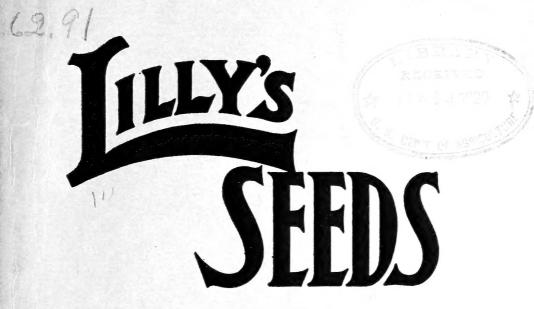
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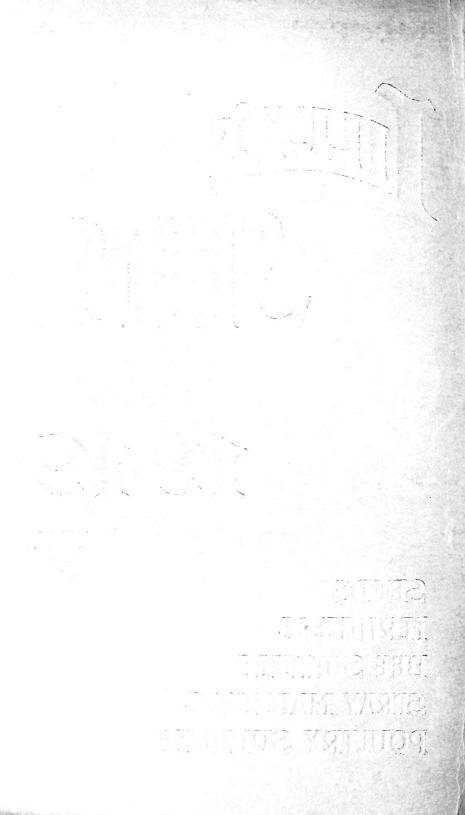


All 10c Packet Seeds 7½c Each



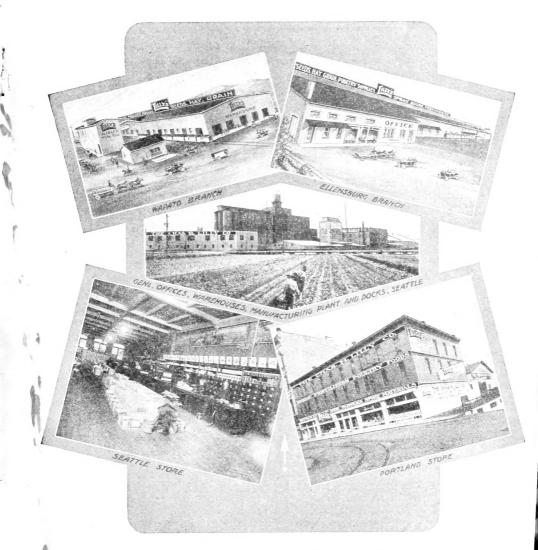
1919 ▼

SEEDS
FERTILIZERS
BEE SUPPLIES
SPRAY MATERIALS
POULTRY SUPPLIES





COMPLETE 1919 CATALOG





Established 1885 SEATTLE

Branches ELLENSBURG, WASH. WAPATO, - - WASH.

General Offices, Factory and Warehouses
Hanford St. and West Waterway
Seattle Retail Store
Pioneer Square, First and Cherry

Portland Branch
Front and Yamhill Sts.
PORTLAND ORE.



YOU and I

The War is won.

Whoever you are, and whoever I am our individual conscience tells us whether or not we did our part. Duty called many away from home to go "Over There," and offer their lives, and to such the rest of us bow in humble admiration—appreciation and thankfulness.

The peak of the demand for men in uniform, for ships, etc., has been reached and passed, but not so with foodstuffs. Now that the war is over the demands of millions of people in those devastated countries that have borne the brunt of the greatest of all wars in the history of the world, will be added to our own.

In our effort to meet this demand we will have the satisfaction of knowing that the things we produce will not be used to further destroy other lives and property. Instead every extra pound of food produced this year will be used to help restore life and health to some one in need and to those less fortunate than ourselves.

Thus it will be both patriotic and profitable to continue maximum production this season. In continuing this program we each have our part to do. No doubt you have already planned to do so, by planning your farm and garden arrangement. We have tried to anticipate your wants and have perfected our supply of seed in quantity and quality to give the best satisfaction possible.

This War was won by individual and mutual co-operation and service. This reconstruction period must be marked by the same spirit. In this spirit we want you to feel that the name means a co-worker of yours.

THE CHAS. H. LILLY CO.

P. S.—Are you puzzled about your ground? Your garden? Your trees? Your poultry? Your roses? The children's pigeons, squabs or rabbits? Pests that reduce your crop? How to insure a next winter's supply of eggs? What to spray and what to use? We invite you to write us your troubles. We'll put a specialist on the job and if there's an answer we'll help you to it.



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 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 vegetable 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 octasionally, 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, 70 pounds.

First and Second Zones. To any post office within 150 miles: 5c for first pound and 1c for each additional pound. Limit, 70 pounds.

Third Zone. More than 150 miles, less than 300 miles: 6c for the first pound, 2c for each additional pound. Limit, 50 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 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.



CANNING DIRECTIONS

Canned vegetables for use when fresh vegetables are not available have an assured place in household economy, and by this method any surplus of the garden may be used to advantage. All of the garden vegetables are wholesome and nutritious when properly canned, and if the directions given are followed all of them may be kept satisfactorily. There are several methods by which Vegetables may be canned. We believe, however, that what is known as the "cold-pack" method is the most satisfactory for general use. By this method, with a table showing the time required for cooking, any fruit or vegetable may be canned successfully.

The Home-Made Outfit.—A serviceable cold-pack home canning outfit may be made of materials found in any household. All that is necessary is a vessel to hold the jars or cans, such as a wash boiler or large tin pail. This vessel should have a tight fitting cover and be deep enough so that water will cover the top of the jars at least one inch. Provide a false bottom of wood or a wire rack to allow of free circulation of water under the jars. The wood bottom may be made of perforated boards or of lath or similar strips of wood nailed to cross pieces. A strip of wood around the edge of the rack will prevent the jars slipping off when lifting the tray out of the cooker. If furnished with handles made of heavy wire the tray may be lifted out of the cooker entirely for removing or replacing jars.

Containers.—All types of jars that seal perfectly may be used. It is suggested that use be made of those which one is accustomed or which may be already on hand. New rubbers should be purchased each year but the glass jars may be used indefinitely. Be sure that no jar is defective. The containers should be thoroughly clean. It is not necessary to sterilize them in steam or boiling water before filling them, for the reason that in the cold-pack process both the insides of containers and the contents are sterilized. The jars should be heated before the cold procedure in which in them. product is put in them.

Directions for Cold-Pack Method

The cold-pack method of canning is so simple and the directions so easily followed that almost any one may successfully can vegetables or fruit with it. The steps to be taken and the precautions to be observed are as follows:

Select sound vegetables and fruits. (If possible can them the same day they are picked.) Wash, clean and prepare them. Have ready, on the stove, a can or pail of boiling water. Place the vegetables or fruits in cheese-cloth, or in some other porous receptacle—a wire basket is excellent—for dipping and blanching them in the boiling water. Put them into the boiling water. (See time-table for blanching on next page.) After the water begins to boil, begin to count the blanching time.

The blanching time varies from one to twenty minutes, according to the vegetable or fruit. When the blanching is complete remove the vegetables or fruits from the boiling water and plunge them a number of times into cold water, to harden the pulp and check the flow of coloring matter. Do not allow to stand in cold water.

The blanching of vegetables removes excess acids, improving the flavor. It also causes some shrinkage, so that a larger quantity may be packed in a container. The blanching and cold dip cause vegetables to retain their original coloring, which enhances their appearance.

Pack the product into the containers, leaving about a quarter of an inch of space at the

With vegetables add one level teaspoonful of salt to each quart container and fill with boiling water.

Test the rubber by stretching or turning inside out. Fit on the rubber and put the lid in place. If the container has a screw top do not screw up as hard as possible, but use only the thumb and little finger in tightening it. This makes it possible for steam generated within to escape and prevents breakage. If a glass jar is used, snap the top bail only, leaving the lower bail loose during sterilization.

Place the filled and capped containers on the rack in the sterilizer. If the home-made or commercial hot water bath outfit is used, enough water should be in the boiler to come at least one inch above the tops of the containers, and the water, in boiling out, should never be allowed to drop to the level of these tops. Begin to count processing time when the water begins to boil.

Consult the time-table on next page, and at the end of the sterilizing period remove the containers from the sterilizer. Fasten covers on tightly at once turn containers upside down to test for leakage, leave in this position until cold and then store in a cool, dry place. Be sure that no draft is allowed to blow on glass jars as it may cause breakage.

If jars are to be stored where there is strong light wrap them in paper, preferably brown, as light will fade the color of products canned in glass jars, and sometimes deteriorate the food value.

Vegetable Canning in Cold-Pack

Vegetables may be divided into five classes, all the vegetables of each class being sterilized by practically the same process under the cold-pack method. These classes are: (1) vegetable greens; (2) roots and tubers; (3) tomatoes and corn; (4) pumpkin and squash; (5) pod vegetables, such as beans, peas and okra. Directions for these various classes are given herewith.

Vegetable Greens.—Besides spinach, dandelions and kindred greens this class includes cabbage, Brussels sprouts and cauliflower. Greens should be trimmed, the old leaves and coarse stems removed, and the greens then blanched in steam from 15 to 20 minutes, in a regular steamer or in any other closed receptacle in which the greens will be suspended or raised above the water. After blanching they should be plunged into cold water. They are then packed tight in containers. If one wishes one may season with meat, olive oil, etc., to taste. Add hot water to fill up the crevices and sterilize two hours in the hot-water bath outfit.

Canning Directions—Continued

Root or Tuber Vegetables.—This class includes carrots, parsnips, beets, turnips and sweet potatoes. After being thoroughly washed and scrubbed with a vegetable brush they should be scalded long enough to loosen the skin. Plunge them immediately into cold water, then scrape or pare off the skin. They may be packed whole or cut into cubes. Fill containers with boiling water, with one level teaspoonful of salt to each quart container. Screw on the tops lightly and sterilize for an hour and a half in the hot-water bath outfit. Cool and store.

Tomatoes.—These demand special canning directions. Scald the tomatoes enough to loosen the skin. Then plunge them into cold water, core and skin them and pack them whole. Do not put in any hot water but add a level teaspoonful of salt to each quart container. Loosely seal and sterilize 22 minutes in hot-water bath outfit. Tighten covers, invert containers to cool and test, wrap in paper and store.

Pumpkin and Squash.—For pie filling cut pumpkin or squash into small pieces, then cook for thirty minutes, so that it becomes pulp. Add one quart of sugar and one teaspoonful of salt to each quart of pulp. After partially sealing sterilize ninety minutes in hot-water bath outfit. Cool, wrap and store. Pumpkin or squash may also be put up in cubic form for special uses, such as frying, creaming or baking. To do this blanch for ten minutes, dip into cold water, pack into containers, fill each container with boiling water and add one level teaspoonful of salt to each quart, but no sugar. Sterilize for ninety minutes in the hot-water bath outfit.

Pod Vegetables.—Such vegetables as lima beans, string beans, peas and okra, should be blanched in boiling water from two to five minutes, plunged into cold water and packed. Fill container with boiling water, adding a level teaspoonful of salt to each quart. Sterilize two hours in hot water bath outfit. Cool and store.

Precautions

One of the troubles to be guarded against in keeping canned goods is the development of mold during storage. Mold is apt to develop if the sealing is defective. Care must therefore be used in sealing. Mold may also develop if the tops of jars are removed, after sterilizing, for replacing rubber rings. It is unsafe to keep jars in a damp place where the rubbers may decompose, as this, too, may result in the development of mold.

Another thing to guard against is improper or inadequate blanching and cold dipping. If vegetables or fruits which require blanching are not handled properly in the process shrinkage is apt to occur during the period of sterilization. Care should be taken to follow the instructions on this point.

Careless packing must be avoided. Vegetables and fruits should be packed closely in containers, and after this has been done the containers should be filled with hot salty water in the case of vegetables and syrup in the case of fruits.

In canning vegetable greens, including spinach, dandelions and kindred vegetables, and cabbage, brussels sprouts and cauliflower, it is important that the mineral salts and volatile oils should not be lost. The retention of these is required for perfect results. For this reason the greens must never be blanched in hot water. The blanching must be in steam. This may be done by having them suspended in a closed vessel partially filled with boiling water, taking care to see that they are above the water line.

It is important that vegetables and fruits should not be allowed to remain too long in the sterilizer. If sterilization is allowed to continue too long the product will shrink. Watch the time and follow the schedule as given in the table.

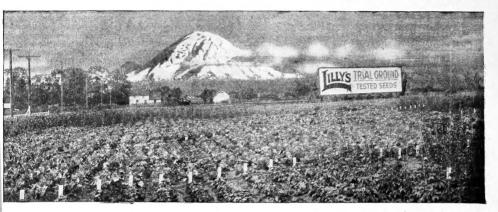
One of the things to be avoided with canned peas, corn, beans and asparagus, is the development of what is known as the state of being "flat sour." The canned goods may show no signs of spoilage, and yet be found, on opening, to be in this condition. The trouble is manifested by a sour taste and disagreeable odor. It may be avoided by making use of vegetables that have not been gathered more than five or six hours. Blanch, cold-dip and pack one jar at a time, placing each jar in the canner as it is packed. This is a wise precaution, and one that should not be overlooked.

The following time-table shows blanching and sterilizing time for various vegetables:

Time-Table for Blanching and Sterilizing

Blanc		Steriliz- ing,	Blanch- ing,	Steriliz- ing,
Minu	tes	Minutes	Minutes	Minutes
Vegetable Greens 15 to	20	120	TomatoesTo loosen skin	22
Cabbage 15 to	20	120	Corn (on cob or off) 5 to 15	180
Cauliflower 15 to	20	120	Lime Beans 2 to 5	120
Brussels Sprouts 15 to	20	120	String Beans 2 to 5	120
Carrots 5 to	8	90	Peas 2 to 5	120
Parsnips 5 to	8	90	Okra 2 to 5	120
Beets 3 to	8	90	Pumpkin (for Pie)Cook 30 Min.	90
Turnips 5 to	8	90	Squash (for Pie)Cook 30 Min.	90
Sweet Potatoes 5 to	8	90	Pumpkin or Squash Tubes 10	90

-Republished by courtesy of the National Emergency Food Garden Commission.



"Best for the West."

After careful tests and observation of practically all varieties of the common garden vegetables we have chosen those listed in the following pages, as being most desirable for the west. Thirty-three years' experience, a vast outlay of time, money and material in testing and grading has given us a fund of knowledge which we wish to impart to you by suggesting the use of certain special vegetable and grain seeds our experience proves to us are the most suitable for the Northwest and which we ourselves believe in to the extent that we feel justified in claiming them to be

"The Best for The West"

Only tested seeds should be planted. It is provoking to put in long hours preparing a garden only to ind that the seeds you have planted will not germinate. Every lot of seed which leaves our plant has been ested for germination and purity. With conditions of soil correct and a fair amount of attention you will be rewarded with a crop which will impress you with the importance of laying aside guess work and plant nly

Tested Seeds

ASPARAGUS One ounce of seed will produce about 500 plants

CULTURE-One hundred to two hundred plants will produce all the sprouts required in an ordinary home garden. To produce the plants from seed, sow early in spring, one inch deep, in drills twelve to eighteen inches apart, and thin the plants to four inches apart in the rows. As the seed germinates very slowly, it is advisable to mix radish seed with it to mark

the rows for cultivating.

The plants will be large enough for transplanting to the permanent bed when one year old, and are considered better at that age than when older, but may be left until the second year if desired. They should be cultivated thoroughly during the summer, and in the fall the tops should be cut off close to the ground and the bed mulched with manure.

As the permanent bed should last for twenty years or more, much care should be taken in preparation. It is essential that the land should be in a high state of cultivation. It its preparation. should be loosened very deeply, either by subsoil plowing or deep spading, and a very heavy application of manure should be plowed under deeply. The ground should then be harrowed repeatedly until it is thoroughly pulverized.

olumbia Mammoth Asparagus superior riety of this delicious early spring vegetable, It is of exceptionally large size, white, nder, and is unexcelled in flavor.

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

All 10c Vegetable Packages, 2 for 15c.

Large French Green Globe Artichoke

The Green Globe Artichoke is a delicious vegetable which is very popular in Europe, and serves to be more generally grown in this country. The plant resembles a mammoth thistle. e edible portion is the immature flower heads, which are boiled and served with butter dress. The young suckers which spring up around the bottom of the plant are also used, served e asparagus. The flower heads are not produced until the second season. It is a perennial, d will last for several years. It is not at all similar to the Jerusalem Artichoke, the edible rtion of which is the tubers, which are used mostly for stock food, and are listed in Farm eds Section of this catalog.

Packet, 10c; ounce, \$1.25; postpaid.



LONGFELLOW BEAN

An Unequalled Extra Early Longfellow is an extra early Green Podded Bush Bean ducing splendid crops of very fleshy pods, which are deliciously tender and brittle. straight, solid. 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 picking. The plants are robust, without runners, and are very productive. The mature

robust, without runners, and are very productive. seed are of a medium size, slender, straight and are a brownish red color freely splashed with buff. Lilly's select stock is sold in sealed packages only. Pkt., 15c; lb., 35c; postage additional.

An early green podded bush Dwarf Horticultural Bean snap 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. Pkt., 15c; lb., 35c; postage additional.

The most generally grown bush lima bean, growing Burbee's Bush Lima Bean about twenty inches high and bearing exceptionally large pods and beans of fine quality. Medium early and very productive. and beans of fine quality.

Packet, 15c; pound, 35c; 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 en-

tirely stringless. Packet, 15c; pound, 30c; postage additional.

Lady Washington Field Bean This white field bean is an improvement over the old Navy Beans; is earlier, larger and more productive. Especially This white field bean is adapted to the west.

Packet 15c, pound 25c. Postage additional.

BEANS

By ALF. CHRISTIANSON, Our Field Man

While the value of beans and peas as food for man and stock has been well known for many generations, it is only recently that the value of these crops as soil renovators and fertility restorers has value of these crops as son the overland and the control will sebeen definitely proved. Beans planted as a rotation crop will secure a sufficient quantity of nitrogen from the air to replenish

that taken from the soil by other agricultural crops. As beans are among the few leguminous plants that provide food for man and animals and at the same time increase the fertility of the soil, they are one of most desirable crops to grow in the farm rotation.

crop is especially beneficial and profitable in Eastern Washington where, to give the soil a needed rest, much of the land must be summer fallowed. By growing beans or peas on this land the land will be made better for the following year's crop of grain and at the same time will produce a profitable crop. This is of special advantage to the farmer who has only a small acreage, making it unnecessary for any part of the farm to lie

Garden beans are divided into bush and pole types, and these into kidney and lima types. The kidney type and these into kidney and lima types. is the best known and most successfully grown in the

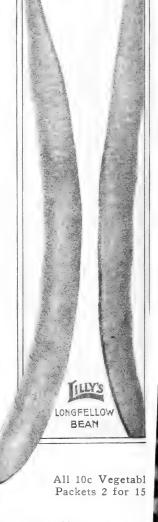
Northwest and is divided into two groups, wax, or yellow podded, and green podded.

The varieties of field beans best known and most successfully grown in the Northwest at the small white or navy beans and the large white or Lady Washington. There are numero other varieties, some of which have been grown in this country with more or less success, Broad Beans, Soy Beans, Pea Beans and Cow Peas. Cow Peas more closely resemble beans the news both in hebit and appearance.

peas, both in habit and appearance.

Beans are among the easiest vegetables to can, and as they produce abundantly here or the coast they might well be termed the most profitable. The cold pack method is a suc cessful and easy means of canning beans. Read canning instructions on pages four and five cessful and easy means of canning beans. Read c which gives the time of blanching, sterilizing, etc.

One hundred and three quart cans of beans, (aside from those used on the table in season) was the results obtained from 25c worth of Kentucky Wonder Beans by one of ou customers on new ground and without previous gardening experience.



BUSH BEANS One Pound Will Plant

CULTURE.—Plant as soon as danger of frost is over, placing the CULTURE.—Plant as soon as danger of trost is over, placing the seeds four to five inches apart in drills and about 2½ inches deep. The rows should be about 2½ feet apart and the soil slightly hilled, to insure good drainage and keep the beans from touching the ground. Most beans should be picked when about four inches long. Frequent picking insures a more prolonged bearing season. Avoid jerking the picking insures a more prolonged bearing season. Avoid jerking the plant as this frequently disturbs young feeding roots. For succession in the home garden, plant 30 feet of row every other week up to August 1st.

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. without runners, early and productive,

Packet 15c; pound 35c; postage additional.

ILLY'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 yellew, 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.

Packet 15c; pound 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 15c; pound 30c; postage additional.

A handsome wax Davis White Kidney Wax Bean 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 and clear white. The dried beans are excellent for baking.

Packet 15c; pound 35c; postage additional.

Prolific Black Wax Bean This is an improved strain of black wax and is an exceptionally produc-ime dwarf, wax-podded variety; hardy, reliable and of the best quali-y. The pods are of medium size, curved, cylindrical, fleshy, and of ight golden color. The seeds are small, oblong and jet black.

Packet 15c; pound 35c; postage additional.

ong Yellow Six Weeks Bean A standard green podded bush bean popular with market The pods are long, flat, uniform and handsome, but are inclined to be stringy. 'he plans are of medium size, erect, without runners, early, productive and reliable.

Packet 15c; pound 35c; postage additional.





POLE BEANS

One pound will plant 125 hills

Culture: Pole beans require the same soil and weather conditions as bush beans. Poles six feet long should be set in the ground three to four feet apart each way, and around the base of these six to ten seeds should be planted two inches deep. The plants should be thinned to three of the strongest plants to each hill after dan-ger of insects is past. It is usually necesger of insects is past. It is usually necessary to give them a little help in starting to wind around the poles; they always wind from right to left.

The culture is the same as for bush beans, except that they are less hardy and

should be planted a week later.



The Best Pole Bean for the North-

west 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 back-ground, very long and flat, generally straight, surface smooth, very brittle, en-tirely stringless and without fiber and of splendid quality. Free from anthracnose, Sold only in sealed packages.

Pkt., 15c; 1b., 35c; postage additional.

Kentucky Wonder Bean

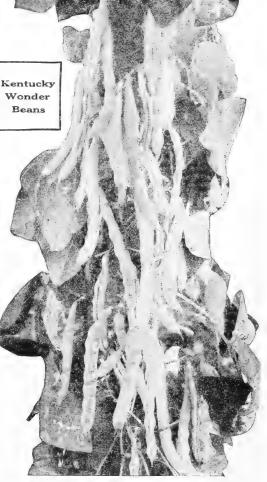
The most popular and one of the best early pole snap beans for home or market. The snap pods are green, with wrinkled surface, very long, curved, extremely brittle, slightly stringy, without fiber, of good quality and free from anthracnose.

Pkt., 15c; lb., 35c; 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.

Pkt., 15c; lb., 35c; postage additional.



SMALL WHITE POLE LIMA

The seed stock for these beans was raised west of the Cascades, and is the only Lima whi is certain to reach maturity here. Excellent for snap or green shell beans. Pods are six seven inches long and contain five large, flat beans. Similar to Scarlet runners, excepting th flowers and beans are white.

Packet, 15c; pound, 40c; postage additiona

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, 15c; pound, 35c; postage additional.

Scarlet Runner Bean

Popular for both ornamental and culing purposes. Grows about ten feet high, beari large scarlet flowers followed by large gropodded beans; excellent as either snap or sh Packet, 15c; pound, 35c; postage ext

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 Nortl west as the bush varieties. It is unsurpassed in productiveness; large, handsome pods ar large seeds. Packet, 15c; pound, 35c; postage additiona

BROCCOLI

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

Packet, 10c; ounce, 75c; postpaid.

BRUSSEL SPROUTS

Dwarf Improved The heads or sproare formed on stalk of the plant, are one to two inches diameter and resemble miniature cabbages. Packet, 10c; ounce, 30c; postpaid.



BEETS An ounce will sow 50 feet of drill, 5 to 6 lbs. to the acre

CULTURE: The round or turnip varieties are grown for summer use. The long varieties are grown for winter use, and on the Pacific Coast may be left in the ground all winter and pulled up from time to time as needed. The seed will germinate much quicker if hot water is poured on it and left to soak a day or more before planting. Sow the seed in drills water is poured on it and left to soak a day or more before planting. Sow the seed in urins twelve to thirty inches apart, according to whether to be cultivated by hand or with a horse, covering the seed one inch deep. Plant very early in spring, and for succession plant turnip varieties at intervals of two or three weeks until the middle of July. Thin the plants to three or four inches apart in the row. The young plants which are pulled out make splendid greens.

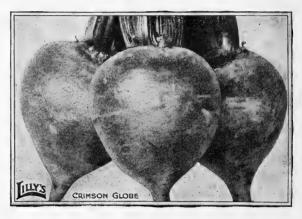
CRIMSON GLOBE BEET

Best Second Early and Main

A splendid variety, the finest of all for rop Beet he home garden, also popular with tarket gardeners. It is not quite so arly as Crosby's Egyptian, but for econd early and succession it has no qual, on account of the quality and elicious flavor.

The beet is nearly globular, slightrelongated, of medium size, about tree inches in diameter with small p-root. The flesh is deep crimson, eautifully ringed or zoned, and is ee from stringiness or woodiness.

The extreme tenderness, sweetness, the flavor and attractive appearance akes this the highest type of blood ornip beet. Our seed is specially own from the choicest strain, and sold in sealed packages only. Packet, 10c; ounce, 20c; postpaid.



DETROIT DARK RED BEET

Detroit Dark Red is considered by many to be the best beet for the market and home gar-, and on account of its uniformly deep rich color the most desirable for canning. The tops small and upright in growth. The leaves are dark green shaded with red. The roots are mesmall and upright in growth. The leaves are dark green shade with red. The roots are mem sized, globular or nearly round, very smooth and of dark red blood color. The flesh is p vermillion red, zoned with a lighter shade of the same color. The variety is very desirable bunching. Careful comparisons with all prominent varieties on the market prove that roit Dark Red is the most uniform in shape and size and the most attractive in color. It is urpassed in quality.

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

SELECTED STOCK CROSBY'S EGYPTIAN

nest 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, ig larger, smoother, thicker, and of much finer quality. The color is rich vermillion, slightly ed; it is fine grained, tender and sweet, and does not become woody or hard. It is a great orite with the market gardeners. Sold only in sealed packages.

'ly Egyptian Beet An extra early vaand early garden culture. The beets are l1 and flattened; dark red; sweet and ten-Packet, 10c; ounce, 15c; postpaid.

ly Blood Turnip Beet Astandard medium vaof excellent quality; also good for sum-and fall use. The flesh is deep red zoned lighter shade; sweet, crisp and tender; yround. Packet, 10c; ounce, 15c; postpaid. and fall use.

Eclipse Blood Turnip Beet of uniform, globular shape, deep red color, fine grained, tender and sweet. Popular for both market and home garden. Pkt., 10c; oz., 15c; postpaid.

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

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

Pkt., 10c; oz., 15c; postpaid.

ILLY'S LUCULLIS SWISS CHARD Spinach Beet, or Sea Kale Beet

Jucullus is the newest, largest and best variety of Swiss Chard or Spinach beet. This type et is grown for its large, tender, succulent leaves, which make the most delicious greens, e thick fleshy leaf stalks, which are cooked and served like asparagus. The seed is planted e spring the same as beets, and the tops are cut off as wanted during the summer, fall ollowing spring. Packet, 10c; ounce, 20c; postpaid.



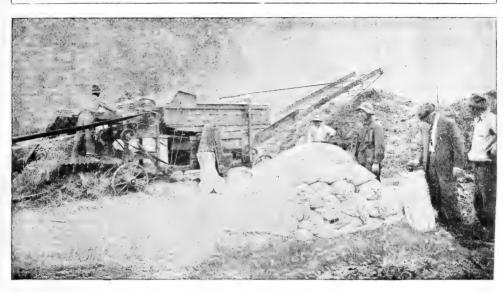
CABBAGE One ounce of seed should produce 1500 to 2000 plants

Seed of the early varieties may be sown in seed bed in September and transplanted to cold frame to be wintered over, or may be sown in hotbed in January or February and the plants transplanted to cold frame when large enough.

Seed of the second early or summer varieties should be sown in seed bed or cold frame early in April, and of the late or winter varieties in May or June. The plants will be greatly improved by transplanting once before setting out in the garden or field.

The plants should always be set in the ground up to the first leaves, and should be planted on a cool, wet day, or immediately after a heavy rain, while the ground is wet.

Cabbage may be grown on most any good soil, but, especially early cabbage, prefers a light, rich loam.

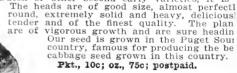


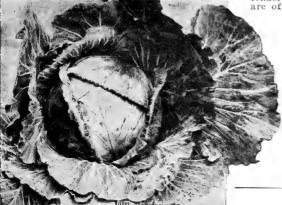
"Threshing Cabbage Seed for Lilly's"

GLORY CABBAGE

A Splendid Second Early Variety: Round Solid Heads Although this i very early for

round-headed cabbage, as early as Early Flat Dutch or other second early varieties, it splendid keeper and is excellent for winter use. The heads are of good size, almost per



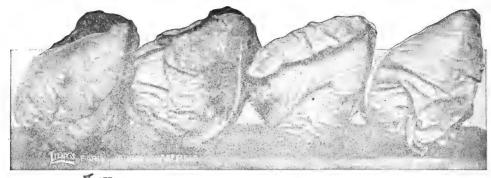


DANISH BALL HEAD Unsurpassed for Winter Use

A medium or late variety, one of t A medium or late variety, one or tvery best keepers, and excellent j late winter or spring shipping. Theads are round, of medium size, vesolid and hard, and of good qualithe plants are vigorous, compact, ceedingly hardy, and reliable. Our size grown with special care from cafully selected heads. fully selected heads.

Pkt., 10c; oz., 75c; postpaid.





EARLY JERSEY WAKEFIELD

An Improved Strain of the Standard Extra Early and ropular 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 control of the strain of the markets in spring. The heads are pyramidal in form, pointed at the strain of the markets in spring. The heads are pyramidal in form, pointed at the strain of the markets in spring. 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 Packet, 10c; ounce, 75c; postpaid. particularly fine strain.

Early Winnigstadt

An excellent variety, but not so early as Early Jersey Wakefield. The heads are similar in form and size, but are more sharply pointed; very hard and the leaves are tightly folded. Packet, 10c; ounce, 75c; postpaid.

Charleston Wakefield

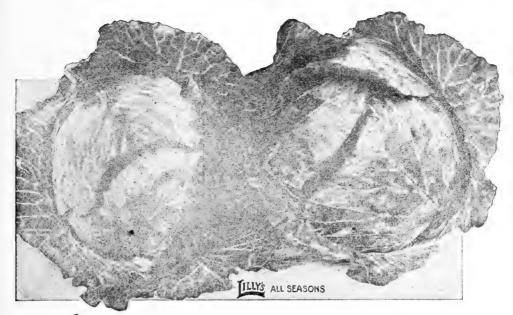
The heads are very similar to Early Jersey Wakefield in form, but are larger and a few days later. They are of the same fine quality, and this variety is a favorite with market gardeners. Packet, 10c; ounce, 60c; postpaid.

COPENHAGEN MARKET

The Earliest Large Round Headed Cabbage—A Wonderful New Variety







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 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, 60c; postpaid.

All Head Early

A large heading second early variety of good sality. May be planted late and used in fall 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, 10c; ounce, 60c; postpaid.

Fottler's Brunswick

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

Packet, 10c; ounce, 60c; 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, 10c; ounce, 60c; 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, 10c; ounce, 60c; postpaid.

Large Late Drummond

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. Can be kept

Packet, 10c; ounce, 60c; postpaid.

Red Dutch

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

Packet, 10c; ounce, 75c; 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, 10c; ounce, 60c; 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, 10c; ounce, 60c; 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, 10c; ounce, 75c; postpaid.



One ounce of seed sufficient for about 125 feet of drill, or 4 pounds per acre

CULTURE: Sow the seed as soon as the ground is in good condition in spring, in rows, twelve to fifteen inches apart, thinning the plants to about three inches apart in the row. For later crops the seed may be sown any time up to the middle of June. Carrot seed is rather slow to germinate and a little radish seed may be sown with it to mark the rows to aid in cultivation. They do well in the Northwest, and are valuable for stock as well as for the table. In the mild climate west of the Cascades they may be left in the ground during the

GOLDEN HALF LONG Finest Main Crop Carrot

Superior Quality, Delicious Golden Half Long is by far the best carrots for home use Sweet, Crisp and Tender

and for market and by many it is preferred for stock feed-

ing, for although it is not so large as the stock carrots, the yield is almost as great and the quality is much superior.

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 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 in sealed packages only.

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

Danver's Half Long Carrot

A standard half long orange-colored car-

rot 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 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, 10c; ounce, 15c, 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, 10c; ounce, 15c, 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 nearly round when forced quickly in 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 the roots are about two to two and one-har mones and, should be used before fully grown, while young and tender.

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

Improved Long Orange This improved strain is ing and is suitable for either table use or stock food. The roots ing and is suitable for either table use or 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, 10c; ounce, 15c, 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.

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

ImprovedShortWhiteCarrot

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, 10c; 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, 10c; 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 25 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 apckages.

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

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

One ounce should produce about 3000 plants

CULTURE: Cultivation and soil should be very much the same as for cabbage, but it is more difficult to grow. To produce perfect heads, cauliflower requires a cool moist season and a rich moist loamy soil. In the Sound country cauliflower does exceedingly well in the average season. For a spring or early summer crop sow in March or early in April in hotbed, and transplant to a coldframe when sufficiently large, and to the open ground as soon as danger of hard freezing is over. Full information in Crop Book.

EARLY ALBA CAULIFLOWER

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

Packet, 25c; ¼ ounce, 90c; postpaid.

Danish Dry-Weather Cauliflower

Danish Dry Weather Cauliflower is especialballsh by Weather Caulinower 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. will make a good crop in dry climates where it has heretofore been consid-

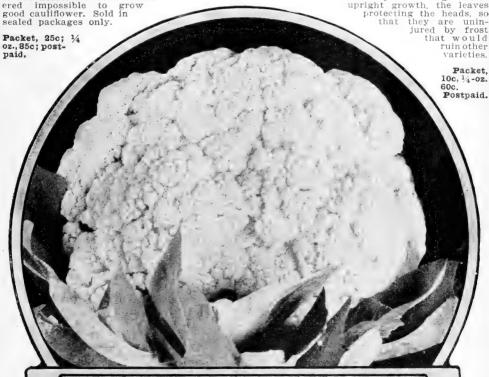
Snowball Cauliflower

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, 10c; 1/4 ounce, 85c; 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,



EARLY ALBA CAULIFLOWE



CELERY One ounce will produce about three thousand plants; one pound will produce plants for one acre.

Culture:

Sow the seed in a hotbed, cold frame or seed bed early in the spring.

Transplanting once or twice before setting the plants in the garden will be beneficial. The tops should be clipped off to induce stock-

iness, and when transplanting, the ends of the roots should be

cut off.

The plants may be set in the garden after some early harvested crop has been removed. They should be set six inches apart in rows three feet apart. They should be given frequent shallow cultivation.

When the plants have attained considerable size, the leaves should be drawn up and a little soil compacted about the base of the plants to hold them upright.

There are several ways of blanching the plants, but the fa-vorite method is with boards. When the plants are a little more than a foot high, set twelve inch boards on edge close to the plants on both sides of the row. Let the tops of the boards lean together against the plants so that they will only be two three inches apart. Hold the boards in this position by nailing cleats across the tops. A few of the leaves will show above the boards. The foliage will soon fill the space, excluding the light, and the stalks will be blanched in ten to twenty days. If the plants are bleached with earth, care should be taken that the crowns do not become filled.

GOLDEN SELF-BLANCHING

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

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

CHERVIL

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

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

CHIVES

Has a mild flavor of young onions, and is used in soups and salads, Packet, 10c; postpaid.



SILVER PLUME CELERY

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

The plants are of medi-

um 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.

Pkt., 10c; oz., 35c; postpaid.

GIANT WHITE WINTER

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

wanted and will be nt 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 pure white, very brittle, and the flavor is delicious.

Pkt., 10c; oz., 35c; postpaid.

GIANT WHITE SOLID

An excellent late fall and win-r variety of immense size and ter variety of immense size and good quality. Blanches white and tender.

Pkt., 10c; oz., 35c; postpaid.

CELERIAC, Turnip-rooted Celery

Large Prague. Large, round, smooth, turniplike roots; used for flavoring soups or as a salad. Packet, 10c; ounce, 25c; postpaid.

COLLARDS

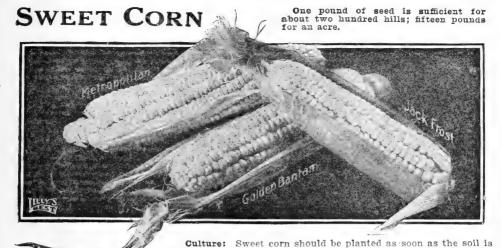
Georgia. A loose form of cabbage grown in the South for greens. Not adapted to the North. Packet, 10c; ounce, 20c; postpaid.

CHICORY

Large Rooted, Used as a substitute for coffee; and the young blanched shoots for salad. Packet, 10c; ounce, 50c; postpaid.

All 10c packets, 2 for 15c.





thoroughly warmed in spring, and successive plantings should be made at intervals of two weeks; or early, medium and late varieties planted, for succession. It is very sensitive to frost, and early plantings may be killed, but it is neither much trouble nor expense to replant. If the

early plantings are not killed the result will be worth taking a chance for.

In our cool climate west of the Cascade Mountains to grow corn successfully, a rich, light, warm soil must be selected and it must be highly cultivated and fertilized. Light applications of nitrate of soda or nitrate of lime early in the growing season will help to give it a good start. The seed may be planted in drills three feet apart and the plants thinned to a single stalk every foot in the row, or five or six kernels may be planted in hills three feet apart each way and thinned to three plants in each hill.

GOLDEN BANTAM

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 equalled 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, 15c; pound, 30c; postage additional

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 be depended upon. The ears are about inches long, and are well filled with ten to twelve rows of large, sweet kernels. It is a twelve rows of large, sweet kernels. It is a little later than Jack Frost and Golden Ban-tam, but earlier than other large varieties. The plants are tall and bear two or three ears each. Pkt., 15c; lb., 30c; 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. Pkt., 15c; lb., 30c; postage additional.

Peep o' Day

One of the very earliest varieties. The ears are about five inches long, the kernels large, white and tender. The stalks are dwarf, only about four feet high, and usually bear two ears each. Pkt., 15c; lb., 30c; 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, 15c; pound, 30c; postage additional.

JACK FROST

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, 15c; pound, 30c; 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. Pkt., 15c; lb., 30c; postage additional.

Country Centleman

A splendid late variety. The small, white A spiendid late variety. The small, white cob is densely crowded with irregular rows of long, slender, white kerinels of excellent quality. **Pkt.**, **15c**; **pound**, **30c**; **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 The kernels are tender, sweet and inches long. delicious.

Packet, 15c; pound, 30c; postage additional.

CORN SALAD

Large Headed Fetticus 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, 10c; ounce, 25c; postpaid.

All 10c packets 2 for 15c

Seven and one-half cents per packet is the cost to you where two or more are ordered. Take advantage of this when ordering.

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. 10c: ounce, 20c; 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, 10c; ounce, 60c; postpaid.

CUCUMBERS One ounce will plant One hundred hills One hundred hills

There are many methods of planting. Some plant in hills six feet apart each way; others plant in hills six by two or three feet and others in drills six feet apart, thinning the plants to one foot apart in the rows after danger of destruction by beetles is past. We prefer the latter method.



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, 15c; postpaid.

PICKLING CUCUMBER

Unequalled 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., 15c; 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 hotbouse fruit that it often brings the same fancy prices. It is uniform in shape, and handsome in appearance. The glossy dark green color is in appearance. The glossy dark green color is maintained almost to maturity, and it retains its color and freshness longer than other varieties, making it splendid for market. Lilly's Select Stock is sold in sealed packages only.

Pkt., 10c; oz., 15c; postpaid.

CUCUMBERS—Continued

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

Packet, 10c; ounce, 15c; 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. best variety for sweet pickles.

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

Early Cluster
An early and very productive variety. The vines are 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.

Packet, 10c; ounce, 15c; 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. fruits are bright green, crisp and tender.

Packet, 10c; ounce, 15c; 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.

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

ENDIVE

CULTURE.—A fine salad vegetable that does exceedingly well in all sections of the Northwest. During the summer and in the dryer and hotter sections it is superior to lettuce. Cultivation and soil required are the same as for lettuce.

BROAD LEAVED BATAVIA ENDIVE

Specially Adapted to the Pa-

cific 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 gar-

den as it deserves to be.

Batavian Broad Leaved Endive, or

The inner leaves form a



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, 10c; ounce, 60c; postpaid.

Black Pekin

sorts. The fruit is nearly as large as the later smooth, black and glossy.

An early variety with fruits nearly as large as the later is nearly round, the skin glossy.

Packet, 10c; ounce, 60c; postpaid.

HERB SEEDS.

	Pkt.	Oz.
Caraway	\$0.10	\$0.15
Catnip	.10	.40
Dill	.10	.15
Lavender	.10	.20
Rosemary	.10	
Saga	.10	-35
Sage	.10	.20
Summer Savory	.10	.30
Sweet Basil	.10	.20
Sweet Fennel	.10	.15
Sweet Marjoram	.10	.20
Thyme	.10	.40

KOHL-RABI

CULTURE .- It is used and grown the same as turnips. Where it is well known it is more as turnips. Where it is well known it is more highly esteemed than turnips for early summer use. Like turnips, it should be sown in drills very early in spring, and used while young and tender, or for winter use it may be sown in July or August, and can be stored the same as turnips.

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, 10c; ounce, 25c; postpaid.

LEEK

Large American Flag The leek belongs to 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, 10c; ounce, 30c; postpaid.

Musselburg An improved variety grow-ing to very large size, with broad leaves spreading like a fan. Packet, 10c; ounce, 30c; postpaid.

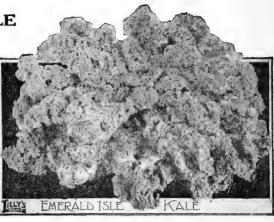


ILLY'S EMERALD ISLE KALE

Emerald Isle is a comparatively new variety of green curled winter kale, and is most desirable on account of its hardiness, excellent quality and beautiful appearance. It is of medium height, the leaves are so finely fringed and curled as to resemnnety 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 grows three to four feet high, bearing long, Jume-like light green leaves, which are deeply cut and finely curled at the edges. Very ornamental, and suffi-ciently hardy to resist frost.



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

A very hardy and vigorously variety of dwarf, spreading habit. The large green leaves have a bluish tinge or bloom, are comparatively Siberian Kale plain in the center, but are cut and frilled at the edges. Packet, 10c; ounce, 20c; postpaid.

For All Seasons A Mammoth New Head Lettuce

new and very popular variety, thriving in all sections and during all seasons. It is a crisp, cabbage-heading lettuce, extremely large, some-times 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 un-der the most trying conditions. The interior is beautifully The interior is beautifully blanched, creamy white, crisp, tender and delicious. It is espe-cially recommended as a standard, main crop, hot-weather let-tuce. It is very popular with market gardeners, and is equally Not recomgood for home use.

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

mended for forcing.

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

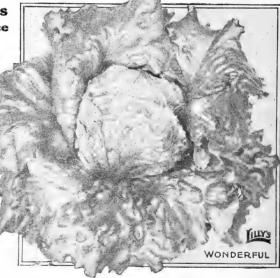
Grand Rapids Lettuce

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, 10c; 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, 10c; ounce, 20c; postpaió-



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, 10c; ounce, 20c; postpaid.

LETTUCE One ounce of seed for 400 feet of drill

CULTURE:—For general crop, sow when ground is in good condition to work in spring in rows t foot apart and thin the plants to six or eight inches apart. For succession sow at intervals of two or three weeks. The plants which are thinned out may be transplanted to other rows.

Lettuce does best in the cool weather in spring and fall. That grown during the hot weather in summer should be protected from the sun, or planted in the shade of some taller crop. It is best when grown quickly, and frequent light applications of nitrate of soda will be very beneficial. A rich, warm, sandy loam soil is best.

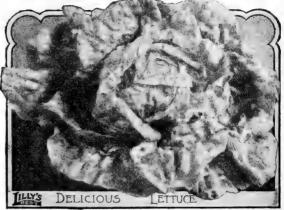
DELICIOUS

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, 20c; postpaid,



BOSTON MARKET or WHITE SEEDED TENNIS BALL

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. Pkt., 10c; oz., 20c; paid.

Prizehead Lettuce

A large clustering.

heading lettuce, easy to grow and an excellent variety for the home garden, but not recom-mended 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, 10c; ounce, 20c; 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, 10c; ounce, 20c; postpaid.

Paris White Coos 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, 10c; ounce, 20c; postpaid.

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 su-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 filt quickly, and stands shipping better than most varieties, making it the best variety for winter forcing in greenhouse. Sold only in sealed packages.

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

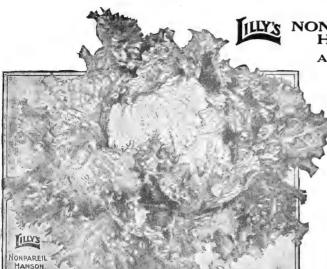
Hanson Head Lettuce A very desirmer head lettuce. The plant is compact and forms a large cabbage-like head, which remains in condition longer than most sorts.

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

NITRATE OF SODA FOR GARDEN CROPS

Wonderful results can be obtained with the correct use of Nitrate of Soda on such crops Wonderful results can be obtained with the correct use of Nitrate of Soda on such crops as lettuce, cabbage, spinach, etc. When used on root crosp such as turnips, carrots, beets, etc., it should be used early in the season, one application after planting and another two weeks later will give the best general results. With lettuce it is different, as you want the leaves to grow and this is just what Nitrate of Soda will do. If you have never used it before, experiment this year; you won't lose, you cannot. In Bulletin No. 162 issued by the U.S. Department of Agriculture they give the results of experiments on one acr cof cabbage, showing where the number of prime heads had been increased from 910 to 7580 by using 400 lbs of nitrate of soda in three equal dressings. Our group book contains this bulletin in full: lbs. of nitrate of soda in three equal dressings. Our crop book contains this bulletin in full; send for it with your next order, also fulfill a promise to yourself to try Nitrate of Soda or some other of the recommended fertilizers, such as blood and bone, bone meal, dried blood, We will be glad to answer any questions you may ask.





NONPARIEL HANSON HEAD LETTUCE

An Improved Strain of a Splendid Variety

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 yellowishgreen; broad, crumpled, and frilled at the edges; and with distinctive midrib. The inner

distinctive midrib. leaves are white, very crisp, and sweet. Sold in sealed packages only. Packet, 10c; ounce, 20; postpaid.

MUSKMELO

CULTURE-As planting is different east and west of the Cascades we refer you to our crop book for full planting instructions.

ILLY'S IMPROVED ROCKY FORD MUSKMELON

The Most Delicious Flavor The ROCKY Ford is the delicicous little cantaloupe served in the best restaurants and hotels and demanded by the markets.

There is no other to compare with flavor. It is small, about five inches in diameter. oval in form, and the skin is rich greenish-gold covered with a beautiful yellow netripening 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

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 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. Pkt., 10c; oz., 15c; postpaid.

Nutmeg Muskmelon

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

10c; ounce, 15c; postpaid.

A well-known old The fruits variety.

Extra Early

Hackensack

are round, about seven inches in diameter, well ribbed and heavily netted. The flesh is pale green, sweet and melting.

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

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, 10c; ounce, 15c; postpaid.

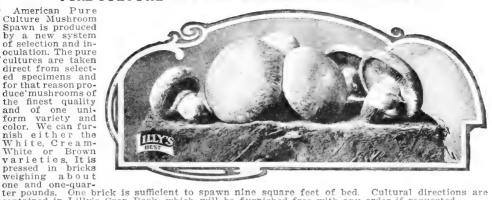
OSAGE OR MILLER'S CREAM MUSKMELON

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, 10c; ounce, 15c; postpaid.

LAMBERT'S 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 uni-form variety and color. We can fur-nish either the White, Cream-White or Brown varieties. It is pressed in bricks weighing about



contained in Lilly's Crop Book, which will be furnished free with any order if requested.

Price 30c per brick; postage additional. Write for prices on larger quantities.

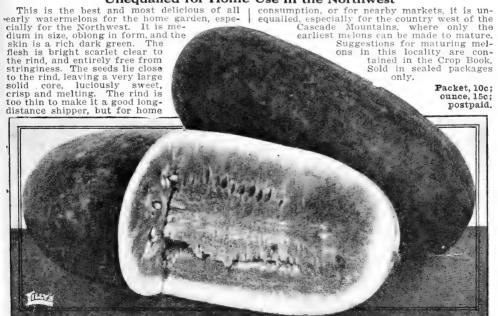
WATERMELON

ounce will plant 30 hills.)

CULTURE: Same as for Muskmelon, except that plants grow larger and require more room. They should be set in drills 10 feet apart each way and thinned to three feet in the rows.

SWEET AS HONEY WATERMELON

Unequalled for Home Use in the Northwest



S KING AND QUEEN WATERMELON

Best Early Variety for Market

King and Queen is the bes twatermelon for market and for shipping in this locality. King and Queen is the best watermeion 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 in sealed packages only. Packet 10c; ounce 15c:postpaid.

Very large and Georgia Rattlesnake Georgia Rattlesnake
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, 10c; ounce, 15c; postpaid. «sweet.

Cole's Early One of the easiest varieties to grow; very early and adapted to conditions in the northwest. A good shipper and excellent for market; also a good variety for the home garden. It is not large but is very productive; nearly round; the rind is very thin, and the deep red flesh is of excellent quality. **Pkt.**, 10c; oz., 15c; paid.

MUSTARD

Southern Curled Hardy and vigorous, with large light green leaves, crimped and frilled at the edges. Excellent while young for salads and garnishing. Seed is dark brown frilled at the edges. Ex for salads and garnishing. Pkt., 10c; oz., 15c; postpaid. and small.

White English Leaves are dark green, small, smooth, and and The deeply cut; mild and tender when young. seed is large and light yellow. Pk. 10, oz. 15, pp. 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, 10c; ounce, 15c; postpaid.

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

Pkt., 10c; oz., 15c; postpaid.

Kleckley Sweet or Monte Christo
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 10c: caree 15c. caree 15c Packet, 10c; ounce, 15c; postpaid.

Dwarf Green, Grown Okra or Gumbo 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, 10c; ounce, 15c; postpaid.

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.







Prizetaker is recognized as one of our best standard varieties. The skin is pale yellow and the flesh clear sparkling white. Sold only in sealed packages.

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

Yellow Flat Danvers

Very similar to Yellow Globe Danvers, except in Very similar to rene... shape. It is early, very productive and renew. The form is round, flattened with small neck. The skin is thin and pale yellow and the flesh is white Packet, 10c; oz., 35c; postpaid

Australian Brown

An early onion of medium size and nearly globular shape, a sure keeper. The skin is a bright brown and the flesh is white, crisp, extremely solid, and of a sweet mild flavor. Packet, 10c; oz., 20c;

postpaid. Large Red Wethersfield

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

Pk., 10c; oz., 35c; pp. White Portugal

or Silverskin A very popular medium white onion. much used for green onions, pickles and for fall winter plant-

ing. The bulbs grow to good size, ripening early and quite evently, are silvery white, nearly round when of bunching size, but flattened when mature. The flesh is mild and of splendid quality.

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

WHITE QUEEN

For Pickles and Early Green Onions This small white onion is used for pickling,

and is also a favorite for green onions in the market garden and home garden, as it produces green onions almost as early as they can be produced from sets. They are 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.

Southport White Globe

The mild flavor of this wonderful variety is famed the world over. It will average from 2 to 2½ inches in diameter and produces large yield. The flesh is fine grained, crisp and of a very fine flavor and snowy white in color,

Packet, 10c; ounce, 45c; postpaid.

UYS ONION SETS

Yellow Danvers Bottom Sets of

Our onion sets are north-ern grown, hardy, handsome, orm size. We grow only the Fine Quality ern grown, hardy, handsome, small and of uniform size. We grow only the Yellow Danvers sets, as that variety proves 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. generally planted.

Price: 1 1b., 25c; 10 1bs., 20c per 1b. If to be shipped by parcel post, postage will

be additional at regular rates. Please write for prices on large quantities.

> All 10c Vegetable Packets Two for 15c

PARSNIPS One Ounce for 400 feet of drill

CULTURE—Sow the seed early in spring, in drills eighteen inches apart and thin the plants to three inches apart. Give frequent shallow cultivation during the summer. The roots may remain in the ground until wanted for use during the winter. They are improved by freezing.

Roots not used during the winter should be dug in spring, for they will produce seed and

become weeds.



Palo Alto is a highly A Highly Improved Strain improved strain of Hollow Crown Parsnip, and is a favorite with our customers. The low Crown Parsnip, and is a favorite with our customers. The flesh is white and of fine texture, tender, free from core and stringiness, 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, 20c; 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, 10c; ounce, 20c; 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, 10c; ounce, 50c; postpaid.

PEPPER

Large Bell or Bull Nose ing their crop early and uniformly.

The plants are vigorous, compact, and very productive, ripential flesh of fine quality for use in salads or for stuffing. The color is deep green while young, bright crimson when ripe. Packet, 10c; ounce, 75c; postpaid.

Long Red Cayenne

The true Cayenne, hot and puntwisted pods about four inches long. Deep green while young, bright red cayenne, hot and puntwisted pods about four inches long. Deep green while young, bright red cayenne, hot and puntwisted pods about four inches long. Long Red Cayenne when ripe.

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 nage color. The flesh is a rich yellow, thick and meaty. Packet, 10c; ounce, 15c; postpaid.

A large, productive, orange colored field pump-kin, usually grown for stock, but good for pies. Connecticut Field Packet, 10c; ounce, 15c; 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 the conditions. Packet, 10c; ource, 15c; postpaid.

RHUBARB OR PIE PLANT

The largest and finest cooking variety. It is vigorous Mammoth Victoria The largest and finest cooking variety. It is vigorous and very productive of thick, red stalks of fine quality, juicy and rich. Packet, 10c; ounce, 15c; postpaid.

SALSIFY OR OYSTER PLANT

Mammoth or 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 persuip in appearance. Mild and delicately flavored.

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



PEAS One pound of seed for 50 feet of drill

Culture: The seed should be sown in drills very early in spring, as soon as the ground is in good condition to work, and covered two or three inches deep. Rows of the extremely dwarf varieties may be as close as twelve to eighteen inches apart; the semi-dwarf and tall varieties should be two to four feet apart.

Some sow the seed in double rows six inches apart, placing trellis or brush between the rows, thus making one row of supports do for two rows of peas.

For succession, seed should be sown at intervals of about two weeks until the middle of June. They do not do well in hot weather in summer, but good crops may again be produced in fall.

On the Pacific Coast, where the winters are mild, the seed may be planted in rather light, porous, well-drained soil in November, as instructed elsewhere for Sweet Peas, and will be

ready for use early in June.

ILLY'S WORLD'S RECORD

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 the flavor. But 100:118 300: postage arters fine flavor. Pkt., 10c; lb., 30c; postage extra.

Boston Unrivaled Pea Agood main

ing about five feet high, and very productive.
The pods are large, pointed and pale green. The peas are large, he peas are large, wrinkled, blue-green in blor, and are of good flavor. Packet, 10c; pound, 25c; postage additional.

Nott's Excelsior Pea A dwarf, early va-teen 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.

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

· Alaska Pea A well-known, smooth seed-tensively used by canners. The vines are strong and vigorous, two feet high, and of light green color. The pods are about three inches long, are well filled with round, blue peas, slightly pitted.

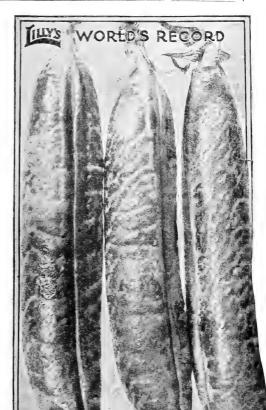
Packet, 10c; pound, 25c; postage additional,

Very early, and of dwarf American Wonder Pea 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 additional.

WASHINGTON WONDER PEA Favorite Extra Early Dwarf Wrinkled Pea An old favorite, and a splendid extra 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.

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.







Best early extra wrinkled Pea

This grand extra early pea has no superior and few if any equals. It is practically as early as the small, round, hard, smooth peas commonly grown for extra carly, and it 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, 15c; pound, 30c; postage additional.

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, 15c; pound, 30c; postage additional.

A good second early or Prizewinner Pea main crop variety. 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, 15c; pound, 30c; postage additional.

A splendid new large pod-Alderman Pea ded 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, 15c; pound, 30c; postage additional.

A tall-growing late or main Quite Content Pea A tall-growing late or main crop variety, five to six feet high, bearing exceedingly large pods in pairs. The peas e large, wrinkled and of good quality.

Packet, 15c; pound, 30c; 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, 15c; pound, 30c; postage additional.

> Dwarf Grey Sugar Pea An edible pod pea growing about two feet in height. Pods very delicious when cooked same as green or wax beans.
>
> Packet, 15c; pound, 30c; postage additional.

To can peas follow closely directions giv-

en on page 9. Success in canning peas is assured if close attention is given to see that the peas are fresh and no time is lost to get them into the cans. Write the Nato get them into the cans. Write the National Emergency Food Garden Commission, Washington, D. C., for full detailed canning instructions covering nearly all vegetables and much other useful information.

An excellent late Dwarf Telephone Pea An excellent late a heavy crop of large, well-filled, attractive, straight pods. The plants grow about two feet Packet, 15c; pound, 30c; postage additional.

Little Gem Pea A medium earry about fifteen to twenty inches high, robust, branching and productive. The pods are about three medium-sized, ing, and productive. The pods are about three inches long, well filled with medium-sized,

green, wrinkled peas of good quality Packet, 15c; pound, 30c; postage additional.



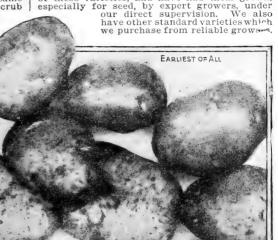
SEED POTATOES

Selected Varieties, Grown Especially for Seed from Thoroughbred Stock After experimenting with many of the most

Although potatoes, when grown under favorable conditions, from good seed, are among the

TILY'S

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, able 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.



One hill Earliest Of All Potatoes, weighing 81/2 lbs., grown on Lilly's Trial Grounds.

Earliest of All

Earliest Of All made the best showing 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.

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. 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 excells 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 warieties 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.

JERUSALEM ARTICHOKES

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 subdueing the land.

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

RADISHES 1 Oz. will plant 100 feet of drill

CULTURE.— The seed may be sown in drills a foot apart and the plants thinned to about two inches, or the seed may be sown in drins a root apart and the plants thinned to about two inches, or the seed may be mixed with seeds of slower growing crops such as lettuce, carrots, parsnips etc., and the radishes will be used before the other crops need the space.

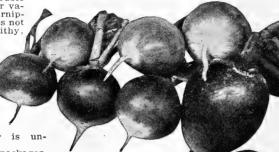
Winter radishes are grown the same as turnips and the seed should be sown in the latter part of July or any time in August. To make them crisp and brittle they must be grown quickly, and for that purpose one or two applications of nitrate of soda will be very beneficial.

ШУЗ CRIMSON GIANT RADISH King of all Early Radishes

Crimson Giant is double the size of any other va-riety of the early turnipshaped type, but 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 early planting outdoors, and for succession. The and flavor texture equalled.

Sold only in sealed packages. Packet, 10c; ounce, 20c; postpaid.



IIY'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. tap-root. Packet, 10c; ounce, 20c; postpaid.

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, 20c; postpaid.

Early Scarlet Turnip Radish

A standard variety for early outdoor planting for home or and deep scarlet. The flesh is market. The roots are small, round, and deep scarlet. The fl white and of good quality. Packet, 10c; ounce, 15c; postpaid.

Early Scarlet Turnip White Tip Radish tra early turnip-shaped radish. The roots are bright scarlet, with a distinct white tip. The flesh is white and of good quality. Pkt., 10c; ounce, 15c; postpaid.

A quick-French Breakfast Radish 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, 10c; onnce, 15c; postpaid.

Long Bright Scarlet Radish An excellent early lent 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, 10c; ounce, 15c; postpaid.

China Rose Winter Radish An excellent winter radish. The roots grow about five inches long and two inches in diameter. The flesh is white, firm, crisp and pungent. be sown late in summer. Seed should

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

White Strasburg

Radish A splendid variety for six in during the summer season. A splendid variety for growing 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, 10c; 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 10c; ounce, 15c; postpaid.





Thick Leaved Improved

For either fall or spring sowing. Produces thick, bright green, crumpled leaves of ent quality. Slow in running to seed. large. excellent quality. Packet, 10c; ounce, 15c; postpaid.

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

Prickly Winter Spinach

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

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

SQUASH

CULTURE: Hubbard Squash should be planted in hills 10 feet each way, for the Hubbard and other long trailing kinds use the same treatment as described for the pumpkin, and no trouble will be had in getting the squash to mature in any section of the Northwest. Care should be used to see that the squash are all picked and stored before the first fall frost, as they are very easily injured.

DELICATA

SOUASH

For Summer or Winter

Delicta is the earliest Delicta 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.

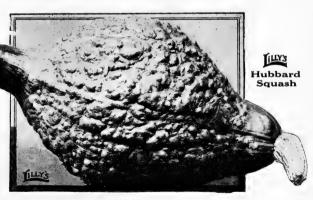
Early Summer Crookneck

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



IUYS HUBBARDSQUASH

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 on compare with it is 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 SQUASH

Very popular in England and can be grown equally well here; they should be eaten when less than half grown, at which time the flesh is very tender and may be cooked like other squash or fried like eggplant. Oblong in shape, color creamy-white.

Price: Packet, 10c; ounce, 15c; postraid.

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.

Price: Packet, 10c; 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.

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

TOMATOES

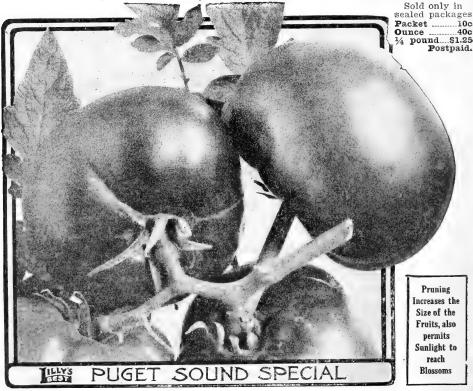
CULTURE: To grow tomatoes successfully on the Pacific Coast, only suitable varieties should be planted and they require special attention. The Crop Book contains suggestions for their culture. It will be furnished free with any order if requested. We also recommend "Littooy's Early Tomato Culture." Price 25c postpaid.

PUGET SOUND SPECIAL TOMATO

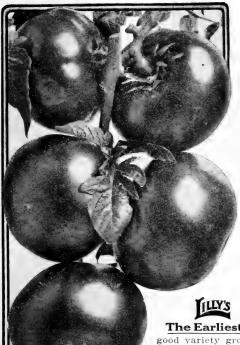
A Splendid Extra Early Tomato That Will Mature on the Pacific Coast

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
ravities. 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.







Tomatoes

One ounce should produce 2000 plants

CULTURE.—On page 15 of our Crop Book will be found full instructions and directions for growing tomatoes from seed. Tomatoes should be started in a greenhouse, hotbed, or in a warm light room in February or early March, and transplanted once or twice before being set outdoors. The best plants are produced by transplanting single plants to pots or berry boxes.

PONDEROSA

Of Immense Size and 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 resistent 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, 40c; 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 vigorous and productive. The fruits are of medium size, smooth and good quality.

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

IMPROVED STRAIN EARLIANA TOMATO

The Earliest Good Variety
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 green house forcing, and is excellent only by Puget Sound Special for outdoor culture on the Pacific Coast. Lilly's improved train is sold only in sealed packages,

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

The fruits are very Red Cherry Tomato one inch in diameter and are used for preone inch in diameter and are used for pre-serves and pickles. They are perfectly round, smooth and of bright red color. Packet, 10c; ounce, 40c; postpaid.

Red Pear Tomato Used for preserves and to make "tomato figs." The fruits are small, pear-shaped, bright red and of delicious flavor.

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

Yellow Pear Tomato
shape and size, but are a rich clear yellow
color.
Packet, 10c; ounce, 40c; postpaid.

Yellow Plum Tomato Fruits are plum-yellow color; and the flesh is yellow and finely flavored. Used for preserves.

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

New Stone Tomato A very large and solid main crop or late tomato. The vines are very 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.

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

Acme Tomato An old, well known variety, popular for home use, replaced 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.

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

Early Michigan A popular second early variety of good quality. The rines are vigorous and productive. The fruits of medium size, crimson-scarlet color, Packet, 10c; ounce, 35c; postpaid.

LY'S PUGET SOUND FORCING TOMATO

Best Variety For Greenhonuse Culture

This splendid extra early strain is especially valuable for greenhouse culture. It is a pro-lific bearer, and most of the fruit is borne close to the main stock, 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.

Packet, 10c; ounce, 45c; postpaid.

LIVINGSTON'S CORELESS

An Excellent Late Variety a medium large late tomato of recent introduction, is a good variety for slicing, and is especially desirable for canning. In shape it is almost perfectly globular, with little or no depression at the stem end. There is no hard core and the seed cells are surrounded by bright red. heavy, meatly delicious flesh. On account of its superior solidity, it is a good long distance shipper. Sold only in sealed packages.

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



SNOWBALL

The Finest Early White Turni**p**

This delicious turnip is the best early vaniety grown. It is equaled in earliness only by Extra Early White Milan, to which it is in every other way superior. Under favorable conitions 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 Packet, 10c; ounce, 25c; postpaid. packages only.

EARLY WHITE MILAN

The Very Earliest Turnip 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

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

PETROWSKI TURNIP

A New Yellow Variety This new early yellow turnip was imported from Finland, and promises to become very popular in 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 line 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 every tried in Alaska.

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

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

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

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

Packet, 10c; ounce, 25c; 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. Color purple or dark red, white below. The flesh white, fine grained and tender. Packet, 10c; ounce, 25c; postpaid.

Purple Top White Globe An early medium sized globular shaped turnip of good quality for table or stock. A heavy producer and good keeper. The flesh is white and of good eating Packet, 10c; ounce, 25c; postpaid. quality.

This turnip grows very long, often Cowhorn Turnip 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.

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

Yellow Aberdeen | A large sizeu, loans, late maturing, long keeping yellow fleshed turnip. It is hardy, productive and valuable for stock feeding. The roots are vellow with purple top. The flesh roots are yellow with purple top. The flesh is pale yellow, firm, tender and sweet.

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

EARLY

RUTA BAGA OR SWEDISH TURNIP

A Very Productive Variety and most satisfactory ruta baga for either table or stock feeding. It is wonderfully productive, large, of good shape, and a splendid keeper. The flesh rich, yellow and of the finest quality.

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

TOBACCO

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

Packet, 10c; ounce, 40c; postpaid. Havana The leaf is very thin and of fine texture. Much used for cigar Pkt., 10c; oz., 50c; ½ 1b., \$1.50.





LOWERS, shrubs and trees often (make the difference between a



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 dicult 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 de-scriptions are important to those who are not familiar with the plants, and will assist choosing those which will be most suitable. and will assist in

doors in the fall or early spring, pre-ferably fall. They

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

Tender Annuals must be grown in pots in a greenhouse or in the house, and exposed out-doors 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 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 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.



ALYSSUM

(Sweet Alyssum)

This dainty little plant is unexcelled for borders, beds, bas, pots, rockeries, and for cutting. baskets, 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 fraggrape is very placeing.

fragrance is very pleasing.

No. 2. Alyssum Benthami. Packet,

10c; 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 clus-ters, and are splendid for blue effects

ters, and are specified 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.

Ameratum Mexicanum,

summer. Packet, 10c; postpaid.

No. 101. Ageratum Mexicanum,
Mixed. About eight inches high and of free
branching habit. Packet, 10c; ounce, 25c; post-

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 Alpine. Pkt., 10c; postpaid.

Balsam (Lady Slipper)

(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., 10c.

Bellis Perennis (Double Daisy)

Excellent border plants, six to eight inches high, bearing April to June. bearing charming double flowers from 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 sum-mer until killed by frost. Excellent for mass-ing and for cut flowers. The flowers are in ing 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

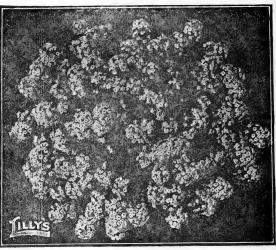
to grow, thinning the plants to a foot apart.

No. 116. Calliopsis, Mixed colors. Pkt., 10c.

Canary-Bird Vine (Tropaeolum Canariense)

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., 10c



Alvesum

ANTIRRHINUM

(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.

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. 1076. Brilliant Scarlet. A very effective d. 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 of plumes resembling a cock's bearing bright Hardy annuals; fine for massing or border work.

No. 17. Celosia Cristata. About one footnigh, bearing large, highly colored combs.







NO HOME is complete without ASTERS NASTRUTIUMS and SWEET PEAS

Produce Magnificent Blooms of this Most Satisfactory Annual



all Comet Asters. 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 glob equaling some of the finer Chrysanthemums.

The plants are of inventor beauty

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. No. 1013. No. 1036. No. 1037. No. 1077. No. 1078. No. 1079. Crego Giant, Mixed Packet, 10c

Perennial Asters

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. ariety is especially valuable for bedding

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

MIXED ASTERS

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., 10c; oz., 75c.





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 add the first summer.

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. Fit., 10c
No. 402. Marguerite, White. Strong growers; free flowering; especially desirable for garden culture. Facket, 10c; postpaid No. 284. Marguerite, Mixed. Fit., 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. Packet10c;

BOOK Free With Orders

CENTAUREA

(Corn Flower. Bachelor's Button. Sweet Sultan)

Among the most attractive and graceful of e old-fashioned flowers. They are hardy anthe 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,

nine inches high, bear a protusion of large, blue, double flowers, and are excellent for pots and edgings — Packet, 10c; postpaid

No. 1685. Blue Emperor. Tall, single Bachelor's Button or Cornflower, growing two feet high — Packet, 10c; postpaid

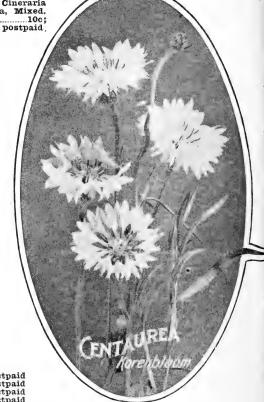
No. 225. Cornflower. The old-fashioned 5. Cornflower, No. 225. Cornflower. The old-fashioned Bachelor's Button, Cornflower, Ragged Sailor,

or Bluebottle..... Packet, 10c; 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; post-

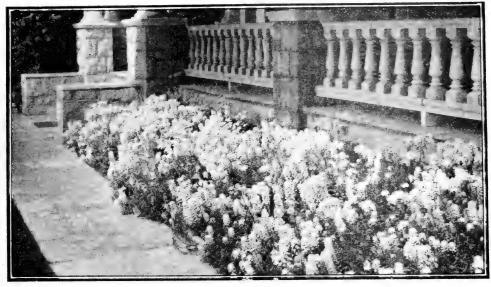
COSMOS

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.

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



39



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 culting. 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.

eter. The No. 39.

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.

yellow. 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 lo-cality. 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 hest in a cool, shady location

No. 165. Mixed Foxglove. Pkt., 10c; postpaid. No. 1086. White Gloxinia-Flowered Foxglove. Packet, 10c; postpaid

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

No. 1088. Grandiflora Foxglove, Bright yel-

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.

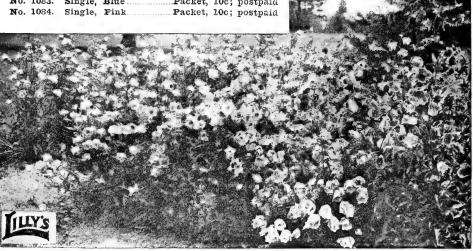
No. 444. Single Annual Gaillardia, Mixed colors Packet, 10c; postpaid

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, 10c; postpaid No. 157. Double, Mixed colors Packet, 10c; postpaid No. 1082. Single, White Packet, 10c; postpaid No. 1083. Single, Blue Packet, 10c; postpaid



Gypsophila (Baby's Freath)

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

No. 925. Snowfiake. (Gypsophila elegans alba pura.) An improved large-flowering hardy

ennial. White. Two feet high

Packet, 10c; postpaid

Ipomoea (Moon Flower Vine. Evening Glory)

The most rapid growing of flowering 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 the evening Moon Flower Vine. (Ipomoea No. 1056.

Mexicana Grandi^{fl}ora Alba.) Covered with large white flowers evenings and cloudy days Packet, 10c

Lobelia

Pleasing half-hardy annuals growing four to Fleasing hair-mary annuals growing four to six inches high and forming compact little bushes literally cover d 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 Packet, 10c; postpaid

No. 1096. Sapphire. A trailing variety, bearing very large deep blue flowers with dark foliage, and rich deep blue flowers

Facilet, 10c No. 364. Erinus Hamburgia. A trailing Lobelia, for hanging baskets or window boxes. Large dark blue flowers Pkt., 10c; postpaid



Gypsophila



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.

Lilly's Annual Everblooming Hollyhock. 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 Packet, 10c; postpaid No. 1092. Pink, Double, Perennial Hollyhock Pkt., 10c

Black, Double, Perennial Hollyhock Pkt., 10c White, Double, Perennial Hollyhock Pkt., 10c Yellow, Double, Perennial Hollyhock Pkt., 10c No. 1093. No. 1094. No. 1095.

LARKSPUR

(Delphinum)

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.....

No. 208. Tall Rocket, Mixed. A tall hardy annual Larkspur,

No. 208. Tall Booket, Mixed. A tall nardy annual Larkspur, growing about two and one-half feet high. Mixed colors...Pkt., 10c
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 dy annuals of easy culture. The African varieties grow two 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 dwarfed in growth, with beautiful striped flowers varieties are dwarfed 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.

One foot high. with large flowers in mixed colors Packet, 10c; 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 secd if sown early.

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

stems, rendering them splendid for cutting....Packet, 10c; postpaid
No. 1054. Myosotis Palustris. The true Forget-Me-Not. A

CROP BOOK, containing cultural directions for flowers. vegetables, and farm crops, also much other useful information, will be furnished free with any order if requested on the order,



MIGNONETTE

No garden is complete without this 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 bed-

Mo. 139. Reseda Odorata. The old-fashioned Sweet Mignonette. Packet, 10c; ounce, 20; 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.

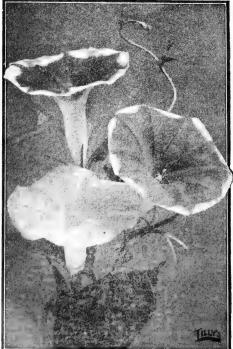
No. 51. Mirabilis Jalapa. Pkt., 10c.

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. 10c.

Petunia

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





No. 61. Choice Single Petunias. A choice mixture of fine single varieties and colors. Packet, 10c; postpaid

MORNING GLORY

Well known hardy climbing annuals, growing subout fifteen feet high and bearing pretty flow-ers in a variety of colors and tints, fully ex-panded only in the morning. Of easy culture and quick growth.

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, 10c; 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. 58. Unistrusting Eugery.
flowers with a black spot on each petal. Hardy
annual Packet, 10c; postpaid

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 Hybrids.

Hardy perennials, producing immense flowers in
gorgeous colors. Packet, 10c; postpaid

No. 351. Mixed Pounies. A choice mixture of

Don't fail to plant Sweet Peas.





NASTURTIUMS

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.

Fall, 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

.....Packet, 10c; ounce, 25c; postpaid of a distinct form and in a great variety of colors.

Packet, 10c; ounce, 30c; postpaid No. 10c0. King Theodore. Very deep crimson, nearly black; dark foliage Pkt., 10c; oz., 25c
No. 906. Pearl. Cream white, or primrosePkt., 10c; oz., 25c

Lobb's Tall Nasturtiums

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

No. 1064. Black Prince. Velvety black flowers; dark foliage. Packet, 10c; ounce, 25c; postpaid. No. 1098. Queen Alexandria. Variegated leaves; flowers blood red, marbled and mottled ...

Packet, 10c; ounce 25c; postpaid No. 1099. Cardinal. Scarlet

lacinated flowers

Packet, 10c; ounce, 30c; postpaid
No. 1101. Flamingo. A beautiful new variety with magnificent lacinated orange flowers. Packet, 10c; ounce, 25c; 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 flow-

trast to the silver variegated foliage. Splendid for bedding or pots.....

Packet, 10c; ounce, 30c; postpaid.
Dwarf Vesuvius. Deep salmon-No. 907. rose; a beautiful shade.

Dwarf Mixed Nasturtiums

The choicest standard dwarf varieties and colors mixed. Splendid for beds and borders. No. 87. Pkt. 10c; oz. 20c; 1/4 lb. 60c; lb. \$2.00.

No. 264. Empress of India. Fiery crimson flowers; compact plant with very dark foliage
Packet, 10c; ounce, 25c; postpaid
No. 911. Dwarf Chameleon. All colors borne No. 911. Dw on each plant...

yellow spotted with maroon.Packet, 10c; ounce, 25c; postpaid

Tall Mixed Nasturtiums

A splendid mixture of the best tall varieties, including all harmonizing colors No. 262. Pkt. 10c; oz. 20c; 1/4 lb. 60c; lb. \$2.00.



CHOICEST VARIETIES

Magnificent and Continuous Blooms

No home in the Pacific Northwest is complete without a bed of Pansics, 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 blooms will be small. Abundant irrigation will produce dant irrigation will produce larger flowers during the sum-mer, 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. better will produce plants blooms if transplanted two or three times.

No. 89. Fine Mixed English ansies. Finest varieties and Pansies.

Pansies. Finest varieties and colors of English Pansies, mixed. The plants are of compact habit....Pkt., 10c; postpaid No.90. Giant Flowered French Pansies, Mixed. A fine mixture of large flowering French varieties......Packet, 10c; postpaid No. 92. Giant Trimardeau, Mixed. A splendid type of immense size, distinct shape and

mense 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 ve

No. 94. Beaconsfield. A very large Pansy, with upper petals light lavender and lower petals purple Packet, 10c No. 203. Emperor William. Dark navy

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.

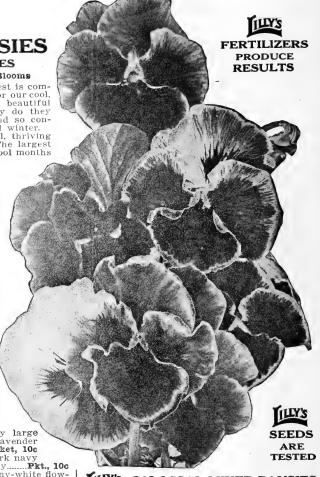
No. 69. Single Portulaca, Mixed colors Packet, 10c; ounce, 60c; postpaid No. 70. Double Portulaca, Mixed. Packet, 10c

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



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 Collosal Mixture.

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

Primroes

(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

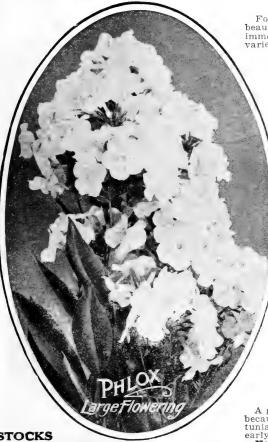
No. 75. Primula Veris. The early spring flowering border primrose or cowslip, a beauti-

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, 10c; postpaid





STOCKS

Stocks are among the most popular halfhardy plants for bedding, edgings, pot cul-ture 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

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., 10c

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 Phlos. (Phlox Drummondi 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.....

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

Ricinus

(Castor Oil Bean)

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

No. 140. Castor Oil Bean. Packet, 10c

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 fragrant flowers in drooping spikes of the most intense glistening scarlet. Splendid in working out color schemes if properly used.

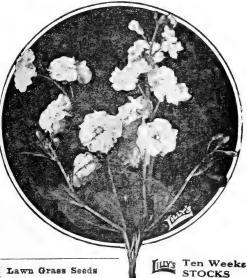
No. 920. Salvia Splendens. Packet, 10c

Salpiglossis

(Painted Tongue)

A great favorite among the half-hardy annuals A great ravoirte among the hair-hardy amounts 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, 10c; postpaid





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.

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

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 fluted.

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., 35c; 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., 35c; postpaid

Dobbie's Cream

Florence Morse

Large wavy flowers of soft blush-pink flushed towards the edge with deeper pink.
No. 1014......Pkt., 10c; oz., 35c; postpaid

Vermillion Brilliant

A brilliant scarlet Spencer of splendid form, The standard is very bold and beautifully waved. On accoun tof its brightness this is a very telling color and should be in every collection.

No. 1046 Pkt., 10c; oz., 40c; postpaid



Dainty

Spencer

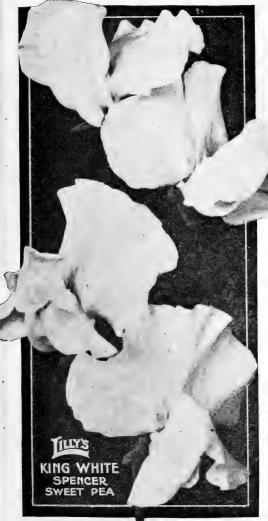
Very large, splendidly formed flowers of blush-white distinctly picotee edged with rosepink. A beautiful Sweet Pea of splendid Spencer form.

No. 1008.....Pkt., 10c; oz., 35c; postpaid

Primrose Spencer

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





Apple Blossom Spencer Avery large bold flower of best Spencer form. The stanard is very bright rose, wings primrose with a flush of rose tint. Very robust and profuse flowering. No. 1050Pkt., 10c; oz., 35c; postpaid

The king of all white Sweet King White 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, fiery red orange, grand Spencer. Practically sunproof. A

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.

White Spencer The flowers are and of magnificent Spencer waved form. The stems are long and generally carry four blossoms.

No. 1001......Pht., 10c; oz., 35c; 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., 35c; postpaid Illuminator A glorious orange-salmon Spencer Sweet Pea of striking color and magnificent form and size. No. 1045Pkt., 10c; oz., 50c; postpaid

Wedgewood A clear light silvery-blue, with just a suggestion of

large Α George Herbert Spencer and beautiful Spencer Sweet Pea. The color is rose-crimson suffused with magenta and showing veins in the wings.

No. 1003.... Pkt., 10c; oz., 35c; 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. 1005Pkt., 10c; oz., 35c; 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., 35c; postpaid

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., 35c; postpaid

Senator Spencer A very large and attractive Spencer; chocolate and seal brown striped, flaked and flaked and

America Spencer Striped brilliant carmine-red over white. Very large flowers of splendid form and striking color.

No. 1024Pkt., 10c; oz., 35c; postpaid

MIXED SPENCER SWEET PEAS

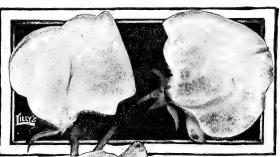
A Superb Mixture of Best Varieties of Giant Waved Spencer Sweet Peas

This splendid mixture contains nearly all varieties of the Spencer type and is designed for those who wish all the colors, shades and fints 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; 0z., 25c; ¼ lb., 75c; lb., \$2.50; postpaid

Fiery Cross

An entirely new shade of red in Sweet Peas and easily the most brilliant red Spencer. The shade of red is hard to describe. It is what is known by some as "Turkey" red or "Military" red. A bright red-orange cerise with some salmon in it might convey the idea. No. 1072. Pkt., 10c; oz., 50c; postpaid



GRANDIFLORA TYPE SWEET PEAS

The Standard, or Grandiflora type Sweet Peas, includes some splendid varieties and beautiful colors, and they bloom lavishly during the entire

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-ooded form. The best white Sweet Pea hooded form. The best vof the Grandiflora type.

King Edward VII

No. 954

Large: open form: bright red. of the pure red Grandifloras.

Lady Grisel Hamilton

No. 465 Soft layender 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., 10c; oz., 20c; 1/4 lb., 60c; lb., \$1.75; postpaid.

ROYAL MIXED SWEET PEAS

A Fine Mixture of Grandiflora Varieties

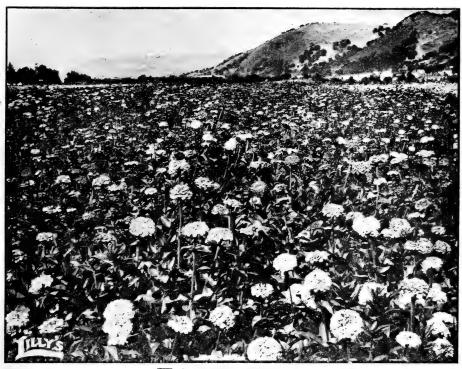
Included in this mixture are the best of all varieties and colors of Grandiflora Type Sweet Every seed is of some worthy variety Peas. and will produce a satisfactory blossom. Those who do not care to keep the colors separate will find this mixture very pleasing.

No. 958. Pkt., 10c; oz., 20c; 1/4 lb., 40c; lb., \$1.25; 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, 10c; 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 sectuded 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.

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 VioletPacket, 10c No. 1106. Viola Cornuta; Tufted Pansy Violets; Mixed colorsPacket, 10c; postpaid

Verbena

Verbenas are low-growing, creeping, halfhardy perennials, blooming the first year from seed, and generally treated as annuals. They are splendid for beds, borders, rockeries, hanging baskets and window boxes.

ZINNIA

This old favorite half-hardy annual has been greatly improved and produces a profusion of large double flowers, excellent for bedding and for boquets. 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., 10c; postpaid





NONPAREIL LAWN GRASS SEED STANDARD FOR THE NORTHWEST

SIMPAND ION THE MODIL WEST

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 is 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.), 30c; 5 lbs. or more, 25c per lb. (Subject to change.)

Postage additional.



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.), 45c; 4-lb. package, \$1.75. Postage additional.

CROP BOOK

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

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.





LLY'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 991/2% pure, is free from dodder and other noxious weed seeds, and consists only of big, plump seeds; all small and shrunken seeds having been removed. Hand-picked seeds could hardly be better. To 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

regard to growing Alfalfa are contained in the Crop Book, which we will give free with any order if requested.

LILLY'S BEST ALFALFA, \$24.00 per 100 lbs. Less than sack lots, 26c 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, \$25.00 per 100 lbs. Less than sack lots, 27c per lb.

SEEDS ARE TESTED for PURITY and GERMINATION

There is a difference in seeds; and this is farmer would intentionally sow a pound of weed seed on his land, yet many are sowing more than that amount of weed seeds each year, mixed with clover and gross seeds. year, mixed with clover and grass seeds. Some do this carelessly, not realizing the results; others do it to save the few cents difference in price between good seed and poor seed.

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

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

Any seed packed in sealed bags branded that can be produced. It is false economy to sow any but the best that can be procured.

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.





山山 RED CLOVER

(Trifolium Pratense)

Very Nearly Perfect, and Cheapest in the End 99 PER CENT PURE

Lilly's Best Red Clover Seed is guaranteed to test not less than 99% pure, and we make it as much better as possible, usually as high as 99%% pure. This state of purity is seldom equalled, and would be impossible without our splendid seed cleaning machinery. We without our spiendid 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

quires 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

Choice Red Clover see enclosed supplement, or, if not of recent date, write for later price list.

WHITE CLOVER

(Trifolium Repens)

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

For lawns, especially, none but the very best White Clover seed obtainable should be sown, as ordinary-seed is very hable to contain sorted. Lilly's Best White Clover is grown on land free from noxious weeds, is thoroughly recleaned, 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 deas ordinary seed is very liable to contain sorrel. 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 erros seeds. 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 prin-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. For prices see enclosed supplement, or write for latest price list.

山珍 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 re-

quired 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 sown at the rate of twenty to thirty pounds per acre. The soil should be very firm.

For prices see enclosed supplement, or write

for latest price list.

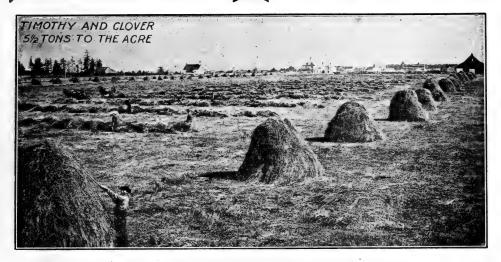
Yellow Sweet Clover (Melilotus Indica)

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.

For prices see enclosed supplement, or write

for latest price list.





TIMOTHY SEED

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 will be very nearly impossible to produce better seed than Lilly's Best. The seed is grown in Idaho on land that is free from weeds, and, with our splendid seed cleaning equipment, all small and light seed, as well as all foreign matter, is removed. None testing less than 99½% pure is branded Lilly's Best. The Pure Seed Law requires only 96% purity.

Timothy is the standard grass for hay in all parts of the country, and, although there may be other grows equally are good or better for him to the country.

Timothy is the standard grass for may 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, \$14.00 per 100 lbs. Less than sack lots, 15c per lb.

Choice Timothy, \$12.00 per 100 lbs. Less than sack lots, 13c per lb.

KENTUCKY BLUE GRASS

(Poa Pratensis)

Kentucky Blue Grass is a true perennial, lasting indefinitely. Its densely creeping rootstocks, 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-stalks 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.

RED TOP (Agrostis Vulgaris)

Red Top, or Herd's Grass, is valuable in wet Red Top, or Herd's Grass, is valuable in wet places where other grasses will not thrive. When mixed with other grasses and clover it 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 bulls and nearly twice 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 if used alone. Price of Canadian Blue Grass will be found on supplement enclosed.

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; 50c per 1b.





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): \$15.50 per lbs. Less than sack lots, 17c per lb.

sixty pounds per acre,

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): \$16.50 per 100 lbs. Less than sack lots, 18c per lb.

Tall 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 successfully in Eastern Washington lifornia. It is best mixed with other Washington grown and California. 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 1b.

Velvet Grass, or Mesquite
(Holcus Lanatus)
Velvet Grass, also known as Mesquite and
Meadow Soft Grass, is of little value except meanow soft Grass, is of fittle value except for pastures on light, sandy, or marshy soils where other grasses will not grow. It has lit-tle food value, is not relished by stock, and on account of its spreading habit is rather diffi-

cult 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. as in bloom, later it becomes hard and woody that 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 nounds ner acre

Price (subject to change): \$31.00 per 100 lbs. Less than sack lots, 32c per lb.

Crested Dog's Tail (Cynosurus Cristatus

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): 50c per lb. For prices on large quantities see enclosed supplement, or later issues which will be mailed on request.

LLYS 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 Cas-In appearance it resembles cade Mountains. 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. 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; \$28.00 per 100 lbs. Less than sack lots, 30c per 1b.

Fine Leaved Fescue

(Festuca Pratensis)

to Sheep's Fescue, but with finer Similar 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 Tenuifolia)

Also known as English Blue Grass. the oest 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; \$27.00 per 100 lbs. Less than sack lots, 29c per lb.

Sheep's Fescue

(Festuca Ovina)
Of dwarf, thick growth, yielding a large amount of nutritious herbage, and is valuable It prefers dry uplands in pasture mixtures. It prefers dry upla and thrives in poor, shallow, gravelly soils.

Price; subject to change; 60c per 1b. See supplement for price on large quantities.

Hard Fescue

(Pestuca Duriscula)

More dwarf than Sheep's Fescue, but useful in pasture mixtures for dry uplands and poor soils. Price; subject to change; 60c per 1b. See supplement for price on large quantities.

Red, or Creeping Fescue (Pestuca Rubra)

creeping rooted species, forming a close and lasting turf, resisting drought and thriving on inferior soils, gravelly banks and ex-Price; 60c per 1b. posed hillsides. See supplement for price on large quantities

PASTURE AND HAY MIXTURE

The Most Suitable Combinations in Correct Proportions for Best Results

These Pasture Mixtures contain the correct early, medium and late grasses to supply pasa 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 Mea-Fescue, Red Top, Alsike, English Rye Grass, Kentucky Blue Grass, Canadian Blue Grass, Red Clover, Italian Rye Grass, and Orchard Grass.

No. 2 Pasture Mixture

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

Prices; subject to change; 1 lb., 25c; 10 lbs., 21c per lb.; 50 lbs., 151/2c per lb.; 100 lbs., \$20.00.





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.

Wheat is a remarkable new winter wheat imported from southern Sweden and is all. It ripe.... the heaviest yielder of them all, earlier than most other varieties. 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 resistent 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: Lb., 10c; 10 lbs. or more, 5½c per lb.; 125 lb. sack, \$6.55. 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 Station describes 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: Lb., 10c; 10 lbs. or more, $5\frac{1}{2}$ c per lb.; 125 lb. sack, \$6.55. F. O. B. Seattle or Portland.

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 the fall,

and with the exception of Sun Wheat it appears to be the only really satisfactory wheat for this section. Its popularity is due to its drought resistance, heavy yielding capacity, non-shattering character and high milling value. Our seed is of the finest quality, carefully selected and thoroughly recleaned.

night.

Price: Lb., 10c; 10 lbs. or more, 5½c per lb.; 125 lb. sack, \$6.55. F. O. B. Seattle or Portland. Prices are subject to change. Current price list will be mailed on request.

Prof. E. E. Gaines, Cerealist, Washington Agricultural Experiment Station, says:

Wheat is the standard grain crop of the Northwest. It is grown under wide variations of temperature, elevation and rainfall. Fall wheat should be drilled in at the rate of from three to six pecks (45 to 90 lbs.) per acre on a rather loose cloddy seed bed. Spring wheat does better when drilled in early on a seed bed that is rather firm below the first two or three inches. Harrowing wheat is of doubtful value unless the ground is badly crusted or foul

with mustard or other weeds.

There are fifty or more varieties of wheat grown in the Northwest, but most of them are Intere are intry of indice varieties of wheat grown in the victiwest, but hinds of them are inferior and should be discarded. The country seems to be in a transition stage just now, as is shown by the introduction and sudden popularity of several new strains, such as Marquis (hard red Spring) and some of the Club Hybrids. As a rule winter wheat yields more than spring wheat. For silage or hay, wheat should be cut in the dough stage, but for grain it should be wer matured.



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 nost 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 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 resistent 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: \$5.00 per 100 lbs.; less than sack lots, 6c lb.F. O. B. Seattle or Portland.

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. 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.

\$5.50 per 100 lbs.; less than sack lots, 6c per 1b. F. O. B. Seattle or Portland. Subject to change. See enclosed Supplement, or write for later issues.

BLACK ALASKA OATS

A Very Superior, Hardy Black Oat

A hardy black oat, with spreading head, thick, black hull, and large, plumb, 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 freez out during the winter. Our seed is very superior, being grown in Washington from seed of a perfected strain which we imported from Sweden Sweden.

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

F. O. B. Seattle or Portland. Subject to change.

Write for prices on large quantities.



GRAY WINTER OATS

Especially Valuable for Fall Sowing

Gray Winter Oats are very hardy, and are generally used for fall sowing, and are especially useful for sowing with vetch. The straw grow: very long, is stiff and not liable to lodge. It is a side 64t with very compact head. The grain is dark gray, large and plump, and it yields well.

Price: \$3.06 per 100 lbs.; less than sack lots. 6c per lb. 1 O. . Seattle or Portland.

A Popular and Productive Variety

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: \$5.00 per 100 lbs.; less than sack lots,
6c per lb. F. O. B. Seattle or Portland.

Prices are subject to market fluctuations. See enclosed Price List Supplement, or later issues which will be mailed on request. Write for prices on large quantities, stating varieties and quantities wanted.

TREATMENT OF SEED OATS FOR SMUT

Immerse the sacks of seed ten minutes in a solution of one pound of Formalin to forty gallons of water; remove the sack, and drain. Allow the seed to remain in the wet sacks over night 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,



Grain and Forage Crops OATS

By Prof. B. F. Gaines, Cerealist, Washington Agricultural Experiment Station

The oat plant grows along at a moderate rate until it begins to head out, then doubles its length and rushes to maturity in less time than any of the other cereals. It has a vigorous, spreading root system, and will do better on sod or newly cleared land than either wheat or barley. It is best to fall plow, then disk in spring and seed with a drill. Oats may be broadcasted with better results than wheat or barley. Some farmers sow them on stubble land and then plow them under, but this is not considered advisable, for oats will respond to thorough seed bed preparation by increased

yields which will well pay for the extra labor. Oats cannot be grown in arid sections where wheat and rye will still produce a crop.

Four to six pecks (40 to 60 lbs.) of seed per acre will produce more grain on the drier uplands than heavier seeding, but eight to ten pecks (80 to 100 lbs.) may be used with profit on the bottom lands. The later varieties such as Swedish Select or Abundance produce the heaviest crops on the bottom lands. Oats are considered the standard grain for horses the world over, and oat hay is excellent for all stock.

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, \$5.00 per 100 lbs.; less than sack lots, 5½c per lb.; F. O. B. Seattle or Portland. Prices are subject to change.

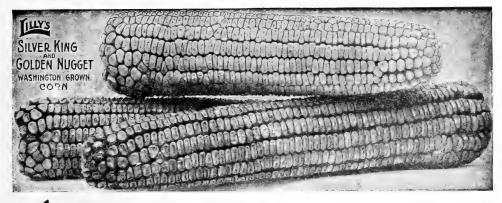
Oats With Peas or Vetch

By Alf. Christianson

Oats is considered the best grain to sow with peas or vetch for green feed, ensilage or hay. They may also be left to ripen and the oats can easily be separated from the peas. Some farmers who have tried growing peas mixed with oats claim that under certain conditions and on some soils they get a better crop than by growing peas alone. However, the principal reason for mixing them is to form a support for the peas so that they will stand up better and can be more easily cut with the mower and when used for green feed or ensilage they make a more correctly balanced food.







LLY'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 for 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.

WASHINGTON **GOLDEN NUGGET**

Our tests prove this to be the best yellow out corn for the Northwest. The stalks grow dent corn for the Northwest. The stalks grow to a good height, producing one or two good cars cach. 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 thor-

oughbred 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: I lb., 20c; 10 lbs.,

121/2 c per lb.; 100 lbs., \$12.00; P. O. B. Seattle or Portland.

WASHINGTON SILVER KING

· A new and very early variety; the largest and best early white corn, and especially 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., 12%c per lb.; 100 lbs., \$12.00; F. O. B. Seattle

or Portland.

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 IOWA GOLD MINE. A medium early golden yellow dent corn PRIDE OF THE NORTH. A splendid quick-growing yellow dent	\$.20 .20 .20	\$.11 .11 .11½	\$.10½ .10½ .11	\$.10 .10 .10½
CHAMPION WHITE PEARL. A large, late, white dent corn EARLY CANADA. An early yellow flint variety	.20	.11	$.10\frac{1}{2}$ $.11$	$.10$ $.10\frac{1}{2}$
KING PHILIP. An early red flint corn adapted to the Northwest. SANFORD WHITE FLINT. A reliable, early, large, white flint corn MINNESOTA NO. 13. A good, new, large, early, yellow dent corn	.20 .20 .20	$ \begin{array}{c} .11\frac{1}{2} \\ .11\frac{1}{2} \\ .11\frac{1}{2} \end{array} $.11	$.10\frac{1}{2}$ $.10\frac{1}{2}$ $.10\frac{1}{2}$
SWEET FODDER CORN. Sweet corn; producing nutritious fodder RED COB ENSILAGE CORN. A field corn for fodder and ensilage	.20	.16	$.15\frac{1}{2}$ $.10\frac{1}{2}$.15



WHITE HULLESS BARLEY

BOTH BEARDLESS AND HULLESS

Thrashes Out Like Wheat, Making it a Valuable Stock and Poultry Food

Barley is one of the very best stock foods, either as grain or hay. It is also splendid as a nurse crop for grasses and clover and as a support for vetch and peas. It is a shallow feeder, and requires a mellow, rich soil with fertility near the surface. It is not a crop for poor, sandy, or worn out land, neither does it do well on newly cleared land, but no other crop responds more readily to good soil and thorough cultivation, and the careful farmer who gives a little extra attention to thorough preparation of the soil will be amply repaid for his trouble.

The only objections to barley have been the long, stiff beards which are objectionable in grain hay, and the hulls, which make the grain less valuable for feeding purposes. These objections are entirely overcome in White Hulless Barley, for it is entirely beardless, as shown in accompanying halftone, and when thrashed is

WISCONSIN PEDIGREE BARLEY Best Bearded Barley

This barley was introduced by the Wisconsin Agricultural Experiment Station, the originators of the well known Oderbrucker Barley, to which they claim that this is much superior. It has very nearly replaced all other varieties of bearded barley in Wisconsin, the greatest barley growing state in the Union

The heads are exceedingly long and are uniformly well filled; the straw is strong; the grain is large, plump, and heavy, and the experiment station claims that it outyields all other bearded varieties five to six

per cent.

Price: \$6.00 per 100 lbs.;
less than sack lots, 6½c per

SIX ROW WHITE BARLEY

Specially selected recleaned seed of the common, white, six-rowed, bearded barley which has been most generally grown. It is somerally sown in fall west of the Cascade Mountains.

Price: \$5.25 per 100 lbs.; less than sack lots, 5%c per pound.

With your next order ask for a copy of our latest Crop Book. There are a great many short articles in this book which are of interest to all farmers as the book covers a variety of topics.



hulless, 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.

\$8.12 per sack of 125 lbs.; less than sack lots, 7c per lb.

Price subject to change.

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: \$6.00 per 100 lbs.; less than sack lots, 61/2c 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: \$5.50 per 100 lbs.; less than sack lots, 6c per pound.

Have you received a copy of our latest retail price list. The prices we quote above are subject to change without notice. Write for latest supplement.



PETKUSER RYE

The Best Winter Rye for the Northwest

After testing all 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 North-

west 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 usually considered too rich

for rye.

Price: Lb., 10c; 10 lbs., 7c lb.; 50 to 100 lbs., 6%c; 125 lbs. or more, 6%. Full sack holds 125 lbs.

RUSSIAN WINTER RYE

A Standard Variety Which Produces Excellent Results

With the exception of Petkuser Rye, this is the best in yield and quality for grain, grain hay, straw or green forage. Our seed is specially recleaned, and only the largest and heaviest kernels are retained. Rye is a valuable and hardy crop, providing green forage in late fall and early spring. It matures more quickly than most other crops and can be made to yield a good crop on soil that is too poor for other cereals. It is splendid to sow with vetch or field peas. In food value it is very similar to wheat and is a very good hog food.

Price: Lb., 10c; 10 lbs., at 7c lb.; 50 to 100 lbs., 6%c; 125 lbs. or more, 6%c. **Pull sack holds** 125 lbs.

EMMER, OR SPELTZ

Produces Good Crops Where Other Grain Fail

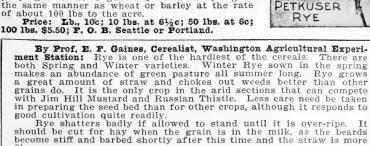
Emmer has been grown in this country for several years, but has been commonly called "Speltz," which is in error, as Speltz is an entirely different grain, little known in this country. Emmer is highly recommended by the United States Department of Agriculture in Farmers' Bulletin No. 139, "Emmer a grain for the Semi-Arid Regions,' which may be procured by writing to your congressman or to the U. S. Department 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.

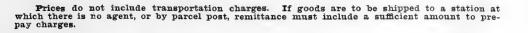
on poor soils.

fibrous.

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 barley or rye. When threshed it retains the hulls, like barley, but the beards are very short, as shown by accom-panying cut. It is generally sown in spring in the same manner as wheat or barley at the rate









ILLY'S VETCH

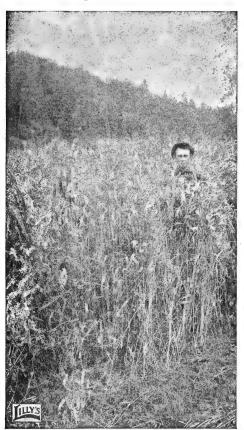
A Valuable Hay, Ensilage, Pasture, Soiling, and Fertilizing Crop

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 some

times for spring sowing.



LLY'S COMMON. 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,

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 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.

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

list.

LY'S WINTER, 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 fertil-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 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.

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

ILLY'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, are ideal for growing peas, and field peas are one of our most valuable crops for either grain, hay, ensilage, or soling. 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







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 full sown crop.

For hay it should be sown at the rate of about thirty pounds per acre; for seed twelve to fifteen pounds is suffi-cient. It produces two to five tons per acre of very good hav.

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 pro-duces as much as five tons of hay and seventy bushels of seed per acre. **Price**, 10c per 1b.

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**, 10c per lb.

Siberian Millet

A comparatively new variety, imported from Russia: earlier than either German or Hungarian, and very hardy, withstandling 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**, 10c per lb.

Write for prices on 100-lb. lots of Millet, Sorghum, Japanese Millet, Buckwheat, Kaffir Corn, Flax-seed, etc. It is impossible in these times to anticipate quantity prices so far in advance.

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 1b.
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 1b. 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.

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, 10c per 1b.

EARLY AMBER SORGHUM

The sugar cane used for making sorghum syrup, also a splendid summer forage crop for cows; very sweet, rich and succulent. Should not be planted until the weather is thoroughly warm in spring.

Price, 15c per lb.; postage additional.

See supplement for larger quantities.

JAPANESE BUCKWHEAT

Excells all other varieties. The grain is large, it yields heavy, ripens early, stands up well, and the flower is fully equal to any other. It remains a long time in bloom and is excel-Price, 15c per 1b. lent for bee pasture.

See supplement for larger quantities,

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.



KALE One pound of seed will produce sufficient plants for one acre

CULTURE: The seed is generally sown in drills three feet apart early in spring and the plants transplanted when six to eighteen inches high. They may be transplanted to ground from which an early harvested crop has been removed, providing sufficient moisture can be depended upon. The plants should be set three feet apart each way. They grow about four feet high with a wide spread of leaves, and a single plant often weighs 30 to 40 pounds. For summer feeding the seed may be sown in the fall and the plants transplanted in the spring but it seldom yields as heavy as that grown for fall and winter feeding. Like cabbage, kale requires rich soil and thorough cultivation. Under favorable conditions it will sometimes yield as high as sixty tons to the acre. sometimes yield as high as sixty tons to the acre.

THOUSAND HEADED KALE

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



Thousand Headed Kale or Cow Kale as it is sometimes called is one of the most useful crops for the Pacific Coast. It belongs to the cabbage family, is succulent and nutritious and is unequalled as green food for stock, especially poultry and cows. West of the Cascade Mountains it is left in the ground all winter and cut as required for feed-

ing.
It is not only an economical It is not only an economical food but by supplying succulent green food will keep stock in perfect health. No poultryman can afford to be without his patch of Kale; it answers the question of green food for fall and winter. Several good articles in the supplementary of the second content of the second conte cles in regard to the culture and uses of kale are contained in our crop book, which will be fur-nished free with any order if requested. Feeding this plant by stripping off the lower leaves is no t recommended as regular practice, as it is extremely la-borious, especially during wet weather, puddles the soil badly and causes the stripped plants to suffer from frost. However, where the green feed runs short in September the larger lower leaves of the kale may be stripped off for feeding at this

Price: Oz., 10c; 1/4 lb., 20c; lb., 65c; postpage additional. Write for prices on larger quantities.

DWARF ESSEX RAPE

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 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 to eight weeks. If not cut close it will sprout up again in fall and as it will stand considerable frost will furnish green food far into the winter. It thrives best in cool weather and is especially adapted to cur climate on the Pacific Coast 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 obtained by sewing in drills and cultivating. Additional cultural directions contained will be found in the crop book.

Price: Lb., 20c; 10 lbs., \$1.50; postage add.

ILLY'S MARROW CABBAGE

White Stemmed Marrow Cabbage

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 weight fourteen to twenty pounds. The stalks are edible and 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., 15c; lb., \$1.00.

Every one with Poultry should have a patch of Kale or Marrow Cabbage



ILLY'S KING OF SWEDES

RUTA BAGA or SWEDISH TURNIP

A Splendid Variety for Stock Food or Table Use

Ruta Bagas are grown and used similar to turnips, but require a longer season for growth and are even more valuable for stock food; they are also preferred by many for table use. Lilly's King of Swedes is an ideal yellow fleshed rutabaga. The flesh is sweet, fine grained, juicy, tender, solid, and the color is bright yellow, very attractive, making it especially desirable for table use. Its large size, productiveness, hardiness and splendid keeping qualities make it the most desirable variety for winter feed for stock.

Pkt., 10c; oz., 20c; ¼ 1b., 65c; 1b., \$2.25

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, vary large, immensely productive, and a good keeper.

Pkt., 10c; oz., 20c; ½ 1b., 65c; 1 lb., \$2.25

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.

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 backbreaking labor, do the work much more quickly, and do it better. They will more than pay for themselves the first season.



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.

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 gen-

erally grown for that purpose. Pkt., 10c; oz., 15c; ¼ lb., 35c; l lb., \$1.10. Write for prices on large quantities.





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 twelve pounds being not uncommon.

Pkt., 10c; ½ 1b., 50c; 1 1b., 90c

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

Write for prices on larger quantities.

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 1b., 50c; 1 1b., 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., 50c; 1 lb., 90c

Golden Tankard Mangel

A popular, tankard shaped, stock beet size; flesh yellow; nutritious and well liked by stock. Will grow in shallow soil.

Pkt., 10c; ½ 1b., 50c; 1 1b., 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. Pkt., 10c; ½ lb., 55c; 1 lb., \$1.00

There prices do not include postage.



LAWN DRESSING

Practically Odorless, Pleasant to Apply; Makes Luxuriant Rich Green Lawns Guaranteed Analysis: Nitrogen as Ammonia, 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 sprinkled. One hundred pounds is sufficient for about twenty-five hundred square feet of old in 25-lb. and 100-lb. bags only.

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

Price 25 lbs. \$1.15; 100 lbs., \$3.85; F. O. B. Seattle or Portland.

Potato Fertilizer Our Potato fertilizer has long been a standard with many of our customers. It contains a little more Nitrogen than our Morecrop and about the same amount of Phosphoric Acid. Some wish a fertilizer running a little stronger to Nitrogen, and to those we recommend this dependable product.

Guaranteed Analysis: Nitrogen as Ammonia, 4%, Phosphoric Aced 10%.

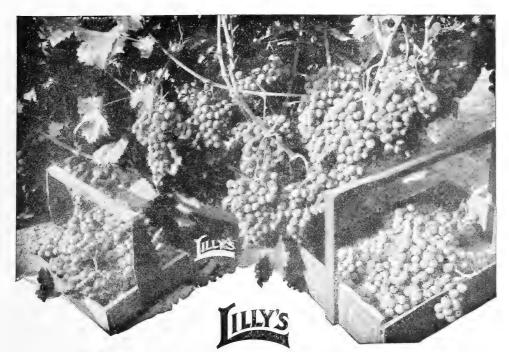
Price 25 lbs, \$1.10; 100 lbs., \$3.60; F. O. B. Seattle or Portland.

Fruit and Vegetable Fertilizer This is a high grade, highly concentrated fertilizer prepared especially for vegetable gardens, orchards and small fruits. 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.

Guaranteed Analysis: Nitrogen as Ammonia, 5%, Phosphoric Aced 10%.

Price, 25 lbs., \$1.15; 100 lbs., \$3.85; F. O. B. Seattle or Portland.





MORCROP FERTILIZER

For Farm and Garden

Is the direct result of our many years experience with fertilizers. To manufacture a general purpose well balanced fertilizer which we could strongly recommend to our customers has been an ambition we have realized in Morcrop. The use of a commercial fertilizer is becoming so common now that it is only a question of which fertilizer will be best suited for certain conditions and not as to whether one should be used. In Morcrop we have combined the elements necessary to make it a fertilizer suitable for all ordinary purposes.

Potatoes

Beets, mangels, turnips, Carrots and other root crops require a fertilizer which will give a good start in the earlier stages of growth, but must not be too will remain in the soil to feed the root gradually without forcing a growth of tops.

Morcrop will remain in the soil to feed the root gradually without forcing a growth of tops.

Lawn Dressing When applied to the lawn at the rate of one hundred pounds to each 2,000 square feet and almost immediate effect will be noticeable. For new lawn use 100 lbs. to each 1,000. One Hundred lbs. of Morcrop is equal to nearly a ton of manure and is not nearly so objectionable. Morcrop is nearly odorless and easy to handle, as it is pulverized and can be sifted onto the lawn in equal dressings.

No Weed Seeds The great drawback to manure is the large amount of weed seeds it contains and which will surely come up to annoy you and rob you of your profits. Morcrop is absolutely free from such weed seeds and contains only matter beneficial to the soil,

Manure Now Scarce

The time is not far back when the word "fertilizer" was summed up in the one word "manure." Each day will find manure more scarce, and as we all know we just must fertilize, we are turning to the commercial fertilizers. which give better results with less outlay of labor, and in the end is really a great deal cheaper when results are summed up.

Guaranteed Analysis: Nitrogen as Ammonia, 2%, Potash 2%, Phosphoric Acid 10%. Price package (about $1\frac{1}{2}$ lbs.), 25c; 25 lbs., 75c; 100 lbs., \$2.50; F. O. B. Seattle or Portland.

When your seed order is mailed in be sure and order a sack or a ton of Morcrop as your needs demand, and the results will open up a new field for profit.

FERTILIZERS

Experiments in the use of fertilizers on cabbage by the Department of Agriculture brought out some remarkable comparisons. One one acre of cabbage without fertilizer 910 prime heads were secured, and when fertilized with three equal dressings 7,580 perfect heads was the result. This extra cost was \$7.00 per acre or \$54.00 for each dollar invested. The agricultural colleges and experiment stations are doing a great work along these lines and you should provide yourself with the different bulletins as they are issued. We will gladly secure for you or have sent to you any bulletin mentioned in our catalog.

Advance a step in your knowledge of commercial fertilizers this year. Make use of a sack or a ton, according to whether you feel you are experimenting or getting real results.

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 great 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), \$13.00 per sack of 200 lbs.; less than sack lots, 8c per lb.;

P. O. B. Seattle or Portland. Guaranteed analysis: Nitrogen, 13%.

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 rosebed is made by mixing large quantities of bone meal with the soil. It is also an excellent top dressing for lawns, flower beds,

etc., and is used extensively in greenhouses, 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., \$3.50. Guaranteed analysis: Nitrogen as Ammonia $2\frac{1}{2}$ to $3\frac{1}{2}$ %; Phosphoric Acid 18 to 22%.

Blood and Bone A quick fertilizer, and for that reason more valuabel 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), \$3.50 per 100 lbs. Guaranteed analysis: Nitrogen as Ammonia 4%; Phos-

phoric Acid 11%.

Dried Blood
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 a pure slaughterhouse blood, dried and finely ground. Packed in 100-lb. bags only.

Price (subject to change), \$5.50 per 100 lbs.
Guaranteed analysis: Nitrogen as Ammonia 15%.

Supherphosphate 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 cross lands and grains. It is generally used at the retained grass lands and grains. It is generally used at the rate of 500 to 1,000 lbs, per acre. Packed in 125-lb. bags.

Guarantedd analysis: Phosphoric Acid, 17%.

Price (subject to change), \$1.75 per 125-lb. bag.

This is the best form of lime for Ground Lime Rock as effective as air-slacked 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, 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), 75c per 100 lbs; \$13.00 per ton.

Cround Phosphate Rock This is raw phosphate rock finely ground. I tis 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.





Insure Your Seed

If you are going to plant legumes such as ALFALFA, CLOVERS, PEAS. BEANS, VETCH, etc., you can insure a catch and vigorous PEAS. BEANS, VETCH, etc., you can insure a catch and vigorous growth by the use of bacteria of the right kind.

Inoculate Every Planting

The State of South Carolina made a test in 1915 on thousands of acres to find out if it paid to inoculate legumes even where they had previously been grown. In a bulletin the Commissioner of Agriculture has this to say:

"From the result of the inoculation of various legumes, the commissioner is firmly of the opinion that it will pay all farmers to inoculate all legumes, even where they are at present successfully grown, because of the great increase of nitrates supplied by high bred bacteria over that supplied by any germs natively present in the soil.

Farmogerm

is the culture which he used in making these tests, FARMOGERM is a pure culture or growth of nitrogen fixing bacteria selected and bred up to transform large amounts of nitrogen from the air into a form where the growing plants can use it. Not only is the plant sup quantities of nitrogen are left for the crops that follow. Not only is the plant supplied, but large

Patented Stopper

By means of the ingenious tube which you can see in the bottle, Farmogerm cultures which grow on jelly are supplied with filtered air and the moisture necessary to the bacteria is kept in the bottle. This is the only known method for supplying air to bacteria, which means that Farmogerm culturs do not lose their life and value in 10 days, 30 days or 6 months, like others, but remain strong, virile and efficient for years.



What Farmogerm Will Do

Unless the soil is very acid or wet, Farmogerm will:

- 1. Develop large and numerous nodules or swellings on the roots of legume plants, which indicate the presence of strong, virile bacteria.
- 2. Increase the yield and quality of legume crops, giving quicker growth and earlier maturity.
- 3. Increase the food value of legumes.
- 4. Make legumes grow in new localities where they cannot otherwise be grown successfully.
- 5. Supply nitrates to other crops growing with the inoculated legume crop.

6. Enrich the soil for future crops.

With the present high prices of nitrogen only a very slight increase in the crop or in the nitrogen left in the soil will more than pay for the Farmogerm.

You cannot afford to take a chance and plant without it. The use of Farmogerm is very simple. Just moisten the

The use of Farmogerm is very simple. Just moisten the seed, allow them to dry out in the sun for a short period and then plant in the usual manner the same day.

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.



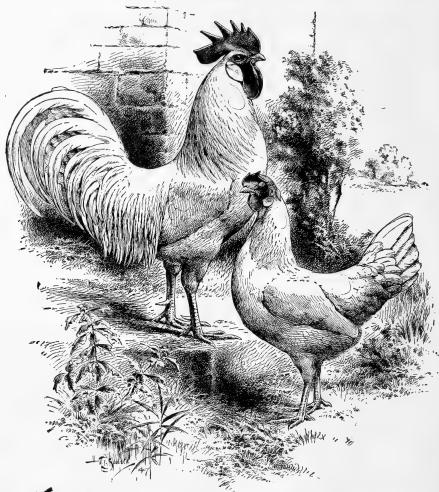
When ordering be sure to state which legume the Farmogerm is to be used for.

Prices.
Garden size\$.50 Postpaid
One acre size 2.00 postpaid
Five acre size 7.50 postpaid
Write for pamphlet describing Farmogerm,
its uses and benefits.

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: \$1.00 per 100 lbs.; \$18.00 per ton; F. O. B. Seattle.



POULTRY SUPPLIES

Poultry Foods Which Produce Results, and Utensils Which Are Practical

If all indications point correctly—1919 is going to be a banner year for those interested in the production of good poultry and eggs. Feed will not be higher; in fact, there is a tendency towards lower prices as this catalog goes to press, and eggs are going to be in greater demand. The Western Washington Egg Federation, with able leaders, are forging to the front in an educational campaign which is bound to mean the use of more and better eggs and a steadiness of price which will benefit every keeper of poultry whether large or small.

It is being urged upon all who can to keep at least a few chickens, and we would add, that you make those few of a good breed. The few cents difference in first cost is nothing when you well know that it costs as much to feed a poor fowl as it does a good one.

If you are getting eggs for incubation get good ones from a reliable dealer. Study up and take care of your poultry. Get the latest state college bulletins. The Experiment Station at Puyallup, Wash., with Mr. and Mrs. Shoup in charge of poultry, have been hard workers towards better poultry, honest fresh eggs and a fair price for both, especially the eggs.

To get the greatest results your poultry.

To get the greatest results, your poultry must receive a fair amount of care, and above all the correct foods in season from the time of the baby chick right up through the growing and laying season and on through its life.

Making poultry food is a business with us. Twenty-five per cent increase in sales during 1918, with a good many chickens going to the block, is evidence that LILLY'S is the leading poultry house today as we have been for many years past.

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 r digestive organs are extremely delicate. We cannot expect them to thrive upon foods ch are unsuitable. The food must be easily digested, must not contain anything that will which are unsuitable. irritating, and must contain the correct elements to build bone, muscle, blood and feathers without forcing or fattening.

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 musty, and no other foods expent these mentioned should be completed.

mixing, cooking, or muss; 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 It should be fed in a shahow dish, later it should be scattered in a little where they will sold the for it like their little lives depended 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

they will eat up clean. They will not eat more than is good for them if it is scattered in a deep litter an dthey 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 meet. tional meat.

These foods should be supplied from the time the chicks are first fed, when they are thirtysix 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. warm and dirty.

||巡 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 ages. It is for sale by deale may be ordered from us direct.

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





ILLS 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.



DEVELOPING FOOD

The Chick's 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 kno wthe 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 slightl ywith water or milk, but it must not be made sticky, only moist enough to make it crumbly when pressed between the hands.

100 LBS

GROWING

FOOD

MANUFACTURED BY THE CHAS. H. LILLY CO.

PORTLAND

This combination contains all of the animal matter and other elements necessary or beneficial for growth of chickens, with the exception of green food, grit and water. An abundance of succulent green food, such as lettuce, cabbage, kale, mangels, etc., should be supplied, for in addition to being necessary for health, it is usually cheap food. The chicks should always have access to a hopper filled with Lilly's Crystal Grit; sand or gravel will not take the place of hard, sharp grit. Plenty of pure, clean, fresh water is essential. Impure water is the cause of a large part of the disease 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 con-

fined.

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.



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 overfeeding, 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

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 re-

quest.

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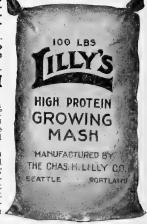
We will be pleased to quote lowest possible quantity prices.

HIGH PROTEIN GROWING MASH A Meal for Healthy Growth

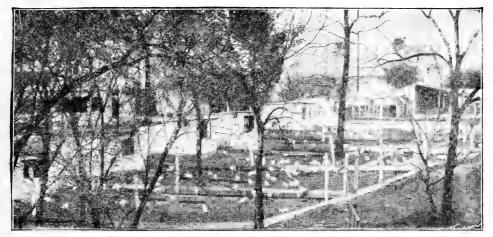
Modern methods of poultry keeping demand dry mashes. In addition to being labor savers and the most economical method of feeding, they make it possible to obtain correctly balanced rations and they supply a needed variety of foods. We would not advise feeding a meal food alone, but it is highly advantageous 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 ration 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 being fed deep litter. furnishes exercise. A busy hen is a happy hen, and no music is sweeter to the ear of a noultryman 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

The litter should consist of straw, hay, chaff, or other suitable material, and should be deep enough to make the hens considerable 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 find all of it before dark. 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.



巡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 many 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.

It is not economy to buy scratch food which contains from five to ten per cent of dust, hulls, and fine particles of food which the hens will miss. Scratch Food costs more than it did several years ago and you should be doubly careful to see that you get what you pay for. The poultryman who buys in large quantities generally knows what he is getting, it is the small keeper of chickens who buys a sack or a dollar's worth, and takes what he gets, who is the real loser. Don't let any dealer tell you that some other Scratch is just as good as LILLY'S, for just as soon as he does that he tells you plainly that LILLY'S is the best, and the best is what you want. If your dealer does not carry LILLY'S a card to us will bring latest prices.

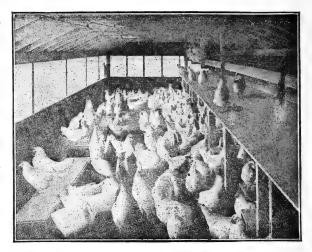
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EGG PRODUCING **FOODS**

Profitable Egg Production Depends Upon Correct Feeding

Breeding and selection have done much to increase egg production, but feeding does more. No hen, regard-less of how well bred, of what strain or what breed, ever produced a great egg yield on an insufficient or un-suitable 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 ele-ments in the right proportions for that purpose. They are made for that purpose. other purposes



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

scalded with boiling water, covered with a blanket, and allowed to steam for a few hours or over night.

100 LBS HIGH PROTEIN EGG MASH MANUFACTURED BY THE CHAS. H. LILLY CO. SEATTLE PORTLAND

🖾 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 It is intended strictly as an

is extremely high in animal foods. It 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 addi-tional 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.



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 posed 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 I'M'S Poultry Foods, order direct from us. See that they

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 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

Price (subject to change) 10 lbs., 60c. LILLY'S Meat Scraps put up in 10 lb. packages only.

Darling's High Protein Meat Scraps An Old 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 nign 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 per cent. protein. Packed in 100-lb. sacks only.

Price (subject to change): \$6.00 per 100 lbs.



BLOOD MEAL 79 Per Cent Protein; 3 Per Cent Fat

Blood Meal is richer in protein content than any of the other foods used for poultry, and, being so extremely high, it is necessary to use great care in feeding it. It should not be fed oftener than three times per week, and the quantity for mature fowls should not exceed four per cent of the total feed; for chicks it should not exceed two per cent. It is used. mostly for mixing with mash foods to balance the ration, and is admirably adapted for that purpose. It is pure slaughter-house blood, dried and ground.

Price (subject to change): 10 lbs., 65c; 100 lbs., \$5.75; F. O. B. Seattle or Portland.

FISH MEAT MEAL High in Protein and Low in Cost

Fish Meat Meal is an excellent and economical meat food for poultry. The early prejudices have been overcome by a process which cinces 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.

able

Price (subject to change): 10 lbs., 60c; 100 lbs., \$5.50; F. O. B. Seattle or Portland.

POULTRY OATS

Oats, sprouted or otherwise, are excellent food for poultry, but ordinary feed oats are usually unfit for this purpose, being light, containing too much coarse hull and fiber, and having poor germinating qualities. This is a special grade; short, plump, heavy and nating gualities. This is a special grade; short, plump, heavy and without beards.

Price (subject to change): \$3.75 per 100 lbs

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 avail-No able, 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.

See enclosed Price List Supplement, or write for later issue. able, otherwise water will do.

or write for later issue.





HOLLY PIGEON FOOD

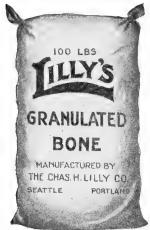
A Balanced Grain and Seed Ration for Pigeons

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.

This food contains no grit, shell, charcoal, or salt, as 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.





[凹] 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 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 Green bone cannot be kept longer than a few days available. 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.

Price: 10 lbs., 45c; 25 lbs., \$1.00; 100 lbs., \$3.50, F. O. B. Seattle or Portland, Prices subject to change.

ILLY'S STAR POULTRY SHELL

This is made from Western Oyster and Clam Shells, which, although excellent for the purpose, by some it is not regarded as

well as the Eastern product.

well as the Eastern product.

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. This shell is furnished 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 suitable for both shell and grit.

Price: 10 lbs., 15c; 25 lbs., 30c; 100 lbs., \$1.00, F. O. B. Seattle or Portland.

Do not buy foods containing grit and shell. Those articles Do not buy roods containing grit and shell. Those articles should be purchased separately for you cannot afford to pay grain and meat prices for them. Always watch the weight of sacks of food purchased. While it is improbable that any manufacturer would dare to give less than the weight branded on the sack, some pack foods in sacks containing 75 to 90 lbs., and although sacks are branded accordingly many fail to comprehend that 100 lbs. of food is cheaper at \$2.15 than 75 at \$1.65.





凹。 CRYSTAL GRIT

An Essential Adjunct of the Poultry Ration

Experienced poultrymen are aware that grit is as necessary to all fowl life as teeth are to the human race. To get the best results from proper feeding, it is absolutely necessary to use a first class grade of grit. The ordinary water washed smooth particles of rock are practically useless. Marble clippings, soft crushed limestone and all products containing large quantities of crude lime are unfit for poultry grit, and are moreover dangerous to the

health of the birds.

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 it is best served in grit and shell boxes. 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., 40c; 100 lbs., \$1.00.



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.

stimulates the appetite and aids digestion, enabling the hen to get the full benefit of her food and convert it int oeggs. 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 134 lbs.), 25c; Large Package (about 334 lbs.), 50c. Postage additional.



ILLY'S GRANULATED CHARCOAL

For Poultry, Hogs and Other Stock

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 poultry, and for mixing with mash foods if desired

Charcoal is valuable as a regulator, purifier, aid to digestion, and a preventive of bowe' 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 hop-per where they may have access to it at any time. It is important that the charcoal be perfeetly dry and clean.

Price: Carton (about 3 lbs.), 25c; 50 lbs., \$1.75; 100 lbs., \$3.50.

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.

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 Price: Carton (about 3/4 lb.), 25c.

POULTRY MUSTARD An Aid to Digestion

Mustard is a valuable condiment for poultry and stock. It is a great aid to digestion, is very heating and a splendid stimulant in bad weather. Lilly's Poultry Mustard is milled from a high grade of mustard seed, and is pure and fresh. A teaspoonful to each six to ten birds over two months old, mixed with mash food, will often be very beneficial. It should not be fed to chicks less than two or three months old. **Price: Carton (about ¾ 1b.), 25c.**



HOLLY BIRD SEED

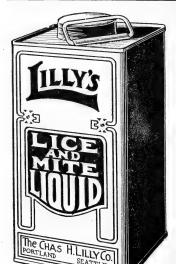
An Excellent Combination of Seeds for Canaries

This is a combination of the best recleaned 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.), 20c. Fostage additional.

Bird Gravel. Pure granite rock ground and screened to the correct size for canaries. Absolutely necessary for good health of birds. health of birdsper lb. \$0.10 Cuttle Bone..... Two pieces, 5c..... .25 Hemp Seed10 Millet Seed .10 Rape Seed .. .10 Blue Poppy Seed15 Sunflower Seed

POULTRY FOODS may be depended upon to produce results



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

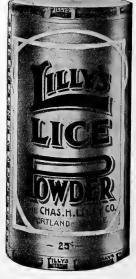
disease, and by debilitating the birds, are the cause of most dis-

ease.

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, 50c; Gallon, \$1.25; Five Gallons, \$3.50 Half Gallon, 75c.



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

quently. It is also valuable for exterminating insects on dogs, cats, and other animals, also on plants.

Price: Carton (about 1 lb.), 25c.

LICE OINTRENT
HEAD LICE ON CHICKS
SCALEN LEGS
SCALEY LEGS

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.





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, cheesey 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.

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 machine is supplied with full directions for operation, thermometer, egg tester, and is in every way complete.

No. 3 IDEAL Incubator

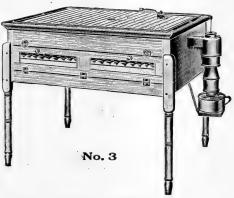
This size is suitable for the larger breeders and ' as it allows for popular with beginners, expansion; it will hatch a small number of eggs equally as well as full capacity, and the expense of running is little more than for the smaller machines.

Construction and material are the same in all The walls are over two inches thick, thorsizes. oughly insulated, and consist of three separate

oughly 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. 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. 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, \$13.25, f.o.b. Seattle or Portland.



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.

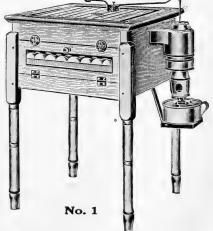
Capacity, 60 hen eggs. Shipping weight, 65 lbs. Floor space, 20x24 inches. Height, 3034 inches.

Price, \$9.75, P. O. B. Seattle or Portland

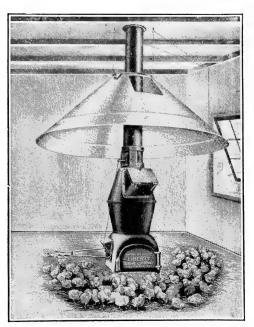
No. 8 IDEAL Incubator

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, \$29.50, F. O. B. Seattle or Portland







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 information.

PRICES

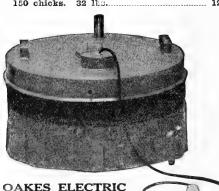
Marvel Colony Brooder with 52" Hover, \$23.50
Marvel Colony Brooder with 40" Hover, \$18.75
Gas Burner (with outfit \$2.00) \$3.00

F. O. B. Seattle or Portland.

OAKES ELECTRIC HOVER

Oakes 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 75 chicks. 14 lbs	7.00
No. 2 Economy Brooder 150 chicks. 32 lbs	10.00
Oakes Electric Hover- 150 chicks, 32 lbs	 12.00



HOVER



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 pre paration is necessary. Made in two sizes.

We do not ask our dealers to stock incubators or brooders. Therefore write us early for full information. We have purchased a very large supply of Ideal Incubators, Marvel Colony and Electric Brooders, for we feel that the coming spring will see a rush to get poultry pens started.



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 cer-tificate 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 poultry-man's outfit, for an inaccurate thermometer is very liable to prove ex-No. 1207. Price, \$1.00, postpaid. ceedingly expensive.





STANDARD INCUBATOR THERMOMETER

The Standard Incubator Thermometer is most generally used, noroughly tested and entirely dependable. It is made by the is thoroughly tested and entirely dependable. It is n Chas. Wilder Co., which is a guarantee of accuracy. mometer may be used in any style of incubator, and may be suspended on a wire, reclined on a base which accompanies some in-No. 1064. Price, 75c, postpaid. cubators, or laid on the eggs.

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 the top of hover. The bulb is protected by a metal No. 1062. Price, 75c, postpaid. Thoroughly reliable.

No. 1311. No. 1312. No. 1330. No. 1331.

INCUBATOR AND BROODER LAMPS

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 Price, \$1.00

No. 1301. No. 2 Incubator and Brooder Lamp, complete. Diameter of fount, 7 inches; depth of fount, 2% 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, 8½ inches; depth of fount, 2¾ inches; height, including chimney, 12 inches. Weight, 134 lbs. Price, \$1.75 .50

No. 1310. No. 1 Fount..... No. 2 Fount .60 No. 3 Fount .75 No. 1 Chimney..... .25 No. 2 Chimney40

No. 1332. No. 3 Chimney No. 1320. No. 1 Burner .25 No. 1321. No. 2 Burner .30 No. 1322. No. 3 Burner .65 No. 1 Wicks, 5%-inch Dozen,
No. 2 Wicks, 1 -inch Dozen, No. 1340. .20 No. 1341. .20

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

NEVER-SMOKE BROODER LAMP

The Never-Smoke Lamp is made especially for brooders not having a sleeve for the chimney t into, or other places where it is not practical to use a chimney. The Never-Smoke Burner

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.

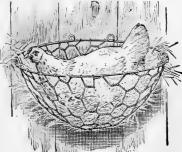
EGG TESTER

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. or candle.

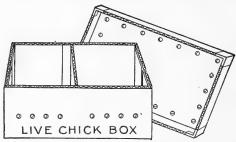
CHINA NEST EGGS

No. 1019. Weight 3/4 lb. per dozen. 30c doz.; \$3.00 gross.



Holly Chick Food and I High Protein Chick Mash make it easy to raise good chicks.

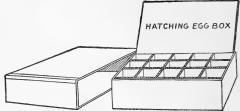




LIVE CHICK SHIPPING BOXES

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.

		PR	ICE		One	Dozen
No.	1081.	25 Chic	k Size		\$0.25	\$2.40
No.	1082.	50 Chic	k Size			3.00
No.	1083.	100 Chic	k Size		.45	4.80
	Wri	te for pr	ices on	large quar	ntities	



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					
No.	1012. 1013. 1084.	30	Egg	Size Size Size	.35	\$3.00 3.60 4.80

PARCEL POST SHIPPING BOXES

A Convenient and Safe Box for Shipping or Carrying Eggs

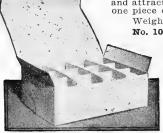
Parcel Post Shipping Boxes are made of heavy corrugated strawboard. In weight about the same as the hatching egg boxes but without the additional cover. These boxes can be used a number of times and will be found a convenient and economical means of shipping eggs by Parcel Post.

			One	Dozen
No.	1100.	One Doz. Size	\$0.12	\$1.20
No.	1011.	Two Doz. Size	.20	2.00
No.	1012.	Three Doz. Size	.25	2.50
No.	1103.	Four Doz. Size	.30	3.00
No.	1104.	Five Doz. Size	.35	3.50
	(Write	for prices on larger qua	ntitie	s)

NORTHWESTERN EGG BOXES

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% lbs.; 100 lbs., 13% lbs.

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



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

No. 1014-C. 12x12x22 for one large or two small birds. Weight, 6½ lbs.; price, 75c each.

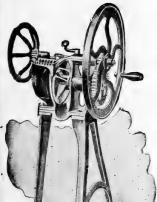
No. 1015-D. 20x22x22. For two large birds. Weight, 10 lbs.; price, \$1.00 each.



The prices which we show here are those in effect at the time that this catalog goes to press. If there are any changes they will be shown in the retail price list which we issue from time to time. There is not a bit of doubt but what the poultry industry is going to be an exceptionally busy one this coming season. There were so very many who reduced their flocks last year and were not able to build them up again to take advantage of the continued high price of eggs the past fall and winter.

Write us for any information which you may desire and if we do not have it at hand we will get it for you if possible.





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 4½x5 inches. Four knives. Shipping weight 120 pounds \$12.00 Humphrey Dry Bone Shell Mill ...

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 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—One 20c; dozen, \$2.00

Star Fount and

Feeder Will nt pint, quart of half-gallon Mason jars. Manufactured of one piece non-rust-ing metal. No parts to come unsol-dered. Little chicks cannot get ittle chicks cannot get Can be used for feed as drowned. well as water.

No. 312, without jar, each 15c

Dry Mash Hoppers

Does away with all trouble of feed clogging, no matter how coarse. The gradual en-largement to the base together with the vibration of the fowls feeding from the trough will force the feed downward. A well built hopper of the greatest merit.

No. 1235, 12 Qt. Ea. \$1.35 No. 1236, 18 Qt. 2.00 No. 1237, 36 Qt. 2.50

Grit and Shell Boxes

Grit, shell and charcoal have now become a recognized essential part of the diet, insuring healthy fowls. They cannot be more economically

supplied than in one of our compartment boxes. Made of heavy galvanized iron.

1299, 3 Compt. Rd. Btm., Ea. \$1.10 1290, 4 Compt. Rd. Btm., Ea. 1.35

Wall Drink Fountain

A convenient style of fountain. Popular with some breeders. Can be hung on the wall of the poultry house out of the litter.

out of the litter,

Style "A" made with removable bottom
so that all parts can be easily cleaned.
Greatly adding to their sanitation and durability. Easily filled. Manufactured of galvanized iron.

No. 1216-A-About 1-gal, capacity, 75c each



Round Baby Chick Feeder

A great feed saver, as the little chicks cannot get into it and contaminate the food. Cannot be upset. Can also be used for water or milk. A well made feeding device that will last for years.

No. 1211-6 in. in diameter....25c each No. 1212--8 in. in diameter.....40c each







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 455c; postpaid.



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.

COLUMN TO A COLUMN PILLING SPECIAL CAPONIZING SET G.P.PILLING & SON CO. PHILA., PA. U.S.A.

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.

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 Figeon 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. Petty's Poultry Punch, 25c, postpaid.



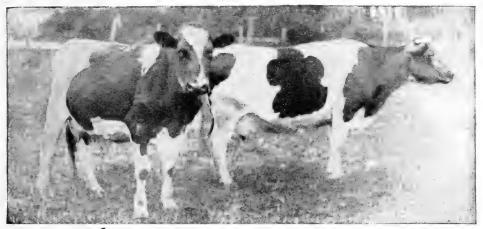
Pilling Farmer's Caponizing Set

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

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

Goods listed on this page will be shipped by parcel post, postpaid, at prices shown.





巡S BUT-ER-FAT FEED

A Reliable Dairy Food Producing the Maximum of Milk at Minimum Cost

It is three years since But-er-fat was introduced to the dairy industry of the Northwest, and the results of these three years have perified our contention that a good, honest, milk producing mill feed would find a ready deman, 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 is prepared especially for us from best grade alfalfa, kiln dried and ground to a coarse meal. It is very high in protein, about the same as bran, and is a splendid adjunct to the grain food. It may be fed either dry or moistened with water, alone or mixed with other food. Splendid results are obtained by scalding it with boiling water, covering it with a blanket and allowing it to team 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.

GROUND BARLEY

THE CHAS H LILLY CO SEATTLE - PORTLAND

Dairymen know the value of ground barley in the ration. It is high in milk producing ele-ments, and is especially valuable where corn is ments, 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.

As prices fluctuate on the products shown on this page, it is impossible to print a price which will hold good for the entire season. We ask you to refer to our latest price lists mailed you from time to time or the one enclosed.

ILLY'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.

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.



CALF

A COOKED and BALANCED FOOD **Raises Better Calves** at Less Expense

Do not kill the calf. It is one of the greatest Do not kill the cair. 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

Calves eat Lilly's Calf Meal with great rellish, 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 feedig 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

and is increasing rapidly. We have never nearly of a case where a farmer after using can mean 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.

Make Mest, Bise Mest, Blood Mills, Ground Plat, Sugar, Ground Plat, Sugar, Ground Austin 5 19 27 % P的证明 45 19 56 % SAPERTON

HE CHAS. H. LILLY CO.

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 thoroughly

sanitary quarters; warm, light, airy, but free from draughts, perfectly clean, with good drainage, and dry.

The first food 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. 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 batter 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 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 (½ 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 clean, fresh water, and a lump of rock salt. As soon as it will nibble from the beginning the cair should be supplied with clean, 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 brand, 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., \$1.50; 100 lbs., \$5.50.



Saves the Orphans, Makes Weaklings 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 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 con-tinually increasing quantities. Some of his finest 1916 and 1917 prize-winners were raised on Lilly's Lamb Meal.

The use and benefits of Lamb Meal are 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., \$1.50; 100 lbs., \$5.50.

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





MAKEMFAT

MAKEMFAT is high in Protein, contains abundance of Mineral nutrients, more fat than in farm grown grains or about 6%. It is palatable, has the proper laxativeness which is essential, thus avoiding constipation usually resulting when Wheat, Barley, Corn or other Grains are fed alone. This feed is highly digestible, reasonable in price, and containing well balanced proportions of digester tankage, oil meal, blood meal, grain and cereal products.

See Price Supplement or write for latest List.

PIG MEAL

Keeps Pigs Growing Without Check at Weaning Time

Weaning time for little pigs is ofttimes 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 ninetyeight 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 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., \$1.50; 100 lbs., \$5.50; P. O. B. Seattle or Portland.

Digester Tankage

Digester Tanakage 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.

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 mil k 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; see Price List.

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 mashes. 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.

See Price Supplement or write for test List.



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-laded feet an antenae. Even the most tender hearted will have no regrets for the destruction of the fly, for no one has been able to discover any service that it has rendered mankind. He unmercifully robs the dairyman and stockman 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 it costs to be them in condition when annoyed by flies. They

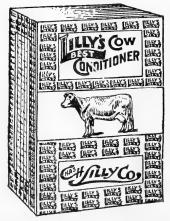
thes. Horses and other stock are less efficient and it costs more to keep them in condition when annoyed by flies. They are a nuisance to the housewife, and much sickness may be traced directly to them.

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.

curtailed.

Lilly's Fly Liquid is easily applied with one of the in-expensive hand sprayers, Holly or 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, 50c; Half Gallon, 75c; Gallon, \$1.25; Five Gallons, \$3.50.





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. undigested food, from which the cow would receive no benefit.

STOCK

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

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

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. ble. When used for horses it makes the glossy and helps to put flesh on.

Write for prices, stating quantity desired.

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.



ELECTRO ARSENATE OF LEAD POWDER

Best Form for Liquid or Dust Spray
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.

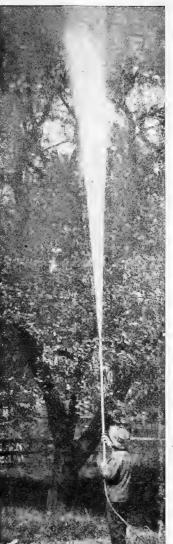
By a special process there is combined properly with lead 32½ to 33½ per cent arsenic oxide with less than one-half of one per cent free arsenic. Arsenic oxide is the active agent; free arsenic will injure the foliage if in excess. This gives a killing strength much greater than that of other brands, 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 dust-

ing, and the only form that is not granular or chrystalline.

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.



		FRICES	
½-1b.	Carton	as	0.40
1-1b.	Carton	1	.60
10-lb.	Drum	••••	5.25
25-1b.	Drum		12.00
50-1b.	Drum		23.00
OC-1b.	Drum		45.00
		F O E Scattle or Portland	

F. U. E. Seattle or Portland.

Electro Bordo-Lead

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 Eordeaux 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

Electro Insectide Soap of 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

Electro Bordo-Pulp This is a scientific compound of copper sulphate (blue vitriol) 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 russeting of the fruit. In Electro Bordo-Pulp all excess of caustic lime is removed

and this russeting 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
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

ILLY'S SOLUBLE SULPHUR COMPOUND THE SULPHUR SPRAY PERFECTED

Equally as Effective 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 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. and in the same manner as lime-sulphur solution. Where one gallon of Thirty-three Degree Lime and 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

and snould not be mixed with a small quantity of water before being placed in the tank.

For estimating the amount required, those who have used limesulphur solution should order a durred, those who have used line-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 di-rections 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 packages. We will be glad to our Spray Bulletin, free, on request. Soluble Sulphur Compound is

manufactured on the Pacific Coast by The Chas. H. Lilly Co. under Niagara Sprayer Co. patents.

1-16.	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 25 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	2.25
Barrel (about fifty gallons) 13	3.00
F. O. B. Seattle or Portland.	

ILLY'S TOBACCO and SOAP COMPOUND

liquid tobacco and soap compound for the destruction of aphis and other plant lice. Especially useful on rose bushes and house plants. One bottle makes three gallons of plants. One bottle makes three gardens spray. Cannot be shipped by parcel post. Price: 7-oz. bottle...

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 Aphis or Plant Lice, Thrip, Apple Aphis, Black Peach Aphis, Currant Leaf Hop-per, Rose Leaf Hopper, and Melon Louse. It is colorless and stainless, and when prop-

erly 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; 1¾ 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 vaporizing of the nicotine. Always uniform and effective. Write for circulars. It may be shipped by parcel post.

Our Holly Sprayer at 45c ea.

Our Continuous at 75c each

Make an Ideal Device for small Spray Work

Quassia Chips

pound of quassia chips in water. After boiling dilute with enough water to make eight gallons of solu-

1 lb., 10c; 10 lbs., 7c

tion.

per 1b.

Used for the destruction of plant lice on cabbage, cauli-flower, fruit trees, etc. Boil one

TREE SOAP

A soap compound for destroying Green Aphis, Woolly Aphis, Hop Aphis, Oyster Shell Scale, Codling Moth, Canker Worm, Caterpillars, and for preventing fungus diseases. adapted for rose bushes. May be Especially May be shipped by parcel post. Postage additional.

Price: 1-lb. cake15c

BLACK LEAF 40

A concentrated solution of nicotine sulphate guaranteed to contain forty per cent nicotine. It is highly recommended for the destruction of Aphis 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 noison, it cannot be shipped by parcel post.

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, $7\frac{1}{2}$ c lb.

DUSTING TOBACCO POWDER

For applying as a dust spray for Aphis and other soft bodied insects outdoors or where fumes cannot be confined.

100 lbs., \$5.00; less than sack lots, $7\frac{1}{2}$ c lb.

Fish Oil Soap

Used as a wash during the summer to destroy Aphis and other insects and to prevent the spread of scales and fungus.

50-lb. box, \$4.50; less than box lots, 12c per lb.

Spraying of Rose Bushes will show most gratifying results

Sulphur

Fine ground sulphur for spraying and fumi-gating. We are importers, and can furnish it in large quantities and at lowest prices. Write for prices, stating quantity wanted.

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 poulthouses, as there is no bucket to move around. poultry

The pump is made entirely of brass. It has | tinually moved about.

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 $3\frac{1}{2}$ feet of $\frac{9}{2}$ -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 con-





AUTO SPRAY No. 1

60 lbs.

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 inches in diameter and 24 inches long, capacity 3½ gallons. The pump is made of seamless brass tubing, 1¾ inches in diameter and 15 inches long. It is equipped with a Shut-off Valve, a Non-clogging Nozzle, and 24 inches %-inch spray hose. Weight, empty, 7 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.

purpose sprayers on the market. The heavy garvanized 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.



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 bttom, and

has a wide bottom, and holds seven gallons. The pump is brass, with brass ball valves, and 1¼-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. ½-in. hose, Vermorel nozzle, and agitator. Price, \$8.00







Electro Arsenate of Lead Powder has many advantages over the paste forms.

BRASS NOZZLE



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 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 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 Weight, 4 lbs.

No. 6 BUCKET PUMP

This is the best and most powerful pump of the kind on the This is the best and most powerful pump of the kind on the market. It is made entirely of brass except the handdle 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. Fitted with brass stop-clock and connection for strongly made. Fitted with brass stonozzle. 4-inch standard pipe threads.



This sprayer is made especially to our order, and in material, construction, model, and effi-ciency 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. the handiest sprayer for all small work and for apply Fly Liquid and Lice Liquid.

Price, 45c



For applying any kind of insecticide, fungi-Spray Copcide, 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 holds 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

one for coarse and one for fine spray. Furnished with either straight or angle neck. No. 107. For Nozzle, Straight75c Fog Hozzle, Angle No. 108.



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

No. 26. No. 27.



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







liable.

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 ture's way, so that it has a chance to grow. The machine is durably conture's way, so that it has a chance to grow. The machine is durably conture's way, so that it has a chance to grow. The machine is durably contured and is onlined with the machine is durably contured to stooping. Every plant is well set and securely rooted by absorption, na-

Acme Rotary Automatic Corn Planter This planter is absolutely dependable, accurate and easy work-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.

> A two-handled corn planter; light, durable, well made and accurate. It is operated by bringing to-gether and separating the handles. Thoroughly re-Price, \$1.50.

Acme Corn Planter

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 ad-justable uniform depth. The operator stands upright, drops the seed in top of tube, steps on hopper to force planter into the grond, and tips plant-Price, \$1.75. er forward to trip it.

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.



Little Giant Broadcast Seeder

Acme

Tubular

Acme Rotary

The best little broadcast seeder for the price. It is light, strong, accurate, and does the work much easier and better than can be done by hand. Weight 3½ lbs.

Price, \$2.28 Price, \$2.25. 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 6 Price, \$4.25.



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.





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.



Certain death to rate; catches them every time. Rats nibble upwards 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 dozen.

Official Mouse Trap

This is the same as the Official Rat Trap except that it is smaller. Price, 10c; 50c per doz.

Hot Bed Thermometer

A reliable thermomeincased in wood, with a brass point to be inserted in the earth in hot bed or mushroom bed.

No. 1068, \$2.50.



No. 44 Gopher Trap

A box and spring arrangement for catching gophers and other rodents. Simple and effective. Wt. 1 lb. Prices, 30c each; \$3 per dozen.





Out o' Sight Mole Trap

· This mole trap is neat and effective. Not unsightly on the lawn. No mole can pass under it and live. Weight 11/2 lhs Price, 85c.



1068

Pot Labels

For labeling plants in pots or beds. Made of white pine painted white.

	Weight	Price	
Size	100	100	1000
4 x 5/8 in.	5 oz.	\$0.15	\$1.00
5 x 5% in.	6 oz.	.20	1.25
6 x % in.	8 oz.	.25	1.50
10 x % in.	16 oz.	.40	3.20
12 x % in.	20 oz.	.45	3.85

For marking or labeling rows in the garden. White pine painted white, 12 inches long, 1 1/8 inches wide. Wt. 2 1/2 lbs. per 100

Garden Stakes

Prices: 100, \$1.00; \$1,000, \$8.00.

Bamboo Plant Stakes

Small bambo orods, six feet long, weight about 12 lbs, per 100. **Prices: Doz.** 35c; 100, \$1.00; 1,000, \$8.00.

Tree Labels

For labeling trees, plants, etc. Made of white ne, painted. Furnished either with or withpine, painted. Furnished either with or out wire. 3½ inches long, 5% inch wide.

	Weight	Price	
Style	100	100	1000
Notched, not wired Copper wired		\$0.15 .25	\$1.00 1.55

Grafting Wax only. Our own make, very superior quality. Packed in one-pound packages One pound, 25c.

NEPONSET PAPER POTS

Made of heavy waxed paper. Splendid for handling and shipping plants. Unbreakable, light, and economical. Samples will be mailed on request.

	Weight	Price-	
Size	1000	100	1000
inches	15 lbs.	\$0.40	~ \$3.00
inches	18 lbs.	.50	3.50
inches	28 lbs.	.75	5.50
inches	50 lbs.	1.25	10.00
	inches inches inches	Size 1000 inches 15 lbs. inches 18 lbs. inches 28 lbs.	Size 1000 100 inches 15 lbs. \$0.40 inches 18 lbs. .50 inches 28 lbs. .75



Prices shown in this catalog do not include transportation charges except when so stated.

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 and three Cultivator Teeth. Shipping weight 45 lbs.

Price, \$20.50. Price, \$17.05.

No. 18 IRON AGE Drill Seeder. No. 17 without cultivating attachments.

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, \$20.75.

No. 20 IRON AGE Single Wheel Hoe

The same as No. 17 and No. 18 without seeder attachment. Equipped with one Landside Plow, two Hoes and three Cultivator Teeth. Shipping weight 28 lbs.

Price, \$11.50.

No. 21 IRON AGE Single Wheel Hoe. Same as No. 20 without Plow and Cultivator Teeth. Equipped with Hoes only. Price, \$8.30.

No. 28 IRON AGE Garden Disc Cultivator. Same as No. 20 except that it has



no Hoes, but is equipped with Fig. 369 Garden Disc Cultivator Attachment, one Landside Plow, and three Cultivator Teeth. Price. \$11.75. This low

No. 19-C

No. 19-C IRON AGE Cultivator and Plow 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, \$7.65.

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 nor fertilizer attachments are interchangeable with the other implements, and no cultivating attachments can be used with this implement. Shipping weight 65 lbs. Price, \$41.90.

No. 23 IRON AGE Fertilizer Distributor. Same as No. 22 without Figure 398 Seeder Attachment. Price, \$30.45.

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.

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.

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. \$1.15.

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. \$9.25.

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. \$3.90.

Fig. 170 Double Moldboard Plow. Has adjustable wings to open furrows of various various \$2.50. widths.

Fig. 169 Combined Disc and Fender Attachment. Used to work close to small plants, or as fenders in combination with cultivator teeth. \$1.90.

Fig. 82 Landside Plow. Furnished with the single wheel cultivators, and may be used with the double wheel cultivators by using Fig. \$2.05.



Fig. 216 Special Fender Side Hoes. Used in place of the regular hoes on any Iron Wheel Hoe.

Fig. 236 Hilling Attachment. May be used with the double wheel hoes. \$2.20.

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. \$1.90.

Fig. 112 Center Tooth Attachment, with No. 1 Hoe when using one wheel. Used \$1.25.

No. 33 Onion Set Gatherer. Used on any of \$1.65. the double or single wheel hoes. C-26 Left Hand Plow C-30 Right Hand Plow C-29 Rake 30-A Cultivator Tooth C-19 Right Hand Side Hoe85

C-20 Left Hand Side Hoe



IRON AGE GARDEN IMPLEMENTS

More and Better Work With Less Labor



No. 306 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 attach-

ment is easily removed and it is then the same as the No. 301 Double and Single Wheel Hoe. Equipment includes Figure 146, Hill and Drill seeder attachment, two hoes, two plows, and four cultivator teeth as shown in the accompanying cut. Wt. 57 lbs.

Price, \$24.90. Price, \$24.90.

No. 7 IRON AGE Hill and Drill Seeder This is the same as the No. 306, without hoes, plows, or cultivator teeth. Those attachments may be added to it at any time if desired a tprices shown for attachments. Price, \$17.50.

No. 314 IRON AGE Hill and Drill Seeder With Hoes and Teeth No. 7 with two hoes and four cultivator teeth added. In other words, it is the same as No. 306 without plows.

No. 304 IRON AGE Drill Seeder and Double and Single Wheel Hoe

This differs from the No. 306 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. 301 Double and Single Wheel Hoe. It is equipped with Fig. 333, drill seeder, two hoes, two plows and four cultivator teeth.

Price, \$23.80.



Price, \$14.75.

No. 27 IRON AGE Double and Single Wheel Garden Disc Cultivator

The same as No. 301 except that it has no Hoes, but is equipped with Fig. 369 Garden Disc Cultivating Attachment. two Plows and four Cultivator Teeth.

No. 316 IRON AGE Hill and **Drill Seeder**

The same as No. 315 without Plow, Hoes and Cultivator Teeth. For those who do not care for the combination implemetn, this is the ideal seeder. Cultivating attachments may be added at any time if desired. Price. \$18.05.

No. 315 IRON AGE Hill and Drill Seeder and Single Wheel Hoe

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PLANTING TABLE FOR VEGETABLE GARDEN

SEED	Quantity Required	Depth	Dist. Apart	When to Sow	Ready for Use
A 11 1 -1 Clair Card			Rows in rov		
Artichoke, Globe, Seed	oz. for 500 plants	1 111.	1 ft. 3 in 3 ft. 2 ft	Spring	second summer
Artichoke, Globe, Plants.	200 11	2 400	3 ft. 2 ft	Spring Early spring	Summer
rtichoke, Jerusalem	1600 lbs. per acre	5 III.	3 It. 2 It	Early spring	Late summer
Asparagus, Seed	l oz for and plants	1 111.	1 ft. 3 in	Early spring	Inira spring
Asparagus, Plants Beans, Dwarf	1 11 1 100 6 1	0 4	4 ft. 14 in	Spring	second spring
Beans, Dwart	1 1b. to 100 feet	2 in.	2 ft. 4 in		45 to 65 days
Beans, Pole Beets, Table	1 1b. to 150 hills	2 III.	4 ft. 3 ft	Late spring	days
Seets, Table	l oz, for 50 feet	1 in.	1 ft. 3 in		bo days
Broccoli	l oz. for 2000 pits	½ in.	2 ft. 12 in 2 ft. 18 in	Spring	Winter
Brussels Sprouts	1 oz. for 2000 pits	½ in.	2 ft. 18 in	Early spring	Fall and winter
Cabbage	1 oz. for 2000 pits	½ 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	11 oz. for 3000 plts	1 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	3 in.	1 ft. 4 in	Early spring	Summer
Chicory	1 oz. for 100 feet	½ in.	1 ft. 3 in	Early spring	4 months
CollardsCorn, Sweet	1 oz. for 2000 plts	½ in.	18 in. 14 in	Spring	Fall
Corn, Sweet	1 lb. for 200 hills	2 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
ucumber	1 oz. for 100 hills	1 in.	0 11. 4 11	Late Spring	13 to 4 months
Egg Plant	1 oz. for 2000 plts	la in.	2 It. 18 in	In hot bed	160 days
Endive	. 1 oz. for 400 feet	in.	18 in. 8 in	Spring	Summer
Horseradish, Roots		. 4 in.	1 2 ft. 112 in	Spring	Fall
Kale	1 oz. for 200 feet	in.	18 in. 12 in	Spring or fall	145 days
Kohl-Rabi	.1 oz. for 150 feet	. 1 in.	1 18 m. 6 m	Spring or fall	4 months
_eek	1 oz. for 300 feet	in.	14 in. 4 in	Early spring	Late summer
Lettuce	.11 oz. for 400 feet	la in.	118 in. 1 8 in	Early spring	165 days
Melon, Musk	11 oz for 60 hills	1 in.	6 ft. 14 ft	Late spring	4 months
Melon, Water Okra, or Gumbo	1 oz. for 30 hills	1 in.	7 8 ft. 16 ft	Late spring	14 months
Okra, or Gumbo	1 oz. for 100 feet	1 in.	4 ft. 2 ft.	Late enring	13 months
Daria, or Guinto Dnion, Seed Dnion, Sets Parsley Parsnip Peas Pepper Potato	1 oz. for 300 feet	1 in.	1 ft. 3 in	Early spring	14 to 5 months
nion, Sets	1 lb. for 40 feet	1 in.	1 I II. 118 111	Harly spring	ISpring
Parslev	1 oz. for 300 feet	a in.	1 1 ft. 4 in	Harly spring	Summer
Parsnip	1 oz. for 400 feet	in.	18 in. 3 in	Early spring	4 months
eas	1 lb. for 50 feet	in.	1 3 ft. 1 2 in	Harly enring	18 to 12 weeks
Penner	1 oz. for 1500 plts	1 in.	21 ft. 18 in	In hot-bed	5 months
otato	5 lbs. for 100 feet	4 in.	1 Z & TT. 11 X 1D	Ishrino	LIHIV to Sent
umpkin	1 oz for 30 hills		8 ft. 8 ft	Late spring Early spring Spring	14 to 5 months
Radish	1 oz for 100 feet		1 ft. 2 in	Early spring	30 to 45 days
Radish Rhubarb, Seed	1 oz for 50 feet	å in.	1 ft. 4 in	Spring	12 years
Rhubarb, Plants	2 02. 101 00 1000	6 in.		Spring	11 year
Ruta Baga	1 oz for 150 feet	in.	15 in 6 in	Spring	3 months
alsify	1 oz for 50 feet	in.	1 ft. 2 in	Early enring	5 months
alsify pinach	1 oz for 200 feet	i in	1 ft. 3 in	Chring & foll	145 days
langeh Ruch	1 oz for 25 hills	2 in	15 in. 6 in 1 ft. 2 in 1 ft. 3 in 4 ft. 4 ft	Late enring	165 days
Sanach Winter	1 oz for 12 hills	2 in	12 ft 12 ft	Late spring	1125 days
Comata Sood	1 og for 2000 ml+~	1 1 in	10 10 10 10	In hot had	150 days
Squash, Bush Squash, Winter Fomato, Seed Fomato, Plants Furnip	02. 10r 2000 pits	4 111.	A ft A ft	Tota spring	100 days
Funnin	1 on for 150 f	1 in	1 ft 2 in	Late spring	CO to 75 2
urmip	oz. for fou feet	III	1 It. 3 In	spring & sum'r.	. by to 75 days

QUANTITY OF FARM SEEDS USUALLY SOWN

	Lbs. Per Acre	
Alfalfa	10 to 20	
Alsike	6 to 10	
Artichokes, Jerusalem	400 to 600	
Barley	100	
Beet, Mangel or Sugar	5 to 6	
Broom Corn	8 to 12	
Buckwheat		
Carrot, Stock	3 to 4	
Clover, Alsike	6 to 10	
Clover, Sweet	20 to 30	
Clover, Red	8 to 15	
Clover, Mammoth Red		
Clover, Crimson	10 to 15	
Clover, Crimson	8 to 10	
Corn, Field	12 to 20	
Corn, Fodder, in drills		
Corn, Pop	5 to 10	
Emmer, or Speltz		
Feterita	10	
Flax, for seed		
Flax, for fiber		
Grass, Kentucky Blue, for pasture		
Grass, Canadian Blue, for pasture		
Grass, Timothy	10 to 20	
Grass, Red Top, Unhulled		
Grass, Red Top, Hulled		
Grass, English or Perennial Rye		
Grass, Italian Rye		
Grass Trehard	40 to 60	

EDS USUALLI SUWN	
	Lbs. Per Acre
Grass, Meadow Fescue	25 to 30
Grass, Brome Grass	30 to 40
Grass, Crested Dog's Tail	20 to 30
Grass, Tall Meadow Oat	
Grass, Velvet, or Mesquite	
Frass. Sheep's Fescue	35 to 40
Grass, Fine Leaved Fescue	30
Grass, Hard Fescue	30
Grass, Red or Creeping Fescue	30
Grass, Pasture Mixtures	30
Grass, Hav Mixtures	30
Grass, Sudan	16 to 24
Hemp Kale, Thousand Headed	40 to 50
Kale, Thousand Headed	1 to 2
Kaffir Corn	6 to 10
Mangel Wurzel	5 to 6
Millet	20 to 50
Oats	75 to 100
Peas, Field	90 to 120
Potatoes	400 to 600
Rape, Dwarf Essex	3 to 5
Ruta Baga	2 to 3
Rye	90 to 120
Soja Beans	30
Sorghum, in drills	10
Turnip	2
Vetch, Common or Spring	60 to 100
Vetch, Hairy or Winter	30 to 60
Wheat	90 to 120



