¼ ounce, 75c; postpaid.

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.

Packet, 5c; ¼ ounce, 35c; postpaid.

SEEDS are tested for purity and germination. If the package is branded "JILLY'S" the seeds may be depended upon.

JILLY'S SELECT STOCK

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; postpaid.

SILVER PLUME CELERY

A handsome early variety, popular with market gardeners on account of its very attractive appearance and requiring a very short time for blanching.

The plants are of medium size, and the foliage forms beautiful silver-white plumes, so aptly suggested in the name. As the plants mature the inner stems and leaves naturally turn white, requiring but a very short time to blanch. The stalks are thick and heavy, with pure white hearts; brittle, crisp and tender; free from stringiness and unexcelled in flavor.

Packet, 10c; ounce, 40c; postpaid.

Golden Self-Blanching

A good standard early variety; blanching easily. The heart is rich golden-yellow; the outer leaves yellowish-green.

Packet, 5c; ounce, 60c; postpaid.

CELERIAC, Turnip-rooted Celery

Large Prague. Large, round, smooth, turnip-like roots; used for flavoring soups or as a salad.

Packet, 5c; ounce, 25c; postpaid.

CHERVIL

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

Packet, 5c; ounce, 20c; postpaid.

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

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.

Packet, 10c; ounce, 40c; postpaid.

Giant White Solid

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

Packet, 5c; ounce 30c; postpaid.

CHICORY

Large Rooted. Used as a substitute for coffee; and the young blanched shoots for salad.

Packet, 5c; ounce 20c; postpaid.

CHIVES, or Schnittlauch

Has a mild flavor of young onions, and is used in soups and salads.

Packet, 10c; postpaid.

COLLARDS

Georgia. A loose form of cabbage grown in the South for greens. Not adapted to the North.

Packet, 5c; ounce 20c; postpaid.

Celery Plants are listed in Plants Section of this catalog.

LILLY'S GOLDEN BANTAM SWEET CORN

The Sweetest and Most Delicious 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. Anyone who has eaten Golden Bantam will never be satisfied with other varieties. The ears are short, six to eight inches long, thick, and compactly filled with very large, plump, creamy-yellow kernels, which become golden-yellow as they ripen. The stalks are of medium height, sturdy and very productive, bearing two ears each. 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; pound, 25c; postage additional.

LILLY'S JACK FROST CORN

The Earliest

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.

Packet, 10c; pound, 25c; postage additional.

Early Minnesota

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

Packet, 10c; pound, 20c; postage additional.

Peep o' Day

One of the very earliest varieties. The ears are about five inches long, and the kernels large, white and tender. The stalks are dwarf, only about four feet high, and usually bear two ears each.

Packet, 10c; pound, 25c; postage additional.

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.

Packet, 10c; pound, 20c; postage additional.

FIELD CORN and POP CORN are listed in Farm Seeds Section of this catalog.

CORN SALAD

Large Headed Petticus, 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.

Packet, 5c; ounce, 15c; postpaid.

For prices on larger quantities see enclosed supplement, or later issues, which will be mailed on request.

LILLY'S METROPOLITAN

The Largest Early Sweet Corn

Metropolitan is a great favorite in the Northwest, where few of the larger varieties can be depended upon. The ears are about eight inches long, and are well filled with ten to twelve rows of large, sweet kernels. It is a little later than Jack Frost and Golden Bantam, but earlier than other large varieties. The plants are tall and bear two or three ears each.

Packet, 10c; pound, 20c; postage additional.

Early White Cob Cory

A very early sweet corn. The plants are dwarf, and usually bear two ears each. The ears are six to seven inches long, and the kernels are milky white, sweet and of good quality.

Packet, 10c; pound, 25c; postage additional.

Country Gentleman

A splendid late variety. The small, white cob is densely crowded with irregular rows of long, slender, white kernels of excellent quality.

Packet, 10c; pound, 25c; postage additional.

Black Mexican

This sweet corn, when young, cooks remarkably white, but the ripe grain is black. It is an excellent late variety. The stalks grow about six feet high, and the ears about eight inches long. The kernels are tender, sweet and delicious.

Packet, 10c; pound, 20c; postage additional.

CRESS

Curled Cress, or Pepper Grass. The leaves are frilled and curled, crisp and pungent, and are used in salads and for garnishing meats.

Packet, 5c; ounce, 15c; postpaid.

Water Cress. A distinct variety of cress with small, oval leaves which are used for salad. It must be grown in shallow water, and the seed is scattered along the banks of streams or ponds.

Packet, 5c; ounce, 50c; postpaid.

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. 25c; 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., 10c; oz., 25c; postpaid.

White Spine Improved

One of the best sorts for table use. The vines are vigorous, fruiting early and abundantly. The fruits are uniformly straight, dark green, fairly well covered with white spines, and when mature are usually about seven inches in length. The flesh is crisp, tender, and of excellent quality. A standard variety for home use and for market.

Pkt., 5c; oz., 20c; postpaid.

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.

Packet, 5c; ounce, 20c; postpaid.

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., 20c; postpaid.

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., 20c; postpaid.

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; ounce, 20c; postpaid.

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; ounce, 20c; postpaid.

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

LILLY'S BROAD LEAVED BATAVIAN ENDIVE (ESCAROLLE)

Specialty Adapted to the Pacific Coast

Endive is an excellent salad vegetable, used similar to lettuce, or it may be cooked as greens, and in our mild climate on the Pacific Coast it may be had at all seasons of the year. It is extensively grown by market gardeners, but is not as generally known in the home garden as it deserves to be.

Batavian Broad Leaved Endive, or Escarole, is especially adapted to our climate, and may be left in the garden during the winter. The leaves are broad, twisted and waved, deep green, with thick, white midribs. The inner leaves form a clustering head which blanches to a beautiful creamy white and is crisp and tender.

Packet, 10c; ounce, 25c; postpaid.

Green Curled Endive

A hardy, vigorous variety, with bright, deep green leaves usually tinged with rose, blanching to a deep cream color. Packet, 5c; ounce, 25c; postpaid.

EGG PLANT

New York Improved. 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.

Packet, 5c; ounce, 60c; postpaid.

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

Packet, 5c; ounce, 60c; postpaid.

HERB SEEDS

	Pkt.	Oz.
Caraway	\$0.05	\$0.15
Catnip	.05	.40
Dill	.05	.15
Lavender	.05	.20
Rosemary	.05	.35
Sage	.05	.20
Summer Savory	.05	.30
Sweet Basil	.05	.20
Sweet Fennel	.05	.15
Sweet Marjoram	.05	.20
Thyme	.05	.40

LILLY'S EMERALD ISLE KALE

Most Delicious Winter Greens

Emerald Isle is a comparatively new variety of green curled winter kale, and is most desirable on account of its hardness, 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. It is hardy, on the Pacific Coast it is seldom injured by freezing, is improved by frost, and may be cut and used at any time during the winter.

Packet, 10c; ounce, 20c; 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 frost.

Packet, 5c; ounce, 15c; postpaid.

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; ounce, 20c; postpaid.

Musselburg. An improved variety growing to very large size, with broad leaves spreading like a fan.

Packet, 5c; ounce, 20c; postpaid.

Thousand Headed Kale, a splendid winter green food for stock and poultry, is listed in Farm Seeds Section of this catalog.

Siberian Kale

A very hardy and vigorous variety of 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.

Packet 5c; ounce, 15c; postpaid.

KOHL-RABI

Early White Vienna. A turnip-like bulb, formed above ground, combining somewhat the flavor of turnips and cabbage. Large enough to be used in ten or twelve weeks from time of sowing.

Packet, 5c; ounce, 25c; postpaid.

LILLY'S WONDERFUL LETTUCE

FOR ALL SEASONS

A Mammoth New Head Lettuce

A new and very popular variety, thriving in all sections and during all seasons. It is a crisp, cabbage-heading lettuce, extremely large, sometimes fifteen inches in diameter and weighing two or three pounds. It is deep rooting, stands heat well, is 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. It is very popular with market gardeners, and is equally good for home use. Not recommended for forcing.

Lilly's Select Stock is sold in sealed packages only.

Packet, 10c; ounce, 25c; postpaid.

Grand Rapids Lettuce

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

Packet, 5c; ounce, 20c; postpaid.

Early Curled Silecia

An excellent early curled lettuce for greenhouse forcing and early outdoor culture. It is of dwarf, compact habit, and the crisp, golden leaves are beautifully curled and are formed in large, very attractive clusters. It is an old favorite.

Packet, 5c; ounce, 20c; postpaid.

LILLY'S FORCING LETTUCE

Unsurpassed for Forcing Excellent for Extra Early Outdoor Culture

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, 25c; postpaid.

May King Lettuce

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.

Packet, 5c; ounce, 20c; postpaid.

Early Curled Simpson

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

Packet, 5c; ounce, 20c; postpaid.

Lettuce, to be crisp and tender, must be grown quickly. Nitrate of Soda 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.

LILLY'S
DELICIOUS
LETTUCE

Prizehead Lettuce

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.

Packet, 5c; ounce, 20c; postpaid.

LILLY'S

NONPAREIL HANSON HEAD LETTUCE

An Improved Strain of a Splendid Late Variety

LILLY'S
NONPAREIL
HANSON

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, crumpled and frilled at the edges; and with distinctive midrib. The inner leaves are white, very crisp, and sweet. Sold in sealed packages only.

Packet, 10c; ounce, 25c; postpaid.

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.

Packet, 5c; ounce, 20c; postpaid.

Paris White Cos Lettuce

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.

Packet, 5c; ounce, 20c; postpaid.

LILLY'S

DELICIOUS LETTUCE

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, 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.

Packet, 10c; ounce, 25c; postpaid.

Boston Market

or White Seeded Tennisball

A popular, small, compact head variety, good for forcing or for early outdoor culture. It is hardy; the heads are solid, and the leaves are dull green in color, crisp, and of good flavor.

Packet, 5c; ounce, 20c; Postpaid.

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

To avoid disappointment, send us your order for garden seeds early. Most vegetable seeds were a short crop last season, we cannot procure seeds from Europe, and the supply will not be sufficient to supply the demand. Those who delay ordering should give us the privilege of substituting other varieties in case we are sold out of the varieties ordered.

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 one and one-quarter pounds. One brick is sufficient to spawn nine square feet of bed. Cultural directions are contained in Lilly's Crop Crook, which will be furnished free with any order if requested.

Price, 25c per brick; postage additional. Write for prices on large quantities.

Rocky Ford, or Netted Gem Muskmelon

Very popular for market, also excellent for the home garden. It is medium early; the fruits are oval, slightly ribbed and densely covered with fine netting. The flesh is green, very sweet and highly flavored.

Packet, 5c; ounce, 15c; postpaid.

Osage, or Miller's Cream Muskmelon

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.

Packet, 5c; ounce, 15c; postpaid.

LILLY'S IMPROVED ROCKY FORD MUSKMELON

THE TRUE POLLOCK STRAIN

The Most Delicious Flavor

The Rocky Ford is the delicious little cantaloupe served in the best restaurants and hotels and demanded by the markets.

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 only in sealed packages.

Packet, 10c; ounce, 15c; postpaid.

Burrell's Gem

A very popular variety in this locality. The skin is rather dark green; the rind is thin, and the flesh is very thick, salmon colored, of a most delicious flavor, juicy, and fairly melts in the mouth.

Packet, 5c; ounce, 15c; postpaid.

LILLY'S CROP BOOK
Contains
Cultural Directions

Nutmeg Muskmelon

A well-known old variety. The fruits are round, about seven inches in diameter, well ribbed and heavily netted. The flesh is pale green, sweet and melting.

Packet, 5c; ounce, 15c; postpaid.

Extra Early Hackensack

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

Packet, 5c; ounce, 15c; postpaid.

If seeds are wanted in large quantities, see Price List Supplement enclosed herewith, or write for quotations, stating varieties and quantities wanted.

LILLY'S SWEET AS HONEY WATERMELON

Unequalled 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 unequalled, 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.

Packet, 10c;
ounce, 15c;
postpaid.

LILLY'S 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.

Packet, 10c; ounce, 15c; postpaid.

Georgia Rattlesnake

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

Packet, 5c; ounce, 15c; postpaid.

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. Seed nearly white.

Packet, 5c; ounce, 15c; postpaid.

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.

Packet, 5c; ounce, 15c; postpaid.

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.

Packet, 5c; ounce, 15c; postpaid.

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.

Packet, 5c; ounce, 15c; postpaid.

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.

Packet, 5c; ounce, 15c; postpaid.

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.

Packet, 5c; ounce, 10c; postpaid.

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

Packet, 5c; ounce, 10c; postpaid.

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

LILLY'S 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 they 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.

Packet, 10c; ounce, 40c; postpaid.

LILLY'S WESTERN WETHERSFIELD

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;
ounce, 40c;
postpaid.

LILLY'S PRIZETAKER

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; ounce, 40c; postpaid.

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; ounce, 35c; postpaid.

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; ounce, 30c; postpaid.

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; ounce, 35c; postpaid.

LILLY'S 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 extra 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; ounce, 45c; 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; ounce, 40c; postpaid.

White Portugal, or Silverskin

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; ounce, 45c; postpaid.

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.

LILLY'S 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 planted.

Price: 1 lb., 25c; 10 lbs., 20c 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.

LILLY'S 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 delicious winter vegetable, it is an excellent stock food. Sold in sealed packages only.

Packet, 10c; ounce, 15c; postpaid.

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, 5c; ounce, 15c; 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 so closely curled as to resemble moss.

Packet, 5c; ounce, 15c; postpaid.

PEPPER

Large Bell, or Bull Nose. The plants are vigorous, compact, and very productive, ripening their crop early and uniformly. The fruits are large, with thick, mild flesh of fine quality for use in salads or for stuffing. The color is deep green while young, bright crimson when ripe.

Packet, 5c; ounce, 30c; postpaid.

Long Red Cayenne. The true Cayenne, hot and pungent. Medium early, bearing slender, twisted pods about four inches long. Deep green while young, bright red when ripe.

Packet, 5c; ounce, 30c; postpaid.

PUMPKIN

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; ounce, 10c; postpaid.

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

Packet, 5c; ounce, 10c; 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; ounce, 15c; 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. **Pkt., 10c; lb., 30c; postage add.**

Boston Unrivalled 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; lb., 25c; postage add.**

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; lb., 25c; postage add.**

Alaska Pea

A well-known, smooth seeded, extra early variety, extensively used by canners. The vines are strong and vigorous, two feet high, and of light green color. The pods are about three inches long, and are well filled with

round, blue peas, slightly pitted. **Pkt., 10c; lb., 25c; postage additional.**

WASHINGTON WONDER PEA

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 several weeks earlier than spring sown seed. It is as early as the extra smooth varieties, and very much superior in quality and flavor. **Packet, 10c; pound, 30c; postage additional.**

LILLY'S LINCOLN PEA

A Dwarf Main Crop Pea of Fine Quality

A splendid dwarf main crop pea. The variety originated in England, but our seed is grown and acclimated in the Northwest. The vines grow about 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; pound, 30c; postage additional.**

American Wonder Pea

Very early, and of dwarf, compact growth, about 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 of fine quality. **Packet, 10c; pound, 30c; postage add**

Order early. The supply of seeds is limited this season.

Washington
Wonder

LILLY'S
GRADUS
PEA

LILLY'S 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 vine is 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, marrow 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. **Packet, 10c; pound, 30c; postage additional.**

LILLY'S THOMAS LAXTON PEA

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.

Packet, 10c; pound, 30c; postage additional.

Prizewinner Pea

A good second early or main crop variety. 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.

Packet, 10c; pound, 25c; postage additional.

Alderman Pea

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

Packet, 10c; pound, 25c; postage additional.

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.

Packet, 10c; pound, 25c; postage additional.

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; pound, 25c; postage additional.

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.

Packet, 10c; pound, 25c; postage additional.

SALSIFY, or OYSTER PLANT

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 resembling a parsnip in appearance. Mild and delicately flavored.

Packet, 5c; ounce, 20c; postpaid.

Rhubarb Plants are listed in Plants Section of this catalog.

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.

Pkt., 5c; oz., 15c; postpaid.

If seeds are wanted in large quantities, see enclosed supplement or write for prices.

LILLY'S CRIMSON GIANT RADISH

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.
Packet, 10c;
ounce, 15c;
postpaid.

LILLY'S

EARLIEST OF ALL RADISH

A Delicious Early Breakfast Radish

A very superior extra early turnip-shaped radish, equally good for forcing or early outdoor culture. It is small, very uniform, round, and the color is bright scarlet with an attractive white tip and a very small tap-root. The flesh is sparkling white, mild, crisp and tender.

Packet, 10c; ounce, 15c; postpaid.

LILLY'S

WHITE ICICLE RADISH

An Early Long White 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. Sold only in sealed packages.

Packet, 10c; ounce, 15c; 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.

Packet, 5c; ounce, 15c; postpaid.

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.

Packet, 5c; ounce, 15c; postpaid.

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.

Packet, 5c; ounce, 15c; postpaid.

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.

Packet, 5c; ounce, 15c; postpaid.

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.

Packet, 5c; ounce, 15c; postpaid.

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.

Packet, 5c; ounce, 15c; postpaid.

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.

Packet, 5c; ounce, 15c; postpaid.

Radishes, to be crisp and tender, must be grown quickly. Nitrate of Soda, applied in several light applications early in the season, will produce good results. See the article, "Nitrate of Soda for Garden Crops," in the Crop Book, which will be furnished free with any order if requested.

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; ounce, 15c; postpaid.

Viroflay Spinach

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

Packet, 5c; ounce, 15c; postpaid.

Bloomsdale Savoy Leaved

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

Packet, 5c; ounce, 15c; postpaid.

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; ounce, 15c; postpaid.

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; ounce, 15c; postpaid.

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 mealy.

Packet, 10c; ounce, 15c; postpaid.

Early Summer Crookneck

A popular early bush variety. The fruits are of the well known crook-neck form, deep yellow, densely warted, and of good quality and flavor.

Packet, 5c; ounce, 15c; postpaid.

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; ounce, 15c; postpaid.

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; ounce, 15c; postpaid.

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; ounce, 15c; postpaid.

LILLY'S
Hubbard
Squash

LILLY'S HUBBARD SQUASH

Unequalled 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 warted. The flesh is golden-yellow, thick, fine grained, dry, sweet, and no other squash can compare with it in flavor. It is unequalled as a winter keeper and shipper.

Packet, 10c; ounce, 15c; 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 cream-white.

Packet, 5c; ounce, 15c; postpaid.

LILLY'S 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. It is equalled in earliness only by Earliana, 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
Packet10c
Ounce40c
 $\frac{1}{4}$ pound.....\$1.25
Postpaid.

We Have
TOMATO PLANTS
 in season
 First of May
 to
 Last of June
 See Plants
 Section

LIVINGSTON'S CORELESS An Excellent Late Variety

Coreless is a medium large, late tomato of recent introduction, is a good variety for canning, 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; 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; postpaid.

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; 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; postpaid.**

The Crop Book contains suggestions for growing tomatoes on the Pacific Coast. Free with orders.

LILLY'S IMPROVED STRAIN EARLIANA TOMATO

The Earliest Good Variety

Although this is an extremely early variety, the earliest good variety grown, the quality is excellent. It produces large clusters of medium size, deep red fruit; uniform in size and of good shape; very solid and of fine flavor. It is a popular variety for greenhouse forcing, and is excelled only by Puget Sound Special for outdoor culture on the Pacific Coast. Lilly's improved strain is sold only in sealed packages.

Packet, 10c; ounce, 35c; postpaid.

LILLY'S PUGET SOUND FORCING TOMATO

Best Variety for Greenhouse Culture

This splendid extra early strain is especially valuable for greenhouse culture. It is a prolific bearer, and most of the fruit is borne close to the main stalk, allowing close pruning. The fruit is of medium size, excellent shape for an early tomato, and of splendid quality. The flesh is firm and meaty, deep red, and of fine flavor. Sold in sealed packages only. Pkt., 10c; oz., 40c; postpaid.

To grow tomatoes successfully on the Pacific Coast, only suitable varieties should be planted, and they require special attention. The Crop Book contains suggestions for their culture. It will be furnished free with any order if requested.

We also recommend "Littooy's Early Tomato Culture." Price, 25c, postpaid.

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; postpaid.

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; postpaid.

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.

Packet, 5c; ounce, 30c; postpaid.

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; postpaid.

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; postpaid.

Yellow Pear Tomato

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

Packet, 5c; ounce, 30c; postpaid.

Yellow Plum Tomato

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

Packet, 5c; ounce, 30c; postpaid.

TOBACCO

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

Packet, 5c; ounce, 30c; postpaid.

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.

LILLY'S SNOWBALL

The Finest Early White Turnip

This delicious turnip is the best early variety grown. 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.

Packet, 10c; ounce, 15c; postpaid.

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.

Packet, 10c; ounce, 15c; postpaid.

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.

Crop failure. No stock.

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.

Packet, 5c; ounce, 15c; postpaid.

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.

Packet, 5c; ounce, 15c; postpaid.

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

Packet, 5c; ounce, 15c; postpaid.

RUTA BAGA, or SWEDISH TURNIP

KING OF SWEDES

A Very Productive Variety

The best and most satisfactory ruta бага 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.

Packet, 10c; ounce, 15c; postpaid.

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

Packet, 5c; ounce, 15c; 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.

Crop failure. No stock.

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.

Packet, 5c; ounce, 15c; postpaid.

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.

Packet, 5c; ounce, 15c; postpaid.

Monarch or Tankard

Very large, tankard-shaped roots, and small top and neck. Purplish-red above ground, yellow beneath. The flesh is very solid, fine grained and sweet. An excellent variety.

Crop failure. No stock.

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, 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 description 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 most suitable.

LILLY'S FLOWER SEEDS

ANNUALS and PERENNIALS

Choicest Varieties Desirable for the West

Hardy Annuals may be sown outdoors in the fall or early spring, preferably fall. They bloom the follow-

ing 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 a 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. Most plants are best started under glass or in the house, and transplanted when large enough.

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.

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 spikes 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 is very pleasing.

No. 2. *Alyssum Benthami*. Packet, 5c; ounce, 25c; postpaid.

AGERATUM

(Floss Flower)

One of the very best bedding plants, covered with bloom from early summer until late in fall. It is a hardy annual 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 Dorritt*. The plant is six inches tall and a foot wide and is a perfect mass of blue flowers all summer. Packet, 10c; postpaid.

No. 101. *Ageratum Mexicanum*, Mixed. About eight inches high and of free branching habit. Packet, 5c; ounce, 25c; postpaid.

Arabis

(Rock Cress)

Excellent for rockeries or edgings. Grows about six inches high and a foot in diameter, covered with pure white flowers very early in spring. A hardy perennial, easy to grow, blooming the second year from seed.

No. 1035. *Arabis Alpina*. Pkt., 10c; postpaid.

Balsam

(Lady Slipper)

A fine old-fashioned garden favorite. 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 do best in full exposure to the hot sun, with rich soil and plenty of water. They grow one and one-half to two feet high. Transplanting two or three times will improve the shape of the plants. They should be set a foot apart.

No. 141. *Double Balsam*, Mixed. Pkt., 5c.

Bellis Perennis

(Double Daisy)

Excellent border plants, six to eight inches high, bearing charming double flowers from April to June. It is a hardy perennial, but will bloom the following summer if the seed is sown in fall or early spring.

No. 13. *Bellis Perennis*, Mixed. Pkt., 10c.

Calliopsis

One of the showiest and most easily grown free-flowering hardy annuals. The plants form perfect little bushes one to two feet high and literally massed with bloom from early summer until killed by frost. Excellent for massing and for cut flowers. The flowers are in various shades of yellow, brown and maroon. It is best to sow the seed where the plants are to grow, thinning the plants to a foot apart.

No. 116. *Calliopsis*, Mixed colors. Pkt., 5c.

Canary-Bird Vine

(Tropaeolum Canariense)

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 wings half expanded.

No. 148. *Canary Bird Vine*. Pkt., 5c

ANTIRRHINUM

Alyssum

(Snap Dragon)

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. 921. *Black Prince*. Dark crimson flowers and very dark foliage. Grows about eighteen inches high. Packet, 10c; postpaid.

No. 4. *Tall Snapdragons*, Mixed. A mixture of good tall varieties, growing three feet high. All colors. Packet, 5c; postpaid.

No. 104. *Dwarf Snapdragons*, Mixed. Best of the dwarf varieties, all colors, mixed. Grows about eight inches high. Packet, 10c; postpaid.

No. 1073. *Golden King*. A splendid yellow snapdragon; three feet high. Pkt., 10c; postpaid.

No. 1074. *Delicata*. A beautiful pink; three feet high. Packet, 10c; postpaid.

No. 1075. *Apple Blossom*. A charming pink shade on a white ground, with a white throat. Three feet. Packet, 10c; postpaid.

No. 1076. *Brilliant Scarlet*. A very effective red. Three feet high. Pkt., 10c; postpaid.

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., 10c; postpaid.

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. 17. *Celosia Cristata*. About one foot high, bearing large, highly colored combs. Mixed colors. Packet, 10c; postpaid.

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

The finest lawns are produced with Lilly's Lawn Grass Mixtures and Lilly's Lawn Dressing.

LILLY'S CROP BOOK
Contains
Cultural Directions
for Asters and
Other Flowers

LILLY'S ASTERS

CHOICE VARIETIES

NO HOME
is complete without
ASTERS
NASTURTIUMS
and
SWEET PEAS

Produce Magnificent Blooms of this Most Satisfactory Annual

The annual China Asters have been so wonderfully improved that they closely resemble Chrysanthemums. They are among the most beautiful and satisfactory of garden annuals, blooming late in the season. The plants are robust and hardy, easily grown, and 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. They require only ordinary care and good garden soil, but respond liberally to a little extra attention. They are exceedingly productive, and the delicate colors, long season of bloom, and vigor of the plants make them indispensable in the garden. The long, graceful stems and immense size and splendid form of the flowers make them among the most pleasing cut flowers.

LILLY'S

CREGO GIANT ASTERS

Largest and Most Beautiful

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 Giant, White.....	Packet, 10c
No. 1013.	Crego Giant, Pink.....	Packet, 10c
No. 1036.	Crego Giant, Crimson.....	Packet, 10c
No. 1037.	Crego Giant, Lavender.....	Packet, 10c
No. 1077.	Crego Giant, Azure Blue.....	Pkt., 10c
No. 1078.	Crego Giant, Purple.....	Packet, 10c
No. 1079.	Crego Giant, Mixed.....	Packet, 10c

Perennial Aster (Michaelmas Daisy)

Michaelmas Daisies fill a most important place in all hardy flower gardens, lighting up the borders and shrubberies with their masses and clouds of dainty and brightly colored blossoms throughout the autumn months. Especially useful for cutting. A hardy perennial.

No. 1081.	Michaelmas Daisy.....	Packet, 10c
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LILLY'S GIANT BRANCHING ASTERS

A Beautiful Late Flowering Variety

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 freely, and grow eighteen inches to two feet high. The flowers are large, very double, and are borne on long stems. This variety is especially valuable for bedding.

No. 940.	Giant Branching, White.....	Packet, 10c
No. 941.	Giant Branching, Pink.....	Packet, 10c
No. 942.	Giant Branching, Lavender.....	Pkt., 10c
No. 1080.	Giant Branching, Crimson.....	Pkt., 10c
No. 939.	Giant Branching, Mixed.....	Pkt., 10c

LILLY'S

MIXED ASTERS

Postpaid.

A fine mixture of many of the best varieties of annual Asters, producing a great variety of splendid forms and colors.

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

LILLY'S

SEEDS are tested, and will grow if other conditions are right.

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 Carnations..... Pkt., 10c
 No. 402. Marguerite, White. Strong growers; free flowering; especially desirable for garden culture..... Packet, 10c; postpaid.
 No. 284. Marguerite, Mixed. Pkt., 10c; postpaid.
 No. 161. Grenadin. A beautiful, early, dwarf variety. Sweet scented, double, scarlet flowers. Packet, 10c; postpaid.

Chrysanthemum

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. 1058. Coronarium, Double, Mixed. Pkt., 10c; postpaid.

Cineraria

Magnificent tender perennials, grown mainly in conservatories, window gardens or greenhouses. The flowers measure two or 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.
 Packet 10c;
 postpaid.

JILLY'S
CROP BOOK
 Free
 With
 Orders

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 to two feet high, and are excellent for beds, borders, and for cut flowers.

No. 923. Dwarf Victoria. A dwarf, double, Bachelor's Button. The plants are only about nine inches high, bear a profusion of large, blue, double flowers, and are excellent for pots and edgings..... Packet, 10c; postpaid.

No. 1085. Blue Emperor. Tall, single Bachelor's Button or Cornflower, growing two feet high..... Packet, 10c; postpaid.

No. 225. Cornflower. The old-fashioned Bachelor's Button, Cornflower, Ragged Sailor, or Bluebottle..... Packet, 5c; postpaid.

No. 1016. Giant Sweet Sultan (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; postpaid.

COSMOS

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

- No. 282. Mixed Cosmos..... Packet, 5c; postpaid.
 No. 1032. White..... Packet, 10c; postpaid.
 No. 1033. Pink..... Packet, 10c; postpaid.
 No. 1034. Red..... Packet, 10c; postpaid.

JILLY'S

CROP BOOK contains cultural directions for flowers, vegetables, and farm crops.

CANDYTUFT

(Iberis)

The annual Candytufts are hardy, and 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 large 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.....Packet, 10c; ounce, 50c; postpaid.

No. 39. **White Rocket.** Good spikes of pure white flowers.....Packet, 5c; ounce, 25c; postpaid.

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., 10c; postpaid.

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 the following summer.

No. 192. **True California Poppy.** Orange-yellow.....Pkt., 5c; oz., 25c; postpaid.

No. 1089. **Special Mixed Eschscholtzia.** All colors.....Pkt., 10c; oz., 60c; postpaid.

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. **Wild Cucumber.** Pkt., 10c; postpaid.

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; postpaid.

DIGITALIS

(Foxglove)

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 Foxglove.** Pkt., 5c; postpaid.

No. 1086. **White Gloxinia-Flowered Foxglove.** Packet, 10c; postpaid.

No. 1087. **Pink Gloxinia-Flowered Foxglove.** Packet, 10c; postpaid.

No. 1088. **Grandiflora Foxglove, Bright yellow.** Packet, 10c; postpaid.

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. **Single Annual Gaillardia, Mixed colors.** Packet, 5c; postpaid.

CAMPANULA

(Canterbury Bells. Bell Flower)

Very ornamental garden plants of the easiest culture. They are hardy biennials, flowering the second year from seed, two and one-half feet high, producing large bell-shaped flowers of beautiful colors during a period of several weeks in early summer.

- No. 15. Single, Mixed colors.....Packet, 5c; postpaid.
 No. 157. Double, Mixed colors.....Packet, 10c; postpaid.
 No. 1082. Single, White.....Packet, 10c; postpaid.
 No. 1083. Single, Blue.....Packet, 10c; postpaid.
 No. 1084. Single, Pink.....Packet, 10c; postpaid.

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.....Packet, 10c; postpaid.

No. 1090. Gypsophila Elegans Rosea. Soft pink. Hardy annual; two feet high... Pkt., 10c.

No. 918. Gypsophila Paniculata. Hardy perennial. White. Two feet high. Pkt., 10c; postpaid.

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. 959. Evening Glory. (Ipomoea Bona Nox). Large rosy-lilac flowers which open in the evening.....Packet, 10c; postpaid.

No. 1056. Moon Flower Vine. (Ipomoea Mexicana Grandiflora Alba). Covered with large white flowers evenings and cloudy days.Packet, 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.....Packet, 10c; postpaid.

No. 1096. Sapphire. A trailing variety, bearing very large deep blue flowers with a pure white eye.....Pkt., 10c; postpaid.

No. 196. Crystal Palace. Compact plants, dark foliage, and rich deep blue flowers.Pkt., 10c.

No. 304. Erinus Hamburgia. A trailing Lobelia, for hanging baskets or window boxes. Large dark blue flowers. Pkt., 10c; postpaid.

Gypsophila

FERTILIZERS will make sturdier plants and larger flowers.

HOLLYHOCK

One of the most majestic of hardy plants, and unequalled 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. Lilly'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.

Packet, 10c.

No. 37. Double Hollyhocks, Mixed. The best double perennial hollyhocks in mixed colors. Packet, 10c; postpaid.

No. 1091. Blood Red, Double, Perennial Hollyhock. Pkt., 10c.

No. 1092. Pink, Double, Perennial Hollyhock. Pkt., 10c.

No. 1093. Black, Double, Perennial Hollyhock. Pkt., 10c.

No. 1094. White, Double, Perennial Hollyhock. Pkt., 10c.

No. 1095. Yellow, Double, Perennial Hollyhock. Pkt., 10c.

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. Dwarf Rocket, Mixed. A splendid hardy annual Larkspur, growing only one foot high and producing large, double, hyacinth-like blooms in a variety of charming colors.

Packet, 10c; postpaid.

No. 208. Tall Rocket, Mixed. A tall hardy annual Larkspur, growing about two and one-half feet high. Mixed colors. Pkt., 5c

No. 1057. Perennial Larkspur. A special mixture of seed saved from specially selected plants, and producing flowers of the richest and most delicate shades. Hardy perennial, growing three to five feet high. Mixed colors. Packet, 10c; postpaid.

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.** Packet, 10c; postpaid.

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 dwarfer in growth, with beautiful striped flowers three or 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. About two feet high with flowers three or four inches in diameter in shades of yellow and orange. Packet, 10c; postpaid.

No. 410. Tall Double French Marigolds. The plants grow about one and one-half feet high. The colors and markings of the large double flowers are very interesting, some being elegantly striped and spotted. Packet, 10c; postpaid.

No. 146. Dwarf Double French Marigolds. One foot high, with large flowers in mixed colors. Packet, 5c; postpaid.

Myosotis

(Forget-Me-Not)

Hardy perennials and annuals, growing six to twelve inches high, 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. Packet, 5c; postpaid.

No. 1054. Myosotis Palustris. The true Forget-Me-Not. A hardy perennial of strong, sturdy growth, with beautiful clear blue flowers. Packet, 10c; postpaid.

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. 139. Reseda Odorata. The old-fashioned Sweet Mignonette. **Packet, 5c; ounce, 15c; postpaid.**

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, and striped flowers. The flowers are shaped like the Morning Glory, and open late in the afternoon.

No. 51. Mirabilis Jalapa. 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.

No. 248. Nigella Damascena, Pkt. 5c.

Petunia

Petunias are half-hardy annuals, and the single varieties are easy to grow, requiring only good soil and a sunny location. They commence flowering early and continue throughout the season.

No. 61. Choice Single Petunias. A choice mixture of fine single varieties and colors.

Packet, 5c; postpaid

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.

Packet, 10c; postpaid

No. 41. Convolvulus Major. The old-fashioned Morning Glory. Makes a growth of ten to twelve feet. Mixed colors.

Packet, 5c; postpaid

POPPIES

Nothing is easier to grow and few flowers are more pleasing than poppies. 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 with large fluted and crinkled flowers in a variety of forms and colors.

Packet, 10c

No. 58. Umbrosum Poppy. Rich vermilion flowers with a black spot on each petal. Hardy annual.

Packet, 10c; postpaid

No. 341. Iceland Poppy. This is a hardy perennial, but will bloom the first year from seed. It bears a profusion of graceful, delicate, single flowers with petals like tissue paper. Mixed colors.

Packet, 10c; postpaid

No. 1030. Oriental Poppy, Mixed Hybrid. Hardy perennials, producing immense flowers in gorgeous colors.

Packet, 10c; postpaid

No. 351. Mixed Poppies. A choice mixture of hardy annual varieties.

Packet, 5c; postpaid

Don't fail to plant **TILLY'S** Sweet Peas.

NASTURTIIUMS

Finest Giant Flowering Varieties

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.

Tall, or Climbing Nasturtiums

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. Quite unique, each plant bearing flowers of a great variety of colors and markings.....Packet, 10c; ounce, 20c; postpaid

No. 1061. Vesuvius. Salmon-rose; dark foliage; an excellent variety. Pkt., 10c; oz., 20c; postpaid

No. 1062. Tall Ivy Leaved Nasturtium, Mixed. The leaves resemble English Ivy. The flowers are of a distinct form and in a great variety of colors.Packet, 10c; ounce, 25c; postpaid

No. 1060. King Theodore. Very deep crimson, nearly black; dark foliage.....Pkt., 10c; oz., 20c

No. 906. Pearl. Cream white, or primrose.....Pkt., 10c; oz., 20c

Lobb's Tall Nasturtiums

Lobb's Nasturtiums are remarkable for the intensely brilliant colors of the flowers, which are slightly smaller than those of other climbing varieties.

No. 1064. Black Prince. Velvety black flowers; dark foliage. Packet, 10c; ounce, 20c; postpaid

No. 1098. Queen Alexandria. Variegated leaves; flowers blood red, marbled and mottled.....Packet, 10c; ounce, 20c; postpaid

No. 1099. Cardinal. Scarlet flowers; dark foliage.....Packet, 10c; ounce, 20c; postpaid

No. 1100. Emma Alida. Dark ivy-leaved foliage, with golden-yellow, orange and deep scarlet lacinated flowers.Packet, 10c; ounce, 30c; postpaid

No. 1101. Flamingo. A beautiful new variety with magnificent lacinated orange flowers.Packet, 10c; ounce, 20c; postpaid

Dwarf, or Bedding Nasturtiums

These dwarf or Tom Thumb varieties form sturdy little bushes completely covered with large, brilliant flowers during the entire season, making a beautiful display in beds or borders.

No. 1068. King Theodore. Velvety red flowers; dark foliage.....Pkt., 10c; oz., 20c; postpaid

No. 1070. Prince Henry. Light yellow marbled with scarlet.....Pkt., 10c; oz., 20c; postpaid

No. 929. Queen of Tom Thumbs. Rich, bright crimson flowers forming a pretty contrast to the silver variegated foliage. Splendid for bedding or pots.Packet, 10c; ounce, 25c; postpaid

No. 907. Dwarf Vesuvius. Deep salmon-rose; a beautiful shade.Packet, 10c; ounce, 20c; postpaid

No. 1112. Lady Bird. Orange, striped with bright scarlet.....Pkt., 10c; oz., 20c; postpaid

Lilly's Dwarf Mixed Nasturtiums

The choicest standard dwarf varieties and colors mixed. Splendid for beds and borders.

No. 87. Pkt. 5c; oz. 20c; ¼ lb. 60c; lb. \$2.00.

No. 264. Empress of India. Fiery crimson flowers; compact plant with very dark foliage.Packet, 10c; ounce, 20c; postpaid

No. 911. Dwarf Chameleon. All colors borne on each plant.....Pkt., 10c; oz., 20c; postpaid

No. 1071. Dwarf Ivy Leaved Nasturtium, Mixed. Deep green leaves of distinctive ivy form; flowers beautifully fringed.Packet, 10c; ounce, 25c

No. 1067. Golden King. Rich golden-yellow.Packet, 10c; ounce, 20c; postpaid

No. 1069. Crystal Palace Gem. Sulphur-yellow spotted with maroon.Packet, 10c; ounce, 20c; postpaid

Lilly's Tall Mixed Nasturtiums

A splendid mixture of the best tall varieties, including all harmonizing colors.

No. 262. Pkt. 5c; oz. 20c; ¼ lb. 60c; lb. \$2.00.

LILLY'S

SUPERB PANSIES

CHOICEST VARIETIES

Magnificent and Continuous Blooms

No home in the Pacific Northwest is complete without a bed of Pansies, for our cool, moist climate is ideal for these beautiful flowers, and in no other locality do they produce such splendid blooms and so continuously from early spring until winter.

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.

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

No. 90. Giant Flowered French Pansies, Mixed. A fine mixture of large flowering French varieties.....Packet, 5c; postpaid

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; postpaid

No. 94. Beaconsfield. A very large Pansy, with upper petals light lavender and lower petals purple.....Packet, 10c

No. 203. Emperor William. Dark navy blue; of large size and very showy.....Pkt., 10c

No. 95. Snowflake. Large satiny-white flowers with light centers.....Packet, 10c

No. 178. Faust, or King of the Blacks. Very large and very dark, almost black.....Pkt., 10c

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

Portulaca (Sun 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.

No. 69. Single Portulaca, Mixed colors......Packet, 5c; ounce, 50c; postpaid

No. 70. Double Portulaca, Mixed. Packet, 10c

Pyrethrum (Golden Feather)

One of the best plants for edging, grown for its beautiful yellow foliage. It is a hardy perennial, but is generally grown as an annual. Six inches high.

No. 76. Pyrethrum Parthenifolium Aureum......Packet, 10c; postpaid

LILLY'S

FERTILIZERS
PRODUCE
RESULTS

LILLY'S
SEEDS
ARE
TESTED

LILLY'S COLOSSAL MIXED PANSIES

This is a splendid mixture of the choicest large-flowering varieties and the most beautiful colors and markings.

No. 930. Lilly's Colossal Mixture.....Packet, 10c; postpaid

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.

No. 75. Primula Veris. The early spring flowering border primrose or cowslip, a beautiful hardy perennial, growing six inches high, and bearing clusters of fragrant flowers in various colors.....Packet, 10c; postpaid

Pinks

(May Pinks. Dianthus)

The old-fashioned single flowered garden or border pink. They are hardy annuals, and will flower the first season from seed sown outdoors early in spring. Height, one foot.

No. 288. May Pinks......Packet, 5c; postpaid

For cultural directions see **LILLY'S CROP BOOK**; free with orders if requested.

PHLOX

For beds and massing, nothing can surpass the beautiful hardy annual Phloxes. They produce immense trusses of brilliant flowers of a great variety of colors and shades throughout the summer. They are 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. 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. This mixture contains all the most beautiful colors and shades. Fifteen inches high.....

.....Pkt., 10c; postpaid
No. 67. Phlox Drummondii, Mixed. Flowers not so large as those of the grandiflora type, but just as bright and free blooming. Fifteen inches high.....
.....Packet, 5c

Ricinus

(Castor Oil Bean)

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

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

Salvia

(Flowering Sage)

Half-hardy perennials, blooming the first year from seed if sown early. The plant grows three feet high and bears profusely during the summer and fall very fragrant flowers in drooping spikes of the most intense glistening scarlet. Splendid in working out color schemes if properly used.

No. 920. Salvia Splendens. Packet, 10c

Salpiglossis

(Painted Tongue)

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

No. 406. Mixed colors.....Packet, 5c; postpaid

STOCKS

Stocks are among the most popular half-hardy plants for bedding, edgings, pot culture and cut flowers. For brilliancy, diversity of colors, fragrance and profusion and duration of bloom they are unsurpassed. The Ten Weeks Stocks are annuals, and from seed started indoors in March or April blooms will be had in July.

No. 84. Large Flowering Dwarf Ten Weeks Stocks, Mixed colors. Half-hardy annual one foot high.....Packet, 10c; postpaid

No. 1107. Large Flowering Dwarf Ten Weeks Stocks, White.....Packet, 10c; postpaid

No. 1108. Large Flowering Dwarf Ten Weeks Stocks, Flesh-pink.Pkt., 10c; postpaid

No. 1109. Large Flowering Dwarf Ten Weeks Stocks, Crimson.....Pkt., 10c; postpaid

No. 1110. Large Flowering Dwarf Ten Weeks Stocks, Light Blue.Pkt., 10c; postpaid

No. 1111. LILLY'S SPECIAL MIXTURE

ANNUAL STOCKS. Choicest varieties and colors of annual Stocks.....Pkt., 10c; postpaid

Sunflower

(Helianthus)

These hardy annuals are splendid for backgrounds, or even for bedding, and must not be confused with the common Sunflower. This is a very double variety, growing about four feet high.

No. 128. Dwarf Double Sunflower. Pkt., 5c

The most splendid lawns are made with **LILLY'S** Lawn Grass Seeds

LILLY'S Ten Weeks STOCKS

LILLY'S SWEET PEAS

SPENCER TYPE

The Most Magnificent Varieties

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 are 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, although spring planting is very satisfactory. A good article on Sweet Pea culture is contained in The Crop Book, which we will furnish free with any order if requested with the order.

SPENCER, OR 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 tinted.

Mrs. Routzahn

A beautiful blending of straw-color tinted with blush-pink and shading to apricot and rose at the edges. One of the finest Spencers.

No. 1011.....Pkt., 10c; oz., 30c; postpaid

Margaret Madison

A charming, clear, azure-blue, self colored. An improved strain; large flowered and one of the most beautiful Spencers.

No. 1048.....Pkt., 10c; oz., 50c; postpaid

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; postpaid

Countess Spencer

The original of the Spencer Type Sweet Peas, and still one of the best. The color is a beautiful clear pink.

No. 949.....Pkt., 10c; oz., 30c; postpaid

Dobbie's Cream

A deep cream-color; large and fine. The best Spencer of this color.

No. 1042.....Pkt., 10c; oz., 30c; postpaid

Florence Morse

Large wavy flowers of soft blush-pink flushed towards the edge with deeper pink.

No. 1014.....Pkt., 10c; oz., 30c; postpaid

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; postpaid

Do not fail to plant Sweet Peas. They are the most satisfactory flowers for the Pacific Coast.

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; postpaid

Primrose Spencer

The best of its class. Clear primrose of the best Spencer form. The flowers are large and beautifully waved.

No. 1002.....Pkt., 10c; oz., 30c; postpaid

LILLY'S
KING WHITE
SPENCER
SWEET PEAS

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; postpaid

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; postpaid

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 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; lb., \$2.50; postpaid.

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; postpaid

Thomas Stevenson

Large and brilliant effective flowers of fiery red-orange. Practically sunproof. A grand Spencer.

No. 1044.....Pkt., 10c; oz., 40c; postpaid

Helen Lewis

A very large and fine Spencer Sweet Pea with orange-colored standard and orange-salmon wings.

No. 953.....Pkt., 10c; oz., 30c; postpaid

White Spencer

The flowers are very large, white, and of magnificent Spencer waved form. The stems are long and generally carry four blossoms.

No. 1001.....Pkt., 10c; oz., 30c; postpaid

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; postpaid

Illuminator

A glorious orange-salmon Spencer Sweet Pea of striking color and magnificent form and size.

No. 1045.....Pkt., 10c; oz., 50c; postpaid

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., 50c; postpaid

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. 1003.....Pkt., 10c; oz., 30c; postpaid

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; postpaid

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; postpaid

Apple Blossom Spencer

A very large, bold flower of best Spencer form. The standard is very bright rose, wings primrose with a flush of rose tint. Very robust and profuse flowering.

No. 1050.....Pkt., 10c; oz., 30c; postpaid

America Spencer

Striped and flaked brilliant carmine-red over white. Very large flowers of splendid form and stroking color.

No. 1024.....Pkt., 10c; oz., 30c; postpaid

LILLY'S GRANDIFLORA TYPE SWEET PEAS

Choice Varieties and Colors

The Standard, or Grandiflora type Sweet Peas, includes some splendid varieties and beautiful colors, and they bloom lavishly during the entire season, but the superior size and form of the Giant Waved Spencer Sweet Peas has reduced the demand for the Grandiflora type, so that we now list

only one or two of the finest varieties of each of the good colors. However, some of these varieties compare favorably with the Spencer type, are extremely hardy and productive, and are very satisfactory in every way. Before the advent of the Spencer type these varieties would have been considered wonderful.

America

No. 364

Very attractive and unique. Crimson-scarlet striped on white. One of the largest of this type. Open form.

Black Knight

No. 365

Large, and of the popular open form. It is one of the darkest colored Sweet Peas, a glossy deep maroon, almost black.

On the Pacific Coast, Sweet Peas planted in fall will produce earlier and better blooms.

Blanche Ferry

No. 964

Standard bright carmine-rose, wings white tinged with pink; open form.

Dorothy Eckford

No. 969

Large, pure white flowers of semi-hooded form. The best white Sweet Pea of the Grandiflora type.

King Edward VII

No. 954

Large; open form; bright red. Best of the pure red Grandifloras.

Lady Grisel Hamilton

No. 465

Soft lavender tinted with mauve in the standard. Hooded form.

Hon. Mrs. E. Kenyon

No. 976

Light primrose; large; semi-hooded form.

Lord Nelson

No. 1039

Dark navy blue. The best of the color.

Prima Donna

No. 1040

Exquisite, clear, light pink; hooded form

Prices: Any of the above Grandiflora Type: Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.25; postpaid.

ROYAL MIXED SWEET PEAS

A Fine Mixture of Grandiflora Varieties

Included in this mixture are the best of all varieties and colors of 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. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 30c; lb., \$1.00; postpaid.

Cultural directions for Sweet Peas are contained in the Crop Book.

Growing Zinnia Seed

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 eighteen inches high, and is excellent for beds and borders.

- No. 26. Purple, Mixed.....Packet, 5c; postpaid
No. 27. Double, Mixed.....Packet, 10c; postpaid

Wallflower

An old European favorite deserving of more appreciation than is shown it 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. It is a perennial, grows about eighteen inches high, is bushy, and very early in spring bears spikes of deliciously fragrant flowers in bright colors.

- No. 98. Double Wallflower. Pkt., 10c; postpaid
No. 99. Single Wallflower. Pkt., 10c; postpaid

WILD FLOWER GARDEN

There are few things more pleasing than a wild-flower 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 will produce a great profusion and variety of pretty flowers.

- No. 438. Wild Flower Garden.....
Packet, 5c; ounce, 20c; pound, \$1.50; postpaid

Violets

These little favorites are deliciously fragrant and are fine for borders and for cutting. They are perennials, quite hardy, but the plants are quite difficult to grow from seed.

- No. 319. Large Single Violet.....Packet, 10c
No. 1106. Viola Cornuta; Tufted Pansy Violets; Mixed colors.....Packet, 10c; postpaid

Verbena

Verbenas 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 and window boxes.

- No. 88. Giant Hybrid Verbenas, Mixed. A splendid mixture of large flowering varieties; all colors.....Packet, 10c; postpaid

ZINNIA

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 large 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.....Packet, 10c; postpaid

- No. 100. Mixed Zinnia. A splendid mixture of good varieties and colors. Pkt., 5c; postpaid

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 good condition when shipped, and to be delivered in good condition when shipped by express. If not satisfactory when received, 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 any 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.

Sunburst

A magnificent yellow Hybrid Tea Rose. The long, pointed buds are carried singly on good stems. The flowers are very large, vigorous and healthy. The color is a beautiful yellow shading to orange copper at the center.

Price, 50c

Juliet

A beautiful new rose of the new Hybrid Brier class, and a distinct novelty. 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. Deliciously fragrant. The foliage is luxuriant and beautiful.

Price, 50c

Lady Hillingdon

A grand yellow Tea Rose. The plant is luxuriant and has beautiful narrow foliage. The buds are long, slender, and pointed. The color is a beautiful deep apricot and chrome yellow.

Price, 50c

George Dickson

A majestic new Hybrid Tea Rose. 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 deep scarlet shaded dark velvety crimson. Richly fragrant.

Price, 50c

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.

Price, 50c

Irish Elegance

This single Irish rose is a profuse and constant bloomer, and makes a splendid garden display. The buds are especially pretty. The flowers are large, single, and the color is apricot shaded with orange and pink.

Price, 50c

Jubilee

A splendid large flowered Hybrid Tea Rose of intense coloring, fiery maroon-crimson, almost black.

Price, 35c

Ophelia

An excellent Hybrid Tea Rose. The plants are vigorous; with clean, dark, leathery foliage; and the beautifully formed buds and flowers are borne on long, stiff stems. The color is salmon shading to pink.

Price, 50c

Prices do not include transportation charges. Plants should be shipped by express.

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. **Price, 35c**

General McArthur

One of the most popular red roses. The plant is vigorous, healthy, and very productive. The flowers are fiery red, of good form, and very fragrant. Hybrid Tea. **Price, 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. The color is a beautiful creamy rose shaded with vermillion and salmon. **Price, 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 beautiful silvery carmine shaded salmon. **Price, 35c**

Frau Karl Druschki

A magnificent snow-white rose, one of the most popular in this locality. The plants are strong, branching freely, and with luxuriant foliage. The flowers are glorious, of immense size, splendid form, very double, of the purest white when fully opened, and are produced in great profusion on long, strong stems. Hybrid Perpetual. **Price, 35c**

Richmond

One of the most satisfactory red Hybrid Tea Roses. The buds are long and pointed, and are borne on long stems. The half opened flowers are very pleasing, and the color is rich scarlet-crimson. **Price, 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. **Price, 35c**

Prince de Bulgaire

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. **Price, 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. **Price, 35c**

Franz Deegan

This magnificent Hybrid Tea Rose is a seedling of Kaiserin Augusta Victoria, and retains its fine form, but the color is a deep orange-yellow merging to creamy white in the outer petals. The plant is healthy and vigorous, the foliage dark and leathery, and the flowers fragrant. **Price, 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, almost pure white. Hybrid Tea. **Price, 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 with a silvery luster. A constant bloomer and delightfully sweet scented. **Price, 35c**

JILLY'S CROP BOOK contains a good article on the culture of roses. Free with orders. When in Seattle, we will be pleased to have you visit our trial grounds and see these roses growing, and blooming if in season.

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 Perpetual.

Price, 35c

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. The flowers are of good size and form, delightfully fragrant, and the color is a rich, velvety, fiery red shaded with a dark velvety sheen.

Price, 35c

Papa Gontier

A strong, vigorous Tea Rose and a constant bloomer. The buds are large, long, and of magnificent form. The flowers are only moderately double, but are very beautiful. The color is a vivid cherry-red, shaded yellow, with reverse of petals crimson.

Price, 35c

Killarney

This splendid Irish Rose is considered by many to be the most beautiful of its class and color. The flowers are large, semi-double, of beautiful form, and the color is a delicate shell-pink. Hybrid Tea. Very fragrant.

Price, 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.

Price, 35c

Dr. Van Fleet

A splendid Hardy Climber; a cross between Souvenir du President Carnot and Rosa Wichuraiana. 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 flesh-pink color.

Price, 35c

Silver Moon

A magnificent white Hardy Climber; a cross between Wichuraiana 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 silver white with bright yellow stamens, delicately fragrant, and are borne on long stems in great profusion.

Price, 35c

Marchal Neil

The best known and most popular yellow climber. The flowers are deep golden-yellow, very large and full, beautifully formed and deliciously fragrant.

Price, 35c

Climbing Cecil Brunner

A free blooming climber bearing clusters of very small, daintily formed, and exquisitely colored flowers. The little buds are especially pleasing. The color is a delicate salmon-rose.

Price, 35c

Crimson Rambler

A well known and very popular climber, producing a great profusion of small crimson flowers in large panicles.

Price, 35c

Dr. Van Fleet

Climbing Belle Siebrecht

This splendid climber is similar, but superior to the bush form of the same name. The flowers are large, well formed, sweetly perfumed, and of a beautiful rosy pink color. The buds are long and tapering. Hybrid Tea.

Price, 35c

Gloire de Dijon

A good, strong climber, hardest of the Tea Roses, and an old favorite. The flowers are large, double, sweet scented, and the color is buff with orange center.

Price, 35c

Thousand Beauties

A beautiful new Polyantha Climber, one of the best of the rambles. The plant makes a wonderful growth and is literally covered with blooms for a long season. The flowers are large, produced in large trusses, and are a delicate pink shaded carmine.

Price, 35c

Prices do not include transportation charges.

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, 15c; dozen clumps, \$1.50**

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

Cabbage Plants

Strong, healthy plants of the following varieties: Early Jersey Wakefield, Lilly's Glory, Copenhagen Market, All Seasons, Danish Ballhead, 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

Fine, hardy, field grown roots of Columbia Mammoth Asparagus. Season Nov. 1st to May 15th. Write for prices on larger quantities.

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**

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 Phenominal 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. Hardy. 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 meat, 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, subacid, 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.

LILLY'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, entirely too many growers give no thought to the selection of seed or varieties. These same farmers would not think of breeding scrub cattle or hogs, but they will plant potatoes that would not even 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. We also have other standard varieties which we purchase from reliable growers.

One hill Earliest Of All Potatoes, weighing 8½ lbs., grown on Lilly's Trial Grounds.

Earliest of All

Earliest Of All made the best showing of any of the early varieties grown in our trial grounds last season. It was about two weeks earlier than any other, and more productive than most of them. It is a round, white potato, very similar to Irish Cobbler, is uniform in size and shape, smooth, and of fine quality.

Irish Cobbler

A splendid extra early variety, and one of the best for early market. The tubers are very handsome, almost round, 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, cooking dry and mealy. It is a very reliable variety and a heavy cropper.

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 tops are short and compact and the potatoes are set close in the hill. In rich soil and with good cultivation it will yield abundantly, but under adverse conditions it will not produce the best results. The skin is pink or flesh color; the flesh is white and of good quality.

Price, subject to change: 10 lbs., 5c per lb.; 50 lbs., 4c per lb.; 100 lbs., \$3.00.

JERUSALEM ARTICHOKE

These are quite distinct from the Green Globe Artichoke 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 easy to grow, and are one of the best and cheapest foods for hogs. They should be planted and cultivated the same as potatoes, and will produce immense crops, but they are very hardy and persistent, and are often planted on new land and the hogs allowed to harvest them, at the same time subduing the land.

Price, subject to change: 10 lbs., 5c per lb.; 50 lbs., 4c per lb.; 100 lbs., \$3.00.

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, from which we have produced splendid crops of seed potatoes. Early Rose is too well known to require much description. It is of good size, oblong, the skin has a rosy blush and the flesh is white.

Up-To-Date

This new main crop potato excels any other late variety that we have grown. It is a remarkably heavy cropper and is exceedingly vigorous and free from disease. The tubers are slightly oblong, flattened, grow to a uniform size, are very attractive, with few and exceedingly shallow eyes. The skin and flesh are white, and the cooking qualities are of the very best, always dry and floury, and the flavor is excellent.

Other Varieties

The above are the only varieties that we have had specially grown for us, but we expect to purchase from reliable growers such varieties as Burbank, Netted Gem, American Wonder, and others. Such good varieties as we can purchase will be listed in price list supplements which we will issue from time to time, and which we will gladly mail to you on request.

Prices quoted in this catalog, unless otherwise specified, are F. O. B. Seattle or Portland.

LILLY'S NONPAREIL LAWN GRASS SEED

STANDARD FOR THE NORTHWEST

A Careful Selection of Suitable Hardy Grasses Forming a Tough and Durable Turf

Nonpareil Lawn Grass Seed is a mixture of many suitable hardy 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 tramping; 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. (Subject to change.) Postage additional.

LILLY'S

IMPORTED LAWN GRASS SEED

For Extra Fancy Lawns

For those who wish an extra fancy lawn, and are willing to give it the care which such a lawn requires, 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 Nonpareil Lawn Grass Mixture for those who do not care to expend the money and labor demanded by an especially fine lawn. Sold in sealed packages only.

Price: Quart package (about 1 lb.), 35c; 4-lb. package, \$1.50. Postage additional.

LILLY'S CROP BOOK

contains instructions for making and maintaining a satisfactory lawn. We will give it free with any order if requested on the order.

LILLY'S LAWN DRESSING

is the best fertilizer for lawns. It is not unsightly to the eyes nor offensive to the nostrils, may be applied at any time, and will keep the grass green and luxuriant.

LILLY'S GOLF LINKS MIXTURE

Produces an Indestructible Turf, Smooth, Tough and 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 intermingled roots reaching deep into the ground.

Price: Quart package (about 1 lb.), 35c; 5 lbs. or more, 35c per lb. (Subject to change.) Postage additional. Write for prices on large quantities.

LILLY'S PUTTING GREEN MIXTURE

Best Grasses for the Purpose. Not Injured by Constant Tramping

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. **Price:** Quart package (about 1 lb.), 35c; 5 lbs. or more, 35c per lb. (Subject to change.) Postage additional. Write for prices on large quantities.

LILLY'S WHITE CLOVER

Only the Best is Good Enough for Lawns

Only the very best White Clover seed should be used for lawns, for most of the seed on the market contains sorrel, and all know what that means in a lawn.

LILLY'S Best White Clover Seed is guaranteed to be 97% pure, or better, and is the best White Clover seed obtainable.

Price: 60c per lb. Postage additional. For prices on larger quantities, see enclosed price list supplement, or write for prices.

LILLY'S KENTUCKY BLUE GRASS

None Better

Our Kentucky Blue Grass Seed is purchased in carload lots from the most reliable growers in Kentucky, and is the best that is to be had. It is re-cleaned by us with our splendid equipment for that purpose, and is free from Canadian Blue Grass and other cheaper seeds.

Price: 35c per lb. Postage additional. If wanted in large quantities, see enclosed price list supplement, or, if not of recent date, write for later supplement.

To keep weeds out of the lawn is difficult enough at the best; do not sow weed seeds.

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. 111.

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 it 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 high price.

Few seedsmen have facilities equal to ours in 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 accurately 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; 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, \$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 99½% pure. This state of purity is seldom equalled, 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, all small 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.

For prices of **LILLY'S BEST RED CLOVER** and **Choice Red Clover** see enclosed supplement, or, if not of recent date, write for later price list.

LILLY'S ALSIKE CLOVER

(Trifolium Hybridum)

Suitable for Cold, Wet Land
98 PER CENT PURE

Alsike Clover thrives on almost any kind of soil, but is especially useful on land that is too wet and cold for Red Clover. It makes a good quality of hay, and may be sown with timothy, as it matures at the same time. It is also good in pasture mixtures for wet land.

We have a second grade, better than is required by the Pure Seed Law, but the difference in price does not warrant the use of any but Lilly's Best. Eight to ten pounds of seed is sufficient for an acre.

For prices see enclosed price list supplement, or, if not of recent date, write for later price list.

White Sweet Clover

(Bokhara Clover. Melilotus Alba)

Bokhara, or White Sweet Clover, was formerly grown almost exclusively for bee pasture, for which it is unequalled, but recently it has become quite popular for hay and pasture. It has a bitter taste, and stock must develop a taste for it, but they soon learn to like it. It is a biennial, and, unless it reseeds itself, must be seeded every second year. It makes a wonderful growth the second season, and the plants resemble Alfalfa in appearance. It is a legume, and has great fertilizing value. Seed is shown at the rate of twenty to thirty pounds per acre. The soil should be very firm.

Price, \$29.00 per 100 lbs.; less than sack lots, 30c per lb.

Yellow Sweet Clover

(Melilotus Indica)

Yellow Blossom Sweet Clover is an annual. The plants are low-growing, erect, and early flowering. It makes a slower growth than the white variety, and it is not so valuable. It is sometimes grown on land prior to sowing Alfalfa, where there has been difficulty in starting Alfalfa, as the bacteria on its roots is capable of inoculating Alfalfa.

Price, \$19.00 per 100 lbs.; less than sack lots, 20c per lb.

LILLY'S WHITE CLOVER

(Trifolium Repens)

Only the Very Best if Fit for Lawns
97 PER CENT PURE

For lawns, especially, none but the very best White Clover seed obtainable should be sown. Ordinary seed is very liable to contain sorrel. Lilly's Best White Clover is grown on land free from noxious weeds, is thoroughly re-cleaned, and is 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.

For prices see enclosed price list supplement, or, if not of recent date, write for later price list.

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. For prices see enclosed supplement, or write for later price list.

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.

TIMOTHY AND CLOVER
SUITABLE TO THE AREA

LILLY'S TIMOTHY SEED

(Phleum 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 weed 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 96% purity.

Timothy is the standard grass for hay in all parts of the country, and, although there may be other grasses equally as 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 have a second grade, Choice Timothy, but especially recommend Lilly's Best.

Prices: Subject to change. See enclosed supplement, or later issues mailed on request.

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.

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 lawns sow one pound to each four hundred square feet. For pasture it is best mixed with other grasses.

Price; subject to change; 35c per lb.

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; subject to change; \$20.00 per 100 lbs. Less than sack lots, 21c per lb.

Prices are subject to change. See enclosed supplement or write for later price list.

LILLY'S 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 makes excellent pasture and a fair grade of hay. We have two grades of Red Top, but recommend the Fancy Red Top, as it is solid seed and only ten to fifteen pounds is required to sow an acre. The Choice Red Top is good seed, but it contains the hulls, and nearly twice as much seed is required.

Fancy Red Top, 24c per lb.; \$23.00 per 100 lbs.
Choice Red Top, 9c per lb.; \$8.00 per 100 lbs.

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 used alone.

Price; subject to change; \$15.00 per 100 lbs. Less than sack lots, 16c 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 tramping.

Price; subject to change; 45c per lb.

JILLY'S ENGLISH RYE GRASS SEED

(*Lolium Perenne*)

One of the Most Valuable Hay and Pasture Grasses for the Northwest

English, or Perennial, Rye Grass is especially adapted to the country west of the Cascade Mountains, where it is quite popular, but should be even more generally grown, for it is one of the most valuable grasses. It has high feeding value, is relished by all stock, 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, strong growth, and when sown thickly 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, or in the same proportion when mixed with other seeds.

Price; subject to change; \$14.00 per 100 lbs. Less than sack lots, 15c per lb.

ITALIAN RYE GRASS

(*Lolium Italicum*)

Italian Rye Grass is supposed to be a biennial, but on the Pacific Coast it lasts 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 makes a rapid growth, and 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.

Price; subject to change; \$16.00 per 100 lbs. Less than sack lots, 17c per lb.

Tail Meadow Oat Grass

(*Avena Elatior*)

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 rooting, hardy, withstands drought, and is grown successfully 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; subject to change; \$28.00 per 100 lbs. Less than sack lots, 29c per lb.

Velvet Grass, or Mesquite

(*Holcus Lanatus*)

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 food value, is not relished by stock, and on account of its spreading habit is rather difficult to eradicate.

Price; subject to change; \$20.00 per 100 lbs. Less than sack lots, 21c per lb.

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 in 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, sow forty to sixty pounds per acre.

Price; subject to change; \$30.00 per 100 lbs. Less than sack lots, 31c per lb.

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, and, as the roots penetrate deeply into the ground, it can stand severe drought. Height one to two feet. Sow twenty to thirty pounds per acre when sown alone, or in that proportion when mixed with other seeds.

Price; subject to change; 45c per lb. For prices on large quantities see enclosed supplement, or later issues which will be mailed on request.

CROP BOOK contains cultural directions and other valuable information. Given free with any order if requested.

Prices quoted in this catalog, unless otherwise specified, are F. O. B. Seattle or Portland.

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 root-stalks, stools more freely, has more and broader leaves, is an annual, and will not become a weed. As it is an annual, it must be seeded each year, like Sorghum or Millet.

The seed should not be sown until the ground becomes thoroughly warmed in spring. It may be broadcasted or drilled at the rate of sixteen to twenty-four pounds per acre, in which case it grows three to five feet high; or it may be sown in rows and cultivated, at the rate of four to six pounds per acre, and sometimes grows six to nine feet high. It may be cut several times during the season.

Price; subject to change; \$40.00 per 100 lbs. Less than sack lots, 41c per lb.

Fine Leaved Fescue

(*Festuca Tenuifolia*)

Similar to Sheep's Fescue, but with finer leaves. It has the same dwarf growth and drought resisting qualities, and is suitable in pasture mixtures for dry and inferior soils; also for dry slopes on lawns.

Price: 60c per lb. For price on large quantities see supplement.

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 land. It comes very early in spring and again in fall, and should form a part of all pasture and hay mixtures.

Price; subject to change; \$17.00 per 100 lbs. Less than sack lots, 18c per lb.

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 upland and thrives in poor, shallow, gravelly soils.

Price; subject to change; 60c per lb. See supplement for price on large quantities.

Hard Fescue

(*Festuca Duriscula*)

More dwarf than Sheep's Fescue, but useful in pasture mixtures for dry uplands and poor soils.

Price; subject to change; 60c per lb. See supplement for price on large quantities.

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: 60c per lb. See supplement for price on large quantities.

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 a long season; also bunch, deep rooting, and creeping grasses to form a tough and lasting turf. The Hay Mixture is 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, Kentucky Blue Grass, Canadian Blue Grass, Red Clover, Italian Rye Grass, and Orchard Grass.

Prices; subject to change; 1 lb., 25c; 10 lbs., 19c per lb.; 50 lbs., 18½c per lb.; 100 lbs. \$18.00.

No. 2 Pasture Mixture

For dry up-lands, and especially useful for sowing on logged-off land. It is composed of White Clover, 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.

JILLY'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 stooling 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: 1b., 10c; 10 lbs. or more, 5¼c per lb.; 125 lb. sack, \$5.95. 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: 1b., 10c; 10 lbs. or more, 5¼c per lb.; 125 lb. sack, \$5.95. F. O. B. Seattle or Portland.

JILLY'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 re-cleaned.

Price: 1b., 10c; 10 lbs. or more, 5¼c per lb.; 125 lb. sack, \$5.95. F. O. B. Seattle or Portland.

Prices are subject to change. Current Price List will be mailed on request.

Prices are subject to change. See enclosed supplement, or write for later supplement.

LILLY'S 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 most promising 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 head 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: \$3.75 per 100 lbs.; less than sack lots, 4¼c lb. F. O. B. Seattle or Portland.

Prices are subject to change. Write for prices on large quantities.

LILLY'S 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, \$3.75 per 100 lbs.; less than sack lots, 4¼c per lb.; F. O. B. Seattle or Portland. Subject to change.

See enclosed Supplement, or write for later issues.

LILLY'S BLACK ALASKA OATS

A Very Superior, Hardy Black Oat

A hardy black oat, with spreading head, thick, black hull, and large, plump, 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 sown 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 Sweden.

Price, \$3.75 per 100 lbs.; less than sack lots, 4¼c per lb.; F. O. B. Seattle or Portland. Subject to change.

Write for prices on large quantities.

LILLY'S 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 stiff 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, \$4.25 per 100 lbs.; less than sack lots, 5¼c 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 overnight and use the next day. 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.

LILLY'S VICTORY OATS.

LILLY'S 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, \$3.50 per 100 lbs.; less than sack lots, 4¼c per lb.; F. O. B. Seattle or Portland.

LILLY'S 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, \$3.75 per 100 lbs.; less than sack lots 4¼c per lb.; F. O. B. Seattle or Portland. Prices are subject to change.

The grain from a single head of Lilly's Hulless Oats.

LILLY'S HULLESS OATS

Something New; Grain Threshes 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 hullless 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, as is shown by accompanying halftone of the grain from one head. The grain is white, large and plump.

Price, 15c 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 TESTED FOR GERMINATION

Varieties Most Suitable for the Northwest, Thoroughly Acclimated

Corn is being grown successfully and quite extensively in some sections of the Northwest. However, this country is not well suited to corn growing, and to be successful it must be given every possible advantage. 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 thoroughbred seed of those varieties, and have grown and acclimated them in Washington.

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 butt and tip. 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 thoroughbred seed, and is tested for germination. We have grown good crops of this variety, proving that it will mature in the Northwest when soil and culture are favorable.

Price, subject to change: 1 lb., 20c; 10 lbs., 12½c per lb.; 100 lbs., \$12.00; F. O. B. Seattle or Portland.

LILLY'S WASHINGTON SILVER KING CORN

A new and very early variety; the largest and best early white corn, and especially recommended for the Northwest. Grown in Washington from thoroughbred seed, and 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. The seed is tested for germination.

Price, subject to change: 1 lb., 20c; 10 lbs., 12½c per lb.; 100 lbs., \$12.00; F. O. B. Seattle or Portland.

LILLY'S NORTHERN GROWN SEED CORN Popular Standard Varieties

	Price per lb.:	1 lb.	10 lbs.	50 lbs.	100 lbs.
LEAMING IMPROVED. Early yellow dent; long, narrow kernels	\$.20	\$.11	\$.10½	\$.10	
IOWA GOLD MINE. A medium early golden yellow dent corn.....	.20	.11	.10½	.10	
PRIDE OF THE NORTH. A splendid quick-growing yellow dent..	.20	.11½	.11	.10½	
CHAMPION WHITE PEARL. A large, late, white dent corn.....	.20	.11	.10½	.10	
EARLY CANADA. An early yellow flint variety.....	.20	.11½	.11	.10½	
KING PHILIP. An early red flint corn adapted to the Northwest..	.20	.11½	.11	.10½	
SANFORD WHITE FLINT. A reliable, early, large, white flint corn	.20	.11½	.11	.10½	
MINNESOTA NO. 13. A good, new, large, early, yellow dent corn	.20	.11½	.11	.10½	
SWEET FODDER CORN. Sweet corn; producing nutritious fodder	.20	.16	.15½	.15	
RED COB ENSILAGE CORN. A field corn for fodder and ensilage	.20	.11	.10½	.10	

Good seed corn is very scarce this season, and those who delay ordering are liable to be disappointed. Much of the seed is very low in germination, and only tested seed should be planted. Prices are subject to change. See enclosed supplement, or write for later issue.

JILLY'S WHITE HULLESS BARLEY

BOTH BEARDLESS AND HULLESS

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 heads, 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-

ing halitone, and when thrashed is hullless, like wheat, to which the large, plump, hard grain is very similar. The hay is superior to any of the other grain hays, and the grain, especially when rolled or ground, is unexcelled as a grain food for horses, hogs, cattle or poultry.

White Hulless Barley is more productive than wheat, and matures about two weeks earlier. It may be sown as late as July, provided sufficient moisture may be depended upon, making it a valuable catch crop. West of the Cascade Mountains it is sometimes sown in fall. It is sown the same as wheat, at the rate of about one hundred pounds per acre.

Price, subject to change: \$5.95 per sack of 125 lbs.; less than sack lots, 5¼¢ per lb.

WISCONSIN PEDIGREE BARLEY

Best Bearded Barley

This barley was introduced by the Wisconsin Agricultural Experiment Station, the originators of the well known Orderbrucker 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 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: \$3.75 per 100 lbs.; less than sack lots, 4¼¢ per lb.

Six-Row White Barley

Specially selected re-cleaned 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: \$3.50 per 100 lbs.; less than sack lots, 4¼¢ per lb.

JILLY'S
WHITE
HULLESS
BARLEY

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 thrash as oats.

Vermont Beardless Barley is very 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: \$4.25 per 100 lbs.; less than sack lots, 5¼¢ per lb.

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: \$3.75 per 100 lbs.; less than sack lots, 4¼¢ per lb.

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, 5½c per lb.; 50 lbs. or more, 5¼c per lb.; per sack, 125 lbs., \$5.95; 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 re-cleaned, 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, 5½c per lb.; 50 lbs. or more, 5¼c per lb.; per sack, 125 lbs., \$5.95; 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, 5½c per lb.; 50 lbs., 5c per lb.; 100 lbs., \$4.50; 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.

Contains
Cultural
Directions

Free with
any order

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.

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 fall sowing generally and sometimes for spring sowing.

LILLY'S COMMON, or SPRING VETCH

(Vicia Sativa)

For Spring or Fall West of the Cascades

Common Vetch is perfectly adapted to conditions west of the Cascade Mountains, where it is sown either in fall or spring, preferably in fall. It is an annual legume, of great value as a nitrogen gatherer, as a green manure, and as a hay, pasture, ensilage and soiling crop. When sown early in 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 one hundred pounds per acre, with about fifty pounds of oats, rye, wheat, or barley to support the vines.

Price, subject to change: \$5.00 per 100 lbs.; less than sack lots, 6c per lb.

LILLY'S WINTER, or HAIRY VETCH

(Vicia Villosa)

For Fall or Spring East of the Cascades

Winter, Sand, or Hairy Vetch is another 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 Cascade Mountains, 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. Used as a cover crop for orchards, it prevents washing of the soil during the winter, and when plowed under in spring it 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, subject to change: \$25.00 per 100 lbs.; less than sack lots, 26c per lb.

LILLY'S PURPLE VETCH

(Vicia Atropurpurea)

A Rapid Growing Variety for Spring Sowing

A new spring vetch described by the Western Washington Experiment Station as follows: "The leaves are long and narrow and the early growth is quite similar to Hairy Vetch (Vicia Villosa). The flowers are borne in clusters like the Hairy Vetch, but are a reddish purple instead of bluish purple. The seed is velvety black and the point of attachment to the pod is white. The plant is not as hardy as Common Vetch, being adapted only for spring seeding. It makes a rapid growth and for spring seeding is a rival of the Common Spring Vetch (Vicia Sativa). It produces seed abundantly, in pods that do not open readily, so is not inclined to shatter." Price, subject to change: \$7.00 per 100 lbs.; less than sack lots 8c per lb.

F. O. B. Seattle or Portland.

To insure a crop of vetch, or other legumes, inoculate the seed with Farmogerm.

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 crops for "hogging 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 for pasture or green food for growing pigs and other stock.

Peas do best when sown very early in spring. They are sometimes sown in 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, alfalfa and vetch, peas are legumes and valuable as a fertilizer. They draw nitrogen from the air and distribute it in the soil, greatly improving the soil, instead of exhausting it as does other crops. When peas are grown on land for the first time, the seed should be inoculated with Farmogerm to insure presence of nitrogen gathering bacteria.

Yellow Canadian Field Peas

These small, round, smooth, yellow peas are the most generally grown field peas for stock food, and great quantities are also used for human consumption.

For prices see enclosed supplement, or write for later issue.

Green, or Bluebell Field Peas

The seed is larger than the Yellow Canadian, and they have a bluish color, but are very similar in all other respects.

For prices see price list supplement enclosed herewith, or write for later price list.

Bangalia Field Peas

A comparatively new variety which has become quite popular east of the Cascades, as it does better than other varieties on dry land. The seed is rather small, slightly dented or wrinkled, and is of a brownish-green color. For prices see enclosed supplement.

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.

For prices see enclosed supplement, or later issues which will be mailed on request.

JILLY'S MILLET

Useful as a 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 before the land will be required 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 is sufficient. It produces two to five tons per acre of very good 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 and seventy bushels of seed per acre.

Price, subject to change: \$9.00 per 100 lbs.; less than sack lots, 10c per lb.; F. O. B. Seattle or Portland.

Write for price list before ordering.

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, subject to change: \$9.00 per 100 lbs.; less than sack lots, 10c per lb.; F. O. B. Seattle or Portland.

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, subject to change: \$9.00 per 100 lbs.; less than sack lots, 10c per lb.; F. O. B. Seattle or Portland.

Japanese Millet

Grows six feet or more in height and produces immense crops of splendid hay, forage, or ensilage. It does well in most all climates and soils. Less seed is required than of the other varieties.

Price, subject to change: \$9.00 per 100 lbs.; less than sack lots, 10c per lb.

FETERITA

A non-saccharine sorghum of special value in the dry farming sections. It is similar to Kaffir Corn, but matures three or four weeks earlier. It makes excellent fodder or produces a good yield of grain.

Price, 15c per lb.

See enclosed supplement for price on larger quantities.

KAFFIR CORN

A splendid forage plant for the country east of the Cascade Mountains, where it produces large quantities of seed or excellent fodder, but it is of little value on the coast.

Price, 10c per lb.; postage additional

For larger quantities, see supplement.

BROOM CORN

Another non-saccharine cane, grown for seed, fodder, and for manufacturing brooms. Not grown successfully on the coast, but may be grown east of the mountains. Grown the same as Kaffir Corn.

Price, 10c per lb.; postage additional.

See supplement for larger quantities.

SUNFLOWER

The seed is excellent poultry food when mixed with grains, and should be more generally grown by poultrymen.

Price, 15c per lb.

See supplement for larger quantities.

FLAX SEED

Sow seed in spring on moist land, at the rate of thirty pounds per acre if grown for seed, or twice that amount if grown for fiber.

Price, 15c per lb.; postage additional.

For price on larger quantities see supplement.

SOJA, or SOY BEANS

The beans are valuable for both human and stock food, also for the oil which they contain. They are not yet grown very extensively in this country, but great quantities are imported from Asia. The plants are also grown for forage and green manure, similar to Cow Pea.

Price, 15c per lb.; postage additional.

See supplement for price on larger quantities.

Prices are subject to change. See enclosed supplement, or write for later supplement.

LILLY'S THOUSAND HEADED KALE

Supplies Green Food for Cows, Sheep, Hogs and Poultry During Winter

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; $\frac{1}{4}$ lb., 20c; lb., 45c; 10 lbs., 40c per lb. Postage additional.

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; lb., \$1.00.

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, and 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 far 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: Lb., 25c; 10 lbs., 20c per lb.; 100 lbs., \$18.00. Postage additional.

LILLY'S POULTRY FOODS

Are Made For Special Purposes
And Produce Definite Results

LILLY'S SEEDS are tested for purity and germination. They grow if cultural conditions are right

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, hardness and splendid keeping qualities make it the most desirable variety for winter feed for stock.

Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 55c; 1 lb., \$1.75

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.

Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 55c; 1 lb., \$1.75.

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.

No stock.

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.

LILLY'S 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.

LILLY'S
Crop
Book
Free with
any order

LILLY'S

MASTODON CARROT

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.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 50c; 1 lb., \$1.50. Write for prices on large quantities.

Study your soil, and feed it systematically; it is the source of wealth.

Lilly's 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., 50c; 1 lb., 90c. 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., 50c; 1 lb., 90c

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., 45c; 1 lb., 85c

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., 50c; 1 lb., 90c

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., 50c; 1 lb., 90c

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., 45c; 1 lb., 85c

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., 50c; 1 lb., 90c

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.

No stock

Write for prices on larger quantities. These prices do not include postage.

LILLY'S FERTILIZERS

Money Judiciously Invested in Commercial Fertilizers Pays Big Dividends

The problem of fertility is an important one to the farmer and gardener, and is one which requires study and experience. No hard 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 replacing 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.

Fertilizers are effective only when 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., \$1.15; 100 lbs., \$3.85; 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: Carton (about 4 lbs.), 30c; 25 lbs., \$1.15; 100 lbs., \$3.85

There is neither pleasure nor profit in growing poor, weak, sickly plants!

LILLY'S

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 our 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., \$1.15; 100 lbs., \$3.85; 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.

This fertilizer may be applied by sowing it broadcast on the plowed ground, before the seed is planted, and harrowing it into the soil. Probably the most economical method is to apply it with a fertilizer drill, or scatter it in the hills or rows, but it must be thoroughly mixed with the soil so that no great quantity of it comes into direct contact with the seeds or roots. Either of these fertilizers may be applied after the seed is planted or while the plants are growing, but it is better to apply it earlier to give it time to become incorporated with the soil before being required by the plants. It is usually applied at the rate of eight hundred to one thousand pounds per acre.

Price, 25 lbs., \$1.10; 100 lbs., \$3.60; F. O. B. Seattle or Portland.

CALF MEAL makes it possible to raise good calves at small expense.

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 few days, and for that reason it is best used as a top dressing after the plants are up. Best results are obtained by two or three light applications, about 150 lbs. per acre each, early in the growing season.

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. It is especially valuable on garden crops such as lettuce, radishes, celery, etc., the quality of which depends upon being grown quickly. An article on the use of Nitrate of Soda is contained in our Crop Book, a copy of which will be furnished with any order if requested.

Price, subject to change: \$12.00 per sack of 200 lbs.; less than sack lots, 7c per lb.; F. O. B. Seattle or Portland.

BONE MEAL

GUARANTEED ANALYSIS

Nitrogen $2\frac{1}{2}\%$ to $3\frac{1}{2}\%$; 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 no waste as the plant food is released only as fast as it can be taken up by the roots of the plants. It may be used in almost unlimited 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 green-houses, hotbeds, nurseries, and for forming soil for potted plants. Our Bone Meal is made from fresh bones that have not lost their value. It is a nice, clean product with no offensive odor. The amount to apply depends upon the purpose for which it is used.

Price, subject to change: 10 lbs., 40c; 100 lbs., \$2.90

Blood and Bone

Guaranteed Analysis: Nitrogen 4%; Phosphoric Acid 11%.

A quick acting fertilizer, and for that reason more valuable than Bone Meal for some purposes, 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, subject to change: \$3.60 per 100 lbs.

Dried Blood

Guaranteed Analysis: Nitrogen 12%.

A very effective and quick acting form of nitrogen, generally used as a top-dressing. Like Nitrate of Soda, it must be used with care, and is best used in several light applications, but when properly used it is a very valuable fertilizer. It is pure slaughter-house blood, dried and finely ground. Packed in 100 lb. bags only.

Price, subject to change: \$5.50 per 100 lbs.

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. bags.

Price, subject to change: \$1.95 per 125-lb. bag.

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 less expensive. A large proportion of the land west of the Cascade Mountains is sour, 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.

Price, subject to change: 85c per 100 lbs.; \$15.00 per ton; F. O. B. Seattle.

Potash Fertilizer

There is no Muriate of Potash, Sulphate of Potash, or Kainit to be had at the time this catalog goes to press, and there will probably be none until after the war is ended.

Ground 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, subject to change: \$1.25 per 100 lbs.; \$22.50 per ton; F. O. B. Seattle.

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, subject to change: 80c per 100 lbs.; \$14.00 per ton; F. O. B. Seattle.

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.

PRICES

Garden Size	\$.50
One Acre Size	2.00
Five-Acre Size	7.50

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.

CHICK FOOD

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 Chick 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 more convenient or economical. No preparation is necessary; no mixing, cooking, or mulling; and no other foods except those mentioned should be supplied.

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 depend upon finding every particle. 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 preferred, it may be moistened slightly with water or milk, but it should 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 very large percentage of husky, robust chicks will be raised to maturity. 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 food. 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.

LILLY'S 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.

LILLY'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 make 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 "**LILLY'S**"

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, and 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 late 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 more than 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 all 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 chick 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. In pure water is the cause of a large part of the disease among 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 range and green food. If closely confined more care 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 poultryman's worst enemies. Use plenty of whitewash and lice killer. Cull out all weak, deformed and undesirable chicks; poor stock is not worth 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, precludes 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 Fattening Food should be fed 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 supplements which will be mailed on request.

We will be pleased to quote lowest possible quantity prices.

HIGH PROTEIN GROWING MASH

A Meal Food for Healthy Growth

Modern methods of poultry keeping demand dry mashes. 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.

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.

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 mashes 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 meat 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

COMMON SENSE EGG FOOD

A Mash Food for Breeders and Layers

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 variety of grains of a carbonaceous 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.

LILLY'S 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 extracted 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., 60c; 25 lbs., \$1.45; 100 lbs., \$5.50; 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 this brand of meat scraps for many 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): \$5.50 per 100 lbs.

LILLY'S 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., 55c; 100 lbs., \$5.00; F. O. B. Seattle or Portland.

LILLY'S 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., 50c; 100 lbs., \$4.50; F. O. B. Seattle or Portland.

LILLY'S 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 moistened. Best results are obtained by scalding 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): 20 lb. bag, 50c; 100 lbs., \$2.25; F. O. B. Seattle or Portland.

LILLY'S 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): \$2.45 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, promotes health, is economical, and is a very 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., 85c; 100 lbs., \$3.00; F. O. B. Seattle or Portland. Subject to change.

LILLY'S No. 2 Granulated Bone

This is a second grade granulated bone, made from the discarded 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: See Supplement.

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., 40c; 100 lbs., \$1.25; F. O. B. Seattle or Portland. Subject to change.

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.

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 the 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., 20c; 25 lbs., 30c; 100 lbs., 75c.

LILLY'S POULTRY TONIC

TONES UP THE SYSTEM

A Regulator and Stimulant; Not an Egg Forcer

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 that is 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 3/4 lbs.), 25c; Large Package (about 3 3/4 lbs.), 50c. Postage additional.

LILLY'S 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.

LILLY'S 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.

LILLY'S 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.

LILLY'S HOLLY BIRD SEED

An Excellent Combination of Seeds for Canaries

This is a combination of the best re-cleaned 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.

Bird Gravel. Pure granite rock ground and screened to the correct size for canaries. Absolutely necessary for good health of birdsper lb. \$0.10

Cuttle Bone Two pieces, 5c25

Sicily Canary Seed15

Hemp Seed10

Millet Seed10

Rape Seed10

Blue Poppy Seed15

Sunflower Seed10

LILLY'S POULTRY FOODS may be depended upon to produce results.

LILLY'S LICE AND MITE LIQUID

EFFICIENCY GUARANTEED

Disposes of the Poultryman's Greatest Enemy

Are your poultry houses infested with mites? If not you are more fortunate than most poultrymen. 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 lice and mites. No louse-infested poultry plant is profitable. They 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 poultryman'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 well 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 bubbles 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 diphtheretic 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.

PACIFIC COAST IDEAL INCUBATORS

Specially Suited to Pacific Coast Conditions

Many years' experience with the Pacific Coast Ideal Incubators has proved conclusively that they are best for Pacific Coast conditions. We have handled several of the best makes, most of them much higher in price, but none of them have given such universal satisfaction as the Ideal. Considering the great number that are in use, and the inexperience of many of the users, the percentage of complaints has been remarkably small. Its simplicity 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 heated by a copper heating system that is not liable to 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.

No. 3 IDEAL 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. The walls are over two inches thick, thoroughly insulated, and consist of three separate and distinct walls with air space.

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 even temperature in all parts of the egg chamber. The regulator and thermometer are of the best.

Capacity, 250 hen eggs; or duck, goose or turkey eggs in proportion to size. Shipping weight, 110 lbs. Floor space, 31x40 inches. Height, 32 inches.

Price, \$18.00, F. O. B. Seattle or Portland

No. 3

No. 2 IDEAL 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 machines.

All sizes of the Pacific Coast Ideal Incubators have proved very 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, 150 hen eggs. Shipping weight, 80 lbs. Floor space 27x30 inches. Height, 32 inches.

Price, \$13.00, f.o.b. Seattle or Portland.

No. 2

No. 1 IDEAL Incubator

This differs from the others only in size, and is perfectly reliable in every way. It 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 the unfertile eggs are culled out.

Capacity, 60 hen eggs. Shipping weight, 65 lbs. Floor space 20x24 inches. Height, 30 1/4 inches.

Price, \$10.00, F. O. B. Seattle or Portland

No. 8 IDEAL Incubator

This large size is preferred by some poultrymen. It is the same as the others in every way except that it is larger. Capacity, 360 hen eggs; duck, goose or turkey eggs in proportion to size. Shipping weight, 200 lbs. Floor space, 34x53 inches. Height, 32 inches.

Price, \$30.00, F. O. B. Seattle or Portland

No. 1

Order early. There will be delays in transportation this year on account of the war.

MARVEL COLONY BROODER BURNS COAL OR GAS

The practice of brooding large flocks of chicks with a brood house stove has taken its place as a practical and profitable system. The early efforts along this line were made with oil burning stoves, but, although they were quite successful, the coal burning stoves have superseded them for the reason that they are more economical, more dependable, and the cost of installation is much less.

The Marvel we believe to be the best stove made for this purpose. It is made by one of the largest and most reliable stove manufacturers, is made as a stove should be made, and has given entire satisfaction in all parts of the country from Texas to Canada.

It is made of heavy cast iron, stands twenty-seven inches high, and the fire pot holds enough coal to keep a fire all through a very cold night. The regulator is easily adjusted and very reliable. A special form of building is not necessary; any room or building can be used.

The Marvel Colony Brooder is made in two sizes, recommended for six hundred and three hundred chicks, although they will care for nearly twice that number if required.

We can provide a Gas Burner for those who wish to burn gas instead of coal.

Write for circular giving full description.

PRICES

Marvel Colony Brooder with 52 in. Hover, \$21.50

Marvel Colony Brooder with 40 in. Hover, \$17.50

Gas Burner.....(with outfit \$2.00) \$3.00

F. O. E. Seattle or Portland.

ECONOMY BROODER HOVER Convenient--Safe--Economical

Metal portable hovers are superior to the old wooden brooders for the reason that they raise a larger percentage of healthy chicks, are more sanitary, safer, more portable, and more economical. The Economy Brooder Hover is complete in itself and can be used in any room or building. No platform, false floor, or other preparation is necessary. Made in two sizes.

Oaks Electric Hover is similar to No. 2 Economy except that it is fitted with electric attachments complete, ready to plug into an electric light socket. Where electricity is available it is the most convenient and economical brooder.

Write for descriptive pamphlet.

No. 1 Economy Brooder Hover. 75 chicks. 14 lbs.....\$ 7.00

No. 2 Economy Brooder Hover. 150 chicks. 32 lbs..... 10.00

Oaks Electric Hover. 150 chicks. 32 lbs..... 10.00

INTERNATIONAL SANITARY HOVER

Very popular among the hundreds of our customers who are using it. It is made of metal, is entirely circular and has no corners for chicks to crowd into, and the lamp arrangement is very convenient. It is complete and may be picked up and moved anywhere. Will care for 150 chicks.

Write for circular.

Price, \$9.00

JULY'S CERTIFIED INCUBATOR THERMOMETER

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 either suspended on a wire or laid directly on the eggs. The thermometer is a vital part of the poultryman's outfit, for an inaccurate thermometer is very liable to prove exceedingly expensive.

No. 1207. Price, \$1.00, postpaid.

JULY'S 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. Price, 75c, postpaid.

JULY'S STANDARD BROODER THERMOMETER

This is the most generally used type of brooder thermometer. It has a metal scale on a wooden base which fits into a round hole in top of hover. The bulb is protected by a metal shield. Thoroughly reliable.

No. 1062. Price, 75c, postpaid.

TYCOS INCUBATOR HYGROMETER

The Hygrometer shows the actual percentage of moisture in the incubator, just as the thermometer shows the temperature. It is not a regulator of moisture, but an indicator of moisture conditions, so that if conditions are not correct they may be made so. Full instructions accompany each instrument.

No. 1213. Price, \$1.50. Extra Wicks, 10c each, postpaid.

JULY'S INCUBATOR AND BROODER LAMPS

- No. 1300. No. 1 Incubator and Brooder Lamp, complete. Diameter of fount, 6 inches; depth of fount, 2 1/4 inches; height including chimney, 9 inches. Weight 1 lb. Price, \$1.00
- No. 1301. No. 2 Incubator and Brooder Lamp, complete. Diameter of fount, 7 inches; depth of fount, 2 1/4 inches; height including chimney, 10 inches. Weight 1 1/4 lbs. Price, \$1.25
- No. 1302. No. 3 Incubator and Brooder Lamp, complete. Diameter of fount, 8 1/2 inches; depth of fount, 2 1/4 inches; height including chimney, 12 inches. Weight 1 3/4 lbs. Price, \$1.75
- No. 1310. No. 1 Fount..... .50
- No. 1311. No. 2 Fount..... .50
- No. 1312. No. 3 Fount..... .75
- No. 1330. No. 1 Chimney..... \$0.35
- No. 1331. No. 2 Chimney..... .35
- No. 1332. No. 3 Chimney..... .35

- No. 1320. No. 1 Burner..... .25
- No. 1321. No. 2 Burner..... .30
- No. 1322. No. 3 Burner..... .65
- No. 1340. No. 1 Wicks, 5/8-inch..... Dozen, .20
- No. 1341. No. 2 Wicks, 1-inch..... Dozen, .20
- No. 1342. No. 3 Wicks, 1 1/2-inch..... Dozen, .25

The above lamps cannot be used with the Ideal Incubators. We can furnish Ideal Lamps at the same prices.

JULY'S NEVER-SMOKE BROODER LAMP

The Never-Smoke Lamp is made especially for brooders not having a sleeve for the 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 fount is 6 inches; height including burner, 8 inches. Size No. 2, only.

- No. 1011. Never-Smoke Brooder Lamp, complete..... \$1.50
- No. 1315. Never-Smoke Brooder Lamp Fount..... .75
- No. 1325. Never-Smoke Brooder Lamp Burner..... .75

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. 15c each; \$1.50 per 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..... Price, 25c

CHINA NEST EGGS

No. 1019. Weight 3/4 lb. per dozen. 35c doz.; \$3.25 gross.

JULY'S Holly Chick Food and JULY'S High Protein Chick Mash make it easy to raise good chicks.

Live Chick Shipping Boxes

These boxes are well made of heavy corrugated strawboard, with partitions and proper ventilating arrangements. In them baby chicks may be shipped safely to any reasonable distance and in any reasonable weather. We can furnish them in 25, 50, and 100 chick sizes. If wanted in large quantities write for quotation, stating quantity wanted.

	PRICE	One	Dozen
No. 1081, 25 Chick Size		\$0.25	\$2.40
No. 1082, 50 Chick Size		.30	3.00
No. 1083, 100 Chick Size		.45	4.80

Write for prices on large quantities.

Hatching Egg Shipping Boxes

These boxes afford complete protection for high priced eggs for hatching when shipped by express or parcel post. They are made of corrugated strawboard, and comply with the Parcel Post Law.

	PRICE	One	Dozen
No. 1012, 15 Egg Size		\$0.30	\$3.00
No. 1013, 30 Egg Size		.35	3.60
No. 1084, 50 Egg Size		.45	4.80

Northwestern Egg Box

For delivering eggs to market and to local customers in a convenient and attractive manner; not for shipping by express or parcel post. Made of one piece of cardboard, with fillers, and folds flat when not in use. Weight, doz., 1 1/4 lbs.; 100, 13 1/4 lbs.

No. 1016, Dozen, 15c; 100, \$1.00; 1,000, \$8.50

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 meal or grain food.

Weight, dozen, 4 lbs.

No. 1006, Dozen, 20c; dozen, \$2.00.

Eyrie Shipping Coops

The most generally used of all shipping coops for show and breeding birds. The top and bottom are made of wood; the body of heavy corrugated strawboard in one piece. It folds flat when not in use, making it convenient to store, and minimizing express charges when returned empty. Furnished in two sizes.

No. 1014-C. 12x22x22.
For one large or two small birds. Weight 6 1/2 lbs.

Price, 75c each.

No. 1015-D. 20x22x22.
For two large birds. Weight 10 lbs.

Price, \$1.00 each.

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. They are fully guaranteed by both the manufacturer and ourselves.

No. 1 Humphrey Green Bone Cutter. Hand Power. Hopper 4 1/2 x 5 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. Shipping weight, 32 lbs.

Price, \$4.00

LICE LIQUID will keep poultry houses free from
Lice and Mites.

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, 65c; 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. 1090. Open Chick Leg Bands, No. 1 or No. 2, 25, 25c; 100, 60c.

Sizes

When ordering leg bands be sure to specify size wanted. Sizes required are as follows:

No. 1 for Bantams.
No. 2 for Leghorns, Anconas, Hamburgs and Andalusians.

No. 3 for Minorcas, Games, Wyandottes, and Rhode Island Reds.

No. 4 for Plymouth Rocks, Orpingtons, Dorkings, and Ducks.

No. 5 for Brahmas and Cochins.

No. 6 for Turkeys and Geese.

Males required one size larger. Some prefer Smith Sealed one size larger.

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 Farmer's Caponizing Set

This set consists of Cutting Knife, Spreader, Film Hook, Testicle Spoon, Probe, Cords with Hooks, and complete instructions.

No. 1026. Farmer's Caponizing Set, \$3.25.

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, \$4.50, 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 is subject to change. See enclosed supplement or write for later price list.

LILLY'S ALFALFA MEAL

Lilly's Alfalfa Meal is prepared especially for us from best grade alfalfa, kiln dried and ground to a course 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 is subject to change. See enclosed supplement or write for later price list.

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.

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 protoids. 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.

For prices see enclosed supplement.

Prices shown in this catalog are subject to change. Supplement will be mailed on request.

LILLY'S

CALF MEAL

A COOKED and BALANCED FOOD
Raises Better Calves
at Less Expense

Do not kill the calf. It is one of the greatest potential sources of wealth in a farming community. Fortunately, the old wasteful practice of killing calves at birth is becoming more unpopular each year, but it is still entirely too prevalent among a certain class of farmers.

Possibly it does not pay to feed whole milk to calves, but they may be raised as well or better, and at a fraction of the cost, on Calf Meal.

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 scours or constipation; most serious difficulties when feeding milk. The use of Calf Meal has become very general and is increasing rapidly. We have never heard of a case where a farmer after using Calf Meal has reverted to the old method of raising calves.

Lilly's Calf Meal is made from the best materials, correctly blended, thoroughly cooked and the food values and constituents are about the same as whole milk, 25% protein and 50% carbohydrates. One pound of Lilly's Calf Meal makes one gallon of milk substitute fully equal to whole milk for raising calves.

There are several methods of handling young calves. In all cases the calf gets the whole milk from its mother during the first five days, as the colostrum is essential for the calf, and the milk is of no use for other purposes during that time. Some allow the calf to run with the cow continually during the first five days; others allow the calf access to the cow only three or four times each day; but the most common method is to separate the calf from the cow entirely.

It is very important that the calf should be kept in thorough sanitary quarters; warm, light, airy but free from draughts, perfectly clean, with good drainage, and dry.

The first feed should be given to the calf about one hour after birth, and should consist of the colostrum. The calf may be allowed to suck this from the cow, or it may be fed from a pail. All feed should be fed at blood heat, 98 degrees.

During the first five days the calf should be fed its mother's milk only. It should be fed not less than three times each day four times will be better. At first it should be fed about one quart of whole milk at each feed, gradually increasing to two quarts at the end of the fifth day.

When the calf is five days old add about two tablespoonsful of Lilly's Calf Meal to the milk at each feed. First make a batte of the meal by wetting with cold water and stirring to keep it free from lumps, then stir in a pint of boiling water and mix with the milk.

Gradually increase the Calf Meal and decrease the milk so that when the calf is two weeks old each feed will consist of about one-half pint ($\frac{1}{2}$ lb.) Calf Meal, one quart whole milk, and one quart boiling water. By the time the calf is four weeks old the whole milk will have been eliminated and each feed will consist of one pint Calf Meal and three pints boiling water. This will be increased or decreased as the welfare of the calf demands, and continued until the calf is able to thrive on other foods.

From the beginning the calf should be supplied with clear fresh water, and a lump of rock salt. As soon as it will nibble at dry food, it should have a little alfalfa or clover hay, also a small quantity of equal parts Calf Meal, oat meal without hulls, corn meal, and bran, mixed, dry. Increase the dry food gradually as the calf learns to like it, and decrease the gruel.

After the second week, if it is desired to feed skim milk instead of whole milk, increase the quantity above that shown for whole milk, and be certain that it is perfectly sweet.

Price (Subject to change. See Price List Supplement.): 25 lbs., \$1.25; 100 lbs., \$4.85.

LILLY'S LAMB MEAL

Saves the Orphans, Makes Weanlings Thrifty, and Benefits All

During the two years that Lamb Meal has been in use it has become very popular with sheep breeders. It was prepared primarily to be used in raising orphan lambs and help in the feeding of those that were not thriving under ordinary conditions.

Among the first to use this meal was the well known sheep breeder, Mr. J. G. S. Hubbard, of Monroe, Oregon. He is very enthusiastic in regard to the value of Lilly's Lamb

Meal for raising lambs, and is using it in continually increasing quantities. Some of his finest 1916 and 1917 prizewinners were raised on Lilly's Lamb Meal.

The use and benefits of Lamb Meal is quite similar to Calf Meal. The quantity fed, and number of feeds per day, vary according to whether the lambs are to be raised entirely on the meal, or whether it is used as an auxiliary feed.

Price (Subject to change. See Price List Supplement.): 25 lbs., \$1.25; 100 lbs., \$4.85.

All prices, unless otherwise specified, are F. O. B. either Seattle or Portland.

LILLY'S DIGESTER TANKAGE

An Economical and Beneficial Adjunct to the Ration for Hogs

The use of Digester Tankage in connection with the regular diet for hog feeding is giving such universal satisfaction that practically all of the extensive hog breeders are now using it.

Digester Tankage is very high in concentrates, and it takes but a very small amount to balance a ration up to a proper feeding ratio. It is used to great advantage at practically every age of the pig. If fed before and after farrowing, it will help the sow to produce a large milk flow and will keep her in good condition.

It may be fed separate, just before the regular feed, or it may be mixed with other food. The amount to be fed will vary from one tablespoonful per head per day for little pigs to as much as eight ounces for grown stock. Lilly's Digester Tankage is made from strictly first class packing-house products, and may be fed with confidence.

Price: \$5.00 per 100 lbs.; \$95.00 per ton; F. O. B. Seattle or Portland. Subject to change.

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 mill feed. For poultry it is best soaked with hot water over night and mixed with the morning feed.

Price, subject to change: \$2.50 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: \$3.85 per 100 lbs.

Write for prices on large quantities.

LILLY'S PIG MEAL

Keeps Pigs Growing Without Check at Weaning Time

Weaning time for little pigs is oftentimes their undoing. This is not to be wondered at when we consider the drastic change that usually takes place at that period. From a diet of mother's milk to the foods commonly supplied is a too radical change for the little fellows.

Lilly's Pig Meal is a perfect substitute for sow's milk; it is appetizing, the pigs like it, and they will thrive upon it and continue to grow without any check. It produces rapid growth of bone, muscle, tendon and blood, and carries the pigs through the critical stages between weaning time and the time when they can thrive on the regular foods.

One pound of Lilly's Pig Meal will make one gallon of milk substitute. Mix the Pig Meal with a small quantity of boiling water, stirring to keep it free from lumps; then add skim milk or hot water at the rate of one gallon to each pound of Pig Meal. It should always be fed at a temperature as near ninety-eight degrees as possible. Feed as much as the pigs will eat greedily, or enough to keep them in good growing condition. Commence feeding a little before the sow is ready to wean the pigs, and continue until they are able to thrive upon other foods, reducing the quantity gradually. Keep pens and troughs perfectly clean. Don't let the pigs stop growing for an instant.

Price: 25 lbs., \$1.25; 100 lbs., \$4.85; F. O. B. Seattle or Portland.

Prices shown in this catalog are subject to change. Price List Supplement will be mailed on request.

LILLY'S 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 and antennae. 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 dairyman 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.

Quart, 35c; Half Gallon, 60c; Gallon, \$1.00; Five Gallons, \$3.50.

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 1½ lbs.), 25c; Large Carton (about 3½ lbs.), 50c; F. O. B. Seattle or Portland.

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 preventive against disease. When the horse needs toning 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 1½ lbs.), 25c; Large Carton (about 3½ lbs.), 50c. Postage additional.

Ground Flax Seed

Flax seed has been a favorite conditioner among horse and cattle 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: 10c per lb.; \$3.25 per 100 lbs.; F. O. B. Seattle or Portland. Subject to change.

CALF MEAL makes it possible to raise good calves at small expense.

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 $32\frac{1}{2}$ to $33\frac{1}{2}$ 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

$\frac{1}{2}$ -lb. Carton	.....	\$ 0.40
1-lb. Carton	.....	.60
10-lb. Drum	.....	5.25
25-lb. Drum	.....	12.00
50-lb. Drum	.....	23.00
100-lb. Drum	.....	45.00

F. O. B. Seattle or Portland.

We will mail you the Vreeland Chemical Co.'s book, "Spraying Simplified," free, if you wish it.

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
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ELECTRO BORDO-LEAD

A combination of Electro Bordo-Pulp and Arsenate of Lead in proper proportions, and especially adapted for a combined spray on 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 4-4-50 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

THE SULPHUR SPRAY PERFECTED

**Equally As Efficient as Lime-Sulphur Solution
More Convenient—Less Expensive**

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 effectual in every way and superior in many 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, two pounds 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 Hanna Sprayer Co. patents.

1-lb. Can \$0.25
10-lb. Can 1.50
100-lb. Drum 9.50

F. O. B. Seattle or Portland.

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 33 degrees Baume, which is as concentrated as it is possible to make a lime and sulphur solution which will remain in solution.

Five Gallon Can \$ 2.25
Barrel (about fifty gallons) 13.00

F. O. B. Seattle or Portland.

LILLY'S TOBACCO and SOAP COMPOUND

A liquid 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

NIKOTEEN

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 Aphid, Black Peach Aphid, 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 cents 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.
8-lb. bottle, \$10.00; 4-lb. bottle, \$5.00; 1-lb. bottle, \$1.50; ½ lb., 85c; ¼ oz., 40c.

APHIS PUNK

A nicotine paper for fumigating 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. Always uniform and effective. Write for circulars. It may be shipped by parcel post.

Can of 12 sheets. Weight 1 lb.....\$0.60
Case of 12 cans. Weight 8 lbs.....6.50

Sulpho-Tobacco Soap

Destroys insects on plants, shrubbery, vines, small fruits, and trees; also on animals, and is valuable as an exterminator of moths, carpet bugs, etc. One can makes 1½ gallons of solution. May be shipped by parcel post. Postage additional.

3-oz. cake.....\$0.10

Quassia Chips

Used for the destruction of plant lice on cabbage, cauliflower, fruit trees, etc. Boil one pound of quassia chips in water. After boiling dilute with enough water to make eight gallons of solution.

1 lb., 10c; 10 lbs., 7c per lb.

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.

The pump is made entirely of brass. It has

two ball valves so arranged that they may be instantly cleaned. The pump is double acting and will generate a pressure of 180 lbs. It is equipped with ¾ feet of ⅝-inch suction hose and a heavy strainer.

A curved extension is furnished extra when desired. The knapsack tank is also extra, and is essential where the sprayer has to be continually moved about.

Auto-Spray No. 5, pump, hose, nozzle, and strainer, complete. Shipping weight 4 lbs.....\$5.00
Galvanized Iron Knapsack Reservoir. Shipping weight 7½ lbs. Additional.....3.50
Curved Extension. Shipping weight 1 lb. Additional......75

Prices do not include transportation charges except when so stated.

LILLY'S TREE SOAP

A soap compound for destroying Green Aphid, Woolly Aphid, Hop Aphid, 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 Aphid 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 the correct amount of water there is no danger of making it so 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......75
2 lbs. Makes 160 to 600 gals. spray.....2.50
10 lbs. Makes 800 to 3,000 gals. spray.....10.75

FUMIGATING TOBACCO POWDER

A finely ground tobacco powder for burning in green houses and other places where the fumes can be confined.

100 lbs., \$5.00; less than sack lots, 7½c lb.

DUSTING TOBACCO POWDER

For applying as a dust spray for Aphid and other soft bodied insects outdoors or where fumes cannot be confined.

100 lbs., \$5.00; less than sack lots, 7½c lb.

Fish Oil Soap

Used as a wash during the summer to destroy Aphid and other insects and to prevent the spread of scales and fungus.

50-lb. box, \$3.75; less than box lots, 10c per lb.

Bluestone

Copper sulphate, for spraying. Prices fluctuate. Write for prices, stating quantity wanted.

Sulphur

Fine ground sulphur for spraying and fumigating. We are importers, and can furnish it in large quantities and at lowest prices. Write for prices, stating quantity wanted.

JILLY'S
SOLUBLE
SULPHUR
COMPOUND
 is the best
 Sulphur
 Spray

IDEAL SPRAY OUTFIT

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, convenient to handle and easy to operate. The tank holds fifteen gallons, and is mounted in such a way that the liquid will not slop or spill. The air chamber is extra large, and a uniform pressure of 150 pounds is easily maintained. The pump barrel is 1 1/4 inches in diameter and 7 inches long. The plunger is brass. The packing may be tightened without removing. The valves are 3/4-inch bronze balls. Both valves are removable. The

outfit includes 10 ft. 3/4-in. pressure hose, 8 ft. pipe extension, Ideal nozzle, brass shut-off cock. Shipping wt., 60 lbs.

Price, \$22.00

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 water paints, Bordeaux mixture, etc. It is made of extra heavy galvanized steel, and is built like a boiler; the top head is convex and the bottom concave, flanged and riveted to the shell. All construction is of the best.

The tank is 7 1/2 inches in diameter and 20 inches long, capacity 4 gallons. The pump is made of seamless brass tubing, 1 1/4 inches in diameter and 15 inches long. It is equipped with the Perfection Shut-off Valve, Angle Fog Nozzle, and 24 inches 3/4-inch spray hose. Weight, empty, 9 lbs.

Price, \$6.00

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, \$12.50

MYERS WHITEWASH SPRAYER

This Whitewash and Cold Water Painting Machine and General Purpose Sprayer is a most complete and serviceable outfit. The tank is made of heavy galvanized iron, has a wide bottom, and holds seven gallons. The pump is brass, with brass ball valves, and 1 1/4-inch cylinder. Fitted with spray hose and Bordeaux nozzle. No extension. Weight 25 lbs.

Price, \$9.00

YANKEE BARREL PUMP

An excellent double acting pump for use with a barrel spraying outfit for all spraying purposes and for whitewashing. Fitted with 5 ft. 1/2-in. hose, Vermorel nozzle, and agitator.

Price, \$8.00

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 the bung hole in a barrel. It requires no foot-rest, clamps, or fastening of any kind. The upward stroke is made by a spring. The brass suction working within a brass cylinder, with brass valves, does away entirely with packing. All parts except handle and hose are brass. Will throw three sizes of solid continuous streams and two sizes of fine round spray. Price, \$2.50

MODOC SPRAY PUMP

This is the best and most powerful pump of the kind 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, \$4.00

Brass Lined Bamboo Extension

A brass tube inside a bamboo rod; about ten feet long. Very strongly made. Fitted with brass stop-cock and connection for nozzle. ¼ inch standard pipe threads. Price, \$3.25

JILLY'S HOLLY SPRAYER

This sprayer is made especially to our order, and in material, construction, model, and efficiency it is superior to other similar sprayers. It is made of heavy tin, is extra strong, the reservoir holds a full quart of liquid, and the plunger is of better construction and material. It is the handiest sprayer for all small work and for applying Fly Liquid and Lice liquid. Price, 50c

Powder Spayer

For applying any kind of insecticide, fungicide, or disinfectant in powder form. The ball valve in end of cylinder is positive in its action, and it is impossible to draw any powder into the cylinder. The powder can hold one quart. Well made of heavy tin. Price, 85c

FOG 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 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. For Nozzle, Straight75c
No. 108. Fog Nozzle, Angle75c

Vermorel Nozzles

These nozzles are furnished either single, like above cut, or double; two nozzles attached to one stem. They are made of brass and are fitted with a steel disc and a disgorger with which they are easily cleaned.

No. 26. 1 Point Vermorel Nozzle.....\$1.25
No. 27. 2 Point Vermorel Nozzle..... 1.50

Continuous Sprayer

For the same purposes as the Holly Sprayer, and will spray Fly Liquid, Lice Liquid, and any of the other insecticides and fungicides in common use. Capacity of tank, one quart. It has an air chamber which makes the pressure continuous, throwing a fine steady spray. It has two nozzles, one for throwing spray at an angle.

Price, 75c

Bordeaux Nozzle

The best nozzle for spraying Bordeaux mixture or whitewash. Makes a flat spray or a solid round stream.

No. 965\$1.00

JILLY'S 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, \$5.50**

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, \$2.25**

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, \$1.50**

ACME

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, \$1.75**

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, \$1.50**

Acme Rotary

Acme

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 3 1/2 lbs. **Price, \$2.25**

Tubular

Acme

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 4 lbs. **Price, \$4.25**

LILLY'S FERTILIZERS

PRODUCE RESULTS

They Pay Big Dividends on Investment

It costs but little more to produce a good crop than a poor one. The difference is nearly all profit.

Plant Lilly's Seeds, on good soil, under favorable weather and cultural conditions, and use Lilly's Fertilizers. This often makes the difference between Success and Failure.

See Fertilizer Section of this Catalog.

This is a poison that gophers will eat. It kills ten gophers where traps get one. It is put up in cans of four sizes. The large can will kill eight hundred or a thousand gophers. Not to be shipped by parcel post.

Prices: 25c, 50c, \$1.00 and \$2.50

No. 44 Gopher Trap

A box and spring arrangement for catching gophers and other rodents. Simple and effective. Weight 1 lb.

Prices: 30c each; \$3.00 per doz.

HOT-BED THERMOMETER

A reliable thermometer, incased in wood, with a brass point, to be inserted in the earth in hot-bed or mushroom bed.

No. 1068.....\$2.50

Garden Stakes

For marking or labeling rows in the garden. White pine, painted white, 12 inches long, 1½ inches wide. Wt., 2½ lbs. per 100.

Prices: 100, \$1.00; 1,000, \$8.00

Bamboo Plant Stakes

Small bamboo rods, six feet long. Weight about 12 lbs. per 100.

Prices: Doz., 25c; 100, 75c; 1,000, \$6.00

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 trap is released by either upward or downward pressure, and is sure to catch them.

Price, 25c each; \$1.75 per doz.

OFFICIAL MOUSE TRAP

This is the same as the Official Rat Trap except that it is smaller.

Price, 10c; 50c 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.

Price, 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. Wt. 1½ lbs.

Price, 75c

Pot Labels Out o' Sight

For labeling plants in pots or beds. Made of white pine, painted white.

Size	Weight		Price	
	100	100	1000	
4 x ½ in.	5 oz.	\$0.15	\$1.00	
5 x ½ in.	6 oz.	.20	1.25	
6 x ½ in.	8 oz.	.25	1.50	
10 x ½ in.	16 oz.	.40	3.20	
12 x ½ in.	20 oz.	.45	3.85	

Tree Labels

For labeling trees, plants, etc. Made of white pine, painted. Furnished either with or without wire. 3½ inches long, ½ inch wide.

Style	Weight		Price	
	100	100	1000	
Notched, not wired.....	6 oz.	\$0.15	\$1.00	
Copper wired.....	7 oz.	.25	1.55	

Grafting Wax

Our own make, very superior quality. Packed in one-pound packages only. One pound, 25c

NEPONSET PAPER POTS

1068 Made of heavy waxed paper. Splendid for handling and shipping plants. Unbreakable, light, and economical. Samples will be mailed on request.

Size	Weight		Price	
	1000	100	1000	
2¼ inches	15 lbs.	\$0.40	\$3.00	
2½ inches	18 lbs.	.50	3.50	
3 inches	28 lbs.	.75	5.50	
4 inches	58 lbs.	1.25	10.00	

Prices shown in this catalog do not include transportation charges except when so stated.

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

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, \$18.50

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, \$14.30

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, \$16.75

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 Fig. 133 Drill Seeder, two Hoes, two Plows, two Rakes, and four Cultivator Teeth. Price, \$17.35

No. 5 IRON AGE Drill Seeder. The same as No. 4 without Hoes, Plows, Rakes or Cultivator Teeth. Price, \$12.85

No. 40 IRON AGE Drill Seeder with Hoes and Cultivator Teeth. The same as No. 4 without Plows and Rakes. Price, \$15.30

No. 1

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 with 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. Price, \$11.20

No. 3 IRON AGE Double and Single Wheel Hoe. Has Hoes only. Same as No. 1 without Plows, Rakes, and Cultivator Teeth. Price, \$7.20

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, \$9.00

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. 369 Garden Disc Cultivating Attachment, two Plows and four Cultivator Teeth. Price, \$11.70

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, Fig. 82 Landside Plow, two Hoes, two Rakes, and three Cultivator Teeth. Shipping weight 45 lbs. Price, \$17.25

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, \$13.50

No. 15

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 Fig. 133 Drill Seeder, one Landside Plow, two Hoes, two Rakes, and three Cultivator Teeth. Shipping weight 45 lbs. **Price, \$15.60**
No. 18 IRON AGE Drill Seeder. No. 17 without cultivating attachments. **Price, \$11.90**
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, \$12.55**

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, two Rakes, and three Cultivator Teeth. Shipping weight 28 lbs. **Price, \$9.50**

No. 21 IRON AGE Single Wheel Hoe. Same as No. 20 without Plow, Rakes, and Cultivator Teeth. Equipped with Hoes only. **Price, \$6.50**

No. 28 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, \$9.95**

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, \$5.80**

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, \$26.65**

No. 23 IRON AGE Fertilizer Distributor. Same as No. 22 without Figure 398 Seeder Attachment. **Price, \$19.50**

No. 19-C

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. 16, No. 17, No. 18, No. 20, No. 21, or No. 28. **\$7.85**

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. **\$6.50**

Fig. 145 Opening Plow for Sowing Onion Seed for Sets. May be used with seeders No. 6, No. 7, No. 15, No. 16, and No. 22. **\$0.65**

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 is being used. **\$7.00**

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. **\$3.15**

Fig. 170 Double Moldboard Plow. Has adjustable wings to open furrows of various widths. **\$2.10**

Fig. 169 Combined Disc and Fender Attachment. Used to work close to small plants, or as fenders in combination with cultivator teeth. **\$1.65**

Fig. 82 Landside Plow. Furnished with the single wheel cultivators, and may be used with the double wheel cultivators by using Fig. 112. **\$1.50**

No. 22

Fig. 216 Special Fender Side Hoes. Used in place of the regular hoes on any Iron Age Wheel Hoe. **\$2.10**

Fig. 236 Hilling Attachment. May be used with the double wheel hoes. **\$1.85**

Fig. 81 Double Weeder Attachment. For destroying weeds in hard crust. For use with double wheel hoes, but may be used with single wheel hoes. **\$1.65**

Fig. 112 Center Tooth Attachment. Used with No. 1 Hoe when using one wheel. **\$0.85**

No. 33 Onion Set Gatherer. Used on any of the double or single wheel hoes. **\$1.25**

C26 Left Hand Plow **.65**

C-30 Right Hand Plow **.65**

C-29 Rake **.65**

30-A Cultivator Tooth **.30**

C-19 Right Hand Side Hoe **.65**

C-20 Left Hand Side Hoe **.65**

These prices are subject to change. See enclosed supplement, or write for later price list.

LEWIS BEE SUPPLIES

The Line that is Nearest Perfect in Workmanship and Material

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

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.

The modern home of the bee, or beehive, is illustrated in its parts by the open illustration shown herewith.

The Floor is known to beekeepers as the Bottom.

The Living Room, known as the Brood Chamber or Body, in which bees rear their brood, keep the pollen, and should have a sufficient amount of honey for their needs.

The Store Room, known as the Super, in which the bees store the surplus honey which we take away from them. The Super may be for Comb Honey, like the lower one in the illustration, or for Extracted Honey, like the upper one. Several supers may be placed on top of each other.

The Roof or Cover, which should fit on either the body or the different tiers of supers. For convenience, all parts should fit on any of the hives.

The Brood Frames are wooden frames or racks in which the combs are suspended separately so that the beekeeper or apiarist may be able to take a hive of bees entirely apart and examine every nook, to ascertain the conditions, hunt for the queen, take away

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.

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.

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 forty-four 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. Hives, supers, etc., are made from clear eastern white pine, which appears to be the only material suitable for that purpose. Sections are made from Wisconsin basswood, are white, highly

or exchange brood or honey, and do all the manipulations that may suit his method or his fancy. During the summer the combs in the brood chamber are filled mainly with brood, pollen, and a little honey, but as fall approaches less brood is reared and honey enough to winter the colony is usually stored by them in the upper part of the combs and in the rear.

The Section Holder is a contrivance to hold the sections in place within the super.

The Sections, or Honey Boxes, are little square frames placed in the super to be filled with comb honey during the harvest.

Separators are placed between the rows of sections, and are necessary to produce a neat section, evenly filled with honey, which may be handled or boxed for shipment without danger of scratching the surface of the combs.

Comb Foundation is used to help the bees by supplying them with the base of the comb made of their own product, beeswax. It helps to secure straight combs in brood frames and sections, saves much labor and material to the bees, and helps to prevent the building of much drone comb.

Bees should be placed in a sheltered spot, as much as possible facing south, in the shade of shrubs or trees. If they can be sheltered from hard winds by a board fence, so much the better. The ideal location is on the south slope of a hill.

Help to reduce the High Cost of Living by producing and eating Honey; you will not find it a hardship.

1 1/2-Story Hive, Open

1 1/2-Story Hive, Closed

Dovetailed Hives for Comb Honey with No. 1 Supers

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. It will cost a trifle more but will yield more than proportionately larger returns. The above illustrates a 1 1/2-story hive; when two supers are included it is then a two-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 3/8-inch entrance and the other a 1/8-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.

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 4 1/4 x 1 1/4 beeway section and the slotted section holders as shown. The separators are the slotted sawed wood style shown. 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 as shown on following pages.

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. We also refer you to the different styles of covers illustrated and described on following pages, all of which can be used on the Dovetailed Hive. We particularly refer you to the Metal Roof Cover, which is becoming a very popular cover, particularly in some climates. The extra charge for this cover is small, as shown in following tables.

A division board is furnished with each eight-frame body, as it is required to fill out the space properly when all eight frames are in place. It is not furnished with the ten-frame size as the ten frames fill the space. The real purpose of a division board is to serve as a partition for reducing the brood space in the case of weak swarms, in which few and remote cases they may be ordered extra for the ten-frame hives.

Prices of hives and sections are shown both with and without foundation comb starters. We recommend purchasing hives without foundation, and supers without sections or foundation, and ordering section boxes and foundation in bulk. Ordinarily you will have to equip the supers with sections and starters more than once.

We advise ordering hives, supers and other parts in the flat, as freight charges on articles of this kind set up are very high. Complete illustrated directions and a sufficient quantity of the proper nails are always furnished, so that you will have no trouble whatever in nailing up the hives, frames, etc.

DOVETAILED HIVES FOR COMB HONEY, WITH NO. 1 OR REGULAR SUPER, FOR 4 1/4 x 1 1/4 x 1 1/8 BEEWAY SECTIONS

A 1 1/2-Story Hive includes Cover, Bottom, Brood Chamber with Brood Frames, and one Super with Inside Furniture.

A 2-Story Hive the same with one extra Super. A Division Board is included with the 8-frame Brood Chamber but not with the 10-frame.

	Nailed Not Painted 1 Hive	In Flat With Nails 5 Hives	Shipping Weight 5 Hives
1 1/2-Story, 8-Frame Hive, without sections or foundation.....	\$3.65	\$14.40	143 lbs.
1 1/2-Story, 10-Frame Hive, without sections or foundation.....	3.80	15.15	152 lbs.
2-Story, 8-Frame Hive, without sections or foundation.....	4.60	18.05	178 lbs.
2-Story, 10-Frame Hive, without sections or foundation.....	4.80	19.15	188 lbs.
1 1/2-Story, 8-Frame Hive, including sections and foundation.....	4.15	16.25	145 lbs.
1 1/2-Story, 10-Frame Hive, including sections and foundation.....	4.30	17.20	154 lbs.
2-Story, 8-Frame Hive, including sections and foundation.....	5.35	21.25	182 lbs.
2-Story, 10-Frame Hive, including sections and foundation.....	5.65	22.65	192 lbs.
For any of above Hives with Metal Roof Covers, add.....	.50	2.50	.....

Dovetailed Hives for Comb Honey with No. 2 Supers

The only difference between this hive and the one above is the equipment of the super, which is called the No. 2 or Plain Super. This style is preferred by some beekeepers, who

claim they get more even and better filled sections. It is just the same size as the one shown above, and holds the same number of sections. The difference is in the inside furni-

The best Books and Journals on Beekeeping are listed in the Books Section of this catalog.

ture, it being equipped with the fence style of separator and plain section holders. These section holders take the $4\frac{1}{4} \times 4\frac{1}{4} \times 1\frac{1}{2}$ no beeway sections; that is, sections without any slots cut in the edges; the little cleats running perpendicular on the fences form the beeways.

DOVETAILED HIVES FOR COMB HONEY, WITH NO. 2 OR PLAIN SUPER, FOR $4\frac{1}{4} \times 4\frac{1}{4} \times 1\frac{1}{2}$ PLAIN OR NO-BEEWAY SECTIONS

	Nailed Not Painted Hive	In Flat With Nails 5 Hives	Shipping Weight 5 Hives
A 1½-Story Hive includes Cover, Bottom, Brood-Chamber with Brood-Frames, and one Super with Inside Furniture.			
A 2-Story Hive the same with one extra Super. A Division Board is included with the 8-Frame Brood Chamber, but not with the 10-Frame.			
1½-Story, 8-Frame Hive, without sections or foundation.....	\$3.70	\$14.70	145 lbs.
1½-Story, 10-Frame Hive, without sections or foundation.....	3.85	15.50	156 lbs.
2-Story, 8-Frame Hive, without sections or foundation.....	4.70	18.65	182 lbs.
2-Story, 10-Frame Hive, without sections or foundation.....	4.95	19.85	196 lbs.
1½-Story, 8-Frame Hive, including sections and foundation.....	4.20	16.55	147 lbs.
1½-Story, 10-Frame Hive, including sections and foundation.....	4.35	17.55	153 lbs.
2-Story, 8-Frame Hive, including sections and foundation.....	5.50	21.85	186 lbs.
2-Story, 10-Frame Hive, including sections and foundation.....	5.80	23.35	200 lbs.
For any of above Hives with Metal Roof Cover, add.....	.50	2.50	.....

Dovetailed Hives for Comb Honey with No. 4 Supers

This hive is equipped with the No. 4 or 4x5 Super, in all other respects it is the same as the others. This super is another style equipped for no-beeway sections. It is practically the same as the No. 2 or Plain Super, except that it takes a section measuring $4 \times 5 \times 1\frac{1}{2}$ standing on the 4-inch side, the super being a trifle deeper to accommodate the taller section.

The advantage claimed by those who favor this style is that the section shows a greater surface of honey, thereby giving a better front for the same amount of honey. It is furnished in two sizes, eight-frame and ten-frame. The eight-frame size is equipped with six section holders, seven fences, springs and a thick follower, and will hold twenty-four sections; the ten-frame size with eight section holders, nine fences and springs, and will hold thirty-two sections.

DOVETAILED HIVES FOR COMB HONEY, WITH NO. 4 SUPER, FOR $4 \times 5 \times 1\frac{1}{2}$ PLAIN OR NO-BEEWAY SECTIONS

	Nailed Not Painted Hive	In Flat With Nails 5 Hives	Shipping Weight 5 Hives
A 1½-Story Hive includes Cover, Bottom, Brood-Chamber with Brood-Frames, and one Super with Inside Furniture.			
A 2-Story Hive the same with one extra Super. A Division Board is included with the 8-Frame Brood Chamber, but not with the 10-Frame.			
1½-Story, 8-Frame Hive, without sections or foundation.....	\$3.80	\$15.20	145 lbs.
1½-Story, 10-Frame Hive, without sections or foundation.....	3.95	16.00	156 lbs.
2-Story, 8-Frame Hive, without sections or foundation.....	4.90	19.65	182 lbs.
2-Story, 10-Frame Hive, without sections or foundation.....	5.15	20.85	196 lbs.
1½-Story, 8-Frame Hive, including sections and foundation.....	4.30	17.20	147 lbs.
1½-Story, 10-Frame Hive, including sections and foundation.....	4.50	18.20	153 lbs.
2-Story, 8-Frame Hive, including sections and foundation.....	5.75	23.15	186 lbs.
2-Story, 10-Frame Hive, including sections and foundation.....	6.05	24.65	200 lbs.
For any of above Hives with Metal Roof Covers, add.....	.50	2.50	.....

No. 1 or Regular Super

The illustration at the left shows the No. 1 or Regular Super, which is the style furnished with the first hive described. It is furnished in two sizes, the eight-frame width and the ten-frame width, and is equipped with inside fixtures for the regular standard $4\frac{1}{4} \times 4\frac{1}{4} \times 1\frac{1}{2}$ open-two-sides sections. The section holders have the bottoms slotted to correspond with the slots in the sections, and the separators are the slotted wood style shown in the illustration. This is the most popular style of super in use today.

While it is listed with sections and foundation for one-inch starters, we advise ordering without sections and foundation, ordering those items in bulk, as previously explained.

For prices, see next page.

Hives, Supers, Covers, etc., are packed in bundles of five, knocked down, with nails and instructions for setting up.

No. 2 or Plain Super

The illustration to the left shows the No. 2 or Plain Super, which is the style furnished with the second hive described. It is furnished in two sizes, the eight-frame width and the ten-frame width, and is equipped with inside fixtures for the $4\frac{1}{4} \times 1\frac{1}{2} \times 1\frac{1}{2}$ no-beeway sections. The section holders have a straight edge bottom slat and the separators are the fence style as shown in the illustration. The length, width and depth of this super is the same as the No. 1.

No. 4 Super

The illustration to the right shows the No. 4 or 4x5 Super, which is the style furnished with the third hive described. It is furnished in two sizes, the eight-frame width and

the ten-frame width, and is equipped with inside fixtures for the $4 \times 5 \times 1\frac{1}{2}$ no-beeway sections. The section holders have a straight edge bottom slat and the separators are the fence style as shown in the illustration.

The length and width of this super is the same as the No. 1 and No. 2, but it is deeper to accommodate the taller section. The ten-frame size of this super can be used as a combined comb and extracted honey super as described on preceding page.

No. 3 or Ideal Super

Another style of super is the No. 3 or Ideal. It is practically the same as the other supers for no-beeway sections except that it is arranged for $3\frac{3}{4} \times 5 \times 1\frac{1}{2}$ no-beeway sections. The eight-frame size holds thirty sections and the

ten-frame size thirty-five sections. We will furnish this style if you desire, but unless you already have some of these in use, we do not recommend them. The No. 4 Super is intended to take the place of this.

DOVETAILED SUPERS FOR COMB HONEY

Including inside furniture	Nailed 1 Super	In Flat 5 Supers	Weight 5 Supers
No. 1 Super, 8-Frame, without sections or foundation.....	\$0.95	\$3.65	35 lbs.
No. 1 Super, 10-Frame, without sections or foundation.....	1.00	3.95	36 lbs.
No. 1 Super, 8-Frame, with sections and foundation.....	1.25	5.00	37 lbs.
No. 1 Super, 10-Frame, with sections and foundation.....	1.35	5.50	38 lbs.
No. 2 or No. 3 Super, 8-Frame, without sections or foundation.....	1.00	4.00	37 lbs.
No. 2 or No. 3 Super, 10-Frame, without sections or foundation.....	1.10	4.35	40 lbs.
No. 2 or No. 3 Super, 8-Frame, with sections and foundation.....	1.35	5.35	39 lbs.
No. 2 or No. 3 Super, 10-Frame, with sections and foundation.....	1.45	5.85	42 lbs.
No. 4 Super, 8-Frame, without sections or foundation.....	1.10	4.45	37 lbs.
No. 4 Super, 10-Frame, without sections or foundation.....	1.20	4.85	40 lbs.
No. 4 Super, 8-Frame, with sections and foundation.....	1.45	6.00	39 lbs.
No. 4 Super, 10-Frame, with sections and foundation.....	1.55	6.50	42 lbs.

One Story Dovetailed Hives

This is the same style of hive shown on previous pages, and includes the same equipment with the exception that no super is included. It is the brood chamber used with all hives,

either for comb honey or for extracted honey. A Division Board is furnished with the eight-frame size, but not with the ten frame size, as previously explained.

Including Cover, Bottom, and Brood Chamber with Frames	Nailed 1 Hive	In Flat 5 Hives	Weight 5 Hives
1-Story, 8-Frame Hive, without foundation starters	\$2.75	\$10.75	108 lbs.
1-Story, 10-Frame Hive, without foundation starters	2.85	11.25	116 lbs.
1-Story, 8-Frame Hive, including foundation starters	2.90	11.25	110 lbs.
1-Story, 10-Frame Hive, including foundation starters	3.00	11.75	118 lbs.
For any of above Hives with Metal Roof Covers, add.....	.50	2.50	

We handle only one grade of hives, the G. B. Lewis Co. eastern white pine; the best.

Bodies or Brood Chambers

These are the regular bodies or brood chambers making up the lower part of both comb honey and extracted honey hives. The illustration to the left shows one of these bodies complete with frames. The frames are the regular self-spacing style. A division board is furnished with each eight-frame hive body, but not with the ten-frame size, as they are not required. They are not furnished with foundation.

The illustration to the right shows the body without frames, but including the metal rabbets on which the frames hang.

DOVETAILED BODIES OR BROOD CHAMBERS

	Nailed 1 Body	In Flat 5	Weight 5
8-Frame Hive Body, with Brood Frames and Division Board	\$1.50	\$5.90	66 lbs.
10-Frame Hive Body, with Brood Frames	1.50	6.10	71 lbs.
8-Frame Empty Hive Body, with metal rabbets only	.90	3.45	35 lbs.
10-Frame Empty Hive Body, with metal rabbets only	.95	3.70	40 lbs.

Empty Supers

Empty Supers include the ends and sides | shells of the No. 1, No. 2, No. 4, No. 3, and only, without inside furniture. They are outside | Shallow Extracting Supers, listed elsewhere.

When ordering, be sure to state which style is wanted

	Nailed 1 Super	In Flat 5	Weight 5
8-Frame Empty Super, No. 1, No. 2, No. 4, or No. 3.....	\$0.50	\$2.00	20 lbs.
10-Frame Empty Super, No. 1, No. 2, No. 4, or No. 3.....	.55	2.10	20 lbs.
8-Frame Empty Shallow Extracting Super.....	.55	2.10	20 lbs.
10-Frame Empty Shallow Extracting Super.....	.60	2.20	20 lbs.

Dovetailed Hives for Extracted Honey

This is the most popular and the most practical hive for the production of extracted honey. It consists of two full-sized bodies with regular full depth brood frames for each. It is also a very handy hive for the man who does not want to spend too much time with the bees, provided he has on hand a quantity of extra stories. These he can put on as fast as the bees fill the lower ones, leaving all the honey in the hives until the end of the season and then extract from all the stories at one time. As bees swarm primarily because of a lack of room, this swarming difficulty

may be largely overcome by using this hive for extracted or chunk honey. We furnish this hive in either eight-frame or ten-frame sizes, but recommend the latter.

A Two-Story Extracted Honey Hive includes Cover, Bottom and two full-depth Bodies fitted with Brood Frames.

	Nailed 1 Hive	In Flat 5	Weight 5
2-Story, 8-Frame Extracted Honey Hive, without foundation.....	\$4.20	\$16.65	174 lbs.
2-Story, 10-Frame Extracted Honey Hive, without foundation.....	4.30	17.30	187 lbs.
2-Story, 8-Frame Extracted Honey Hive, with foundation.....	4.50	17.65	175 lbs.
2-Story, 10-Frame Extracted Honey Hive, with foundation.....	4.60	18.35	188 lbs.
For any of above Hives with Metal Roof Covers, add.....	.50	2.50	.....

For prices of extra stories for these hives, see Hive Bodies at top of this page.

Dovetailed Hives with Shallow Extracting Supers

This hive has Shallow Extracting Supers, 5 1/2 inches deep, equipped with Shallow Extracting Frames, 5 1/2 inches deep. It is especially adapted to localities where the honey flow is short and colonies of moderate strength. One super or half-story can be added at a time and storage room increased gradually, according to the strength of the colony.

Prices shown for five Hives, Supers, Covers, etc., will not apply on less than full bundles of five.

1½-STORY AND 2-STORY DOVETAILED HIVES FOR EXTRACTED HONEY WITH SHALLOW EXTRACTING SUPERS

A 1½-Story Extracting Hive includes Cover, Bottom, Brood-Chamber with Brood Frames, and one Shallow Extracting Super with Shallow Extracting Frames. A 2-Story Extracting Hive is the same with two Shallow Extracting Supers with Shallow Extracting Frames.

	Nailed Not Painted 1 Hive	Flat 5 Hives	Weight 5 Hives
1½-Story, 8-Frame Extracting Hive, without foundation.....	\$3.65	\$14.30	143 lbs.
1½-Story, 10-Frame Extracting Hive, without foundation.....	3.80	15.25	158 lbs.
2-Story, 8-Frame Extracting Hive, without foundation.....	4.50	17.85	178 lbs.
2-Story, 10-Frame Extracting Hive, without foundation.....	4.75	19.25	200 lbs.
1½-Story, 8-Frame Extracting Hive, with foundation.....	3.95	15.30	144 lbs.
1½-Story, 10-Frame Extracting Hive, with foundation.....	4.10	16.25	159 lbs.
2-Story, 8-Frame Extracting Hive, with foundation.....	4.95	19.35	179 lbs.
2-Story, 10-Frame Extracting Hive, with foundation.....	5.20	20.75	201 lbs.
Any of above Hives with Metal Roof Covers, add.....	.50	2.50	.....

SHALLOW EXTRACTING SUPERS

Including Shallow Extracting Frames and Follower.	Nailed 1 Super	Flat 5	Weight 5
8-Frame, Shallow Extracting Super, without foundation.....	\$0.90	\$3.55	35 lbs.
10-Frame, Shallow Extracting Super, without foundation.....	1.00	4.00	42 lbs.

For prices of Empty Shallow Extracting Supers, see previous page.

Excelsior Cover

The Excelsior Cover is the style regularly furnished with the Dovetailed Hives unless one of the other styles is specified. It is a combination of a flat and gable cover, being flat on the under side and slanting like a gable roof on the top side. The manner in which the ridge piece extends over the end cleats, binding all parts securely together, is a great improvement over the way it was formerly constructed.

Metal Roof Cover

Climate plays an important part in the style of hive covers that should be used. In humid sections the Excelsior Cover is suitable, but in the arid sections of the West, this cover is better. It has all the advantages of the Colorado Cover, and is lighter. It is very strong and simple, and has a metal top of regular roofing tin. An important feature is the Inner Cover, which is a regular Super Cover or Bee Escape Board without bee escape.

Colorado Cover

This cover has a rim which allows it to drop partly over top edge of hive, effectually keeping out rain and snow. The rim also allows for an air space of about two inches which is very desirable in arid sections. It is intended to be used in connection with the inner cover, which is a regular Super Cover or Bee Escape Board without bee escape. The hole provided for bee escape can easily be closed when bee escape is not in use.

Ventilated Gable Cover

This double cover is desirable in extremely warm climates where there is little or no shade. There are open spaces in the two side edges between top and bottom boards, permitting constant circulation of air.

If Colorado or Metal Roof Covers are wanted without inner covers, deduct 15c each.

	Nailed 1 Cover	Flat 5	Weight 5
Excelsior Cover for 8-Frame Hive.....	\$0.70	\$2.75	26 lbs.
Excelsior Cover for 10-Frame Hive.....	.75	2.90	27 lbs.
Ventilated Gable Cover for 8-Frame Hive.....	.70	2.75	25 lbs.
Ventilated Gable Cover for 10-Frame Hive.....	.75	2.90	27 lbs.
Colorado Cover, with Inner Cover, for 8-Frame Hive.....	1.00	4.20	40 lbs.
Colorado Cover, with Inner Cover, for 10-Frame Hive.....	1.05	4.35	42 lbs.
Metal Roof Cover, with Inner Cover, for 8-Frame Hive.....	1.25	5.40	33 lbs.
Metal Roof Cover, with Inner Cover, for 10-Frame Hive.....	1.30	5.55	40 lbs.

Write for special prices on bee supplies in large quantities, stating quantities wanted.

Reversible Bottom

The regular bottom furnished with the Dove-tailed Hives. It is so constructed that it can be turned either side up, forming a $\frac{3}{8}$ -inch entrance on one side and a $\frac{7}{8}$ -inch entrance on the other. The larger entrance is intended to be used during hot weather.

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 very serviceable and low-priced. The slanting piece on the front provides an easy run-way into the hive.

HIVE BOTTOMS AND HIVE STANDS

	Nailed One	Flat Five	Weight Five
Reversible Bottom for 8-Frame Hive.....	\$0.60	\$2.15	163 lbs.
Reversible Bottom for 10-Frame Hive.....	.60	2.30	172 lbs.
Hive Stand for 8-Frame Hive.....	.40	1.40	105 lbs.
Hive Stand for 10-Frame Hive.....	.40	1.45	110 lbs.

Lewis Observation Hive

This is a complete beehive fitted with glass sides through which the life, habits and workings of the busy bee may be observed with safety. Splendid for schools, colleges and the home. It is fully equipped with brass trimmings. It is arranged to place inside of the room with the entrance for bees extending under a window raised about two inches. The super is fitted with sections and starters and the brood chamber with frames without the foundation starters. Foundation in the frames is not included as it is too liable to breakage in transit. Full frames of bees can be secured and placed in this hive.

1½-Story, 8-Frame Observation Hive, Weight 47 lbs.....\$13.00

Self-Spacing Hoffman Frame

The Hoffman Brood Frame is, and has been for many years, the standard and most popular frame. It is the frame regularly furnished with the Dovetailed hive bodies or brood chambers. The end bars are pierced ready for the wire in case you use full sheets of foundation. The top bars have a double groove on the under side, in one of which the foundation is inserted and in the other a long wedge-shaped strip, to hold the foundation secure.

Shallow Extracting Frame

The Shallow Extracting Frame is 5½ inches deep, and is used in the Shallow Extracting Super. It has the self-spacing Hoffman end bar and is end-spaced with staples in the same way as the Self-Spacing Hoffman Brood Frame.

Metal-Spaced Frame

The Metal-Spaced Frame is being used by some beekeepers in localities where propolis is very abundant, sticky and hard, causing the wooden projections of the Hoffman end bars to split off when frames are pried apart. The stamped metal spacing device shown at the right overcomes this trouble. As shown in the illustration, the metal pieces are bent over the top-bar, strengthening that part of the frame. These frames are interchangeable with the Hoffman style. This metal spacer is superior to other similar spacers, as it has less surface contact.

Beekeepers requiring bee supplies in very large quantities will please write for special quantity prices, stating articles and quantities wanted.

BROOD AND EXTRACTING FRAMES, In Flat, With Nails	10	100	500	Weight, 100
Self-Spacing Hoffman Frames.....	\$0.50	\$4.70	\$22.35	47 lbs.
Shallow Extracting Frames, 5½ inches deep.....	.40	3.50	16.40	28 lbs.
Metal-Spaced Frames	.60	5.00	26.85	57 lbs.

Prices do not include transportation charges.

Wiring Frames

If you use full sheets of foundation in brood frames, we recommend the practice of wiring the frames as shown in the cut on the left. Hoffman end-bars are properly pierced for wire. No. 30 Tinned Wire, listed below, is the most satisfactory.

3 1/4	oz. spool No. 30 Tinned Wire	Price, \$0.10; Weight,	2 oz.
1	lb. spool No. 30 Tinned Wire	.20	6 oz.
1	lb. spool No. 30 Tinned Wire	.30	10 oz.
1	lb. spool No. 30 Tinned Wire	.45	18 oz.
5	lb. spool No. 30 Tinned Wire	1.60	6 1/4 lbs.

Slotted Section Holder

The Slotted Section Holder is the kind furnished with the No. 1 or Regular Dovetailed Super for 44x44x1 7/8 Beeway Sections. It consists of a slotted section slat and two end blocks.

Plain Section Holder

The Plain Section Holder is the kind furnished with the No. 2 or Plain Dovetailed Super for 4"x4"x1½ Plain or No Beeway Sections. It consists of a plain section slat and two end blocks.

4x5 Plain Section Holder

This Plain Section Holder is the kind furnished with the No. 4 or 4x5 1/2" Plain or No. 4x5 1/2" Beeway Sections. It consists of a plain section slat and two end blocks.

Slotted Wood Separator

Slotted Wood Separator
The Slotted Wood Separator is the kind furnished with the No. 1 or Regular Dovetailed Super for 4½x4½x17½ Bee-way Sections in connection with the Slotted Section Holder. They are made of clear basswood, and are sawed, not a veneer.

Fence Separator

The No. 2 or P Fence Separator is used in the No. 2 or Plain Super with the Plain Section Holders for $4\frac{1}{2} \times 4\frac{1}{2} \times 1\frac{1}{2}$ Plain or No Beeway Sections. The No. 3 or Ideal Fence Separator is used in the No. 3 or Ideal Super with Plain Section Holders. The No. 4 Fence Separator is used in the No. 4

Slats for 3"x5x1½ Plain Sections. The No. 4 or 4x5 Fence Separator is used in the No. 4 Super with Plain Section Holders for 4x5x1½ Plain Sections. The S Fence Separator is used with 4¼x4¼x1½ Plain Sections in the regular slotted section holders in place of the slotted wood separator when one desires to use the 4¼x4¼x1½ Plain Sections instead of the regular beeway style. These fences are not only glued, but the posts or cleats are securely sewed to the slats with a fine, tough, tinned wire; a great improvement over the glued and nailed fences.

SECTION HOLDERS AND SEPARATORS

	10	100	Weight, 100
SECTION HOLDERS AND SEPARATORS			
Slotted Section Holders, In the flat, including nails.....	\$0.40	\$3.10	30 lbs.
Plain Section Holders, For $4\frac{1}{4} \times 4\frac{1}{4} \times 1\frac{1}{2}$ Plain Sections.....	.35	2.70	30 lbs.
Plain Section Holders, For $4 \times 5 \times 1\frac{1}{2}$ Plain Sections.....	.35	2.70	30 lbs.
Slotted Section Slats, $\frac{1}{4}$ inch thick.....	.25	1.55	15 lbs.
Ideal Plain Section Slats.....	.25	1.60	18 lbs.
Slotted Wood Separators, used with $4\frac{1}{4} \times 4\frac{1}{4} \times 1\frac{1}{2}$ Beeway Sections.....	.25	1.25	8 lbs.
Plain Wood Separators, used in the old style T supers.....	.20	2.95	6 lbs.
Fence Separators, No. 2, No. 3, No. 4, or S Fence Separators.....	.35	2.95	12 lbs.
Super Followers, used in No. 1 supers to squeeze sections tight.....	.60	5.30	30 lbs.

Super Springs

Super Springs are furnished with supers and are placed between the follower or fence separator and the side of the super. They are far better than any kind of wooden wedge or thumb-screw, as they cause an easy fielding pressure upon the sections and adapts itself to any swelling or shrinkage of the fixtures. **Price:** 1c each; 80c per 100; \$6.90 per 1000

Metal Parts Hives

ARTICLE	Price 10	Price 100	Weight 100
Flat Tins for section holder rests for 8-Frame Supers.....	\$0.15	\$0.85	3 lbs.
Flat Tins for section holder rests for 10-Frame Supers.....	.15	.90	4 lbs.
Tin Rabbets for frame rests for 8-Frame Hive Bodies.....	.25	1.60	7 lbs.
Tin Rabbets for frame rests for 10-Frame Hive Bodies.....	.25	1.60	8 lbs.
T-Tins for old style T-Supers, 13 inches long.....	.25	1.60	7 lbs.
T-Tins for old style T-Supers, 15 inches long.....	.25	1.80	8 lbs.
Metal Spacers for Metal Spaced Frames.....	.10	.50	3 lbs.

There is pleasure and profit in beekeeping; if not already interested, investigate it.

Wood and Wire Queen Excluding Honey Board

In the production of extracted honey it is desirable to have some way of preventing the queen from depositing eggs in the extracting combs, and for that reason queen excluders are very generally used. We particularly recommend the Wood and Wire style, which has been improved recently. The metal parts now have seven wires to each strip, instead

of three as formerly, and we believe that it is the best excluder on the market. It is superior to the perforated metal, as it presents smooth, round edges for the worker bees to pass.

Wood and Zinc Queen Excluding Honey Board

This is constructed of perforated zinc strips with wood bars between, and is a good excluder, although we do not consider it as good as the Wood and Wire Excluder. It has the same wood rim construction, making it rigid and substantial.

Wood Bound Zinc Queen Excluding Honey Board

This is another style of perforated metal queen excluder. It is substantial and durable, but is not considered as good as the wood and zinc excluder. It has a wood rim the same as the wood and zinc, but does not have the inside wood slats. When placed on the hive there is a bee space above and below the zinc.

Unbound Zinc Queen Excluding Honey Board

This is simply a sheet of the perforated metal, without the wood rim. It is placed directly on top of the frames. Although we do not consider them as good as any of the other styles, a great many of them are sold.

Queen Excluding Honey Boards and Queen Excluding Metal

	Price 1	Price 10	Price 100	Weight 100
Wood and Wire Queen Excluding Honey Board for 8-Frame Hive.....	\$0.75	\$6.70	\$65.00	240 lbs.
Wood and Wire Queen Excluding Honey Board for 10-Frame Hive.....	.80	7.60	74.00	280 lbs.
Wood and Zinc Queen Excluding Honey Board for 8-Frame Hive.....	.55	4.80	46.50	140 lbs.
Wood and Zinc Queen Excluding Honey Board for 10-Frame Hive.....	.60	5.35	52.00	160 lbs.
Wood Bound Zinc Queen Excluding Honey Board for 8-Frame Hive.....	.55	4.90	47.50	160 lbs.
Wood Bound Zinc Queen Excluding Honey Board for 10-Frame Hive.....	.60	5.45	53.00	110 lbs.
Unbound Zinc Queen Excluding Honey Board for 8-Frame Hive.....	.45	4.00	39.00	60 lbs.
Unbound Zinc Queen Excluding Honey Board for 10-Frame Hive.....	.50	4.55	44.50	70 lbs.
Unbound Zinc Queen Excluding Honey Board, 16x20 inches.....	.55	4.85	47.00	80 lbs.
Full Sheet Queen Excluding Zinc, 32x96 inches.....	4.40	-----	-----	1 lbs.
Queen Excluding Zinc cut to order, per square foot.....	.30	-----	-----	1/2 lb.
Zinc Strips; two rows holes; 18x18 1/2 inches.....	-----	.40	3.40	5 lbs.
Woven Wire Queen Excluding Strips, new style.....	-----	.85	7.75	10 lbs.

Alley's Queen and Drone Trap

The Alley Trap will automatically catch the drones in an apartment by themselves, from which they can readily be removed. The trap will also catch the queen when a swarm issues, and hold her confined until the apiarist can give her his attention. As she cannot get away, the bees will usually return to the hive and may be easily hived by removing the old hive and putting a new one for the swarm in its place, attaching the Alley Trap, with the queen in it, to the new hive. When the slide is drawn the queen can pass into the hive, and the swarm will enter the new hive without further attention. Weight 1 lb. Price, one, 75c; ten, \$6.75

We pay highest market price for beeswax; write for quotation.

Bee Entrance Guard

This is to a certain extent accomplishes the purpose of the Alley Trap, but has no compartment in which to trap or cage the queen or drones, only confining them to the hive.

Price: One, 25c; ten, \$2.25

Bee Escape Board

A Bee Escape Board or Super Cover with Bee Escape inserted. When ordering be sure to state whether for 8-frame hive or 10-frame hive.

With Single Bee Escape—One, 45c; ten, \$4.00
 With Double Bee Escape—One, 45c; ten, \$4.15
 Without Bee Escape, Flat—One, 25c; five, \$1
 Without Bee Escape, Nailed—One, 25c; five, \$1.10.

Van Deusen Hive Clamps

For fastening bottom to body of hive, also for fastening upper stories together when moving hives.

Price, with screws, 10 pairs, 50c

Hive Hooks

Used for the same purposes as the hive clamps. Made of malleable iron, and are neat and very convenient.

Price, with screws, 10 pairs, 35c

Two-Inch Hive Staples

Hive Staples are used the same as the Clamps and Hooks shown above, are much cheaper, and are really better, as they are more easily attached and do not project over the sides. The staples should be placed in a diagonal position at each end, so that they will brace against each other. They are two inches across the top and the points are about three-quarters of an inch long.

Price: 1 lb., 30c; 5 lbs., \$1.25

Manum's Swarm Catcher

The most practical device for catching swarms. It is to be attached to a long pole and when the swarm is clustered on a limb, the open basket is pushed up under them. A quick jar on the limb will cause them to drop into the basket, and the lid is closed by raking it against a limb. It is then propped up in the shade near by, and any outside bees will soon cluster on the outside of the basket.

Price, without pole, \$1.70

Swarming Box

This is one of the best devices for hiving bees. It is the nature of bees to go into a box, and those that cannot get in will cluster on the outside. It is to be attached to a pole, the same as the Manum's Swarm Catcher. The cross pieces serve as legs and handles.

Price, without pole, 90c

Porter Bee Escape

No beekeeper can afford to be without bee escapes as they are great labor savers when taking off honey. They make it unnecessary to shake heavy supers to get the bees out, or to smoke them. The escape is used in connection with a bee escape board.

Price: One, 20c; doz., \$2.00; postpaid

Double Porter Bee Escape

The Double Bee Escape is for the same purpose as the Single, but has two exits instead of one, allowing the bees to go out in case one of the exits becomes clogged.

Price: One, 25c; doz., \$2.25; postpaid

Porter Honey House Escape

This escape is for use in doors and windows of extracting rooms, allowing the bees to go out and preventing their return.

Price: One, 25c; doz., \$2.60; postpaid

PAT. OCT. 10, 1910
 by Roberts &
 Hartwick
 CARROLLTON, ILL.

Hives, Supers, Covers, etc., are packed in bundles of five, in the flat, with nails and instructions for setting up. The price of five will apply only on five or multiples of five. When one, or less than five, is ordered, it will be mailed up, and the price shown for one will apply.

Lewis Section Honey Boxes

The G. B. Lewis Co. Honey Sections are noted as being the best. They are made of Wisconsin Basswood, which is white, tough, and admits of a highly finished polish. Extreme care is used in making them, and they are practically perfect in every way. They are polished on both sides, are of exactly the same thickness, and the grooves are cut to a uniform depth, so that thousands may be folded without breaking one. If the grooves were cut a trifle too deep, or not deep enough, the sections would be liable to break when folding, or if not cut absolutely square the section would not be square when folded.

Only the whitest and clearest basswood is used for making sections. After they are completed and polished they are sorted carefully and every section showing the slightest defect or discoloration is graded No. 2. The G. B. Lewis Co. No. 2 Sections are better than the No. 1 Sections made by some other manufacturers.

BEEWAY SECTIONS

The $4\frac{1}{4} \times 4\frac{1}{4} \times 1\frac{1}{2}$ Two-Beeway Section is the standard, and is the style that we always furnish when the order does not specify otherwise. We can also furnish the one, three, and four-beeway sections in this size, and can furnish them in either No. 1 or No. 2 grade.

PLAIN SECTIONS

The following Plain or No Beeway Sections are carried in stock: $4\frac{1}{4} \times 4\frac{1}{4} \times 1\frac{1}{2}$, $4 \times 5 \times 1\frac{1}{2}$, and $3 \times 5 \times 1\frac{1}{2}$. We have these in No. 1 grade only.

The G. B. Lewis Co. manufactures other styles, but there is little demand for styles other than the above, and we do not carry them in stock. However, if they are required, we can procure them. Write for prices.

A	$4\frac{1}{4}$	OPEN 1 SIDE
B	$4\frac{1}{4}$	OPEN 2 SIDES
C	$4\frac{1}{4}$	OPEN 3 SIDES
D	$4\frac{1}{4}$	OPEN 4 SIDES
E	$4\frac{1}{4}$	PLAIN
F	$4 \times 5 \times 1\frac{1}{2}$	PLAIN
G	$3 \times 5 \times 1\frac{1}{2}$	PLAIN

Sections	$4\frac{1}{4} \times 4\frac{1}{4} \times 1\frac{1}{2}$ Two-Beeway			One, Three or Four-Beeway			Plain or No-Beeway	
	No. 1 Grade	No. 2 Grade	Weight	No. 1 Grade	No. 2 Grade	Weight	No. 1 Grade	Weight
100 Packages of	\$1.10	\$1.05	7 lbs.	\$1.15	\$1.10	7 lbs.	\$1.10	6 lbs.
500	4.10	3.85	35 lbs.	4.25	4.00	35 lbs.	4.05	30 lbs.
1,000	7.90	7.45	70 lbs.	8.15	7.70	70 lbs.	7.60	60 lbs.

If sections are required in quantities of five thousand or more, please write for prices.

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 over-production of drones, there is no question but that it pays every beekeeper to use it.

Medium Brood Foundation is recommended for use in brood frames and extracting frames only. If the aim is only to secure straight combs, and to accomplish it as cheaply as possible, a strip one inch wide and sixteen and one-half inches long securely fastened in the center of the top bar will be sufficient. The objection to this plan, however, 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 beekeepers 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 make the effort 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 or when colonies are moved, or when honey is to be extracted from them. To obtain satisfactory combs it is in all cases absolutely necessary to have the hives standing level sidewise. Light Brood Foundation

Fig. 1.

Fig. 2.

Fig. 3.

should be used in full sheets only when the frames are wired.

Thin Surplus and Extra Thin Surplus 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 in top and a very narrow starter ($\frac{1}{2}$ inch) on the bottom. Fig. 2 shows another form of starter commonly used, and for which we recommend the use of Thin Surplus. Fig. 3 is the one referred to above, and for which Extra Thin Surplus is recommended. As shown, the section is provided with a narrow bottom starter of about $\frac{1}{8}$ of an inch, and a full top starter reaching to within about $\frac{1}{4}$ inch of the bottom starter. This method is considered the most desirable of any and is used by many large beekeepers.

COMB FOUNDATION

	Size of sheets	Sheets per lb.	Per pound. 1 lb.	Per pound. 5 lbs.	In lots of 10 lbs. 25 lbs.
Medium Brood Foundation	$16\frac{1}{2} \times 7\frac{7}{8}$ in.	7 to 8	\$0.75	\$0.72	\$0.70 \$0.68
Light Brood Foundation	$16\frac{1}{2} \times 7\frac{7}{8}$ in.	9 to 10	.80	.74	.72 .70
Thin Surplus Foundation	$16\frac{1}{2} \times 3\frac{3}{8}$ in.	28 to 29	.85	.79	.77 .75
Extra Thin Surplus Foundation	$16\frac{1}{2} \times 3\frac{3}{8}$ in.	31 to 32	.90	.82	.80 .78

If Foundation is to be shipped by parcel post add sufficient to pay postage. One pound of foundation weighs about one and one-half pounds, including packing.

Division Board

A Division Board is included in each 8-frame hive body, as it is necessary to fill out the space properly after all eight frames are in place. It is not included with the 10-frame hive bodies, as the ten frames fill the space. However, we are listing them separately for those who wish a few for the purpose of reducing brood space in case of weak swarms. This new style is a great improvement over others. As shown in the illustration, it is metal bound at the ends, the steel binding also forming the hanger. This will be appreciated by those who have had trouble with the wooden projections breaking off. The metal ends are self spacing on one side and flat on the reverse side, so that the board may be spaced from the frame, or not, as is desired.

breaking off. The metal ends are self spacing on one side and flat on the reverse side, so that the board may be spaced from the frame, or not, as is desired.

DIVISION BOARDS

	Price 1	Price 5	Price 10	Weight 10
Division Boards, full depth.....	\$0.15	\$0.55	\$1.10	15 lbs.
Division Boards, shallow, for shallow extracting supers.....	.15	.50	1.00	10 lbs.

Section Scraping Knife

The first especially constructed knife for this important work. All kinds of make-shift knives are being used by beekeepers for cleaning filled honey sections. The principal drawback to most of them is that the hand is too far away to properly guide the cutting edge, and the percentage of mutilated sections is large. As shown in the illustration, the handle comes well up to the point of the knife, giving the operator complete control over it.

Price, 35c

Bingham Uncapping Knife

The new Bingham honey knife is a great improvement over the old style, as the handle fits the hand and the operator can use it all day without fatigue.

Price, 95c

Steam-Heated Uncapping Knife

This steam-heated uncapping knife is most desirable in cool weather. For small quantities to be extracted in warm weather the regular Bingham honey knife will do the work very nicely.

The new cold handle fits the hand perfectly and does not become hot when used with steam or hot water. Both knives are of the best materials and workmanship.

Price: \$3.35, (Weight 3 lbs.); With Oil Stove and Generator (Weight 8 lbs.), \$6.75.

Hive Tent

Constructed of netting, and very convenient for setting over a hive when introducing queens, transferring, etc., when robbers are so troublesome that the work could not be done otherwise. It is 5x5x6 feet high, and weighs about six pounds.

Price, \$3.50

Handy Section Press

A low-priced device for folding sections. It can be attached to the wall or a bench, and is very handy if you have only a small quantity of sections to fold. It is regularly furnished adjusted for $4\frac{1}{4} \times 4\frac{1}{4} \times 1\frac{1}{8}$ sections, but will be furnished for other sizes if so ordered. Weight, 1 lb.

Price, 75c

Lewis Foundation Fastener

The best device on the market for fastening starters in sections. It can be securely fastened to a wall or table, and foundation can be easily, accurately and securely fastened. It can be adjusted for any style and width of section. The shelf can be adjusted for any ordinary lamp, and we furnish it without lamp. Weight, $7\frac{1}{2}$ lbs.

Price, \$1.50

Lewis Section Squeezer

If you have a large amount of sections to fold, you should certainly have one of these machines, for there is no device equal to it for folding machines. It is simple in operation, compact, and can very easily be adjusted for any size section. When sent out it is adjusted for $4\frac{1}{4} \times 4\frac{1}{4} \times 1\frac{1}{8}$ sections, but can be readjusted for any other size in a few minutes. In operation, all that is required is to place the section in the metal rest, press forward forcing the dovetailed joint under the spool, and it will spring back free. Weight 13 lbs.

Price, \$3.75

When ordering goods to be shipped by parcel post do not fail to remit amount to pay postage.

This is the most simple device for folding sections, and is thoroughly practical for small quantities. It is made to fold the regular $4\frac{1}{4} \times 4\frac{1}{4}$ sections only. Weight 9 lbs. Price, \$2.00

Lewis Section Former

This is also a very good section former, and has been used by many large beekeepers with entire satisfaction. It is a foot power machine, and unlike other low-priced devices for folding sections, it is adjustable for any size section. Weight $8\frac{1}{4}$ lbs. Price, \$2.20

Colorado Section Press

Parker Fastener

A simple and low-priced device for the small beekeeper, for fastening starters in $4\frac{1}{4} \times 4\frac{1}{4}$ sections. Weight 1 lb. Price, 40c

Daisy Foundation Fastener

An old style device and not as good in any way as the Lewis Foundation Fastener. Furnished for $4\frac{1}{4} \times 4\frac{1}{4}$ sections. Extra plates for $3\frac{5}{8}$ or 4 inch sections 20c each. Weight $6\frac{1}{2}$ lbs. Price, with lamp, \$1.75; without lamp, \$1.25

Woodman's Section Fixer

With this combined section press and foundation fastener sections can be properly and rapidly folded into shape and top and bottom comb foundation starters attached all at one handling. It is constructed principally of pressed steel and is strong, compact and light. Regularly furnished for $4\frac{1}{4} \times 4\frac{1}{4}$ sections. If wanted for 4x5 sections so specify in the order. Weight $4\frac{1}{2}$ lbs. Price, with lamp, \$3.60; without lamp, \$3.10

Van Deusen Wax-Tube Fastener

This wax-tube is very handy for fastening foundation to plain top-bars and for full sheets of foundation cut to fit the section exactly. It will feed a fine stream of hot wax between the foundation edge and the wood, cementing them together. Weight 5 oz. Price, 30c

Hive Scraper

For scraping hives, supers, bottom-boards, etc. It has a flat steel blade and a wooden handle. Weight $\frac{1}{2}$ lb. Price, 25c

Hive Tool

A very handy tool for use in the apiary, used as a scraper or a pry. Made of good steel, nickel plated. Weight 6 oz. Price, 50c

German Bee Brush

Brushes are used for brushing bees off the combs. This is the most popular style. The strands are soft and pliable and the brush is long enough to reach clear across an ordinary Langstroth size frame. Price, 30c

Cogshall Bee Brush

One of the oldest styles of bee brushes, and not considered to be as good as either the Dixie or the German bee brushes. The strands are thinned out and long, so as to give a soft, pliable sweep. Weight 6 oz. Price, 35c

Spur Wire Imbedder

For imbedding wire in foundation when frames are wired. This is the best device for the purpose. We recommend that it be used hot, so that each tooth melts a small amount of the wax and cements it to the wire. Weight $\frac{1}{4}$ lb. Price, 30c

Dixie Bee Brush

Another style of brush which is quite popular. It is a double brush, and has a strong wooden handle. Weight 6 oz. Price, 25c

Bingham Bee Smokers

The Bingham Bee Smoker has been on the market for nearly forty years, and is the standard in this and many foreign countries. It leads in such features as metal legs, metal binding on the bellows, turned edges, a new valve spring in the bellows valve, steel fire grate with sufficient openings for air and draft. The cover sets on the inside of the fire pot and is self-cleaning, as the liquid creosote runs back into the fire and is burned up.

The Bingham Smoker, unlike other smokers, is provided with a valve in the bellows, which makes it respond to the least delicate touch, giving as much or as little smoke as is required. The connecting blast tube is so arranged that it gives a stronger blast than others, and never back-fires. The larger sizes are best, as they hold more fuel, give more smoke, require filling less often, and are especially recommended for those who work with their bees several hours at a time. The two larger sizes are provided with hinged covers.

BEE SMOKERS.

Stove. Wt. Price.

Bingham, Smoke Engine.....	4 in.	1¾ lbs.	\$1.40
Bingham, Doctor	3½ in.	1½ lbs.	1.10
Bingham, Conqueror	3 in.	1½ lbs.	.95
Bingham, Little Wonder.....	2½ in.	1 lb.	.75
Cornell, Standard	3¼ in.	1¾ lbs.	1.05
Cornell, Junior	2½ in.	1 lb.	.65
Clark Smoker		1¾ lbs.	.75

NEW BINGHAM
BEE SMOKER
Patented

Bee Gloves

These gloves are well made of heavy material which is practically sting-proof, with long sleeves. Made in three sizes—large, medium and small. Weight 9 oz. Price, 80c

Muth Ideal Bee Veil

Made of best quality lightweight wire and cambric. Fits nicely on either a straw or derby hat. There is no chance for a bee to crawl in, nor can the wind blow the wire against the face.

BEE VEILS.

Price.

Muth Ideal Bee Veil	\$.90
Cotton Tull Bee Veil	.80
Cotton Tulle with Silk Face Bee Veil	.95
All Silk Bee Veil	1.20
Mosquito Bar Bee Veil	.60
Globe Bee Veil	1.20
Extra Net for Globe Veil	.95

Alexander Feeder

This is undoubtedly the best and most popular feeder. If desired, it may be left in the hive the entire season, and while there, 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. For price see next page.

Miller Feeder

This feeder is placed inside of the super on top of the brood frames. It has two compartments for syrup. When feeding is left until the last moment, this feeder is a good one, for with it one can feed from ten to twenty-five pounds of syrup at a single feed. For price see next page.

Division Board Feeder

Has the same outside dimensions as a brood frame or division board, and is to hang in the brood chamber in the same way. To feed, the hive cover is shoved back just far enough to expose the opening in the top, and the syrup is poured in from a coffee pot, without exposing the cluster or using smoke.

Simplicity Feeder

The Simplicity Feeder may be placed at the entrance at night, over the brood frames, or in the brood nest by removing two of the frames. For prices see next page.

All prices are subject to change. Price list supplement will be mailed on request.

Thale's Regulative Vacuum Feeder

This feeder can be instantly attached by simply inserting the feed pan through the entrance of the hive, and it does not block the entrance. It feeds on the inside, underneath the cluster; will feed thick or thin syrup, and does not clog or overflow. The feed slide can be instantly regulated from the outside of the hive to feed either fast or slow without removing the feeder or disturbing the bees. It can be set to empty in four hours or four days, always feeding the exact amount for which it is set.

As there is only a certain amount in the food pool all the time to which the bees have access, they cannot glut the entire supply. It will feed in freezing weather, and there is no opening of the hive to refill, as it is only necessary to lift off the empty bottle and replace it with a filled one.

Boardman Entrance Feeder

To be shoved up close to the entrance on one side, extending the spurs far enough into the entrance to prevent robber bees from without from passing the guards from within. A Mason jar, with perforated cap, inverted, allows the feed to pass through no faster than the bees can take it. Furnished without jars, but with cap.

France Pepper-Box Feeder

Simply a tin can with perforated cover, which can be filled with feed, inverted and placed over the frames. Furnished in two sizes—one pint and one quart.

through it. It is the only wax extractor that makes a practically clean and perfect job of wax extracting, and accomplishes the desired result with but one handling of the slumgum. Beekeepers with any considerable number of colonies cannot afford to be without one of these presses, for it will pay for itself in one or two seasons, besides being used as a honey press, uncapping can, and tank for liquifying honey. A pamphlet with further information and complete directions will be mailed on request. Weight, 150 lbs. Price, \$30.00

Doolittle Solar Wax Extractor

A solar wax extractor is arranged for melting the combs by the rays of the sun, and does not require any attention but the filling and emptying. It is adapted for melting burr and brace combs and scrapings, but is not suitable for rendering old combs and scrapings containing dirt. Weight, 30 lbs. Price, \$7.00

Dadant Uncapping Can

This is made up of two twenty-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. After the accumulations have drained off for several days, they may be removed from the upper compartment and dumped; the honey may be drawn off from below. Weight, 56 lbs. Price, \$14.50

Comb Bucket

For carrying frames to the extracting house. Weight, 5 lbs. Price, \$2.00

Carlin Foundation Cutter

For cutting one sheet of foundation at a time. Weight, 3 oz. Price, 30c

Plenty of equipment is a good investment, and the best is the most economical.

Honey Extractors

These extractors are the latest and best make. The Novice is intended for those having a small number of colonies. It is moderate in price and just as well built as the larger machines, the difference being in the size and that it is non-reversible. It is equipped for two frames, and to reverse these frames it is necessary to take them out, reverse, and replace.

The Cowan is built for those having a larger number of colonies. This is a reversing machine, so that the frames of comb do not have to be taken out to be reversed. These extractors have ball bearings and slip-gear, and are equipped with two baskets for two frames. The Automatic Reversible is a still heavier and larger machine, being equipped with four baskets so that four frames of combs can be handled at one time. All that is necessary to reverse the baskets is a slight pressure on the brake, without stopping the machine. These machines, like the others, have ball bearings and slip-gear

HONEY EXTRACTORS

	Weight	Price
No. 5, 2-Frame Novice, for Langstroth or Hoffman Frames standing on end, or any other frame not over 9½ in. deep or 18¼ in. long, top bar 20 in. long.....	45 lbs.	\$17.50
No. 15, 2-Frame Cowan, for two frames same as above.....	100 lbs.	24.00
No. 25, 4-Frame Automatic, for Langstroth or Hoffman Frames.....	210 lbs.	52.25
No. 30, 6-Frame Automatic, for Langstroth or Hoffman Frames.....	300 lbs.	68.20

Miller Queen Catcher and Introducing Cage

Any one who is timid about catching the queen by the wings can slip this cage over her, when she will crawl up and the cage can then be closed with the plug.

Price, 10c each.

West's Cell Protector and Spiral Cage

These Cell Protectors are used to prevent the bees from gnawing and tearing down cells given them during certain times of the year.

The Spiral Cages can be slipped over the Cell Protectors to hold the virgin queen after she hatches and until disposed of.

Cell Protector, 5c each; Spiral Cage, 10c each.

Benton Queen Mailing Cage

These are used for mailing queens. They are furnished complete without candy. The covers bear complete directions for introducing the queen.

Price, 10c

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.

Price, One, 10c; Ten, 40c.

Frame Wedge Driver

Used for forcing the wedge properly and evenly down into the groove in the top bar in Hoffman Brood Frames. The time saved will pay for this device in a very short time.

The reverse side is arranged to be used in imbedding wires into the foundation when full sheets of foundation are used in the frames.

Weight, 5 lbs.

Price, \$1.00.

Prices are F. O. B. Seattle or Portland. If goods are to be shipped by parcel post, or by freight or express to a station at which there is no agent, an amount sufficient to pay transportation charges must be remitted in addition to prices.

Section Holder Nailing Form

A very handy little device for nailing section holders for 4¼x4¼ sections, making them accurate, so that the sections fit perfectly. Beekeepers understand the importance of this, for when there is a slight variation the sections do not fit.

Weight, 1¼ lbs.

Price, 75c.

these cases should be packed in to absorb the jar when handled. rугated paper and plain paper.

Size—Sections	10	100	Wt. 100
24 4¼x4¼x1½ Sections.....	\$3.10	\$28.60	360 lbs.
24 4¼x4¼x1½ Sections.....	2.95	27.40	340 lbs.
24 4x5x1½ Sections.....	2.95	27.40	340 lbs.
24 3½x5x1½ Sections.....	2.95	27.40	340 lbs.

Safety Shipping Cases

The Safety Shipping Case is the same as the Regular style and in addition includes special Safety Cartons made of heavy pulp board. It is especially adapted for single case shipments, or for shipments of less cases than is required to fill a carrier. It is claimed that the immunity from damage to honey shipped in these cases over shipments made in the regular cases without carriers will more than make up for the additional cost. The corrugated paper lining is the same as is provided with the regular style, and is used in the same manner. The Safety Cartons still further protect the honey against damage, and in addition permit of the retailing of comb honey in a very neat and sanitary manner.

SAFETY SHIPPING CASES.

	10	100	Wt. 100
For 24 4¼x4¼x1½ Sections	\$4.60	\$43.80	580 lbs.
For 24 4¼x4¼x1½ Sections	4.50	42.60	560 lbs.
For 24 4x5x1½ Sections	4.50	42.60	560 lbs.
	120	1200	Wt. 120
Extra Safety Cartons	.80	7.10	5 lbs.

One Case, Two Cans. Weight 10 lbs.....Write for price.
Ten Cases, Two Cans Each. Weight 100 lbs.....Write for price

One Gallon Honey Cans

One gallon square cans with screw caps, packed in strong shipping cases containing twelve cans.

One Case, Twelve Cans, 20 lbs.....Write for price
Ten Cases, Twelve Cans Each.....Write for price

Rauchfuss Foundation Cutting Box

This box will hold about forty sheets of Surplus Foundation 3½ inches wide, and with the corrugated edge knife, which is included, the whole lot of sheets may be perfectly cut at one time. The saw kerfs are placed ⅝ inch apart, therefore foundation may be cut any multiple of ⅝ inch. The best size is 3½ inch pieces for the top sheet in sections, and a ⅝ inch piece for the bottom starter. This leaves sufficient space between to allow for stretching of foundation, which is liable to occur in warm weather. The knife should be lubricated with either diluted honey or soapsuds to prevent the wax from sticking to it. The cutting is done with a sawing motion, with but little pressure. Weight, 3 lbs. Price, \$1.20.

To the beginner who wishes to learn the science and practice of profitable beekeeping, and to the experienced apiarist who wishes to add to his knowledge or take advantage of the experience of others, we recommend the books "THE HONEY BEE" and "ABC AND XYZ OF BEE-KEEPING," listed on following pages. These books are practical as well as scientific, and the beginner will find in them information in regard to every detail of the business.

PLANTING TABLE FOR VEGETABLE GARDEN

SEED	Quantity Required	Depth	Dist. Apart		When to Sow	Ready for Use
			Rows,	In row		
Artichoke, Globe, Seed.....	1 oz. for 500 plants	1 in.	1 ft.	3 in.	Spring	Second summer
Artichoke, Globe, Plants.....			3 ft.	2 ft.	Spring	Summer
Artichoke, Jerusalem.....	600 lbs. per acre.....	3 in.	3 ft.	2 ft.	Early spring.....	Late summer
Asparagus, Seed	1 oz for 500 plants	1 in.	1 ft.	3 in.	Early spring.....	Third spring
Asparagus, Plants			4 ft.	14 in.	Spring	Second spring
Beans, Dwarf	1 lb. to 100 feet.....	2 in.	2 ft.	4 in.	Late spring.....	45 to 65 days
Beans, Pole	1 lb. to 150 hills.....	2 in.	4 ft.	3 ft.	Late spring.....	75 days
Beets, Table	1 oz. for 50 feet.....	1 in.	1 ft.	3 in.	Early spring.....	65 days
Broccoli	1 oz. for 2000 plts.....	in.	2 ft.	12 in.	Spring	Winter
Brussels Sprouts	1 oz. for 2000 plts.....	in.	2 ft.	18 in.	Early spring.....	Fall and winter
Cabbage	1 oz. for 2000 plts.....	in.	2 ft.	18 in.	Early spring.....	90 to 150 days
Carrot	1 oz. for 125 feet.....	in.	1 ft.	2 in.	Early spring.....	Early summer
Cauliflower	1 oz. for 3000 plts.....	in.	2 ft.	18 in.	Early spring.....	110 days
Celeriac	1 oz. for 5000 plts.....	in.	2 ft.	5 in.	Early spring.....	Fall and winter
Celery	1 oz. for 5000 plts.....	in.	3 ft.	6 in.	Spring	6 months
Chervil	1 oz. for 100 feet.....	in.	1 ft.	4 in.	Early spring.....	Summer
Chicory	1 oz. for 100 feet.....	in.	1 ft.	3 in.	Early spring.....	4 months
Collards	1 oz. for 2000 plts.....	in.	18 in.	14 in.	Spring	Fall
Corn, Sweet	1 lb. for 200 hills.....	in.	3 ft.	3 ft.	Late spring.....	80 to 100 days
Corn Salad	1 oz. for 50 feet.....	in.	1 ft.	3 in.	Early spring.....	100 days
Cress, Peppergrass	1 oz. for 150 feet.....	in.	1 ft.	3 in.	Spring	Summer
Cucumber	1 oz. for 100 hills.....	1 in.	6 ft.	4 ft.	Late spring.....	3 to 4 months
Egg Plant	1 oz. for 2000 plts.....	in.	2 ft.	18 in.	In hot bed.....	160 days
Endive	1 oz. for 400 feet.....	in.	18 in.	8 in.	Spring	Summer
Horseradish, Roots		4 in.	2 ft.	12 in.	Spring	Fall
Kale	1 oz. for 200 feet.....	in.	18 in.	12 in.	Spring or fall.....	45 days
Kohl-Rabi	1 oz. for 150 feet.....	in.	18 in.	6 in.	Spring or fall.....	4 months
Leek	1 oz. for 300 feet.....	in.	14 in.	4 in.	Early spring.....	Late summer
Lettuce	1 oz. for 400 feet.....	in.	18 in.	8 in.	Early spring.....	65 days
Melon, Musk	1 oz. for 60 hills.....	1 in.	6 ft.	4 ft.	Late spring.....	4 months
Melon, Water	1 oz. for 30 hills.....	1 in.	8 ft.	6 ft.	Late spring.....	4 months
Okra, or Gumbo.....	1 oz. for 100 feet.....	1 in.	4 ft.	2 ft.	Late spring.....	3 months
Onion, Seed	1 oz. for 300 feet.....	in.	1 ft.	3 in.	Early spring.....	4 to 5 months
Onion, Sets	1 lb. for 40 feet.....	1 in.	1 ft.	1 1/2 in.	Early spring.....	Spring
Parsley	1 oz. for 300 feet.....	in.	1 ft.	4 in.	Early spring.....	Summer
Parsnip	1 oz. for 400 feet.....	in.	18 in.	3 in.	Early spring.....	4 months
Peas	1 lb. for 50 feet.....	in.	3 ft.	2 in.	Early spring.....	8 to 12 weeks
Pepper	1 oz. for 1500 plts.....	in.	2 1/2 ft.	18 in.	In hot-bed.....	5 months
Potato	5 lbs. for 100 feet.....	4 in.	2 1/2 ft.	18 in.	Spring	July to Sept.
Pumpkin	1 oz. for 30 hills.....	2 in.	8 ft.	8 ft.	Late spring.....	4 to 5 months
Radish	1 oz. for 100 feet.....	in.	1 ft.	2 in.	Early spring.....	30 to 45 days
Rhubarb, Seed	1 oz. for 50 feet.....	in.	1 ft.	4 in.	Spring	2 years
Rhubarb, Plants		6 in.	4 ft.	3 ft.	Spring	1 year
Ruta Baga	1 oz. for 150 feet.....	in.	15 in.	6 in.	Spring & sum'r.....	3 months
Salsify	1 oz. for 50 feet.....	in.	1 ft.	2 in.	Early spring.....	5 months
Spinach	1 oz. for 200 feet.....	in.	1 ft.	3 in.	Spring & fall.....	45 days
Squash, Bush	1 oz. for 25 hills.....	in.	4 ft.	4 ft.	Late spring.....	65 days
Squash, Winter	1 oz. for 12 hills.....	in.	12 ft.	12 ft.	Late spring.....	125 days
Tomato, Seed	1 oz. for 2000 plts.....	in.			In hot-bed.....	150 days
Tomato, Plants			4 ft.	4 ft.	Late spring.....	
Turnip	1 oz. for 150 feet.....	1/2 in.	1 ft.	3 in.	Spring & sum'r.....	60 to 75 days

QUANTITY OF FARM SEEDS USUALLY SOWN

Lbs. Per Acre		Lbs. Per Acre	
Alfalfa	10 to 20	Grass, Meadow Fescue.....	25 to 30
Alsike	6 to 10	Grass, Brome Grass.....	30 to 40
Artichokes, Jerusalem	400 to 600	Grass, Crested Dog's Tail.....	20 to 30
Barley	100	Grass, Tall Meadow Oat.....	20 to 25
Beet, Mangel or Sugar.....	5 to 6	Grass, Velvet, or Mesquite.....	40 to 50
Broom Corn	8 to 12	Grass, Sheep's Fescue.....	35 to 40
Buckwheat	40 to 60	Grass, Fine Leaved Fescue.....	30
Carrot, Stock	3 to 4	Grass, Hard Fescue.....	30
Clover, Alsike	6 to 10	Grass, Red or Creeping Fescue.....	30
Clover, Sweet	20 to 30	Grass, Pasture Mixtures.....	30
Clover, Red	8 to 15	Grass, Hay Mixtures.....	30
Clover, Mammoth Red.....	8 to 15	Grass, Sudan	16 to 24
Clover, Crimson	10 to 15	Hemp	40 to 50
Clover, White, for pasture.....	8 to 10	Kale, Thousand Headed.....	1 to 2
Corn, Field	12 to 20	Kaffir Corn	6 to 10
Corn, Fodder, in drills.....	50 to 75	Mangel Wurzel	5 to 6
Corn, Pop	5 to 10	Millet	20 to 50
Emmer, or Speltz	100	Oats	75 to 100
Feterita	10	Peas, Field	90 to 120
Flax, for seed	30	Potatoes	400 to 600
Flax, for fiber	50	Rape, Dwarf Essex	3 to 5
Grass, Kentucky Blue, for pasture.....	20 to 30	Ruta Baga	2 to 3
Grass, Canadian Blue, for pasture.....	20 to 30	Rye	90 to 120
Grass, Timothy	10 to 20	Soja Beans	30
Grass, Red Top, Unhulled.....	30 to 40	Sorghum, in drills.....	10
Grass, Red Top, Hulled.....	10 to 15	Turnip	2
Grass, English or Perennial Rye.....	30 to 50	Vetch, Common or Spring.....	60 to 100
Grass, Italian Rye	30 to 50	Vetch, Hairy or Winter.....	30 to 60
Grass, Orchard	40 to 60	Wheat	90 to 120

BOOKS

The Best Authorities on Farming and Gardening

Following is a complete and up-to-date list of the best works on agriculture, horticulture, dairying, poultry keeping, stock raising, etc. Those printed in capitals are carried in stock, and orders will be filled promptly. Others are mailed direct from the publishers, and should reach the purchaser about ten days after the order is received by us. Prices include postage except when otherwise specified.

Poultry, Pigeons, and Pets

SUCCESSFUL POULTRY KEEPING.	176 pages, 9x12.....	\$1.00
POULTRY HOUSES AND FIXTURES.	180 illustrations.....	.75
ARTIFICIAL INCUBATING AND BROODING.	96 pages. Ill.....	.50
EGGS AND EGG FARMS.	96 pages, 9x12. Illustrated.....	.50
THE CHICK BOOK.	80 pages, 9x12. Illustrated.....	.50
THE LEGHORNS.	144 pages, 9x12. Splendidly illustrated.....	1.00

THE PLYMOUTH ROCKS.	All varieties. 144 pages, 9x12. Illustrated.....	1.00
THE ORPINGTONS.	80 pages, Ill.....	.75
DUCKS AND GEES.	104 pages, 9x12.....	.75
THE BANTAM FOWL.	68 pages. Ill.....	.50
THE WYANDOTTES.	160 pages. Ill.....	1.00
EGG RECORD AND ACCOUNT BOOK.	.....	.25
RELIABLE POULTRY REMEDIES.	.....	.25
A Living from Eggs and Poultry.	For the beginner. New. 188 pages, 5x7. Ill.....	1.00
Profits in Poultry.	352 pages. Cloth.....	1.00
Poultry Diseases.	By E. J. Wortley.....	.75
Poultry Appliances and Handicraft.	.....	.60
Poultry Architecture	.....	.60
Profitable Poultry Production.	.....	1.50
American Bird Fancier.	116 pages. Paper.....	.50
Canary Birds.	110 pages. Paper.....	.50

RHODE ISLAND REDS.	88 pages. Ill.....	.75
THE ASIATICS.	For the fancier of Brahmas, Cochins and Langshans. Ill.....	.50
TURKEYS.	Their care and management.....	.75
STANDARD OF PERFECTION.	Latest revised edition. The official guide for judging, mating and breeding. Cloth.....	2.00
Poultry Breeding and Management.	By Dryden. New. 416 pages. Ill. Cloth.....	1.60
Making Poultry Pay.	324 pages. Ill.....	1.00
The New Egg Farms.	By H. H. Stoddard.....	1.00
Poultry Feeding and Fattening.	.....	.60
Squabs for Profit.	150 pages. Cloth.....	.60
Turkeys and How to Grow Them.	.....	1.00
The Dogs of Great Britain, America and Other Countries.	370 pages, 5x7.....	1.50

Bees

THE HONEY BEE.	By Langstroth and Dadent. A thorough course in beekeeping; scientific, but easily understood by the beginner. 575 pages; 229 engravings; cloth bound. Postage additional; weight 2 1/4 lbs.	1.50
BEE PRIMER.	By Dadent.....	Postpaid, .15
Advanced Bee Culture.	W. Z. Hutchinson.....	.90
Fifty Years Among the Bees.	.....	.90
Scientific Queen Rearing.	By Doolittle.....	.70
American Bee Journal.	Monthly. Per year.....	1.00
Gleanings in Bee Culture.	Monthly. Year.....	1.00

ABC AND XYZ OF BEE CULTURE.	A new edition of this popular book. 900 pages; profusely illustrated. Weight 4 lbs. 6 oz. Postage additional.....	2.50
Bee Keeping.	By E. F. Phillips.....	2.00
Productive Bee Keeping	.....	2.00
How to Keep Bees.	For the amateur.....	1.20
First Lessons in Bee Keeping	.....	.90
Beekeepers' Review.	Monthly. Per year.....	1.00
Quimby's New Beekeeping.	.....	1.00

Cattle and Dairying

Profitable Dairying.	By C. L. Pack.....	.75
First Lessons in Dairying	.....	.60
The Manufacture of Ice Cream and Ices.	.....	2.00
Practical Dairy Bacteriology	.....	1.25
The Science and Practice of Cheese Making.	520 pages. Illustrated.....	1.75
Questions and Answers on Buttermaking.	.....	.60
Clean Milk.	146 pages. Cloth.....	1.50
The Dairyman's Manual.	478 pages. Ill.....	1.50
Keeping One Cow.	A collection of essays.....	1.00

The Management and Feeding of Cattle.	By Prof. Thomas Shaw. 496 pages. Cloth.....	2.00
A Dairy Laboratory Guide	.....	.60
Modern Methods of Testing Milk and Milk Products.	By L. L. Vanslyke. 214 pages.....	1.00
The Business of Dairying.	.....	1.25
Questions and Answers on Milk and Milk Testing.	100 pages, 5x7.....	.60
Guenon's Treatise on Milk Cows.	.....	1.00

Live Stock

Judging Farm Animals		2.25
American Cattle Doctor		2.00
Farm Stock.	By C. W. Burkett.....	1.50
First Principles of Feeding Farm Animals.	By C. W. Burkett. 348 pages. Ill.....	1.50
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