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PORTLAND



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ESTABLISHED 1885

1921

Nothing is more pleasing to the eye than green grasses kept finely shorn .--- Bacon.

Beautiful Lawns

What can I do to make a green velvety lawn?

This, in some form or other, is the question that is asked by 90 per cent of all who take an interest in their gardens and wish to possess a lawn of satisfactory appearance. It is the common question, too, that is asked by everyone as soon as he begins to take an interest in the grounds surrounding his home. Although there are many things that enter into the making of a good lawn, THE MOST ESSENTIAL IS SUITABLE SEED, for without good seed all your labor is wasted. THE ANSWER IS BELOW.



Imported Lawn Seed

This mixture is composed of the very finest growing grasses which have been carefully chosen to suit the climatic and soil conditions on the Pacific Coast and will produce a firm, velvety, rich green turf of uniform color, which will remain green all the year.

It is the result of many years' practical experience and the best that money can buy.

Price, 1 lb., 50c; 4-lb. package, \$1.80. (Subject to change.) Postage additional.



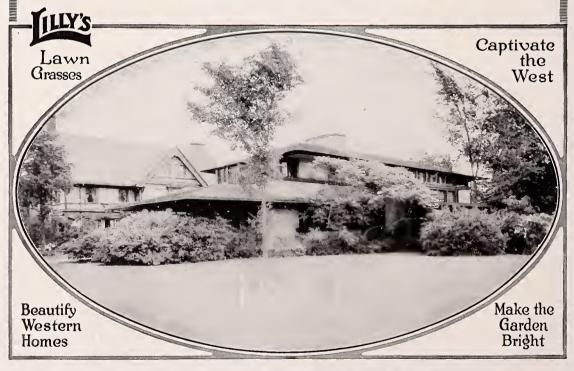
Nonpareil Lawn Seed

Standard for the Northwest

Nonpareil Lawn Grass Seed is a mixture of many suitable hardy grasses; scientifically selected to produce a green lawn all the year, and form a thick, matted turf with roots reaching far into the ground to withstand drought and prevent heaving in winter. Especially adapted to the Pacific Coast. It contains White Clover to make a quick showing and act as a nurse crop for the grasses.

The grasses are not so fine as those in our Imported Lawn Grass Mixture, but will produce a splendid lawn with less care, and is recommended where endurance is desired. One pound of seed is sufficient for aboat three hundred square feet of new lawn, or to renew about six hundred square feet of old lawn.

Price, 1 lb., 45c; 5 lbs. or more, 40c per lb. (Subject to change.) Postage additional.



Lilly's "Morcrop" is the best fertilizer for Lawns. Keeps the grass green. See inside back cover.



No. 1

CLOVER, GRASSES, SEED GRAINS, ETC.

At the time of going to press with our catalog it was impossible to quote prices against the respective items owing to market fluctuations. These prices here listed are revised to date but are-

Subject to Change Without Notice.

Prices are per 100 lbs. In less than sack lots the price will be $\frac{1}{2}c$ per pound additional for lots of 50 lbs. or more, 1c per pound additional for lots of less than 50 lbs. For single pounds add 5c per lb.

Catalog Page	VARIETIES	Sacks Con- tain	Prices Current Per 100	Catalog Page	VARIETIES	Sacks Côn- tain	Current Prices Per 100
2 GBC		lbs.	lbs.			lbs.	lbs.
				1.		1	
45	ALFALFA	100	001.00	53	Regenerated Swedish Select	100	3.00
	Lilly's Best, 99½% pure		\$24.00 25.00		Lilly's Black Side Oat	100	4.25
	Turkestan		55.00	51	Barley		
	Grimmi	1 100	55.00	51	White Hulless-Beardless	125	3.75
46	CLOVER	1			Beardless, General Stock		4.00
	Red, Lilly's Best, 99% pure	100	24.00		Wisconsin Pedigreed		4.25
	Red Mammoth	100	28.00		Bearded		3.00
	Alsike, Lilly's Best, 99% pure		23.00		Six Row White		4.00
	White, Lilly's Best, 98% pure	160	60.00		Vermont Beardless	100	4,25
	Sweet—White Blossom Sweet—Yellow Blossom	160	18.00 14.00	54	Field Corn	1 150	Postpaid Frit Extra
	Crimson		20.00		Silver King Golden Nugget		tig
		1 100	20.00		Pride of the North		E a c
47	GRASS SEEDS				North Western Dent		tta
Contract of Contra	Timothy, Lilly's Best, 991/2 %	i i			Leaming Improved		10 ct
	pure	100	11.00		Iowa Gold Mine	150	SAL
	Kentucky Blue Grass	112	53.00		Minnesota No. 23	150	20c P \$1.75 \$6.50,]
	Canadian Blue Grass		45.00		Champion White Pearl		200
	Red Top	100	29.00		Early Canada	150	85.0
	Brome Grass	100	25.00		King Philip	150	69
48	Creeping Bent	100	40.00		Sanford White Flint		1 1b. 10 1bs.
40	English Ryegrass		12.00 12.00		Minnesota No. 13 Sweet Fodder		1-8
	Italian Rye Grass Orchard Grass	100	28.00		Red Cob Ensilage	150	20
	Cheat	100	7.00	56	Rve	1 1 3 0	- <u>-</u>
	Tall Meadow Oat Grass		43.00		Rosen	125	2.75
	Crested Dog's Tail		65.00		Petkuser		3.50
	Velvet Grass, or Mesquite		20.00		Common	125	2.75
49	Meadow Fescue	125	35.00	55	Vetch		
	Sudan Grass	100	12.00		Common or Spring Vetch	125	5.00
	Sheep's Fescue		55.00		Winter or Hairy Vetch		16.00
	Hard Fescue	$100 \\ 100$	55.00		Purple Vetch	125	16.00
	Red Fescue	1 100	55.00 55.00	57	FIELD PEAS		
	Pasture and Hay Mistures	1 100	55.00	57	Yellow Canadian	.130	7.00
	No. 1 Pasture .Mixture	50	17.00		Green or Bluebell	130	7.00
	No. 2 Pasture Mixture	50	17.00		Bangalia	130	5.00
	Hay Mixture	50	17.00		Large Marrowfat	130	7.00
	and the second	1 1			Whip-Poor-Will Cow Peas	-130	23.00
50	FIELD GRAINS]					
	Wheat	1		57	EMMER OR SFELTZ	100	3.75
	Sun Wheat	125	3.50		MILLET		
	Marquis Pedigreed Bluestem		3.50 3.50	58	Golden	130	6.00
	Baart		3.50		Siberian		6.00
	Club	125	3,50		Jaranese		8,00
	Forty-fold		3 50		Hungarian		8.00
	Red Russian		3.50				
	Oats	1			Other Field and Forage Seeds		
52	Shadeland Climax	100	3.50	57	Sunflower Flax Seed	75	10.00
52	Victory	100	3.50	58	Flax Seed	160	8.00
53	Abundance		3.50		Japanese Buckwheat		7.90
52	Black Alaska		3.25	61	Thousand Headed Kale	$125 \\ 160$	60.00 12.00
	Banner Grav Winter	100	3.00 3,25		Dwarf Essex Rape	100	12.00
	Gray Winter	100	3,23				

Prices are per 100 lbs. In less than sack lots the price will be $\frac{1}{2}c$ per pound additional for lots of 50 lbs. or more, 1c per pound additional for lots less than 50 lbs. For single pounds add 5c per lb.

POULTRY AND STOCK FOODS

Catalog POULTRY GRAIN FOODSM.CO Page

72	Holly Chick Food, 100s	3
72	Growing Food, 100s	2
72	Scratch Food, 100s	2
72	Pigeon Food, 100s	3
72	Feed Wheat, 125s	2
72	Clipped Barley, 110s	2
72	Oats for Sprouting, 100s	2
2	Kaffir Corn	2
72	Whole Corn	1
72	Cracked Corn	2
	Feed Millet	4

STERILIZED BABY CHICK STARTER

Trial Size	.25
3-1b. size	.40
25s per 100	8.00
1008	7.60

MASH FOODS

73	Lilly's Buttermilk Mash, 100s	2.45
73	H. P. Chick Mash, 100s.	2.55
73	H. P. Growing Mash, 100s	2.45
73	H. P. Egg Mash, 100s	2.20
	Puyallup Station Egg Mash, 100s	2.20
	Golden Egg Mash, 100s	2.05
73	Fattening Mash, 100s.	2.45
73	Moulting Mash, 100s	2.65
	BONE, SHELL AND GRIT	
774	No. 1 Cronulated Pone 100g	3.00

	NO I Granulated Done, 1005
74	Eastern Oyster Shell, per sack (about
	100 lbs.)
74	Blue Point Oyster Shell, per sack (about
	100 lbs.)
74	Star Shell, per sack (about 100 lbs.)
	Crystal Grit, Fine or Medium, 100s
74	Western Granulated Charcoal (50-lb.
	sacks), per 100 lbs.
	Western Powdered Charcoal (50-lb. sks.)
	per 100 lbs.

Catalog Page

MEAT FOODS

73	Lilly's Meat Scraps, 100s	4.50
73	Darling's Meat Scraps, 100s	5.25
73	Fish Meat Meal, 100s	4.25
66	Blood Meal, 100s	5.00
69	Digester Tankage, 100s	4.50

STOCK AND DAIRY FOODS

74	Condensed Buttermilk, 52-gal. bbl. (about	
	400 lbs.), per 100 lbs	5,00
	10-gal. bbl. (about 90 lbs.), per 100 lbs	6.50
68	Lilly's Calf Meal, 100s	5.10
69	Lilly's Lamb Meal, 25s	5.40
69	Lilly's Pig Meal, 100s	5.10
70	Alfalfa Meal, 100s	1.30
	Alfalfa Molasses Feed, 100s	1.80
70	But-er-fat Dairy Feed, 80s (per 100)	1.85
70	Golden Dairy Feed, 80s	1.85
69	Mak-em-fat Hog Feed, 100s	2.10
70	High Protein Dairy Feed, 100s	2.10
69	Soy Bean Meal, 100s	3.15
69	Oil Meal, 100s	3.05
69	Cocoanut Meal, 100s	1.55
69	Ground Flax	10.00
70	Steam Dried Beet Pulp	2.05
70	Whole Feed Barley	1.85
70	Rolled Barley, 80s	1,95
70	Ground Barley, 100s	1.95
70	Corn Feed Meal, 100s	1.95
70	All Grain Chop, 80s	2.00
70 70	Whole Feed Oats, 100s Rolled Feed Oats, 70s	2.05
70	Ground Oats, 80s	2.05
70	Sterilized Bone Meal, 100s	4.00

FERTILIZERS

Catalog Page

COMPLETE MIXED FERTILIZERS

100

Inside Morcrop Fertilizer, 100s	2.75
Back Morcrop Fertilizer, 25-lb sacks	3.00
Cover Morcrop Fertilizer, 10-lb. sacks	3.75
Morcrop Fertilizer, 1½ lbs., per pkg	.25
Morcrop Orchard Special, 100s	3.75
Morcrop Potash Special, 100s	3.50

ANIMAL FERTILIZER

66	Blood and Bone, 100-lb. sacks	3.00
66	Bone Meal, 100-lb. sacks	2.75
66	Sheep Guano	1.50
66	Fish Fertilizer	4.00
66	Dried Blood, 100s	5.00

Catalog Page

CHEMICAL FERTILIZERS

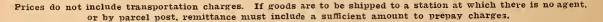
	Sulphate of Amonia, 225-lb. sacks	4.50
65	Muriate of Potash, 225-lb. sacks	6.00
65	Nitrate of Soda, 225-1b, sacks	3.75
65	Superphosphate, 125-lb. sacks	1.80
65	Ground Lime Rock, 100-lb. sacks	.90
65	Gypsum Land Plaster, 100 lbs	.90
65	Hydrate Lime, 50-lb sacks	1.50
65	Agricultural Sulphur, 100-lb. sacks	3.00

SEATTLE

Prices are per 100 lbs. Ton lots 10c per 100 less.

Prices on this List are for mail orders or f. o. b. our Seattle Plant. Extra charge made for city deliveries. While we (The Chas. H. Lilly Co.) exercise care to have all seeds pure and true to name, we do not give any warranty, expressed or implied, as to description, quality, productiveness, or any other matter of seeds we send out, and we will not be in any way responsible for the crop. If the purchaser does not accept the goods on these terms we are to be at once advised, and money Paid for same will be promptly refunded.

THE CHAS. H. LILLY CO.



Every Garden Means A Home

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NOBODY will take exception to the little maxim which adorns our title; but how many, agreeing therewith fully and completely, will still fail to see how inseparable are the garden and the home, not only in the abstract concept but in the actual fact? Why is it that there is still so much ugliness all about us, despite the great effort that has been made to do something towards creating beauty? Is it not because this unity is unrecognized?

EVERY HOME means definite relation, in every part and detail, with its garden and the outdoors. This is what we have yet to learn and to be governed by—that the house reacts in appearance, and in effect too, upon the garden; and the garden likewise cannot be dissassociated from the house and other buildings. They are all members of one body, and they must bear everywhere evidences of this close relationship and interrelationship. Especially must these evidences be developed where indoors and outdoors come together, as in porches, galleries, loggias on terraces, and at wall openings, whether these are for windows or doors. They are details to be sure. But who does not know that attention to details is the thing that distinguishes between the commonplace and the fine and finished.

Good Seeds Essential

The initial cost of seeds of any kind is infinitesimal comparatively with the anticipated results. Cheap seeds of unknown origin only lead to disappointment and failure which is often not realized until it is too late to make a second seeding. It is not what you pay for seeds but what you get for what you pay that counts.

Since 1885

The name fursh has stood for all that is best in seeds for Farm and Garden. Careful selection and growth has earned for them an enviable reputation in the Northwest and their superiority is freely acknowledged.

> SO GOOD THEY CANNOT BE DUPLICATED. SO POPULAR THEY ARE WIDELY IMITATED. THE MAME ON PACKAGE OR SACK DIS-TINGUISHES THE LEADER FROM ITS FOLLOWERS.

Be Sure You Buy Mars and Order Early

THE CHAS. H. LILLY CO. ESTABLISHED 1885

SEATTLE

Branches ELLENSBURG, WASH. WAPATO, - - WASH. YAKIMA, - - WASH.

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

Portland Branch Front and Yamhill Sts. PORTLAND, ORE. "Western America's Greatest Seed House"

ILLYS CROP BOOK

contains cultura! instructions-FREEon request

Eat Your Own Home-Grown Dinner

Here is ı Producer We need more

GROW VEGETABLES-**GROW MORE VEGETABLES-GROW STILL MORE VEGETABLES!**

HE GARDEN, made by one's own hands, is always the best garden because it is part of oneself. A garden made by another may interest, but it is another person's individuality. This applies with special force to Vegetables. Those grown at home are fresher, crisper and taste altogether DIFFERENT from the much handled and frequently stale products sold in the City. Besides, the hygenic value of fresh Vegetables is beyond question; their value to the family cannot be estimated in terms of money.

Service

The Seed business is maintained entirely on confidence, it being impossible for the most advanced expert to determine the guality and purity of strain by mere inspection of the seed-You have to trust your seedsman to sell you seeds which have been carefully selected and grown. Quality in seeds means inbred characteristics. Nearly half a million customers have evidenced their confidence in *Lilly's* Seeds by their continued patronage year after year. There are other seeds at other prices but none superior to Lilly's-they grow!

About Varieties

Only those varieties are offered in this catalog which our many years practical experience as growers has taught us are best suited to our soil and climatic conditions. It is obviously to the planter's advantage to recognize the su-periority of Lilly's Tested Seeds as compared with others which may be entirely unsuited to North Western conditions.



Columbia Mammoth

Asparagus

One ounce of seed will produce about 500 plants

Giant Argenteuil

A superior variety of this delicious early spring vegetable, which should ducing large, thick green stalks, have a place in every home garden. Of exceptionally large size, white, their thickness completely up to the tender, and unexcelled in flavor.

Columbia Mammoth

The popular French variety, prosometimes nearly an inch in diameter with few scales; the stalks retain top and have close round heads.

Pkt. 5c, oz. 10c, 1/1b. 30c. Postpaid Pkt. 5c, oz. 10c, 1/1b. 30c. Postpaid

Palmetto

A very early and prolific variety, producing an abundance of very large deep green shoots of the best quality with a distinctly pointed tip.

Pkt. 5c, oz. 10c, 1/4 lb. 30c, Postpaid

Artichoke

Large French This perennial plant reschibles a mediane boiled edible portion is the immature flower heads, which are boiled This perennial plant resembles a mammoth thistle. The Green Globe spring up around the bottom of the plant are also used, served like asparagus. The flower heads are not produced until the second season. Distinctive from the Jerusalem Artichoke, the edible portion of which is the tubers, which are listed in Farm Seed Section of this catalog.

Pkt. 10c, oz. \$1.00, 1/4 lb. \$3.25, Postpaid



Bush Beans

Jones' Stringless

A Delicious Yellow Podded, Dwarf Variety

A comparatively new variety, very popular with many of our customers. The pods are a beautiful waxy yellow, very large and nearly straight, round, plump, full, very brittle, stringless and without fiber. In flavor and quality they are unexcelled. The ripe dry seeds are white and are excellent for shelled beans. The plants are of medium size, thick stemmed, erect, without runners, early and productive.

Pkt. 15c, 1 lb. 35c, 10 lbs. \$3.00, Postage extra.

Golden Jersey Wax 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 many years. The plants are small, hardy, very erect, vigorous, thick stemmed, without runners, early and productive. The pods are rich golden yellow, broad and thick, solid fleshed, of splendid quality, tender, brittle and stringless.

Pkt. 15c, 1 lb. 35c, 10 lbs. \$3.00, Postage extra.

Golden Wax

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.

Pkt. 15c, 11b. 30c, 10 lbs. \$2.50, Postage extra.

Davis White Kidney Wax

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

Pkt. 15c, 1 lb. 30c, 10 lbs. \$2.50, Postage extra.

Prolific Black Wax

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

Pkt. 15c, 1 lb. 30c, 10 lbs. \$2.50, Postage extra.

Refugee, or 1000 to 1

A very productive, hardy, vigorous late sort, much in favor for canning. Pods 5 to $5\frac{1}{2}$ inches long, somewhat slender, round and slightly curved; fine grained and good quality.

Pkt. 15c, 1 lb. 30c, 10 lbs. \$2.50, Postage extra.

Canadian Wonder

An exceptionally hardy, rapid growing variety and very prolific. Pods, long, green, fleshy and of excellent quality. Pkt. 15c, 1 lb. 30c, 10 lbs. \$2.50, Postage extra.

Broad Windsor

The old English "Broad Bean"-largest and best of its class. Pkt. 15c, 1 lb, 20c, 10 lbs. \$1.75, Postage extra.



Wardwell's Kidney Wax

A standard variety maturing a little later than Golden Wax. Yields a large crop of long nearly straight pods, light golden color, handsome pods, about 6 inches long, of good quality very exten sively used for snaps for the home garden. The plants are strong growing and bear their long pod well up from the ground. Leaves are large, broad and slightly ruffled.

Pkt. 15c, 1 lb. 30c, 10 lbs. \$2.50, Postage extra.

Long Yellow Sixweeks

A variety much used for the home garden and the market. The plants are heavy, hardy, large, vigorous, erect and very productive. Long pods about 6 inches. Straight, flat, handsome, rather light green. Giant early maturing sort.

Pkt. 15c, 1 lb. 39c, 10 lbs. \$2.50, Postage extra.





Bush Beans

Longfellow is an extra early green podded snap bean, producing splendid crops of very long, round, straight, solid, fleshy pods, which are deliciously tender and brittle. The flavor is excellent. The plants are robuct, without runners, and every productive. Lilly's select stock is sold in sealed packages only.

Pkt. 15c, 1 lb. 30c, 10 lbs. \$2.50, Postage extra.

Dwarf Horticultural

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

Pkt. 15c, 1 lb. 30c, 10 lbs. \$2.50, Postage extra.

Burpee's Bush Lima

The most generally grown bush lima bean, growing about twenty inches high and bearing exceptionally large pods and beans of fine quality. Medium early.

Pkt. 15c, 1 lb. 30c, 10 lbs. \$2.50, Postage extra. Burpee's Stringless

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

Pkt. **15c**, 1 lb. **30c**, 10 lbs. **\$2.50**, Postage extra.

Pole Beans One pound will plant 125 hills Carmine Pole

The Best Pole Bean for the Northwest

The most attractive pole bean for snap, green, shell or dry shell beans, for home or market. The pods are brilliantly splashed with bright carmine on a greenish yellow background. very long and flat, generally straight, surface smooth, very brittle, entirely stringless, without fibre. Free from anthracnose. Sold only in sealed packages. Pkt. **15c**, 11b. **3Cc**, 10bs.**\$2.50**, Postage ettra.

Kentucky Wonder

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, without fibre. Pkt. **15c**, 1 lb. **30c**, 10 lbs **\$2.50**, Postage extra.

Lazy Wife Pole

One of the most popular kidney pole varieties, and the best late pole bean. Of superior quality as snaps, and excellent for green or dry shell beans. Pkt. **15c**, 1 lb. **30c**, 10 lbs. **\$2.59**, Postage extra.

Kentucky Wonder

Small White Pole Lim

The only Lima which is certair, to reach maturity here. Excellent for snap or green shell beans. Pods are six to seven inches long and contain five large, flat beans. Similar to Scarlet Runners, excepting that flowers and beans are white. Pkt. **15c**, 1 lb. **30c**, 10 lbs **\$2.50**, Postage extra.

Horticultural or Speckled Cranberry

The best of the horticultural varieties for general use. Equal to Lazy Wife as a general purpose late snap and green shell pole bean for home or market.

Pkt. 15c, 1 lb. 30c, 10 lbs. \$2.50, Postage extra.

Small White Navy

A splendid field variety and excellent for baking. Pkt. 15c, 1 lb. 20c, 10 lbs. \$1.75, Postage extra.

Brussel Sprouts Dwarf Improved

The heads or sprouts are formed on the stalk of the plant, are one to two inches in diameter and resemble minature cabbages. Pkt. 5c, Oz. 40c, $\frac{1}{4}$ lb. 1.25, Postpaid.

King of the Garden or Large White Lima

The best pole Lima bean, but not so well adapted to the Northwest as the bush varieties. Unsurpassed in productiveness; large, handsome pods and seeds.

Pkt. 15c, 11b. 35c, 101bs. \$3.00, Postage extra.

Scarlet Runner

Popular for both ornamental and culinary purposés, Grows about ten feet high, bearing large scarlet flowers followed by large greenpodded beans.

Pkt. 15c, 1 lb. 30c, 10 lbs. \$2.50, Postage extra.

Lady Washington Field Bean

An improvement over the old Navy Eeans; is earlier, larger and more productive. Especially adapted to the west. P_{kt} . **15c**, 1 lb. **20c**, 10 lbs. **\$1.75**, Postage extra.

Broccoli

Large White French

The heads resemble cauliflower, and it is used in the same manner, but is hardier. Pkt. 5r, Oz. 60c, $\frac{1}{10}$ lb. 22.00, Postpaid St. Valentine

The finest quality of its class, producing firm heads very early. Pkt. 5c, Oz. \$1.25, ¼ lb. \$4.00, Postpaid.



Beet **Crimson Globe**

The finest of all for the home garden, also popular with market gardeners. The beet is nearly globular, slightly elongated, of medium size, about three inches in diameter with small tap-root OOTheofleshis deep crimson, beautifully ringed or zoned, and is free from stringiness or woodiness. Our seed is specially grown from the choicest strain, and is sold in sealed packages only.

Pkt. 10c, Oz. 20c, ¼ lb. 50c, Postpaid.

www. Crosby's Egyptian

An improvement over the old Extra-Early Egyptian. It is fully as early as the old variety, and excelts it in all other respects, being larger, smoother, thicker, and of much finer quality. The color is rich vermillion, slightly zoned; it is fine grained, tender and sweet, and does not become woody or hard. Sold only in sealed packages.

Pkt. 5c, Oz. 15c, 1/1 lb, 40c, Postpaid.

Detroit Dark Red

Considered to be the best beet for the market and home garden, and on account of its uniformly deep rich color the most desirable for canning. The leaves are dark green shaded with red. The roots are medium-sized, globular or nearly round, very smooth and of dark red blood color. The flesh is deep vermillion-red, zoned with a lighter shade of the same color.

Pkt. 5c, Oz. 15c, 1/1b. 35c, Postpaid.

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

Pkt. 5c, Oz. 15c, 1/4 lb. 35c, Postpaid.

Early Blood Turnip

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

Pkt. 5c, Oz. 15c, 1/ Ib. 35c, Postpaid

Long Smooth Blood

A standard long late variety—root 12 to 14 inches. Flesh deep purplish red; good quality and excellent keeper. Pkt. 5c, Oz. 15c, 1/4 lb. 35c, Postpaid.

Eclipse Blood Turnip

Very early, of uniform, globular shape, deep red color, fine grained, tender and sweet. Popular for both market and home garden. Pkt. 5c, Oz. 15c, 1/4 lb. 35c, Postpaid.

Swiss Chard (SPINACH OR SEA KALE BEET)

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

Pkt. 10c, Oz. 20c, 1/4 lb. 50c, Postpaid.

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

IIIIYS Crimson Globe

MARKET GARDENERS

and others requiring seeds in very large quantities, please ask for special prices.



SWISS CHARD

Large Ribbed White

May be used as a salad or cooked as greens. Resembles an ornamental beet top but has no edible root. Used for greens for chickens by cutting the stem and leaf which are also very ornamental.

Pkt. 5c, Oz. 15c, 1/1 lb. 45c, Postpaid.



TILLY'S

Giant

Lucullus

Puget Sound Cabbage Seed

ABBAGE SEED is one of our specialties, and we produce a quality unexcelled in America. The Puget Sound country is one of the very few localities in the United States where Cabbage seed of the highest quality is produced. Our Puget Sound grown seed will produce a greater percentage of large, firm heads than any other stock to be had; it has become noted all over the country, and we supply wholesale seedsmen in all parts of North America, European and other countries abroad as well as our own local trade. Our cabbage seed, being grown and acclimated in this country, is especially adapted to the Northwest.

One ounce of seed should produce 1500 to 2000 plants

First Early Varieties

Copenhagen Market

A wonderful cabbage. Although it is very early, the round, solid heads grow to very large size, 10 to 12 pounds, and are produced on short stems and have few outer leaves. The plants are hardy, sturdy, and may be depended upon to produce solid heads at an early season. Our seed is grown in the Puget Sound country, from seed stock imported direct from Denmark.

Pkt. 10c, Oz. 50c, 1/4 lb. \$1.50 Postpaid

Early Winnigstadt

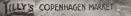
An excellent variety, but not so early as Early Jersey Wakefield. The heads are similar in form and size, but are more sharply pointed; very hard and the leaves are tightly folded.

Pkt. 5c, Oz. 35c, 1/4 lb. \$1.35, 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. This variety is a favorite with market gardeners.

Pkt. 5c, Oz. 35c, 1/4 lb. \$1.35, Postpaid



All Head Early

A large heading early variety of good quality. May be planted late and used in fall and early winter. The plants are compact, with few outer leaves. Stems are short. Heads are large, solid, and flat, but very deep. Remarkably free from "spreading" leaves thus permitting close planting and increased yield per acre. Pkt. 5c, Oz. 35c, 14 lb. \$1.35, Postpaid

Early Jersey Wakefield

An Improved Strain of the Standard Extra Early and Popular Variety

This old standard variety is more generally grown and one of the most popular extra early cabbages. Equally popular for either the home garden or for market. The heads are pyramidal in form, pointed at the top, with but few outside leaves, 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 a particularly fine strain. Pkt. 5c, Oz. 35c, ¼ lb. \$1.35, Postpaid

Early Jersey Wakefield





Glory

A Splendid Second Early Variety; Round Solid Heads

Although this is very early for a round-headed cabbage, it is a splendid keeper and is sold and heavy, deliciously tender and of the finest quality. The plants are of vigorous growth and are sure heading. Our seed is grown in the Puget Sound country, famous for producing the best cabbage seed.

Pkt. 10c, Oz. 45c, 1/1 lb. \$1.50, Postpaid.

Mars All Seasons, or Succession

One of the Most Satisfactory Second Early Cabbages for General Use

A very desirable second early or intermediate season cabbage. As its name implies, it is adapted for either summer, fall, or winter use. The heads become solid long before they are fully grown, and may be used at that time or

during the long season until they are mature. It is not liable to split. The heads are very large, nearly round, slightly flattened, very solid and of excellent quality. This variety is 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.

Pkt. 5c, Oz. 45c, 14 lb. \$1.50, Postpaid.

Early Flat Dutch

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

Pkt. 5c, Oz. 35c, 1/4 lb. \$1.25, Postpaid.

Fottler's Brunswick

One of the best second early or inter-ediate cabbages for fall use. The plants mediate cabbages for fall use. The plants have very short stems, large leaves, and are very compact. The heads are large, flat, sold and of fine cuality.

Pkt. 5c, Oz. 35c, 1/4 lb. \$1.25, Postpaid.

The Joys of Gardening

How many have experienced the joy

now many nave experienced the joy and satisfaction that comes from working in the soil? How many realize what it means after the day's work is over to take a hoe or some other garden tool, and feel the thrill that comes from stirring the soil and planting the seed? Gardening is natural exercise and brings practically all muscles into play. You forget the office or factory when digging in the earth. In preparing and planting your gar-den you concerted for further when the soil. Who descript den, you cannot help feeling a sort of partnership with the soil. Who doesn't like to stir the warm, mellow earth in the spring when it is time to plant the seed: No home ground or home is complete without a garden, and those who have never planted vegetables or flowers have missed much.



Remember it's always the quality that determines the price. Plant

Lilly's Seeds.

TILY'S GL

ILLY'S ALL SEASONS

It makes all the difference in the world whose seeds you plant, and all that difference is in favor of ILLY'S

Western America's Best Seeds

ILLYS

TILLY'S Danish Dallhead



PeTsai Cabbage

Surehead

One of the most reliable late or main crop cabbages; very hardy and exception-ally sure heading. The heads are large, broad, thick, somewhat flattened, com-pact, very solid and of excellent quality. Pkt. 5c, Oz. 35c. 1/4 lb. \$1.35, 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.

Pkt. 5c, Oz. 40c, 1/4 lb. \$1.40, Postpaid.

PeTsai or Celery Cabbage

A wonderful salad plant growing 15 or 16 inches high somewhat resembling Cos Lettuce or similar to Swiss Chard. The Lettuce or similar to Swiss Chard. The hearts blanch to a crystalline white; whiter than lettuce and more beautiful than cabbage. Should be sown in July. Pkt. 5c; Oz. 40c, 1/4 lb. \$1.40, Postpaid.

Cabbage

Late and Savoy Varieties Danish Ballhead

Unsurpassed for Winter Use

A medium or late variety, one of the very best keepers, and excellent for late winter or spring shipping. The heads are

round, of medium size, very solid and hard, and of good quality. Vigorous, compact, exceedingly hardy, and reliable. Our seed is grown on Puget Sound with special care from carefully selected heads.

> Pkt. 10c, Oz. 50c, 1/4 lb. \$1.50, Postpaid.

Large Late Drumhead

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

Pkt. 5c, Oz. 35c, 1/4 lb. \$1.35, Postpaid.

Red Dutch

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

Pkt. 5c, Oz. 40c, 1/4 lb. \$1.40, 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.

Pkt. 5c, Oz. 40c, 1/2 lb. \$1.40, Postpaid.

Premium Late **Flat Dutch**

A popular late variety; 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.

> Pkt. 5c, Oz. 40c, 1/4 lb. \$1.40, Postpaid.

The Quality

of the seed you plant will be mak-ing your garden's success or failure months after the cost is forgotten.







Golden Half Long

Finest Main Crop Carrot

By far the best carrot for home use and for market and by many it is preferred for stock feeding, for although it is not so large as the stock carrots, the yield is almost as great and the quality is superior.

Carrots should be more generally grown, both for table and stock. 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 lea dpencil 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 are especially adapted to growing them. Sold in sealed packages only.

Pkt. 10c, Oz. 20c, 1/4 lb. 45c, 1 lb. \$1.25, Postpaid.

Danver's Half Long

A standard half long orange-colored carrot grown largely on account of its great produc-tiveness 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.

Pkt. 5c, Oz. 20c, 1/4 lb. 45c, 1 lb. \$1.25, Postpaid.



Danver's

Half

Long

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

orange-red; medium early. Pkt. 5c, Oz. 25c, 1/4 lb. 45c,1 lb. \$1.25,

Postpaid. Long Orange Improved

This improved strain is medium to late maturing 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.

Pkt. 5c, Oz. 20c, 1/4 lb. 40c, 11b. 1.00, Postpaid.

Short Horn Early Scarlet Horn or French Forcing

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 should be used before fully grown, while young and tender.

Pkt. 5c, Oz. 20c, 1/4 lb. 45c. 1 lb. \$1.25. Postpaid.

Oxheart, or Guerande

Especially desirable on shallow or hard soil where longer rooted varieties would not thrive. The tops are small. The 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 is desirable for table use, when mature they are excellent for stock.

Pkt. 5c, Oz. 20c, 1/4 lb. 40c, 1 lb. \$1.00, Postpaid

Varieties Recommended for Stock Feeding

These keep well when stored for winter use, and form an extremely whole-some addition to the winter rations of stock when fed in conjunction with corn and dry fodder. The rich coloring of the deep orange-colored sorts is esteemed also as imparting a richer coloring to milk and butter during winter months.

The most popular white carrot for stock feeding on account of its immense size, productiveness and heing 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 Seed Section of this catalog. Sold only in sealed package.s

White Belgian

A large and very productive white carrot, recommended for stock food only. Very similar to improved short white.

Pkt. 5c, Oz. 15c, 14 lb. 30c, 1 lb 90c, Postpaid. Pkt. 5c, Oz. 15c, 1/4 lb. 35c, 1 lb. 95c, Postpaid.

Improved Short White

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

Pkt. 5c, Oz. 15c, 1/4 lb. 30c, 11b. 90c, Postpaid.



Cauliflower

One ounce should produce about 3000 plants

Cauliflower is grown in the same manner as Cabbage, usually as a late fall crop, but when started early in the spring, excellent heads, can be grown of the dwarf early varieties. To make the best and largest heads the plants need cool, moist weather, well-enriched soils and thorough cultivation. The Cauliflower is highly esteemed for the mild, delicate flavor and extreme tenderness of the solid white heads.

www.libtool.com.ci

Early Alba

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 for market, for forcing or for outdoor culture. It is the largest early cauliflower, and is equally good for either extra early or for main crop. It is a sure producer of large, solid compact snow-white heads of unequalled quality, flavor and beauty. Lilly's Early Alba cauliflower seed is sold only in sealed packages.

Pkt. 25c, ¹4 Oz. \$1.10, 1 Oz. \$4.20, Postpaid.

Snowball

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

Pkt.10c, 1 Oz. \$1.00, 10z. \$3.50, Postpaid

Large Late Algiers

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

Pkt. 10c. 1 Oz. 60c, 1 Oz. \$2.00, Postpaid.

Veitch's Autumn Giant

A large late cauliflower, producing quite compact white heads. The large late varieties are not nearly so reliable as the earlier Erfurt type. Known on the Pacific coast under the name of *California Wonder*.

Pkt. 10c, 1/4 Oz. 40c, 1 Oz. \$1.50, Postpaid.



Danish Dry-Weather

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

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

Pkt. 25., 1/4 Oz. \$1.00, 1 Oz. \$3.50, Postpaid.

IT'S A FACT

that the consumer pays at least twice the prices the raiser receives for his garden and farm products. Realizing this, it is surely a great incentive to become both producer and consumer. In addition to the saving in dollars and cents, there is the pleasure of enjoying fresh, palatable vegetables of a quality not attained elsewhere.



One ounce will produce about 3000 plants; one pound will produce plants for one acre

E Paris Golden Yellow

The plants are of compact semi dwarf habit and form numerous stalks. They are heavily ribbed, of golden yellow color-very crisp and tender. Leads all the self blanching varieties for earliness and productiveness. This is the variety so extensively grown in California for supplying the Northern Markets in the early season before the nome products are ready. Altogether a very desirable sort to grow. The Standard Celery for early use. Pkt. 10c, Oz. 45c, 1/1b. \$1.40, Postpaid.

Silver Plume

A handsome early variety, popular with market gardeners on account of its very attractive appearance and requiring a very short time for blanching. The plants are of medium size, and the foliage forms beautiful silver-white plumes, so aptly suggested in the name. As the plants mature, the inner stems and leaves naturally turn white. The stalks are thick and heavy, with pure white hearts; brittle, crisp and tender; free from stringiness and unexcelled in flavor.

Pkt. 5c, Oz. 25c, 1/4 lb. 90c, Postpaid

Giant White Winter

Giant White is unequalled as a late winter celery. Like other winter varieties, it is not self-blanching, and must be blanched by banking with earth or with boards. On the Pacific Coast it may be left in the garden until wanted and will be fit for use as late as March or April. This variety is unexcelled in keeping qualities; grows very tall, but with large, white stalks, very brittle, and the flavor is delicious.

Pkt. 5c, Oz. 30c, 1/4 lb. 90c, Postpaid.

Giant White Solid

An excellent late fall and winter variety of immense size and good quality. Vigorous with fleshy, solid, tender stalks which in blanching become yellow-white.

Pkt. 5c, Oz. 30c, 1/4 lb. 90c, Postpaid.

Golden Self-Blanching

A good standard early variety; blanching easily. The heart is rich golden yellow; the outer leaves yellow. Pkt. 5c, Oz. 45c, 1/4 lb. \$1.40, Postpaid.

Chervil

Curled. Very finely curled, resembling parsley; used in soups and salads. Pkt. 5c, Oz. 25c, 1/4 lb. 90c, Postpaid

Collards

Georgia. A loose form of cabbage grown in the South for greens. Not adapted to the North. Pkt. 5c, Oz. 20c, 1/4 lb. 60c, Postpaid

Chives

Usually grown as an edging and has a mild flavor of young onions. The leaves are used in soups and salads for seasoning.

Pkt. 10c, Oz. 50c, 1/4 lb. \$2.00, Postpaid.

His man with the

Chicory Large Rooted. Used as a substitute for coffee; and the young blanched shoots for salad. Pkt. 5c, Oz. 40c, 14 lb. \$1.40, Postpaid.

Celeriac or Turniprooted Celery

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

> Pkt. 5c, Oz. 25c, 1/4 lb. 75c, Postpaid.



Sweet Corn

One pound of seed is sufficient for about two hundred hills; fifteen pounds for an acre

📖 Golden Giant

A Brand New Early Variety

One of the most perfect Sweet Corns every introduced. Offered last season for the first time it has more than justified the claims we made for it and we confidently recommend it to every gardener who is looking for the finest type of Early Sweet Corn. Produces ears nine inches long with kernels of a deep golden yellow of exquisite flavor. Equal in every respect to Golden Bantam with the added advantage of larger ears very compactly filled. This excellent variety is Washington grown and therefore thoroughly acclimated—a point strongly in its favor. A trial will convince the most critical gardener that Golden Giant is destined to become very popular. Every Western planter will be pleased with the distinctive features of this Corn. It is very hardy and may be planted early. We advise you to mail order on receipt of this catalog to avoid disappointment as we are receiving enquiries before going to press with our book.

> Pkt. 20c, 1 lb. 40c, 10 lbs. \$3.75, Postage additional. (See also page 4 of cover).

Stowell's Evergreen

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

Pkt. 15c, 1 lb. 30c, 10 lbs. \$2.75, 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, 1 lb. 30c, 10 lbs. \$2.75, 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, 1 lb. 30c, 10 lbs. \$2.75, Postage additional.

Black Mexican

This sweet corn, when young, cooks remarkably white, but the ripe grain is black. It is an excellent late variety. The stalks grow about six feet high, and the ears about eight inches long. delicious. Pkt. **15c**; 10 lbs. **\$3.00**, Postage additional.

Country Gentleman

A splendid late variety. The small, white cob is densely crowded with irregular rows of long, slender, white kernels of excellent quality. Pkt. **15c**, 1 lb. **35c**, 10 lbs. **\$3.00**, 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, 1 lb. 30c, 10 lbs. \$2.75, Postage additional.



Golden Giant



THE SWEETEST AND MOST DELICIOUS EARLY SWEET CORN

Golden Bantam is one of the sweetest and most deliciously flavored sweet corns that has ever been grown, has no superior for the home garden or early market. In earliness it is excelled only by "lack Frost" and

and has no superior for the home garden or early market. In earliness it is excelled only by "Jack Frost," and in flavor it is surpassed by none. 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. Golden Bantam is extra early and plantings can be medie a week or ten days earlier than with the less hardy varieties of White Sweet Corn. Sold only in sealed packages. Dit 150 104 5275 Date 114'

Pkt. 15c, 1 lb. 30c, 10 lb. \$2,75, 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 inches long, and are well filled with ten to twelve rows of large, sweet kernels. It is a little later than Jack Frost and Golden Bantam, but earlier than other large varieties. The plants are tall and bear two or three ears each.

Pkt. 15c, 1 lb. 30c, 10 lbs. \$2.75, Postage additional.

Jack Frost

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

Pkt. 15c, 1 lb. 30c, 10 lbs. \$2.75, Postage additional.

Early Evergreen

Has ears fully as large as those of Stowell's and is about five days earlier. Its most valuable feature, is the extreme paper whiteness of the grains, which makes not only a more attractive ear when served on the table, but is most important for the canner. It retains its whiteness when put up in cans.

Pkt. 15c, 1 lb. 30c, 10 lbs. \$2.75, Postage additional.

A Good Pointer About Picking To have the finest sweet corn, it must be picked in just the right condition, that is, when the skin of the grain breaks at the slightest puncture, and plantings should be made frequently enough always to have a supply at this stage. The quality will be inferior if it is either a few days too old or too young.

HOW TO GROW CORN

Sweet Corn should be planted as soon as the soil is 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 rows, or five or six kernels may be y anted in hills three feet apart each v.ay and thinned to three plants in each hill.

Large quantities of commercial fertilizers should be used, with potash and phosphoric acid predeminating. Nitrates should be used early in the season only, as they tend to retard maturity. Cultivation should be frequent and thorough, and, especially after spring rains have ceased, should be shallow.

One pound of seed is sufficient for about two hundred hills; fifteen pounds for an acre.



Cucumber

One ounce will plant onc hundred hills

den guide. Free to customers on request.

of the Pacific

TILLY'S Pride of the Pacific

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. One of the best varieties for greenhouse culture. Unsurpassed for growing outdoors, either for market or 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.

PRID PACIFIC

Pickling

Unequalled for Large or Small Pickles The young cucumbers are thickly set with small spines, and possess the distinctly roughened surface so much de-sired 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, 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, 14 lb. 50c, Postpaid.

White Spine Improved

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

Pkt. 5c, Oz. 15c, 1/4 lb. 45c, Postpaid.

Long Green

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

Pkt. 5c, Cz. 15c, 1/4 lb. 45c, Postpaid.

Lilly's Improved Telegraph FOR FRAME CULTURE

The finest type of this celebrated cucumber for market growing. The quality and beauty of the fruit is of the highest—skin smooth, deep in color and the fruit remains stiff after cutting; produces 3 to 4 cucumbers to a joint. A long fruit, 18 to 20 inches with short handle. Per Packet 25c, Postpaid.

Pkt. 10c, Oz. 15c, 1/4 lb. 50c, Postpaid.

Davis Perfect

A Splendid Extra Early Cucumber

This variety grows nine to twelve inches long, and perfect in shape, color, quality and flavor. It is very early, and when grown outdoors so closely resembles hothouse fruit that it often brings the same fancy prices. 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. 5c, Oz. 15c, 1/4 lb. 50c, Postpaid.

Early Cluster

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

Pkt. 5c, Oz. 15c, 14 lb. 45c, Postpaid.

Early Frame, or Short Green

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

Pkt. 5c, Oz. 15c, 1/4 lb. 45c, Postpaid.

Boston Pickling

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

Pkt. 5c, Oz. 15c, 1/4 lb. 45c, Postpaid.

Lemon Cucumber

Resembles a lemon in shape, size and color and has a flavor distinctive and superior to any other variety. It lacks the bitterness of the common cucumber. Very prolific. Can be eaten freely without harmful re-ults.

Pkt. 5c, Oz. 20, 14 lb. 55c, Postpaid.



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.

Pkt. 5c, Oz. 25c, 14 lb. 75c, Postpaid.

Cress Curled or Pepper Grass

The leaves are frilled and curled, crisp and pungent, and are used in salads and for garnishing meats.

Pkt. 5c, Oz. 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.

Pkt. 10c, Oz. 60c, Postpaid.

Endive

Broad Leaved Batavian

Specially Adapted to the Pacific Coast

Endive is an excellent salad vegetable, used similar to lettuce, or it may be cooked as greens, and in our mild climate on the Pacific Coast it may be had at all seasons of the year. Not as generally known in the home garden as it deserves to be. Batavian Broad Leaved is especially adapted to our climate, and may be left in the garden during the winter. The leaves are broad, twisted and waved, deep green, with thick, white midribs. The inner leaves form a clustering head which blanches to a beautiful creamy white and is crisp and tender. Pkt. **10c.** Oz. **15c.** ½ lb. **45c.** Postpaid.

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Green Curled Endive

A hardy, vigorous variety, bright, deep green leaves usually tinged with rose, blanching to a deep cream color. Pkt. 5c, Oz. 15c, 1/4 lb. 45c, Postpaid.

Egg Plant

New York Improved

Very productive, the plants bearing six to eight fruits ch. The fruits are large, nearly round, dark purple, free each. of thorns and of excellent quality.

Pkt. 5c, Oz. 50c, 14 lb. \$1.85, Postpaid

Black Pekin

An early variety with fruits nearly as large as the later sorts. The fruit is nearly round, the skin smooth, black and glossy. Pkt. 5c, Oz. 50c, 14 lb. \$1.85, Postpaid.

Kohl-Rabi Early White Vienna

A turnip-like bulb, formed above ground, combining somewhat the flavor of turnips and cabbage. Large enough to be used in ten or twelve weeks from time of sowing. Pkt. 5c, Oz. 25c, 1/4 lb. 75c, Postpaid.

HERBS					
	Pkt.	Oz.			
Anise	05	\$0.35			
Caraway	.05	.25			
Catnip	25	\$1.00			
Dill	05	.20			
Horehound		.35			
Lavender		.50			
Rosemary		.50			
Sage	05	.35			
Summer Savory	.05	.50			
Sweet Basil		.40			
Sweet Fennel		.25			
Sweet Marjoran	n .05	.50			
Tansy		.65			
Thyme		.60			
Wormwood	05	.65			

Leek

Large American Flag

The leek belongs to the onion family, and is a good fall^o and winter substitute for green onions. Pkt. 5c, Oz. 30c, ¹/₄ lb. 85c, Postpaid.

Musselburg

An improved variety growing to a very large size, with broad leaves spreading like a fan. Pkt. 5c, Oz. 30c, 1/4 lb. 85c, Postpaid.







Forcing

Excellent for Extra Early Out Door Culture For forcing in greenhouse or cold frames, or for extra early outdoor culture, this variety has no superior. The plant grows upright, does not form heads, but makes a quick growth of large, thin, light green leaves, finely curled, crimped, and savoyed. It remains in condition for cutting for a considerable time, and stands shipping better than most varieties,

Pkt. 10c, Oz. 20c, 1/4 lb. 50c, Postpaid.

Manpareil Hanson Head

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. The leaves are bright yellowish-green; broad, crumpled, and frilled at the edges; and with distinctive midrib. Inner leaves are white, very crisp, and sweet.

Pkt. 10c, Oz. 20c, 1/4 lb. 50c, Postpaid.



Lettuce One ounce of seed for 400 feet of drill Delicious

An Extra Early Head Lettuce

Very early, forming handsome, compact, firm heads of medium size of the finest quality, earlier than any other. 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. Although generally used for early out door culture, it is excellent for forcing and for succession during the summer. The heads are round, solid, and stand shipping well. Sold only in sealed packages.

Pkt. 10c, Oz. 25c, 1/4 lb. 70c, Postpaid.



Boston Market or 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. This is the white seeded sort.

Pkt. 5c, Oz. 15c, 1/4 lb. 45, Postpaid.

Prizehead

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

Pkt. 5c, Oz. 15c, 1/1b. 45c, Postpaid.

May King

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

Pkt. 5c, Oz. 15c, 1/4 lb. 45, Postpaid.

Big Boston

A fine forcing variety, producing heads of very large size, often measuring ten to twelve inches in diameter. It succeeds better in cooler temperatures than most strains. Heads well in the open ground during the cool weather of spring or fall. One of the most widely grown of all American varieties.

Pkt. 5c, Oz. 15c, 1/4 lb. 45c, Postpaid.



Lettuce Www York or Wonderful A Mammoth New Head Lettuce

A new and very popular variety, thriving in all sections and during all season's.WWA. crisp, cabbage-heading lettuce, extremely large, sometimes fifteen inches in diameter and weighing two or three pounds. It is deep rooting, stands heat well, is slow to run to seed, and especially adapted for growing during the summer months. It is a sure header under the most trying conditions. The interior is beautifully blanched, creamy white, crisp, tender and delicious. Especially recommended as a standard, main crop, hot-weather lettuce. Very popular with market gardeners, and is equally good for home use. Not recommended for forcing. As we usually have a heavy demand for this variety we recommend early ordering. Sold in sealed packages only.

Pkt. 10c, Oz. 40c, ¼ lb. \$1.25, Postpaid.

Early Curled Simpson

A standard variety for forcing or for very early outdoor culture. The leaves. in loose clusters, are light green in color, slightly frilled and much blistered, are

crisp, tender and sweet. Especially adapted for sowing thickly and cutting while the plants are young. Pkt. 5c, Oz. 15c. 1/4 lb. 45c, Postpaid.

Grand Rapids

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.

Pkt. 5c. Oz. 15c. 1/4 lb. 45c, Postpaid.



Los Angeles Market

One of the most reliable, sure-heading sorts; heads globular, large and late; leaves large and very broad, borders finely frilled; color clear light green. A fine variety for midsummer planting outside, as it withstands the hot season and is a slow seeder. Pkt. **5c**, Oz. **40c**, ½ lb. **\$1.25**, Postpaid.

Paris White Cos

Grows to very large size. The inner leaves blanch readily and are of fine flavor. One of the most popular market sorts; also called White Paris Self-Folding Cos or Trianon Cos.

Pkt. 5c. Oz. 15c. 1/4 lb. 45c, Postpaid.

HEALTH HINT As a health food Lettuce has no superior. After the winter season, when we all eat too much meat and starch foods, lettuce comes like a prescription

from a well advised doctor. Sown every week or ten days up to the end of July will ensure a continuous

supply of fresh, crisp, tender lettuce all season.

Grand Rapids

Kale or Borecole

Emerald Isle

A grand variety of green curled winter kale, and is most desirable on account of its hardiness, excellent quality and beautiful appearance. Of medium height, the leaves are so finely fringed and curled as to resemble parsley, and it is of a beautiful rich, emerald green color. It is hardy; on the Pacific Coast it is seldom injured by freezing, in fact is improved by frost, and may be cut and used at any time during the winter.

Pkt. 10c, Oz. 25c, 1/4 lb. 75c, Postpaid.

Tall Scotch

Grows three to four fect high, bearing long, plume-like light green leaves, which are deeply cut and finely curled at the edges. Very ornamen-tal, and sufficiently hardy to resist frost.

Pkt. 5c. Oz. 20c. 1/4 lb. 60c. Postpaid.

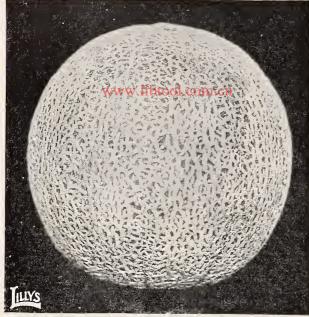
Dwarf Green Curled

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

Pkt. 5c, Oz. 20c, 1/ 1b. 60c, Postpaid.







Pollock 10-25

Improved Rocky Ford

The Rocky Ford is the delicious little cantaloupe served in the best restaurants and hotels. It is small, about five inches in diameter, oval in form, and the skin is rich greenish-gold covered with a beautiful yellow netting. The flesh is light green, very deep, ripening clear to the rind, very solid and with a very small seed cavity.

Pkt. 10c, Oz. 20c, 1/4 lb. 45c, Postpaid. Extra Early Hackensack

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

Pkt. 5c, Oz. 20c, ¼ lb. 40c, Postpaid.



Honey Dew

Musk Melon Pollock 10-25

The latest and positively the most successful of any Musk Melon introduced to date. It is not an untried variety but one that has proved its merit which distinguishes it as the most popular melon with growers everywhere. It is a reselection from the Pollock No. 25 and supercedes that excellent sort by reason of its long distance shipping qualities. An early melon of the solid netted type, very small seed cavity with thick luscious flesh of genuine salmon tint shading to green near the rind. A prolific yielder and is admittedly the finest salmon-fleshed melon ever introduced. We strongly recommend a trial.

Pkt. 10c, Oz. 25c, 1/ lb. 75c, Postpaid.

Burrell's Gem

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

Pkt. 5c, Oz. 20c, 1/4 lb. 45c, Postpaid.

Rocky Ford or Netted Gem

Very popular for market and 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.

Pkt. 5c, Oz. 20c, 1/4 lb. 40c, Postpaid.

Osage or Miller's Cream

Medium early, large and nearly round. The skin is deep green, free from netting, heavily ribbed and light green bands between the ribs. The flesh is very thick, orange colored, firm Pkt. 5c, Oz. 15c, ¼ lb. 40c, Postpaid. and of fine quality. Pkt. 5c, Oz. 15c, ¼ lb. 40c, Postpaid.

Nutmeg

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

Pkt. 5c, Oz. 15c, 1/4 lb. 40c, Postpaid

Honey Dew

Fruits with smooth, almost white rind, measuring about six inches in diameter by seven to eight inches long. The green flesh is thick and is of a peculiar sweet flavor. To have the melons in the best condition gather as soon as they slip from the vine and store in a cool place for two or three days. Pkt. 5c, Oz. 25c, 1/4 lb. 75c, Postpaid.

Mushroom Spawn

Pure Culture

Is produced by a new system of selection and inoculation. The pure cultures are taken direct Lambert's from selected specimens and produce mushrooms of the finest quality of uniform variety and color. We can furnish either the White, Cream-White or Brown varieties. In bricks weighing about one and one-quarter pounds. One brick is suf-ficient to spawn nine square feet of bed. Brick 30c, 10 Bricks \$2.75, Postage extra.

Ask for leaflet on Mushroom Culture-FREE on request.



Water Melon One ounce of seed will plant 30 hills

King and Queen

Best Early Variety for Market

The fruit is of uniform medium size; round, smooth and of fine appear-ance. 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. Pkt. **10c**, Oz. **20c**, ½ Ib. **40c**, Postpaid.

Georgia Rattlesnake

Very large and long, suitable for warm localities. The skin is light green, distinctly striped and blotched with a darker shade. The flesh is bright scarlet, tender and sweet. Pkt. 5c, Oz. 20c, ½ lb. 40c, Postpaid. Pkt. 5c, Oz. 20c, 1/4 lb. 40c, Postpaid.

Cole's Early One of the easiest varieties to grow; very early and adapted to con-ditions in the northwest. A good shipper and excellent for market; also a good variety for the home garden. It is not large but is very productive; nearly round; the rind is very thin, and the deep red flesh is of excellent quality. Pkt. 5c, Oz. 20c, ½ Ib. 40c, Postpaid.

Kleckly 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. Pkt. 5c, oz. 20c, ½ lb, 40c, Postpaid.

Sweet as Honey

Unequalled for Home Use in the Northwest

This is the best and most delicious of all early watermelons for the Northwest. It is medium in size, oblong in form, and the skin is a rich dark Northwest. It is medium in size, oblong in form, and the skin is a rich dark green. The flesh is bright scarlet clear to the rind, and entirely free from stringiness. The seeds lie close to the rind, leaving a very large solid core, lusciously sweet, crisp and melting. Sold in sealed packages only. Pkt. **10c**, Oz. **20c**, ¼ lb. **45c**, Postpaid.

Florida Favorite

Very large and of excellent quality. The fruits are long, dark green, irregularly striped and mottled. The flesh is deep red, very sweet and tender, Seed nearly white. Pkt. 5c, Oz. 20c, 1/4 lb. 40c, Postpaid.

Tom Watson

Probably the best shipping melon, and one of the best main crop sorts; grows a very large size. Fruit large and long in shape, colored a medium green with a light tracing of a darker shade, flesh rich red and of good quality; seeds white. Pkt. 5c, Oz. 20c, ½ lb. 45c, Postpaid.

Citron—Red Seeded

Small round melons, used exclusively for preserves or pickles; not suitable for eating. The skin is dark green, distinctly striped and marbled with light green. The flesh is white, matures late in the fall and may be kept for a long time. Pkt. 5c, Oz. 20c, ½ lb. 40c. Postpaid.

No fruit is so easily grown or more delicious to eat than good Water Melon. We take every precaution to have varieties true to type.

MUSTARD Southern Curled

Hardy and vigorous, with large Fight green leaves, crimped and frilled at the edges. Excellent while young for salads and garn-ishing. Seed is dark brown and small. Pkt. 5c, 0z. 15c, ½ lb. 35c, Destand Postpaid.

White English

Leaves are dark green, small smooth, and deeply cut; mild and tender when young. The seeds are large and light yellow. Pkt. 5c, Oz. 10c, 14 lb 30c, Postpaid.

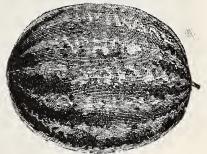
OKRA or **GUMBO** Dwarf Green

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

Pkt. 5c, Oz. 15c, 1/ 1b. 30c, Postpaid. 3



King and Queen



Cole's Early



Florida Favorite





Tom Watson

Grow A Garden

FOOD is the worlds greatest problem and the only practical individual solution to the vexed question of H. C. of L. is to grow your own vegetables. You'll like them better and if you don't grow them yourself, you will probably have to go without them. Order seeds NOW-



Onions have been aptly termed the 'money crop of the garden -our strains are dependable and true to type.

ILLY'S

Prizetaker

Onion Prizetaker (Select Stock)

A great favorite with market gardeners. It attains its immense size under exactly the

same conditions necessary to cultivate other sorts. It is a bright clear straw color; always grows to a uniform and most perfect shape. The bulb is very sol-id and heavy. The flesh is crisp, white and of delicious quality. It is very hardy and a good winter keep-

er, as it ripens up hard and firm. It is very fine-grained and of mild, delicate flavor.

Sold only in sealed packages.

Pkt. 10c, Oz. 30c, 1/4 lb. 85c, 1 lb. \$2.75, 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 excel-lent flavor. One of the best main crop varieties.

Pkt. 5c., Oz. 20c, ¼ lb. 75c, 1 lb. \$2.50, 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.

Pkt. 5c, Oz. 20c, ¼ lb. 60c, 1 lb. \$2.00, Postpaid.

Southport White Globe

The mild flavor of this wonderful variety is famed the world over. It will average from 2 to $2\frac{1}{2}$ inches in diameter and produces large yield. The flesh is fine grained, crisp and of a very fine flavor and snowy white in color.

Pkt. 5c, Oz. 30c, 1/2 lb. 85c, 1 lb. \$3.00, Postpaid.

Yellow Flat Danvers

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

Pkt. 5c, Oz. 20c, ¼ lb. 60c, 1 lb. \$2.00, 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.

Pkt. 5c, Oz. 20c, ¼ lb. 70c, 1 lb. \$2.25 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, some, and very hard and crisp. The color is a beautiful waxy white, and flavor is deliciously mild. Sold in sealed packages only. They are extra early, very small, round, not necky, hand-

Pkt. 10c, Oz. 50c, 1/4 lb. \$1.60, 1 lb. \$5.00 Postpaid.



Onion One ounce of seed will sow 300 feet Longkeeper

Longkeeper, as the name implies, has marvelous keeping qualities which in ad-4 dition to its splendid appearance, fine quality and flavor, and phenomenal yield, makes it the most popular and profitable for the market. It is also unexcelled for home use, as the bulbs form 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. Pkt. **10c**, Oz. **30c**, 1/4 lb.

90c, 1 lb. \$3.00 Postpaid.

CROP BOOK will be mailed free to customers on request.



Western Wethersfield

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

Pkt. 10c, Oz. 30c, 1/4 lb. 90c, 1 lb. \$3.00, Postpaid.

White Portugal or Silverskin

A very popular medium white onion, much used for green onions, pickles and for fall and winter planting. The bulbs grow to good size, ripening early and quite evenly, are silvery white, nearly round when of bunching size, but flattened when mature. The flesh is mild and of splendid quality. Pkt. **10c**, Oz. **30c**, 1/4 lb. **90c**, 1 lb. **\$2.75**, Postpaid.

Oregon Yellow Danvers

A type developed in Oregon where it is very popular, in fact, it is considered by many the standard market variety in that State. The bulbs ripen up hard and early; are good keepers; an excellent sort for table or market. It has the thin brownish yellow skin of the Danver types with firm, white, fine grained flesh which is mild in flavor. Bulbs grow uniformly large, half globe shape with small neck. Pkt. **10c**, Oz. **25c**, ¼ lb. **80c**, 1 lb. **\$2.65** Postpaid.

HINTS ON ONION CULTURE

Onions require a well-drained loam. The land should be very rich and it is necessary that it should have raised a hoed crop the previous season. It is a mistake to attempt to grow onions on weedy or rundown land. To get the best results a, heavy top dressing of well-rotted barnyard manure should be well worked into the soil. After this a complete commercial fertilizer containing a large proportion of potash should be used. This should be sown broadcast at the rate of 1,000 pounds per acre. If the land has been in a high state of cultivation the commercial fertilizer may replace the barnyard manure. It costs no more to the commercial fertilizer may replace the barnyard manure. It costs no more to cultivate a crop that yields 800 bushels per acre than it does to cultivate a crop that yields only 300 bushels. When land is in good condition onions may be grown on it yields only our busies. When tand is in good condition only in the spring as the land can be worked. If intended for hand cultivation, sow in rows 12 to 14 inches apart, and if for horse cultivation about 30 inches apart. It requires about four pounds of seed per acre.



Onions growing for seed

Onion Sets VHY THEY ARE PLANTED

Onion Sets are now an established and recognized factor in onion production. The reasons for this general use are easily understood. (1) The first saving is in labor, being much less than when seed is sown. (2) Owing to quick growth the danger of loss of crop from insect pests is practically eliminated. (3) Onion Sets produce bulbs in one-half the time that is required by raising from seed. The majority of gardeners realize the great advantages to be derived from adopting this easy common sense method of obtaining early onions for table use. The grower is also able to crop much earlier.

IF ONION SETS are to be shipped by parcel post, postage will be additional at regu-lar rates. Please write for prices on large quantities.

ONION SETS are northern grown, hardy, handsome, small and of uniform size. We grow only the most suitable varieties which have proven to give best results in our section. 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. 1 lb. 25c, 10 lbs. 20c Per lb.

Garlic (Selected Sets) A perennial bulbous plant of the onion family, highly esteemed for flavoring soups, stews, etc. Cultivation the same as Onion Sets. Writefor prices.

Garlic (Seed) In response to considerable demand we offer choice seed: Pkt. 5c, Oz 25c, 14 Ib. 25c, 11b. 52.25 Cultivation the same as onion seed.



Where Our Seeds Are Tested

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 rom the depression in the crown.

Pkt. 5c, Oz. 15c, 1/ 1b. 40c, Postpaid.

Long White Dutch

A popular variety with many gardeners. It grows smooth, long roots of excellent quality and is preferred in some sections to other sorts. Pkt. 5c, Oz. 15c, 1/4 lb. 40c, Postpaid.

Parsley Champion Moss Curled

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 research a set of the start of the set of th and are so closely curled as to resemble moss.

Pkt. 5c, Oz. 10c, 14 lb. 35c, Postpaid.



Parsnip **ILLY'S** Palo Alto

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. immense crops, and in addition to being a delicious winter vegetable, it is an excellent stock food. Pkt. 10c. Oz. 15c, 14 lb. 45c, Postpaid

IIIYS Palo Alto

CROP BOOX

is free with orders on request

Champion Moss Carled



Pepper

Peppers are not a very certain crop west of the Cascade Mountains, and we recom-mend that the plants be started in berry boxes or on inverted sods. In warmer climates the plants may be started under glass the same as tomatoes. They should not be planted outdoors until very late in spring, after the weather and soil are thoroughly warmed.

Large Bell or Bull Nose

The plants are vigorous, compact, and very productive, ripening their crop early and uniformly, Whe figure are largen with thick, mild flesh of fine quality for use in salads or for stuffing. The color is deep green while young, bright crimson when ripe. Pkt. 5c, Oz. 70c, ¼ lb. \$2.00, Postpaid.

Long Red Cayenne

The true Cayenne, hot and pungent. Medium early, bearing slender, twisted pods about four inches long. Deep green while young, bright red when ripe. Pkt. 5c, Oz. 70c, ½ lb. \$2.00, Postpaid.

Pimiento

This new pepper is very mild with thick, heavy flesh and has a delicate flavor. Of good shape, being of medium length and smooth. Delicious when used in salads or creamed like onions. Very prolific and a good shipper.

Pkt. 5c, Oz. 75c, 1/4 lb. \$2.25, Postpaid. **Ruby King**

Fruit of a bright red color six to seven

Chinese Giant lts mammoth size, splendid shape, beau-tifully rich, glossy-red flesh and mild flavor, all lead us to recommend it. Its strong bushy plants are heavily loaded with large fruits, which are produced throughout the season. A very unusual variety worthy of the highest recommendation.

Pkt. 5c, Oz. 80c, 1/4 lb. \$2.40, Postpaid.

Sugar or Sweet Pie

vines are very productive. The fruits are round, somewhat flattened, and of a deep

orange color. The flesh is a rich yellow,

A large, productive, orange colored field pumpkin, usually grown for stock, but good

Pkt. 5c, Oz. 20c, 1/4 lb. 45c, Postpaid. **Connecticut Field**

Pkt. 5c, Oz. 20c, 1/4 lb. 45c, Postpaid.

The best variety for making pies.

inches long by about four inches through. Remarkably pleasant and mild in flavor, and can be eaten sliced with vinegar, like tomatoes. The best for making mangoes.

Pkt. 5c, Oz. 80c, 1/4 lb. \$2.40, Postpaid.

Pumpkin

The

Jumbo or King of Mammoth The largest pumpkin grown, sometimes weighing more than two hundred pounds. The skin is salmon-orange, and the flesh is unity yellow, very thick, and of excellent quality for pies as well as for stock. Pkt. 5c, Oz. 20c, ¼ lb. 50c, Postpaid.

Large Cheese

A large variety, producing pumpkins in abundance. Has thick meat of fine quality. Very suitable for canner's use.

Pkt. 5c, Oz. 20c, 1/4 lb. 45c, Postpaid.

Rhubarb or Pie Plant Mammoth Victoria

The largest and finest cooking variety. It is vigorous and very productive of thick, stalks of fine quality, juicy and rich. Pkt. 5c, Oz. 20c, 14 Oz. 50c, Postpaid. red stalks of fine quality, juicy and rich.

Salsify

thick and meaty.

for pies.

Vegetable Oyster

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 Mild and delicately flavored.

> Pkt. 5c, Oz. 25c, 1/4 lb. 75c, Postpaid.



Connecticut Field Pumpkin



Salsify or Vegetable Oyster



BE SURE YOU PLANT

IN

WASHINGTON WONDER



Peas Early Varieties

One pound of seed for 50 feet of drill

Peas from any one planting will remain in the best condition for use only for a com-paratively short time. To have a constant supply throughout the season, a succession of plantings should be made.

The dwarf varieties do not bear as heavily nor for as long a period as the climbing sorts, but for small gardens they have the advantage that they are economical in space and do not require support. Consequently they are grown almost exclusively by many Western gardeners. One or two dwarf sorts sown every ten days or two weeks will maintain a supply.

Washington Wonder

Favorite Extra Early Dwarf Wrinkled

An old favorite, and a splendid extra early dwarf pea. It grows only about sixteen inches high, and requires no support. It is quite prolific, and produces a good crop of well filled pods containing six to nine good-sized wrinkled peas of excellent flavor. It is sufficiently hardy to be sown in the fall on the Pacific Coast, thereby producing peas several weeks earlier than spring sown seed. It is as early as the extra smooth varieties, and very much superior in quality and flavor. Pkt. **15c**, 1 lb. **35c**, 10 lbs. **\$3.00**, Postage extra.

An Excellent Early Wrinkled Variety

World's Record is an English variety which has proved to be perfectly adapted to the Northwest. Our seed has been grown in this locality for several seasons, and is thoroughly acclimated. The vines are semi-dwarf, growing about three feet high, and the yield, size and quality of the peas is wonderful considering its extreme earliness. The pods are large, dark green, of the Gradus type, and are filled with eight or ten large wrinkled peas, sweet and of fine flavor. Pkt. 15c, 1 lb. 35c, 10 lbs. \$3.00, Postage extra.

Gradus or Prosperity

Best Extra Early 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 early, 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 onehalf 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.

Pkt. 15c, 1 lb. 35c, 10 lbs. \$3.00, Postage extra.

Blue Bantam

A New First Early Dwarf Wrinkled Pea

The raisers claim that this variety is unequaled for combination of extreme earliness, superb quality, and unusual productiveness. The dwarf vigorous vines average fifteen inches in height and carry really enormous crops of large, deep bluish-green pods. The pods measure four to four and one-half inches long and are tightly packed with eight to ten large, deep bluish-green peas of most luscious flavor. It has jumped into first place among the Dwarf Early peas and we certainly recommend a trial.

Pkt. 15c, 1 lb. 40c, 10 lbs. \$3.75, Postage extra.

are the finest in the world. We grow many hundreds of acres annually PUGET for our home and export trade. All the varieties offered are produce SOUND of our own crops grown in Washington and are thoroughly recleaned PEAS to remove all impurities.



Peas Early Varieties Thomas Laxton Extra Early and Fine Quality

Thomas Laxton Peas are very similar to Gradus in every way except the shape of the pods, the ends of which are square, and the pods and 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.

Pkt. 15c, 1 lb. 35c, 10 lbs. \$3.00, Postage extra.



One of the best of the new English varieties. An exceptionally early, productive and handsome pea. Height 16 inches. Vine and foliage moderately heavy, medium green; pods deep green, 4 inches long, semi-broad, pointed and well filled with 8 to 9 very large and very dark green peas. Fully as early as Laxtonian and more productive; seed blue, semi-wrinkled.

Pkt. 15c, 1 lb. 40c, 10 lbs. \$3.75, Postage extra.

Laxtonian One of the Leading Dwarfs

A large podded, dwarf variety on the order of Gradus, though more dwarf and a little earlier. Height $1\frac{1}{2}$ feet; pods and vine dark green; pods $3\frac{3}{4}$ inches long, straight and pointed, containing 6 to 8 large, dark green peas.

Pkt. 15c, 1 lb. 40c, 10 lbs. \$3,75, Postage extra.

American Wonder

Very early, and of dwarf compact growth, about twelve inches high. Very popular with those who object to making a support for the vines. The pods are about three inches long, straight, round, blunt at the ends, and light green. The peas are of medium size, wrinkled, and of fine quality.

Pkt. 15c, 1 lb. 30c, 10 lbs. \$2.75, Postage extra.

Nott's Excelsior

A dwarf, early variety, about fourteen inches high, and quite productive. The pods are three inches long, round and blunt at the ends. The pods are of medium size, green, wrinkled.

Pkt. 15c, 1 lb. 30c, 10 lbs. \$2.75, Postage extra.

Little Gem

A medium early dwarf variety, growing about fifteen to twenty inches high, robust, branching, and pro-ductive. The pods are about three inches long, well filled with medium-sized, green, wrinkled peas.

Pkt. 15c, 1 lb. 30c, 10 lbs. \$2.75, Postage extra.

Alaska, or Earliest of All

A well-known, smooth seeded, extra early variety, extensive-ly used by canners. The vines are strong and vigorous, two feet high, and of light green color. The pods are about three inches long, and are well filled with round, blue peas, slightly vitted pitted. Pkt. 15c, 1 lb. 25c, 10 lbs. \$2.00, Postage extra.



Nott's Excelsior



ILLY'S

Thomas

Laxton

Peas Main Crop and Late Varieties

Tall Telephone

The Market Gardener's Favorite The old standard market gardener's main crop, large podded pea. Vine and foliage strong and heavy, medium green. Grows four to five feet high, and bears an abundunce of long, straight, pointed pods filled with large peas of a rich, sugard flavor. Main crop, very productive. Pkt. 15c, 1 lb. 35c, 10 lbs. \$3.00, Postage extra.

An Excellent Late Dwarf Pea

An improvement on the old Daisy, having larger and darker green pods. Height 2½ feet, vine and foliage dark green and exceptionally stout; pods dark green, 4½ inches long, straight and pointed; containing 8 to 9 dark green peas of the best quality.

Pkt. 15c, 1 lb. 35c, 10 lbs. \$3.00, Postage extra.

Lincoln

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 peas are of medium size, curved and pointed, and are well filled with good-sized wrinkled peas, very sweet and of excellent quality.

Pkt. 15c, 1 lb. 30c, 10 lbs. \$2.75

Postage extra.

Quite Content

A Giant Podded Main Crop Marrowfat A tall-growing late or main crop variety, five to six feet high, bearing exceedingly large pods in pairs. The peas are large, wrinkled and of good quality.

Pkt. 15c, 1 lb. 30c, 10 lbs. \$2.75, Postage extra.

Dwarf Grey Sugar

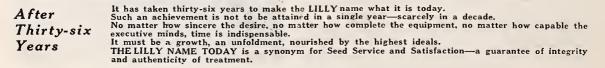
Luscious in Flavor An edible pod pea growing about two feet in height. Pods very delicious when cooked same as green or wax beans.

Pkt. 15c, 1 lb. 30c, 10 lbs. \$2.75, Postage extra.

Swedish Sugar

A tall edible pod pea of decided merit. Excellent eating both as pod and shell peas. Sweet in flavor. Grows 6 to 7 feet high. Our stock is true.

Pkt. 15c, 1 lb. 30c, 10 lbs. \$2.75, Postage extra.





Tall Telephone

Alderman

Large Podded, Fine Flavor

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

Pkt. 15c, 1 lb. 30c, 10 lbs. \$2.75, Postage extra.

Prizewinner

Yields Abundantly

A good second early or main crop variety. The vines grow about three feet high, and bear abundantly; very large, deep green, slightly curved, pointed pods, well filled with large, wrinkled peas of exceptionally fine flavor.

Pkt. 15c, 1 lb. 25c, 10 lb3. \$2.25, Postage extra

Prices Seed Potatoes subject to change. See Supplement next page 48. Write for quotations

Seed Potatoes

Early Rose This old standard early potato is one of the best early varieties. Early Rose is too well known to require much description. It is of good size, oblong, the skin has a rosy blush and the flesh is white.

Earliest of All

Earliest of All has frequently made the best Earliest of All has frequently made the best showing of any of the early varieties in our trial grounds. It is about two weeks earlier and more productive than many other varieties. 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.

> MAIL ORDER EARLY

Notice

It sometimes happens stocks become exhausted earlier than we anticipated, it being impossible to foresee in advance of planting season what the demand will be. Moreover, crops vary considerably in regard to quantity and quality which increases the difficulty of providing suitable seed of any particular variety. We, therefore, request customers to name a second or even third choice when ordering. In the event of our being sold out of the particular variety ordered we will substitute the nearest similar variety unless specific instructions to the con-trary accompany the order. All orders received for potatoes are filled in strict rotation.

Gold Coin

A first-class main crop variety which, although of comaratively recent introduction, has rapidly come to the front. Grows to a large size—vines strong and vigorous. Very pro-ductive. The tubers are white tinged with pink of fine cooking and eating quality.

Other Varieties

In addition to the above we expect to purchase from re-liable growers such varieties as Burbank, Netted Gem, Amer-ican Wonder, Early Ohio, Beauty of Hebron, Early Puritan 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.

Bovee

One of the best varieties, 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. The skin is pink or flesh color; the flesh is white and of good quality.

Up-to-Date

This new main crop potato excels any other late variety. It is a remarkably heavy cropper, 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.

Jerusalem Artichokes

These are quite distinct from the Green Globe Artichoke listed in the Vegetable Seed Section of this catalog. The tubers resemble potatoes, but, although by some they are considered a great delicacy, in this country they are used mostly for hog food. They are easy to grow, and are one of the best and cheapest foods for hogs. They should be planted and cultivated the same as potatoes, and will produce immense crops, but they are very hardy and persistent, and are often planted on new land and the hogs allowed to harvest them, at the same time subduing the land.

Price, subject to change: See supplement following page 48 or write for quotations.



One ounce of Seed will plant 100 feet of drill

Radish Crimson Giant King of all Early Radishes

Crimson Giant is double the size of any other variety of the early turnip-shaped type, but does not become hollow or pithy, the flesh remaining white, solid, crisp, tender and juicy and of the mildest flavor. It is equally suitable for early planting outdoors, and for succession. The texture and flavor is unequalled.

Pkt. 10c, Oz. 15c, 1/4 lb. 45c, Postpaid.

Early Scarlet Turnip

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

Pkt. 5c, Oz. 15c, 1/1b, 40c, Postpaid.

Crimson Giant

Earliest of All

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.

Pkt. 10c, Oz. 15c, 1/ 1b. 45c, Postpaid.

Early Scarlet Turnip (White Tip) Also Known as Rosy Gem

A very popular extra early turnip-shaped radish. The roots are bright scarlet; with a distinct white tip. The flesh is white and of good quality. Pkt. 5c, 0z. 15c, ¼ lb. 40c, Postpaid. WE GIVE quick service. Mail your order early

Early Scarlet Turnip

French Breakfast

A quick-growing, small, olive-shaped radish. The color is deep ose-scarlet except a little clear white about the tip. Excellent for forcing or for the home garden. Pkt. 5c, Oz. 15c, ¼ lb. 40c, Postpaid.

China Rose Winter

A splendid long white variety for growing during the summer months. The roots, when mature, are four to six inches long, thick at the shoulder, somewhat tapering.

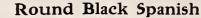
Pkt. 5c, Oz. 15c, 1/4 lb. 45c, Postpaid. White

An excellent 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. Seed should be sown late in summer.

Pkt. 5c, Oz. 15c, 1/4 lb. 45c,

Postpaid.



A popular winter radish. The roots are round, sometimes topshaped, three or four inches in diameter. The skin is black; the flesh white, very compact, decidedly pungent but well flavored. Keeps well. Pkt. 5c, Oz. 15c, ½ lb. 40c, Postpaid.

Long Bright Scarlet

An excellent early long red radish. The roots are smooth, slender, about six inches long, uniform in shape, and very attractive. Pkt. 5c, Oz, 15c, ½ lb. 40c, Postpaid.





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. Pkt. 5c, oz. 20c, 1/1b, 50c, Postpaid.

Half Long Deep Scarlet

A valuable variety for forcing. Very popular in the South. The Radishes are of slightly larger diameter and most brilliantscarlet coloring. Flesh purest white, crisp and juicy.

Pkt. 5c, Oz. 15c, 1/4 lb. 45c, Postpaid.

RADISH is a hardy, quick-growing crop, and the seed may be sown as soon as the ground can be worked properly in early spring, and for succession at intervals of ten days or two weeks as long as wanted. The soil should be very rich, light and warm. 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. The seed may be sown in drills a foot 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. Radishes are very subject to root maggots, and the only practical cure yet invented is to apply MAGGOTBAIT, further particulars of which are given on later

MMOTH VICTO

CROP BOOK is a practical help to every gardener. It is free with orders on request.

Spinach Mammoth Victoria

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.

Pkt. 10c, Oz. 15c, 1/4 lb. 35c, Postpaid.

Viroflay

Has very large, thick, dark green leaves. A fa-vorite with market gardeners for either fall or spring Pkt. 5c, Oz. 10c, 1/4 lb. 30c, Postpaid. sowing.

Bloomsdale Savoy Leaved

A very early variety, hardy, and suitable for early spring use. The leaves are large, round and thick, very much savoyed. Pkt. 5c, Oz. 10c, 1/4 lb. 30c, Postpaid.

Thick Leaved Improved

For either fall or spring sowing. Produces large, thick, bright green, crumpled leaves of excellent quality. Slow in Pkt. 5c, Oz. 10c, 1/4 lb. 30c, Postpaid. running to seed.

Prickly Winter A standard market gardeners' variety for fall sowing. The leaves are bright green, large, smooth, and shaped like an arrow head. Pkt. 5c, Oz. 10c, 1/4 lb. 30c, Postpaid.

NEW. ZEALAND SPINACH

The stems and leaves are soft, thick, fleshy, and of a crystalline ap-pearance. Started early in spring, the plants will resist heat and make a strong growth during the summer. Pick off the leaves from the stem, cooking them only, and you will have delicious greens all summer long. Pkt. 10c, Oz. 20c, 1/4 lb. 50c, Postpaid.

THE GARDEN

is art and the plants are in part the objects through which this art finds expression.



Squash

Summer Varieties

Early Summer Crookneck

Early and Productive

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.

Pkt. 5c, Oz. 15c, 1/4 lb. 40c, 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.

Pkt. 5c, Oz. 15c, 1/4 lb. 40c, Postpaid.

English Vegetable Marrow

Very popular in England and can be grown equally well here; they should be eaten when less than half grown, at which time the flesh is very tender and may be cooked like other squash or fried like eggplant. Oblong in shape, color creamy-white. Pkt. 5c, Oz. 15c, 1/4 lb. 40c, Postpaid.

Winter Varieties

Hubbard

Unequalled for Winter Use

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

Pkt. 10c, Oz. 20c, 1/4 lb. 60c, Postpaid.

Mammoth Chili

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 for stock food.

Pkt. 5c, Oz. 20c, ¼ lb. 60c, Postpaid.

Delicata

For Summer or Winter

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

Pkt. 10c, Oz. 20c, 1/4 lb. 60c, Postpaid.

Boston Marrow

Produces Large Oval Fruit

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.

Pkt 5c, Oz. 15, ¼ lb. 40c, Postpaid.

CROP BOOK

gives valuable cultural hints—ask for a copy when mailing your order—it is free.

Sibley or Pikes Peak

UBRAR

We offer this variety in response to active demand during last season. It grows a smooth shell of thin pale green color; the flesh is thick, solid and deep orange color; very dry, fine grained with a delicate flavor. Pkt. 5c, Oz. 20c, ¼ lb. 60c, Postpaid.



Tomato One oz. of seed should produce 2000 plants

Puget Sound Special A Splendid Extra

Puget Sound Special is decidedly the best tomato that may be depended upon to mature west of the Cascade Mountains. It is equalled in earliness only by Earliana, sometimes producing ripe fruit as early as July 4th. The flesh is solid, meaty, and of delicious flavor, with few seeds and no hard core. It is a heavy yielder of splendid firm fruits, which are of good shape and rich red color. For the Pacific Coast it is the best for either early or late; also excellent for hot-house culture. Pkt. **10c,** Oz. **50c,** ½ lb. **\$1.50,** Postpaid.

Earliana Earliana

Puget Sound Forcing Best Variety For Greenhouse Culture

A prolific bearer, and most of the fruit is borne close to the main stalk, allowing close pruning. The fruit is of medium size, excellent shape for an early tomato, and of splendid quality. The flesh is firm and meaty, deep red, and of fine flavor. Pkt. 5c. Oz. 50c. ½ lb. \$1.50. Postnaid

	41.00	9 Post	paia.
LIVINGSTON'S CORELESS A medium large late tomato. 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.	Pkt.		
PONDEROSA Ponderosa is massive in size. Of good form, smooth, free from wrinkles and does not crack. The flesh is solid and meaty, almost seedless and of delicious flavor. Our seed is carefully grown from se- lected stock			1.50
DWARF CHAMPION A dwarf, compact, second early variety, growing only about two feet high and re- quiring no stake; vigorous and productive. The fruits are of medium size, smooth and of good quality EARLY MICHIGAN A popular second early variety of good quality. The vines are vigorous and pro-			1.35
ductive. The fruits of medium size, crimson-scarlet colorate NEW STONE A very large and solid main crop or late tomato. The vines are very large, vigorous and	5c	40c	1.20
very productive. The fruits are bright, deep scarlet, oval, exceptionally smooth and uniform in size, and of excellent quality. A splendid shipper	5c	40c	1.20
early; of medium size, purplish pink, round, smooth and free from cracks. The flesh is solid and of good quality and flavor. CHALK'S EARLY JEWEL An exceptionally fine early variety, about ten days later than Earliana; fruit			1.20
uhiformly smooth, round and solid; color crimson; a good canning sort for the North GOLDEN HUSK Greatly in demand for use as a preserve. The fruits are enclosed in a husk or calyx			1.20 1.75
which grow about half an inch in diameter and are of very sweet flavor			1.50
RED PEAR 'Used for preserves and to make "tomato figs." The fruits are small, pear-shaped, bright red and of delicious flavor			1.75 1.75
YELLOW PLUM Fruits are plum-shaped, clear, deep yellow color; and the flesh is yellow and finely flavored. Used for preserves			1.75

Tobacco

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

Pkt. 5c; Oz. 50c, 1/4 lb. \$1.50, Postpaid.

Havana

The leaf is very thin and of fine texture. Much used for cigar wrappers. Pkt. **5c**, Oz. **60c**, 1/4 lb. **\$1.80**, Postpaid.

VEGETABLE PLANTS

We can ship in season strong healthy plants of the following:

> Cabbage Cauliflower Tomato Celery Pepper

Write for Special Plant List.

Remember

Pruning increases the size of the fruits, and permits the sunlight to reach the blossoms.



TILLYS CROP BOOK is a true garden guide-Get your copy.

Siowbail

Turnip Snowball

This delicious turnip is the best early variety grown. Under favorable conditions is 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; flesh is pure, sparkling white, sweet, tender, crisp and delicious. Pkt. 10c, oz. 20c, 1/4 lb. 50c,

1 lb. \$1.35, Postpaid.

Early Early White Milan

An excellent table turnip adapted for very early spring planting. The flesh is finegrained, tender and of a mild, sweet flavor.

Pkt. 10c, Oz. 20c, ¼ lb. 60c, 1 lb. \$1.75, Postpaid.

Petrowski A FAVORITE IN ALASKA

This new early yellow turnip was imported from Finland. The following is description by Prof. C. C. Georgeson, special agent in charge of Alaska inves-tigations: "Turnip of medium size; top short, spreading so that lower leaves generally lie on the ground. Flesh yellow, tender, very pleasant. Shape rounded, almost spherical; quite uniform in size and shape. Medium early. An excellent keeper and altogether the best turnip we have ever tried in Alaska."

Pkt. 10c, Oz. 20c, ¼ lb. 60c, 1 lb. \$1.75, Postpaid.

Cowhorn

Grows very long. Very popular for stock. The flesh is fine grained and of good flavor. It grows very quickly. Well adapted for fall and early winter use.

Pkt. 5c, Oz. 15c, 1/4 lb. 40c, 1 lb. \$1.00, Postpaid

Yellow Aberdeen

A large-sized, round, late-maturing, long-keeping, yellow-fleshed turnip. Hardy, productive and valuable for stock feeding. The roots are yellow with purple top. Flesh pale yellow, firm, tender and sweet. Pkt. 5c, Oz. 15c, ½ lb. 45c, 1 lb. \$1.25, Postpaid.

Rutabaga

King of Swedes

Purple Top White Globe

good quality for table or stock. A heavy producer

and good keeper. The flesh is white and of good eating quality. Pkt. 5c, Oz. 15c, 1/1b. 40c, 11b. \$1.00, Postpaid.

Golden Ball or Orange Jelly One of the most delicately flavored. It is of very quick

growth and is adapted to either early spring or fall planting. The tops are small. Roots are of medium size, round, very

smooth, and deep yellow; the flesh is firm, crisp and of ex-

Early White Flat Dutch

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

Purple Top Strap-Leaf

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 is white, fine

Pkt. 5c, Oz. 15c, 1/4 lb. 50c, 1 lb. \$1.25, Postpaid.

Pkt. 5c, Oz. 15, 1/4 lb. 40c, 1 lb. \$1.00, Postpaid.

Pkt. 5c, Oz. 15c, 1/4 lb. 40c, 1 lb. \$1.00, Postpaid.

An early medium-sized, globular-shaped turnip of

The best and most satisfactory rutabaga for either table or stock. Wonderfully productive, large, of good shape, and a splendid keeper. The flesh is rich, yellow and of finest quality.

Pkt. 10c, Oz. 20c, 1/4 lb. 45c, 1 lb. \$1.25, Postpaid.

American Purple-Top

One of the most popular varieties for table or stock. Very hardy and productive; flesh is yellow, solid and sweet. Pkt. 5c, Oz. 15c, 1/ lb. 40c, 1 lb. \$1.20, Postpaid.

Bangholm

Very large in size. Skin yellow with purple top. Flesh nice yellowish color, fine in texture, firm, solid and mild in Pkt. 5c. Oz. 15c. 1/4 lb. 40c. 1 lb. \$1.25, Postpaid. flavor.



cellent quality.

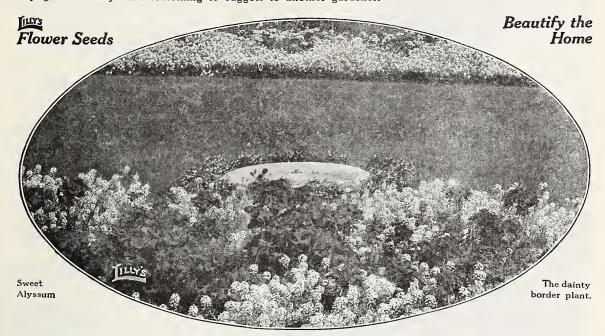
fine-grained and sweet.

grained and tender.

Beautify Your Garden

".....to be satisfied with your possessions but not contented with yourself until you have made the best of them." —Van Dvke

A RT for art's sake is a poor enough philosophy, but art for beauty's sake, and beauty for beauty's sake are the food of the spirit whereon it shall wax strong and fine and come to full perfection. And nowhere does beauty wait so eager to reveal itself and so eager to instruct and educate as in a garden. Here any one who seeks may find, whether the scene of their efforts covers a mountain and a valley in extent or is confined to the little square of a town dooryard. Moreover, each one who has found has something to offer all the rest, regardless of their field of search; for the beauty that lies in any garden always has something to suggest to another gardener.



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

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

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

Biennials are best sown outdoors in September, and will bloom the following summer, after which they will die. If sown in spring they will not bloom until the next year. Hardy Perennials seldom bloom the first year, but usually bloom the second and many succeeding years. They may be sown in spring, but are best sown outdoors in September.

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

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

The seed bed for flowers should be carefully prepared. The soil should be rich, consisting of a good proportion of sand and leaf mold, and should be very finely pulverized. The smaller seeds should be covered very lightly by sifting fine dirt over them, just enough to hide them. Water should be applied in a fine spray, and not too much of it. Most plants are best started under glass or in the house and transplanted when large enough.

A FLOWER GARDEN should have some protection on the north, if early flowers are desired. A southern or eastern exposure will permit the garden to get the benefit of the strong morning sunlight, which is so beneficial to plants. For a large amount of flowers in midsummer and the early beautification of a new place annual flowers will prove most satisfactory. Hardy perennials are deservedly popular, as they need little attention from year to year, but most of them are best fitted as background plants.



The Most Popular Flower in the World

Spencer Sweet Peas

Choice Varieties Make the Garden Gay

www.libtool.com.cn

Sweet Peas, the most beautiful of the hardy climbing annuals, are very easy to grow, and thrive under ordinary garden conditions with very little care, but a little extra attention will be amply repaid in larger earlier blooms and brighter colors. The climate of the Pacific Coast is ideal for their best development, and in no other locality will they produce blooms in such wonderful profusion and perfection.

On the Pacific Coast, where the ground does not freeze to any depth, the best time to plant is in November. They will apparently make very little growth during the winter, and it is better if the tops do not show above the ground until spring, but they will make a remarkable amount of root growth which will induce a strong growth of vines very early in spring, producing better blooms and much earlier than if planted in spring. They may, however, be planted in February, March or April, and will do very well.

A Superb Mixture of Best Giant Waved Varieties

This splendid mixture contains nearly all varièties of the Spencer type and is designed for those who wish all colors, shades and tints but do not care to keep them separate or to go to the expense of purchasing each of the many varieties.

No. 1007, Pkt. 10c, Oz. 25c, 14 lb. 75c, 1 lb. \$2.50,

Postpaid.

Mrs. Routzahn

A beautiful blending of straw-color tinted with blushpink and shading to apricot and rose at the edges. One of the finest. 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. 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, and still one of the best. The color is a beautiful clear pink. No. 949......Pkt., 10c; Oz., 40c; Postpaid.

Dobbie's Cream

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

Florence Morse

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

No. 1014.....Pkt., 10c; Oz., 40c; Postpaid.

Vermillion Brilliant

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

No. 1046.....Pkt., 10c; Oz., 40c; Postpaid.

Dainty

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

No. 1008......Pkt., 10c; Oz., 40c; Postpaid.

Primrose

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

No. 1002.....Pkt., 10c; Oz., 40c; Postpaid.



Margaret Madison

Spencer, or Orchid Flowered

Are 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, bearing 3 or 4 magnificent flowers. Many of the flowers are two and one-half inches across, and are heautifully formed, daintily waved and fluted.

Spencer Sweet Peas

Royal Purple Considered to be the best purple Sponcer IThercolor deepens and improves as the flowers age. A strong grower, very floriferous and excellent for exhibition.

No. 1113....... Pkt., 10c; Oz., 55c; Postpaid.

Blanche Ferry

Standard bright carmine rose, wings white hinged with pink. Medium size, open form. An old popular and vigorous variety. No. 1114......Pkt., 10c; Oz., 50c; Postpaid.

Fiery Cross An entirely new shade of red and easily the most brilliant red Spencer. The shade of red is hard to describe. A bright red-orange cerise with some salmon in it might convey the idea. No. 1072......Pkt., 10c; Oz., 50c; Postpaid.

King White The king of all white Sweet Peas because of the perfection of the flower in every detail-form, size, waviness and glistening immaculate whiteness. No. 1041..Pkt., 10c; Oz., 50c; Postpaid.

Thomas Stevenson

Large and brillian effective flowers, fiery red orange. Practically sunproof. A grand Spencer.

No. 1044 Pkt., 10c; Oz., 45c; Postpaid. White

The flowers are very large, white and of magnificent Spencer waved form. The stems are long and generally carry four blos-soms. No. 1001..........Pkt., 10c; Oz., 35c; Postpaid.

King Edward

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 of striking color and mag-nificent form and size. No. 1045. Pkt., 10c; Oz., 50c; Postpaid.

Wedgewood

A clear light silvery-blue, with just a suggestion of mauve in the banner. An improved large flowering strain and the best variety of its color.

George Herbert

Asta Ohn

The best Lavender Spencer. The flowers are very large and beautifully waved. The color is a beautiful soft pinkish lavender. No. 1005 Pkt., 10c; Oz., 40c; Postpaid.

Othello

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., 40c; Postpaid.

Flora Norton

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

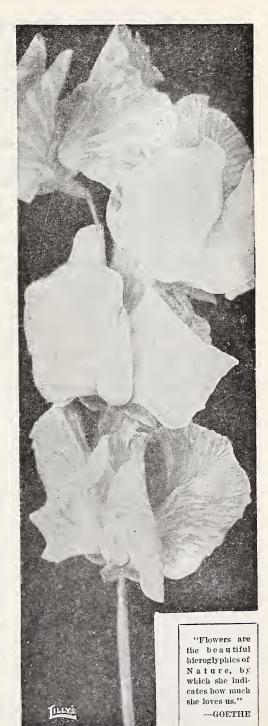
A very large and attractive Spencer; chocolate and seal brown striped, flaked and mottled on ivory white. Very distinct and novel and one of the very largest in size. No. 1051......Pkt., 10c; Oz., 35c; Postpaid.

America

Striped and flaked brilliant carmine-red over white. Very large flowers of splendid form and striking color. No. 1024......Pkt., 10c; Oz., 40c; Postpaid.

Apple Blossom

A very large bold flower of best Spencer form. The standard is very bright rose, wings primrose with a flush of rose tint. Very robust and profuse flowering. No. 1050 Pkt., 10c; Oz., 40c; Postpaid.





Sweet Peas

Selected Grandifloras The Best That Grows

The Standard, or Grandiflora type Sweet Peas, includes some splendid varieties and beautiful colors, and they bloom lavishly during the entire season, but the Spencer (or waved) types have now gained such popularity that they are slowly but, nevertheless, surely taking precedence over the grandifloras. The varieties we offer are, in our opinion, the best sorts to grow and will please those who still have preference for the grandiflora types.

Royal Mixed

A Fine Mixture of Grandiflora Varieties

There are many enthusiastic lovers of gardens who wish to obtain a continuous and varied supply of bloom throughout the summer months, who find it so newhat expensive to purchase all the named varieties of their own choice, and it is to these customers Lilly's Royal mixed will appeal. Included in this mixture are the best of all varieties and colors of Grandiflora Type Sweet Peas. Every seed is of some worthy variety and will product a satisfactory blossom. No. 958 Pkt. 10c, Oz. 20c, 1/ 1b. 40c, 1 lb. \$1.25. Postpaid.

America

No. 364 Very attractive and unique. Crimsonscarlet striped on white.

Black Knight No. 365

One of the darkest colored Sweet Peas, a glossy deep maroon, almost black.

Blanche Ferry No. 964 Standard bright carmine-rose, wings

white tinged with pink; open form.

Dorothy Eckford No. 969 Large, pure white flowers of semi-hooded form. The best white.

King Edward VII

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

Lady Grisel Hamilton No.465

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

Hon. Mrs. E. Kenyon No. 976 Dark navy blue. The best of the

color.

Lord Nelson No. 1039

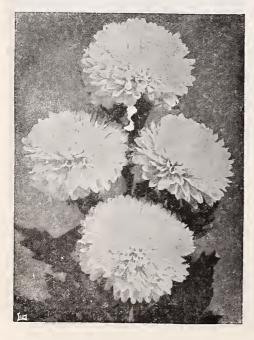
Exquisite clear, light pink; hooded form.

> Prima Donna No. 1040

Light primrose; large, semi-hooded form

Prices: Any of the above Grandiflora Type: Pkt., 10c; Oz., 20c; 1/4 lb., 60c; lb., \$1.75; Postpaid.

IN FLOWER SEEDS help to make Western Homes brighter aud in closer concord with Nature at its best



Asters

No home is complete without Asters, Nasturtiums and Sweet Peas. Lilly's choice varieties of Asters produce magnificent blooms of this popular Annual.

They require only ordinary care and good garden soil, but re-spond liberally to a little extra attention. They are exceedingly pro-ductive, and the delicate colors, long season of bloom, and vigor of the plants make them indispensable in the garden.

Crego Giant Largest and Most Beautiful

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

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

No. 1012.	Per Pkt.		Per Pkt.
Crego Giant, White	10c	No. 1077.	
No. 1013.		Crego Giant, Azur	e Blue10c
Crego Giant, Pink	10c	No. 1078.	
No. 1036.		Crego Giant, Purp	ole10c
Crego Giant, Crimso	n10c	No. 1079.	
No. 1037.		Crego Giant, Mixe	d 10c
Crego Giant, Lavend			
Donon	nial A	store (Michaelm	as

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

No. 1081. Michaelmas DaisyPkt., 10c



Asters **Example 3** Giant Branching

A Beautiful Late Flowering Variety lid late-flowering branching Asters. They begin blooming

Splendid late-flowering branching Asters. 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. C This variety is especially valuable for bedding.

aubic	101 00	aame.	-		rerrkt.
No.	940.	Giant	Branching.	White	10c
				Pink	
				Lavender	
No.	1080.	Giant	Branching,	Crimson	10c
				Mixed	

Mixed Asters

Alyssum (Sweet Alyssum)

Unexcelled for borders, beds, baskets, pots, rockeries, and for cutting. It is a hardy annual, grows about nine inches high and is covered with spikes of small white flowers during the summer and fall. It may also be grown in pots in the house during winter, where the exquisite fragrance is very pleasing.

No. 2. Alyssum Benthami Pkt., 10c; Oz., 30c; Postpaid.

Ageratum (Floss Flower)

One of the very best bedding plants. 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 brushlike flowers are borne in clusters. Splendid for blue effects in the garden. No. 439. Little Dorrit. The plant is six inches tall and a foot wide and is a perfect mass of blue flowers all summer.

Pkt., 10c; Postpaid. No. 101. Ageratum Mexicanum, Mixed. About eight inches high of free branching habit......Pkt., 10c; Oz., 30c; Postpaid.

Arabis (Rock Cress)

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

Antirrhinum (Snap Dragon)

Usually 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.....Pkt., 10c; Postpaid. No. 4. Tall Snapdragon, Mixed. A mixture of good tall varieties, growing bloce fact bick All colors. No. 1075. Apple Blossom. A charming pink shade on a white ground, with a white throat. No. 1076. Brilliant Scarlet. A very effective red. Three feet high.

Pkt., 10c; Postpaid.

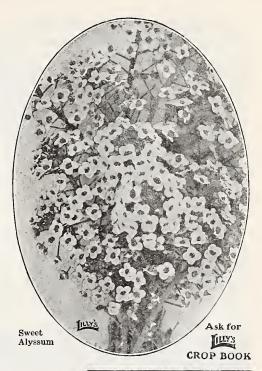
Balsam (Lady Slipper)

Bellis Perennis (Double Daisy)

Excellent border plants, six to eight inches high, bearing charming double flowers from April to June. It is a hardy perennial, but will bloom the following summer if the seed is sown in fall or early spring. No. 13. Bellis Perennis, Mixed.......Pkt., 10c; Postpaid.

Calendula (Pot Marigold)

One of the best and showiest free-flowering hardy annuals. Of the easiest cul-





Antırrhinum



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

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 Pkt., 10c; Postpaid.

Cosmos

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

No. 282.	Mixed Cosmos Pkt.,	10c;	Postpaid.
No. 1032.	WhitePkt.,	10c;	Postpaid.
No. 1033.	PinkPkt.,	10c;	Postpaid.
No. 1034.	RedPkt.,	10c;	Postpaid.



Cosmos

Carnation

(Dianthus)

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

No. 40. Mixed Double Carnations......Pkt., 10c No. 402. Marguerite, White. Strong growers; free flower-ing; especially desirable for garden culture......

Centaurea

(Corn Flower. Bachelor's Button. Sweet Sultan) Among the most attractive and graceful of the old-fashioned

Allong the 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 projugitor of large blue double flowers and are arcallent for profusion of large, blue, double flowers, and are excellent for

.....Pkt., 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; Postpaid.

Calliopsis

One of the showiest and most easily grown hardy annuals. The plants form perfect little bushes ont to two feet high and literally massed with bloom. Ex-cellent for massing and 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 to a foot apart.

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

Canary-Bird Vine

(Tropaeolum Canariense)

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

Celosia (Cockscomb)

Odd, picturesque plants, bearing bright colored flowers of plumes resembling a cock's comb. Hardy annuals; fine for massing or border work.

No. 17 Celosia Cristata. About one foot high, bearing large, highly colored combs. Mixed colors.... Pkt., 10c; Postpaid.

Cobaea Scandens (Cup and Saucer 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, turn-ing to bright purplish-blue.

No. 120. Cobaea Scandens Pkt., 10c; Postpaid.



Every Garden means a HOME-Not just a HOUSE on a Vacant lot

PLANT ILLYS SEEDS

Gaillardia A shown 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.......Pkt., 10c; Postpaid.

Echinocystis (Wild Cucumber)

One of the quickest growing hardy annual hTe foliage is dense, and it is one of the vines. Vines. In le 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 per-manent growth is desired. A profusion of frag-rant white flowers is followed by an abundance of ornamental prickly seed pods. No. 995. Wild Cucumber....Pkt., 10c; Postpaid.



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

duce the inest spikes the plants should be transplanted. No. 922. Empress. A grand variety, producing large spikes of bloom resemb-ling a white Hyacinth. The spikes often measure seven inches long by two and one-quarter inches in diameter. The plant is

Gardening means making gardens in the widest application of the word. By gardening we mean indeed ALL that goes into the embellishment of the surroundings of the home-that contributes to the use and the enjoyment of outdoors as part of the home.

IUYS Fertilizers Make Sturdier Plants and Larger Flowers

Daisy

(Chrysanthemum leucanthemum)

This splendid hardy perennial is a great favorite for bedding and cut flowers. Theplants 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; Postpat.

Eschscholtzia (California Poppy)

The state flower of California, and a hardy annual of striking character, both in form and color; bright, rich, Gaillardia any manner. From seed sown in fall or early spring blooms will be had the following summer.

No. 192. True California Poppy. Orange-yellow......Pkt., 10c; Oz., 25c; Postpaid No. 1089. Special Mixed Eschscholtzia. All colors.....Pkt., 10c; Oz., 50c; Postpaid.

Digitalis

(Foxglove)

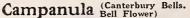
Hardy perennials, blooming the second year from seed, and especially adapted to this locality. They grow three to five feet tall and produce freely long spikes of Gloxina like flowers in vari-ous colors. Splendid for permanent beds, masses and backgrounds. Thrives best in a cool, shady location.

No. 165. Mixed Foxglove..... No. 1086. White Gloxinia-Flowered FoxglovePkt., 10c; Postpaid. No. 1087. Pink Gloxinia-Flowered Foxglove ... No. 1088. Grandiflora Foxglove, Bright Yel-low......Pkt., 10c; Postpaid.









Very ornamental garden plants of the easiest culture. They are hardy biennials flowering the second year from seed, 2½ feet high, producing large bell-shaped flowers of beautiful colors during early summer. Pkt Postnaid

		I KL., I OSLPHILL
Single, M	Aixed colors	
Double.	Mixed colors	IUC
Single,	white	IUC
Single	Plue	10c
Single 1	Pink	10c
omgie, i	****	
	Double, Single, Single,	Single, Mixed colors Double, Mixed colors Single, White Single, Blue Single, Pink

Gypsophila (Baby's Breath)

Very pretty free-flowering plants. There are both annual and perennial varieties which are graceful and delicate, and of special value for mixing with other flowers in bouquets. No. 925. Snowflake. (Gypsophila elegans alba pura.) An improved large-

flowering hardy annual variety, producing graceful sprays of pure white blos-soms. Grows about two feet high Pkt., 10c; Postpaid. No. 1090. Gypsophila Elegans Rosea. Soft pink. Hardy annual; two feet Pkt., 10c; Postpaid. al. White. Two feet high. No. 918. Gypsophila Paniculata. Hardy perennial. high.....Pkt., 10c; Postpaid.

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 pinshed off when they reach the desired height, thus inducing development of branches and forming a bush. No. 961. Lilly's Annual Everblooming Hollyhock. This splendid variety is a bardy or a different active will be in blooming in luck.

No. 1091.	Blood Red, Double, Perennial	10c
	Pink, Double, Perennial	
	Black, Double, Perennial	
	White, Double, Perennial	
	Yellow, Double, Perennial	

Ipomea (Moon Flower Vine. Evening Glory) The most rapid growing of flowering half-hardy annuals, producing a dense mass of heart-shaped leaves which form a background for a great profusion of

Covered with large white flowers evenings and cloudy days Pkt., 10c; Postpaid.

Lobelia

Pleasing half hardy annuals growing four to six inches high literally covered with small, bright flowers during the entire season.

No. 195. Emperor William. A verv

Annual Hollyhock Annual Hollyhock dwarf, compact variety, covered with white, blue-margined flowers from June to November......Pkt., 10c; Postpaid. flowers with a pure white eye

No. 196. Crystal Palace. Compact plants, dark foliage, and rich deepPkt., 10c; Postpaid. blue flowers.

 blue flowers
 Pkt.
 10c;
 Postpaid.

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

Larkspur (Delphinium)

The Larkspurs are among the most popular of garden flowers. Seed of the hardy annual varieties sown in the open ground early in spring will pro-

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, or for cut flowers. No. 927. Dwarf Rocket, Mixed. A splendid hardy annual Larkspur, growing ofly 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, growing about two and one-half feet high. Mixed colors. 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. Pkt., 10c; Postpaid.Pkt., 10c; Postpaid. colors_____

Lupins





Marigold

(Tagetes)

Marigolds are favorite free-flowering hardy annuals of easy culture. The African varieties grow two to three feet tall, bear large yellow or orange-colored flowers, and are adapted for large beds or mixed bor-ders. The French varieties are dwarfed in growth, with heavy field detined devices there or form in year. beautiful striped flowers three or four inches in diam-eter, 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. About two feet high with flowers three or four inches in diameter

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

No. 146. Dwarf Double French. One foot high, with large flowers in mixed colors...... Pkt., 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 seed if sown early.

No. 310. Lilly's Victoria Dwarf. A very beautiful hardy biennial variety; of dwarf, bushy habit, bearing large clusters of the brightest azure-blue flowers on long, graceful stems, render-ing them splendid for cutting.....

Pkt., 10c; Postpaid.

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

Mignonette

No garden is complete without this old favorite, sweet scented hardy annual. The plants grow a foot or more in height, bearing pyramidal-shaped flower spikes about six inches long, made up of thickly set florets which are ex-No. 139. Reseda Odorata. The old-fashioned Sweet ceedingly fragrant. Valuable for bedding borders, or also

for pot culture.

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 Clory, and open late in the afternoon.

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

Morning Glory

Well known hardy clinging annuals, growing about fifteen feet high and bearing pretty flowers in a variety of colors

No. 41. Convolumbles Major. The add factoring Marine Marin

Glory. Makes a growth of ten to twelve feet. Mixed colors Pkt., 10c; Postpaid.

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 neathe numerous large double flowers of light blue and white. No. 248. Nigella Damascena.....Pkt., 10c; Postpaid.



WRITE FOR ILLY'S CROP BOOK The True Garden Guide-FREE With Orders

> Shirley Poppy

A garden to fulfill all its requirements should appeal to the mind-the heart and to the imagination.

Petunia

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

No. 61. Choice Single. A choice mixture of fine single

Poppy

FLANDER'S POPPY

No. 1114. This is the well known Poppy of "Flan-ders' Fields" so often mentioned in songs and stories of the great war. Profusely blooming medium sized flowers, bright scarlet in color. Very shown when planted in masses. A bed of these Poppies forms a glowing memorial to our heroes. Pkt., 10c; ½ Oz., 25c; Oz., \$1.50.

Pkt., 10c; Postpaid. Pkt., 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 No. 1030. Oriental Poppy, Mixed Hybrids. Hardy per-Pkt., 10c; Postpaid.

No. 351. Mixed Poppies. A choice mixture of hardy anFERTILIZERS Produce Results

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.

Im Dwarf Mixed

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

No. 87Pkt., 10c; Oz., 20c; 1/4 lb., 50c; lb., \$1.50

Tall Mixed

A splendid mixture of the best tall varieties, including all harmonizing colors. No. 262.....Pkt., 10c; Oz., 20c; 1/4 lb., 50c; lb., \$1.50

Tall, or Climbing

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 bear-

ing flowers of a great variety of colors and markings...... Pkt., 10c; Oz., 25c; Postpaid.

Lobb's Tall

Lobb's Nasturtiums are remarkable for the intensely brilliant colors of the flowers, which are slightly smaller

Dwarf, or Bedding These dwarf or Tom Thumb varieties form sturdy little bushes completely covered with large, brilliant flowers during the entire season, making a beautiful

flowers during the entire season, making a beautiful display in beds or borders. No. 1068. King Theodore. Velvety red flowers; dark foliage........Pkt., 10c; Oz., 25c; Postpaid. No. 1070. Prince Henry. Light yellow marbled with scarlet.......Pkt., 10c; Oz., 25c; Postpaid No. 929. Queen of Tom Thumb. Rich, bright crimson flowers forming a pretty contrast to the silver variegated foliage. Splendid for bedding or pots........Pkt., 10c; Oz., 30c; Postpaid. No. 907. Dwarf Vesuvius. Deep salmon-rose; a beautiful shade......Pkt., 10c; Oz., 25c; Postpaid beautiful shade Pkt., 10c; Oz., 25c; Postpaid.

Lady Bird. Orange, striped with bright scarlet No. 1112.

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

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

Pkt., 10c; Oz., 30c; Postpaid. No. 1067. Golden King. Rich golden-yellow Pkt., 10c; Oz., 25c; Postpaid.

No. 1069. Crystal Palace Gem. Sulphur-yellow spotted with crimson.....Pkt., 10c; Oz., 25c; Postpaid.



Choicest Varieties Magnificient and Continuous Blooms

Superb

No home in the Pacific Northwest is complete without a bed of Pansies, for our cool, moist climate is ideal for these beautiful flowers, and in no other locality do they produce such splendid blooms and so continuously from early spring until winter. The Pansy is a hardy perennial, thriving best in a cool, moist location. The largest blooms are produced during the cool months in spring and fall; during the warm summer months the blooms will be small. Abundant irriga-tion will produce larger flowers during the summer, but care must be taken that the water is warm, for the plants can-not stand the shock of cold water. For early spring bloom the seed may be sown outdoors about the first of September. Spring sown seed will produce blooms the following fall. The plants will produce better blooms if transplanted two or three times. three times.

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

UNS Collossal Mixed

Portulaca

(Sun Plant)

A brilliant hardy annual, growing about six inches high, and thriving in warm, dry, sunny situations. Excellent for low beds, borders, and for sowing on exposed banks where other flowers would not thrive.

Primrose

(Primula)

Primroses are among the most charming of perennials for winter and spring decoration in the house and conservatory. No. 75. Primula Veris. A beautiful hardy perennial, growing six inches high, and bearing clusters of fragrant flowers in various colors......Pkt., 10c; Postpaid.

Salpiglossis

(Painted Tongue)

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

No. 406. Mixed colors......Pkt., 10c; Postpaid.

Pinks

Pansies

(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 Pkt., 10c; Postpaid.

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.

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 Pkt., 10c; Postpaid.



Phlox

Phloxes produce immense trusses of brilliant flowers of a great variety of colors and shades throughout the summer. They are easy to grow, and thrive in most any kind of soil if given a sunny position. The seed may be sown outdoors early in spring, and in a few weeks the plants will be covered with blooms.

No. 919. Lilly's Large Flowering Phlox. (Phlox Drum-mondi Grandiflora.) This is the finest type, having the In the interst type, having the largest heads of bloom and the largest individual flowers. This mixture contains all the most Obeautiful Colors and shades. Fifteen inches high......Pkt., 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......Pkt., 10c; Postpaid.

Stocks

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

Sunflower

(Helianthus)

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

No. 128. Dwarf Double Sunflower Pkt., 10c; Postpaid.



Salvia

(Flowering Sage)

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

No. 920. Salvia Splendens......Pkt., 10c; Postpaid.

Sweet William (Dianthus barbatus)

As a border plant it has few equals, being very showy. 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. Our mixture contains guite an assortment of colors.

Violets

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

No. 319. Large Single Violet Pkt., 10c; Postpaid.

Verbena

One of the dear old flowers that will always be popular both in the garden and house. Verbenas are low-growing, creeping, half-hardy perennials, blooming the first year from seed, and generally treated as annuals. They are splendid for beds, borders, rockeries, hanging baskets and window boxes. Fewer plants are better liked and give greater satisfaction.

No. 88. Giant Hybrid, Mixed. A splendid mixture of large flowering varieties; all colors......Pkt., 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

No. 99. Single......Pkt., 10c; Postpaid.

Zinnia

Flowers throughout the entire summer and early fall. This 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. The Zinnia is a very free grower and of robust habit.

Wild Flower Garden

There are few things more pleasing than a wild-flower garden hidden away in some secluded spot or among shrubbery. This mixture is ideal for the pur-pose, being composed of such hardy annuals as will require little care beyond scattering the seed, and will product a great profusion and variety of pretty flowers.

No. 438. Wild Flower Garden Pkt., 10c; Oz., 25c; Ib., \$2.00; Postpaid.

Flowering Plants

In season we carry a large and varied stock at our Seattle, Portland and Yakima Stores of PANSIES, ASTERS, LOBELIA, CANDYTUFT, ANTIRRHINUM, STOCKS, etc., all strong plants. Those interested in choice DAHLIAS please ask for special catalog.



Tested Field Seeds-They Grow

L AND without population is a wilderness, and population without land is a mob. The United States has many social, political, and economic questions, some old, some new, to settle in the near future; but none so fundamental as the true relation of the land to the national life. A prosperous agricultural interest is to a nation what good digestion is to a man. The farm is the basis of all industry. The soil is the only resource that renews itself continually after having produced value, ut is strange that almost all contries, including our own, should, until taught by approaching misfortune, fail to realize the primary and indispensable place of agriculture in sound national development... It is but prosperity, and individual existence upon the land and its proper care.—James J. Hill.

ALFALFA ADDS NITROGEN TO THE SOIL



ALFALFA WILL GROW TWO CROPS A YEAR

Best

These two words carry a significance which is now recognized in the West as the highest quality obtainable in seeds. Whenever you buy seeds of the "L. B." brand you know you are getting the best.

are getting the best. Recleaned and Tested, free from Dodder and other noxious weed seeds.

$99\frac{1}{2}$ Per Cent Pure

Lilly's Best Alfalfa Seed is the acme of perfection. It never tests less than 99½% pure, is free from dodder and other noxious weed seeds, and consists only of big, plump seeds; all small and shrunken seeds having been removed. 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.

seed is cleaned until it is practically perfect. 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 eight to twelve pounds per acre.

Price subject to change; see supplement following page 48.

Use "FARMOGERM" for Alfalfa-it insures success. See page 63

Turkestan, or Dry Land

(Medicago Turkestanica)

This variety comes from central Asia and has been grown successfully for many years in the West; is very hardy, and 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.

Price subject to change; see supplement following page 48.

Grimm

(Medicago media)

Undoubtedly this variety has in recent years attracted the attention of Alfalfa growers more than any other variety. The origin of this type is the result of cross hybridizing of the blue flowered species with the yellow flowered. Grimm belongs to the "variegated" class and has a more branching root system which may possibly account for it being hardier than the "blue flowered" (Medicago sativa) varieties.

Extract from United States Government Bulletin No. 209:

"The Grimm alfalfa is much hardier than the ordinary kinds obtained from Kansas, Utah and clsewhere, and there is even strong reason to believe that it is the hardiest known form of the cultivated plant. It not only endures extremely low temperatures with or without snow and other acverse conditions, but it can be cut with greater safety late in the fall and will bear more abuse in the way of pasturage than any other plant. There is some disagreement among investigators as to how Grimm alfalfa obtained its hardiness, but there is no difference of opinion that it is hardy."

Price subject to change; see supplement following page 48.

Read This

Last Spring we bought 200 pounds of your best Alfalfa Seed from your Wapato House and secured the best stand of any under the project. We project. sowed 15 pounds per acre and found that its high germinating power reallv made this too much. WILLOUGHBY RANCH COMPANY, Richland. Washington. August, 19, 1920.



A fine crop of Alfalfa from Lilly's Seeds



Clover

Red (Trifolium pratense) — 99 Per Cent Pure

Red Clover is an important crop in all parts of the country, and is especially valuable west of the Cascade Moun-tains, 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 twelve pounds per acte. Lilly's Best Red Clover Seed is guaranteed to test not less than 99% pure, and we make it as much better as possible; usually as high as 99½% pure. This state of purity is seldom equalled, and would be im-possible without our splendid seed cleaning machinery. The Pure Seed Law requires only 92% purity, and that is considered very good seed, but it allows more than a pound of weed seeds to each acre, and such seed should never be sown when better seed can be procured. For prices see supplement following nage 48. be sown when better seed can be procured. For prices see supplement following page 48.

OUR CLOVER SEEDS GROW

Mammoth Red (Trifolium

This is a very valuable crop for Western Washington where the ground is gravelly, high, or very light soil, as it makes a satisfactory growth and good crop where medium Clover will not produce a paying crop. It should, however, be avoided on heavy soils as it makes too rank a growth and if the soil is heavy it makes coarse hay. Sow at the rate of eight to twelve pounds per acre. Mammoth Clover has the added advantage of being ready to cut for hay at a time of year when Western Washington is sure of good haying weather. For prices see supplement following page 48.

Alsike (Trifolium)-99 Per Cent Pure Suitable for Cold, Wet Land

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

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

For prices see supplement following page 48.

White (Trifolium -98 Pe : Cent Pure Only the Very Best is Fit fo . Lawns

For lawns, especially, none but the very best White Clover seed obtainable should be sown, as ordinary seed is very liable to contain sorrel. Lilly's Best White Clover is grown on land to contain sorrel. 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 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 pas-ture, six to eight pounds mixed with grass seeds.

For prices see supplement following page 48.

Crimson Clover (Trifolium incarnatum)

Crimson Clover is an annual useful principally as a cover crop or to plow under for green manure. It is grown quite extensively in the South, but it is not specially recommended for the Northwest. Ten to fifteen pounds of seed is sown to the acre. For prices see supplement following page 48.

Sweet Clover

White Blossom (Melilotus alba). Bokhara, or White Sweet Clover, was formerly grown almost exclusively for bee pas-ture, but recently it has become guite 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 pounds per acre. The soil should be very firm.

For prices see supplement following page 48.

An ANNUAL White Blossom variety was discovered at the Iowa Experiment Station recently which is stated to yield re-markably heavy in a very short period from sowing. It is, however, not yet available in commercial quantities.

Yellow Blossom (Melilotus indica). Yellow Blossom Sweet Clover is an annual. The plants are low-growing, erect, and early flowering. For prices see supplement following page 48.





Conceded to be one of the most valuable gracses of great nutritive value and very productive. The seeds being very small and produced in great abundance, its cost is the most economical of any grass.

99½ Per Cent Pure Best is the Purest Seed Obtainable

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 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 fifteen pounds per acre. We have a second highest price. The seed is sown at the rate of ten to fifteen grade, Choice Timothy, but especially recommend Lilly's Best.

Price subject to change; see supplement following page 48.

Kentucky Blue Grass

(Poa pratensis)

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

Our seed is imported direct from 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. Sow at the rate of fifteen to twenty pounds per acre. For lawns sow one pound to each four hundred square feet. For pasture it is mixed with other grasses.

Price subject to change; see supplement following page 48.

Red Top

(Agrostis vulgaris)

Red Top, or Herd's Grass, is valuable in wet places where other grasses will not thrive When mixed with other grasses and 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 onl, ten to twelve pounds is required to sow an acre. The Choice Red Top is good seed, but it con tains the hulls, and nearly twice as much seed is required. Fancy Red Top, Choice Red Top: Price subject to change; see supplement following page 48

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 fifteen to twenty pounds per acre for pasture if used alone.

Price subject to change. See supplement following page 48.

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 fifteen to twenty pounds per acre. Price subject to change. See supplement following page 49

Price subject to change. See supplement following page 48.

Creeping Bent, or Fiorin

(Agrostis stolonifera)

A splendid grass in lawn or pasture mixtures. Its creeping, rooting stems form tough, compact turf that is improved by tramping. Price subject to change. See supplement following page 48.

Unless otherwise specified, prices quoted are f.o.b. Seattle or Portland



Timothy



ILLY'S Red Top





Prices subject to change. Unless otherwise quoted are f.o.b. Seattle or Portland

Orchard Grass

English Rye Grass

(Lolium perenne)

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

English, or Perennial, Rye Grass is especially adapt-English, or Perennial, Rye Grass is especially adapt-ed 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 a high feeding value, is relished by all stock, and is good in both hay and pasture mixture. 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 twenty-five to forty pounds per acre. or in the same proportion when forty pounds per acre, or in the same proportion when mixed with other seeds.

Price subject to change. See supplement following page 48.

Italian Ryegrass (Lolium italicum)

Italian Rye Grass is supposed to be a biennial, but on the Pacific Coast it lasts almost indefinitely, but on the Facilic Coast it lasts almost indefinitely, and is one of our most valuable pasture grasses, as it produces green feed late in the season after rapid growth, and will furnish more green pasture in midsummer than any other grass. On moist, rich soil and under irrigation the rapidity of growth and produc-tiveness of Italian Rye grass are really wonderful. Sow the rate of twenty-five to forty pounds per acre when at the rate of twenty-five to forty pounds per acre when

used alone. Price subject to change. See supplement following page 48.

Orchard Grass (Dactylis glomerta)

Orchard Grass, or Cocksfoot, is one of our most useful grasses. Though it looks coarse, it is one of the earliest, most productive, nutritious and valuable of the cultivated grasses. It comes very early in spring, furnishing pasture earlier than other grasses. It makes good hay if cut as soon as in bloom; later it becomes hard and woody. It is especially valuable, mixed with other grasses and clovers, for pastures and for sowing on logged off land. It is very hardy, and thrives in shady places where other grasses will not grow, but is not suitable for lawns. It thrives in a great variety of soils and as its roots penetrate to a considerable depth, it withstands drought better than most other grasses on light, dry soils. Being a bunch grass, it is best mixed other grasses on light, dry soils. Being a bunch grass, it is best mixed with other grasses. When used alone, sow twenty-five to forty pounds per acre.

Price subject to change. See supplement following page 48.

Crested Dog's Tail (Cynosurus cristatus)

A perennial grass forming a smooth and lasting turf, excellent in mix-tures 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. See supplement following page 48.

Tall Oat Grass

(Avena elatior)

Valuable for pasture on account of its early and luxuriant growth. It also produces a large quantity and good quality of hay. It is deep rooting, hardy, withstands drought, and is grown successfully in Eastern Washing-ton and California. It is best mixed with other grasses, and should not exceed one-fifth of the total amount of seed sown.

Price subject to change. See supplement following page 48.

THE INESTIMABLE VALUE of Grasses for pasturage and hay crops is so generally known that anything we might add would hardly emphasize their great utility for feeding purposes. It is, however, of the utmost importance that Grass Seeds of the finest possible quality only be used. They cost practically the same as seeds of doubtful germination and uncleaned samples, while the results are vastly different.



Ask for **Special Prices** on Large Quantities

Velvet Grass or Mesquite (Holcus lanatus)

Velvet Grass, also known as Mesquite, Meadow Soft Grass and Yorkshire Fog. is of little value except for pastures on light sandy, or marshy soils where other grasses will not grow. It has little food value, is not relished by stock, and on account of its spreading habit is rather

difficult to eradicate. Price subject to change. See supplement following page 48.



CLOVER, GRASSES, SEED GRAINS, ETC.

At the time of going to press with our catalog it was impossible to quote prices against the respective items owing to market fluctuations. These prices here listed are revised to date but are—

Subject to change without notice.

Prices are per 100 lbs. In less than sack lots the price will be $\frac{1}{2}$ c per pound additional for lots of 50 lbs. or more, lc per pound additional for lots of less than 50 lbs. For single pounds add 5c per lb.

Catalog Page	VARIETIES	Sacks Con- tain 1bs.	Current Prices Per 100 lb:	Catalog Page	VARIETIES	Sacks Con- tain Ibs.	Current Prices Per 100 lbs
45	ALFALFA Lilly's Best, 99½% pure Turkestan Grimm	$100 \\ 100 \\ 160$	\$26.50 35.00 50.00	51	Barley White Hulless—Beardless Beardless, General Stock Wisconsin Podigreed Bearded Six Row White	$ \begin{array}{c c} 100 \\ 100 \\ 100 \end{array} $	4.50 4.50 4.75 4.00 4.50
	Red, Lilly's Best, 99% pure Red Mammoth Alsike, Lilly's Best, 99% pure White, Lilly's Best, 98% pure Sweet—White Blossom Sweet—Yellow Blossom	$100 \\ 100 \\ 160 \\ 160 \\ 160$	26.00 30.00 33.00 76.00 30.00 18.00	54	Field Corn Silvcr King Golden Nugget Pride of the North North Western Dent Leaming Improved	$150 \\ 100 \\ 100 $	Postpaid 06 Postpaid 00 freight extra
47	GRASS SEEDS Timothy, Lilly's Best, 99½% pure Kentucky Blue Grass Canadian Blue Grass Red Top Brome Grass Creeping Bent	$ \begin{array}{r} 112 \\ 112 \\ 100 \\ 100 \end{array} $	11.00 37.00 25.00 25.00 30.00 40.00	-	Iowa Gold Mine Minnesota No. 23 Champion White Pearl Early Canada King Philip Sanford White Flint Minnesota No. 13	$ \begin{array}{r} 150\\ 150\\ 150\\ 150\\ 150\\ 150\\ 150\\ 150\\$	lb 25c Postp lbs. \$2.00 Po lbs. \$7.00 fre
48	English Ryegrass Italian Rye Grass Orchard Grass Cheat Tall Meadow Oat Grass Crested Dog's Tail	$ \begin{array}{r} 165 \\ 165 \\ 100 \\ 125 \\ 165 \\ 165 \\ \end{array} $	12.50 12.50 28.00 7.00 43.00 47.00 20.00	56	Sweet Fodder Red Cob Ensilage Rosen Petkuser	$150 \\ 150 \\ 125 $	41 001 5.50 5.00 4.00
49	Velvet Grass, or Mesquite Meadow Fescue Sudan Grass Sheep's Fescue Hard Fescue Red Fescue Fine Leaved Fescue	$125 \\ 100 \\ 100 \\ 100 \\ 100 \\ 100$	35.00 12.00 35.00	55	Common Fall Sced Rye Vetch Common or Spring Vetch Winter or Hairy Vetch Purple Vetch	125	4.00 4.50 8.00 23.00 22.00
50	Pasture and Hay Mixtures No. 1 Pasture Mixture No. 2 Pasture Mixture Hay Mixture FIELD GRAINS	$50 \\ 50 \\ 50 \\ 50$	18.00 18.00 18.00	57	FIELD PEAS Yellow Canadian Green or Bluebell Bangalia Large Marrowfat Whip-Poor-Will Cow Peas	$ \begin{array}{r} 130 \\ 130 \\ 130 \\ 130 \end{array} $	4.50 4.50 4.50 6.00 23.00
	Wheat Sun Wheat Marquis Pedigreed Bluestem Baart Club Forty-fold Red Russian	$125 \\ 125 $	$\begin{array}{r} 4.50 \\ 4.50 \\ 4.50 \\ 4.50 \\ 4.50 \\ 4.50 \\ 4.50 \\ 4.50 \end{array}$	57 58	WHIPT OFFWIT COW Feas EMMER OR SPELTZ MILLET Golden Siberian Japanese Hungarian	$\begin{array}{c} 130\\ 130\end{array}$	8.50 9.50
52 52 53 52	Oats Shadeland Climax Victory Abundance Black Alaska Banner Gray Winter	$ \begin{array}{c} 100 \\ 100 \\ 100 \end{array} $	4.50 4.00 4.00 4.00 3.75 4.00	57 58 61	Other Field and Forage Seeds Sunflower Flax Seed Japanese Buckwheat Thousand Headed Kale	75	10.00 8.00 7.00 60.00
53	Regenerated Swedish Select Lilly's Black Side Oat	100	4.00 4.25	. 01	Dwarf Essex Rape	160	10.00

Prices are per 100 lbs. In less than sack lots the price will be $\frac{1}{2}$ c per pound additional for lots of 50 lbs. or more, lc per pound additional for lots less than 50 lbs. For single pounds add 5c per lb.

POULTRY AND STOCK FOODS

POULTRY WEAVNIPtonscom.cn

66	Holly Chick Food, 100s\$	3.80
66	Growing Food, 100s	3.80
66	Scratch Food, 100s	3.20
	Golden Hen Food, 100s (scratch)	3.00
66	Pigeon Food, 100s	3.75
66	Feed Wheat, 125s	3.20
66	Clipped Barley, 110s	2.85
66	Oats for Sprouting, 100s	2.75
-66	Milo Maize	3.15
66	Kaffir Corn	.3.15
66	Feed Buckwheat	5.75
66	Whole Corn	2.50
66	Cracked Corn	2.60
	Feed Millet	6.00

MASH FOODS

67	Lilly's Buttermilk Mash, 100s	3.50
67	H. P. Chick Mash, 100s	3.50
67	H. P. Growing Mash, 100s.	3.50
67	H. P. Egg Mash, 100s	3.50
	Puyallup Staton Egg Mash, 100s	3.50
	Golden Egg Mash, 100s	3.00
67	Fattening Mash, 100s	3.60
67	Moulting Mash, 100s	3.60

BONE, SHELL AND GRIT

68	No. 1 Granulated Bone, 100s	3.50
68		
	lbs	1.80
68	Blue Point Oyster Shell, per sack (about	
	100 lbs.)	1.25
68	Star Shell per sack (about 100 lbs.)	1.25
68	Pearl Clam Shell	1.60
	Crystal Grit, Fine or Medium, 100s	1.50
68	Western Granulated Charcoal (50-lb.	
	sacks) per 100 lbs.	3.60
	Western Powdered Charcoal (50-lb, sks)	
	per 100 lbs.	2.50

Catalog Page

MEAT FOODS

57	Lilly's Meat Scraps, 100s	6.00
	Darling's Meat Scraps, 100s	6.00
	Fish Meat Meal, 100s	5.75
	Blood Meal, 100s	8.00
35	Digester Tankage, 100s	6.00

STOCK AND DAIRY FOODS

	Condensed Buttermilk 52 gal. bbl. (about 400 lbs.) per 100 lbs.	7.00
	10 gal. bbl. (about 90 lbs.) per 100 lbs	
65	Lilly's Calf Meal, 100s	
65	Lilly's Lamb Meal, 25s	6.40
65	Lilly's Pig Meal, 100s	6.30
64	Alfalfa Meal, 100s	1.85
64	But-er-fat Dairy Feed, 80s (per 100)	2.45
64	Golden Dairy Feed, 80s	2.45
65	Mak-em-fat Hog Feed, 100s	2.70
64	High Protein Dairy Feed, 100s	
65	Soy Bean Mcal, 100s	2.40
65	Oil Meal, 100s	4.15
	Cocoanut Meal, 100s	6.65
65	Ground Flax	
64	Steam Dried Beet Pulp	
64	Whole Feed Barley	
64	Rolled Barley, 80s	
64	Ground Barley, 100s	2.70
64	Corn Feed Meal, 100s	2.70
64	All Grain Chop, 80s	2.75
64	Whole Feed Oats, 100s	2.60
64	Rolled Feed Oats, 70s	2.70
84	Ground Oats, 80s	2.70

FERTILIZERS

Prices are per 100 1bs. Ton lots 10c per 100 less.

2 00

Catalog

Page COMPLETE MIXED FERTILIZERS

THEING MOLCIOD	reitinzer, itus	
Back Morerop	Fertilizer, 25-lb. sacks 3.40	
Cover Morerop	Fertilizer, 10-lb. sacks	
Morcrop	Fertilizer, 1½ lbs., per pkg	
Morerep	Orchard Special, 100s	
Morerep	Potash Special, 100s 3.50	

ANIMAL FERTILIZER

63	Blood and Bone, 100-lb. sacks	4.00
63	Bone Meal, 190-lb. sacks	3.25
63	Sheep Guano	1.75
63	Fish Fertilizer	4.25
63	Dried Blood, 100s	8.00

Page CHEMICAL FERTILIZERS

	Sulphate of Ammonia, 225-lb, sacks	9.25
62	Muriate of Potash, 225-lb. sacks	9.00
62	Nitrate of Soda, 225-lb, sacks	4.00
62	Superphosphate, 125-lb. sacks	2.00
62	Ground Lime Rock, 100-lb. sacks	.90
62	Gypsum Land Plaster, 100 lbs.	.90
62	Hydrated Lime, 50-lb. sacks	2.00
83	Agricultural Sulphur, 100-lb, sacks	3.00

Prices on this List are for mail orders or f. o. b. our Seattle Plant. Extra charge made for city deliveries.

While we (The Chas, H. Lilly Co.) exercise care to have all seeds pure and true to name, we do not give any warranty, expressed or implied, as to description, quality, productiveness, or uny other matter of seeds we send out, and we will not be in any way responsible for the crop. If the purchaser does not accept the goods on these terms, we are to be at once advised, and money paid for same will be promptly refunded.

THE CHAS. H. LILLY CO. " " SEATTLE

Prices do not include transportation charges. If goods are to be shipped to a station at which there is no agent, or by parcel post, remittance must include a sufficient amount to prepay charges.

Meadow Fescue

(Festuca pratensis)

Also known as English Blue Grass. One of the best of It is very hardy, 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; see supplement following page 48

Sheep's Fescuem.cn (Festuca ovina)

Of dwarf, thick growth, yielding a large amount of nu-tritious herbage, and is valuable in pasture mixtures. It prefers dry uplands and thrives in poor, shallow, gravelly soils.

Prices; subject to change; see supplement following page 48.

Hard Fescue

(Festuca duriuscula)

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

Price; subject to change; see supplement following page 48.

Red, or Creeping Fescue

(Festuca rubra)

A creeping rooted species, forming a close and lasting turf, resisting drought and thriving on inferior soils, gravelly banks and exposed hillsides.

Price; see supplement following page 48.

Sudan Grass

(Andropogon Sorghum)

A great drought resisting hay and forage crop, especially suitable for hot, dry sections, but it is not recommended and is not adapted to sections west of the Cascade Mountains. In appearance it resembles Johnson Grass but does not have the aggressive root-stalks, stools more freely, has more and broader leaves, is an annual, and will not become a weed. As it is an annual, it must be seeded each year, like Sorghum or Millet.

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

The following are good reasons why you should grow Sudan Grass:

1. It lacks entirely the underground root stocks which make some other grasses a pest.

2. Two or even three cuttings can be obtained from it under favorable conditions.

Price; subject to change; see supplement following page 48.

Fine Leaved Fescue

(Festuca ovina tenuifolia)

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

Price; see supplement following page 48.



Our Grass Seeds Are Recleaned and Tested

Pasture and Hay Mixtures

The Most Suitable Combinations in Correct Proportions for Best Results

These Pasture Mixtures contain the correct early, medium and late grasses to supply pasture continuously during a long season; also bunch, deep rooting, and creeping grasses to form a tough and lasting turf. The Hay Mixture is composed of tall-growing grasses which will mature about the same time, and will produce the maximum amount of hay of the best quality.

No. 1 Pasture Mixture

Especially prepared for wet bottomlands. It contains Meadow 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 of White Clover, English Rye Grass, Italian Rye Grass, Canadian Blue Grass, Meadow Fescue, and Kentucky 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; see supplement following page 48



Ask

For

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Snecial

Prices

Large



iurs Sun

A New Winter Wheat Especially Adapted to the Northwest

After many years experimenting our tests have proven that Sun Wheat excels all others in yield and quality, for the country west of the Cascade Mountains. Sun Wheat is a remarkable new winter wheat imported from southern Sweden and is the heaviest yielder of them all. It ripens earlier than most other varieties. The grain southern Sweden and is the heaviest yielder of them all. It ripens earlier than most other varieties. The grain is plump, of a reddish color, and the weight per measured bushel is above the average. It does well on rather light soil, and is resistant to rust and smut. The heads are compact, firm and uniform; very similar to Club wheat but much longer. Its stooling habit is especially good. The straw is of medium height, erect and very stiff. In a comparative test in adjoining fields and under identical conditions, Sun Wheat yielded 55 bushels and Club wheat 40 bushels per acre. The seed is grown for us on contract, from specially selected seed and is under the direct supervision of our grain expert from the time the land is plowed until the seed is threshed and cleaned.

Price; subject to change; see supplement following page 48.

ILLY'S

Sun Wheat alib

-115

Pedigreed Bluestem Specially Selected Seed

Conceded to be one of the most valuable Spring varieties for Northwest. Bluestem has long been the standard and is still the Northwest. unexcelled. East of the mountains it is very extensively grown. The Bluestem of the Pacific Coast has a white grain and smooth chaff quite unlike the velver chaff and red grains of the States East of the Rockies. Although a Spring variety it can be sown as a Fall wheat in sections where winters are mild. Its popularity is due to its drought resistance, heavy yielding capacity, non-shattering character and high milling value. Our seed is of the finest quality, carefully selected and thoroughly recleaned.

Price; subject to change; see supplement following page 48.

Marquis

The "Thousand Dollar Prize" Wheat

Unquestionably one of the best all round Spring wheats grown, yielding as high as 50 bushels to the acre. Extremely early and pro-ductive as well as hardy. Grows stiff, strong straw of medium height and matures its plump, round, dark red kernels two weeks earlier than the Blue Stem. Easy to handle at harvest because free from beards. Unexcelled in both milling and baking qualities. Sow in early Spring.

M. E. McCollam, Agronomist, Washington Agricultural Experiment Station, says of it:

"Some desirable characteristics of Marquis Wheat as grown under Western Washington conditions are early maturity, high bushel weight, non-lodging and non-shattering qualities. Marquis Wheat should be cut when it is not too green. The milling quality of this wheat is distinctly better than the soft Red Winter types. As grown in Western Washington most Marquis will probably class as Red Spring under Federal grain standards."

Price; subject to change; see supplement following page 48.

Red Russian

A great favorite in Eastern Washington being grown very extensively in the Palou e country where it seems particularly suited to. It is a late maturing wheat with very vigorous growth and its abnormal yields of grain have undoubtedly attributed to its popularity. It grows a luxuriant plant very close in habit which makes it doubly valuable for choking out weeds. The stock we offer has been thoroughly recleaned—is true to type and we confidently recommend it. Price; subject to change; see supplement following page 48.

OBSERVATIONS BY PROF. E. P. GAINES, CEREALIST, WASHINGTON AGRICULTURAL EXPERIMENT STATION

Wheat is the standard grain crop of the Northwest. It is grown under wide variation 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 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

The country seems to be in a transition stage just now as is shown by sudden popularity of several new strains, is a rule, winter wheat yields more than spring wheat. For sliage or hay wheat should be cut in the dough stage, but for grain it should be well matured. As a rule.





in collection in the hite Hulless-Beardless

Threshes Out Like Wheat, Making It a Valuable Stock and Poultry Food

Threshes 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 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 objectionable in grain hay, and the hulles, which make the grain less valuable for feeding purposes. These objections are entirely overcome in White Hulless Bar-ley, for it is entirely beardless, as shown in accompanying half-tone, and when threshed 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. Culture the same as Common Barley. Price; subject to change; see supplement following page 48.

Price; subject to change; see supplement following page 48.

Vermont Beardless_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 is a splendid variety to sow with vetch or peas. It is very productive. Price; subject to change; see supplement following page 48.

Wisconsin Pedigreed

The world's greatest prize winner; yields nearly twice a much to the acre as common barley and has made millions of dollars for the farmers of America's barley growing districts. 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 subrucker Barley, to which they claim that this is much su-perior. It has very nearly replaced all other varieties of bearded barley. 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. Our seed is the genuine Wisconsin Pedi-greed of extra fine quality-sure to please. Price; subject to change; see supplement following nage 48

page 48.

Beardless

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. stand up on any land. Sow as early as possible for frost does not hurt it.

Prices; subject to change; see supplement following page 48.

Six Row White (Extra Selected)

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

Price; subject to change; see supplement following page 48.

Barley may be planted either in fall or spring. It winter kills more easily than wheat, however. The straw is somewhat weaker than Barley **Pointers** however. The straw is solution of that reason it is that of wheat or oats and for that reason it is

I of that of wheat or oats and for that reason it is liable to lodge when seeded on moist rich bot-tom lands. On the average it yields three hundred pounds more per acre than wheat and two hundred and sixty-four pounds more than oats. The counties of greatest barley pro-duction in Washington are Columbia, Garfield, Whitman, Lincoln and Walla Walla, ranking in the order named.



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Ask for

TUY'S

CROP BOOK It's FREE with Orders

GROW BARLEY THIS YEAR

ILLYS

WHITE

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BARLEY



in an interval in a subir stabilities a subir particular and

ORDER EARLY The best time to order is immediately after receipt of this catalog. Write TODAY



Shadeland Climax-Tree Oat

The Shadeland Climax is an excellent medium maturing variety leland Climax is an excellent medium maturing variety of Tree Oats. According to a statement made by Mr. C. P. Nairn of Amity, Oregon, who developed this excellent variety, it is a selection of Swedish Select and is now considered one of the standard varieties for Western Oregon where it has given very con-sistent and abnormally large yields. Where quick growth and early maturity are es-sentials, Climax will give a bountiful crop of the finest quality Oats you have ever seen. The white grains are plump, uniformally large, with a very thin hull and are often borne three in a spikelet, which doubt-less accounts for its wonderful vield. So far as our

less accounts for its wonderful yield. So far as our own tests show it does not appear to be injured by early freezing and later drought.

It is considered an ideal variety for planting West of the Cascades and can be sown in either Fall or Spring—in fact, any time the ground is in right shape. In other sections where the climate is more severe it is preferable to plant in Spring. It has yielded over 100 bushels per acre when other Oat crops in the same section suffered severely with drought.

The stock we offer has been grown under our personal supervision and can be recommended with every confidence.

Prices; subject to change; see supplement following page 48.

Victory

Excels Others in Yield on Light Soil

Our tests show Victory Oats to be way ahead of all others in yield on light soils, although Abundance Oats yield about the same yield on light soils, although Abundance Oats yield about the same on heavier soil, and they are not of such extremely fine quality as Regenerated Swedish Select. However, the quality is good, and as productiveness is the most important point with most growers, we highly recommend this variety. Victory is a head oat; the straw is of medium height and is particularly firm and elastic, making it resistant to lodging. The grain is white with a slight reddish shade, and is smaller than Regenerated Swedish Select. Our seed is pure, and is grown with special care, in Western Washington, from seed stock imported from Sweden. Price: subject to change: see supplement following page 48.

Price; subject to change; see supplement following page 48.

Black Alaska A Very Superior, Hardy Black Oat

A hardy black oat, with spreading head, thick, black hull, and large, plump, colored kernels. The straw is large and strong, not liable to lodge, stools dark colored kernels. freely, is a heavy yielder, and is splendid to sow with vetch or field peas to sup-port the vines. It is sometimes sown in fall, but is not so hardy as Gray Winter Oats, and is more liable to freeze out during the winter. Our seed is very su-Price; subject to change; see supplement following page 48. perior.

Banner

A Popular and Productive Variety A very popular white oat, with spread-The ing head, introduced from Scotland. straw is of medium height, and stands up well. The grain is white, with a compar-atively 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; subject to change; see supplement following page 48.

Gray Winter

Especially Valuable for Fall Sowing

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

Price; subject to change; see supple-ment following page 48.

The ONLY WAY to protect or insure your crop in the first instance is by sowing dependable seeds of highest germination-WE HAVE THEM. Mail your order CROP Insurance early





Swedish Select

Swedish Select has long been popular. Our seed is grown in Washington, thoroughly acclimated, from regenerated stock obtained direct from Gartons, Ltd., the well known plant breeders of England.

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. 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 one of the most valuable varieties grown.

Price, subject to change; see supplement following page 48.

Abundance

This is a variety introduced from Scotland, and has made a splendid showing in our seed fields, yielding equal to Victory Oats on heavy soil. It also ranks with the best in trials at the Washington Agricultural Experiment Station. The straw is of medium height, sturdy, and stands erect. It is medium early; has a spreading head; the grain is white and of medium size and weight. Price, subject to change; see supplement following page 48.

Write for SPECIAL PRICES on Large Quantities

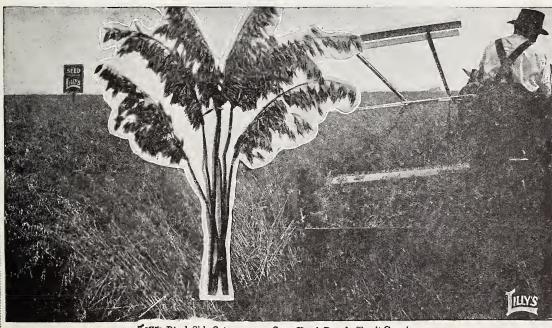
Black Side Oats

Our prediction of last year as to abnormal cropping qualities of this excellent selection has been realized. Our contract crops in 1920 were the talk of the district and everyone who saw them growing was enthused with their exceptionally fine appearance and yielding properties.

At the time of going to press with our catalog we had not received deliveries of all our crops, but John Oakland of Mt: Vernon, Wash., raised OVER 90 BUSH. PER ACRE of this variety and other growers' crops will undoubtedly equal this.

Those of our customers who have hitherto grown the Old Black Tartarian will appreciate this special selection. These Oats were originally picked out from our trials and grown in comparison with others three years ago when they at once outyielded all others. During growth they showed marked characteristics of head and stiff large straw. While it is true that Side Oats do not generally yield as heavily as head oats this selection has proved an exception for two successive seasons. The kernels are larger than other varieties of this type but have a slightly thicker hull.

We have a generous stock, but in view of the exceptionally fine qualities of this Oat there is sure to be a heavy demand. Mail your order early to avoid disappointment, as you cannot obtain Black Side Oats of equal quality elsewhere. Price subject to change; see supplement following page 48.



Black Side Oats grown on Oscar Kamb Ranch, Skagit County.



Eselected Field Corn

Tested for Germination

Varieties Most Suitable for the Northwest

ABOUT OUR FIELD CORN

PLAINFACTS Corn can be grown successfully in the Northwest but the soil and cultivation must be right to ensure satisfactory crops. It is especially valuable as a fodder crop and is unequalled for silage. WE SELECT OUR SEED FROM THE BEST SOURCES OF SUPPLY, AND IT'S GROWN IN THE

RIGHT LATITUDES CTOTORIVE THE NEXT YEAR'S CROP EVERY CHANCE TO RIPEN PROPERLY. Our seed corn is grown for us under the best possible conditions. Consequently it is unusually strong in vitality. It is carefully graded, too, which insures a bumper crop of high grade ears, not nubbins. It is repeatedly tested for ger-mination, so we know that it is right when it leaves our shipping room. A test, to satisfy us, must show a sufficient num-

ber of root sprouts to secure a strong stand and big yield. Remember, it costs as much to plant poor, indifferent seed and to cultivate the ensuing crop as it does to plant LILLY'S SELECTED SEED CORN, which is the best the market affords.

To make sure of getting the right sort of corn for next season's planting, mail your order and remittance at once, stating your planting and soil conditions-we'll hold the corn until you want it sbipped-and send you corn tested right up to date.

Silver King

Silver King is one of the most useful varieties ever introduced. It has been the means of etxending the corn growing industry over a greater amount of new territory than has ever been done by any other single variety. It is particularly adapted for growing in those latitudes where other varieties of corn do not mature satisfactorily. The stalks Generally grow 7 to 8 feet in height with ears $2\frac{1}{2}$ feet from the ground. The ears are 7 to 9 inches long, smooth, straight rowed, and of perfect shape. Kernels are large, pure white and dented.

TILLYS

North Western Dent

This is in a class by itself both as to appearance and earliness and its merits are not sufficiently known and appreciated in the North-west. It is a cross between a Red Flint corn and a White Dent corn and has red kernels with white caps and shading. It is extremely early and productive. Under ordinary circum-stances it will mature in 85 to 90 days and yields from 60 to 80 bushels of corn per acre. As a silo corn Northwestern Dent is very de-sirable for it produces an unusually big amount of good fodder.



The best yellow dent corn for the Northwest. The stalks grow to a good height, producing one or two good ears each. The ears are ten to eleven inches long, fourteen to sixteen rowed, and well filled. The cobs are small and the kernels deep, flinty, slightly dented and of a beautiful golden yellow color. Grown from thoroughbred seed, and is tested for germination.

Pride of the North

This excellent variety has long been the standard corn recommended by the Agricultural Stations as the best yellow dent for Washington and Oregon. The grain is very long, sets close on the cob. It is extremely rich in oil and sugar, goes further in flesh production than ordinary sorts. It matures early and yields heavily. Is especially recommended for silo.

Other Popular Sorts

LEAMING IMPROVED Early Yellow dent; long, narrow kernels.

IOWA GOLD MINE A medium early golden yellow dent corn.

MINNESOTA NO. 23 One of the earliest yellow dent va-rieties. Sometimes called White Cap Yellow Dent.

CHAMPION WHITE PEARL A large, late, white dent corn.

EARLY CANADA An early yellow flint variety.

> KING PHILIP An early red flint corn adapted to the Northwest.

SANFORD WHITE FLINT A reliable, early, large, white flint corn.

MINNESOTA NO. 13 A good, new, large, early, vellow dent corn.

SWEET FODDER CORN Sweet corn; producing nutritious fodder.

RED COB ENSILAGE CORN A red corn for fodder and ensilage.

Prices subject to change-See supplement following page 48.

filly's Silver King



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 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 ex-clusively west of the Cascade Mountains, and in other mild, cool, moist climates, for either spring or fall sowing. Winter Vetch is used east of the Cascades and in climates where the winters are severe and the summers hot and dry, for fall sowing generally and sometimes for spring sowing.

summers hot and dry, for fall sowing generally and sometimes for spring sowing.

(Vicia atropurpurea)

There are so many excellent characteristics and its I here are so many excellent characteristics and the proven sutability to our climatic and soil conditions after several years trial that we confidently recom-mend Purple Vetch to a place on every farm. For Spring sowing it undouhtedly is a strong rival to the Common Vetch and we predict it will ultimately super-ord that ald unity. cede that old variety.

E. B. Stookey, Agronomist, Western Washington Experimental Station, wrote to us July 12, 1920. "The citrus growers of California find that this is

much better adapted under their conditions for green manuring than anything else they have tried. We have grown Purple Vetch here for many years and our average yield per acre is 22 bushels. It is very well adapted to upland and can be depended on to yield ahout this rate. On the lowlands it has a tendency to grow too late in the season, it being much like peas in this respect. A characteristic about this that makes it very desirable for green manuring is the fact that when there is sufficient moisture it will make a much hetter growth at high temperature than any other Vetch."

The seed we offer is produce of our own contract crops grown in Washington and the quality is excel-lent. As there is certain to he a heavy demand please mail order early as stock of the quality we offer is not large.

For price see supplement following page 48.

Winter or Hairy (Vicia villosa) For Fall or Spring East of the Cascades

Winter, Sand, or Hairy Vetch is another legume, similar to Com mon Vetch, and valuable for the same purposes, but it is suitable for climates where the winters are more severe and the summers hotter and drier for fall sowing but it may also be sown in spring.

It makes splendid hay, ensilage, pasture, green feed, and is of special value as a fertilizer. Used as a cover crop for orchards, it prevents washing of the soil during the winter, and when plowed under in spring it makes one of the very best fertilizers, furnishing nitrogen and humus, both of which are needed by the soils in that section. Nitrogen is the most expensive fertilizing element, and is the element most lacking.

The seed of Hairy Vetch is smaller than Common Vetch, and thirty pounds is sufficient to sow an acre. With it should be sown about sixty pounds of wheat or rye to keep the plants off the ground. Price subject to change; see supplement following page 48.

Common, or Spring (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 pasture, ensilage and soiling crop. When sown early in fall it is a splendid cover crop for orchards. It makes excellent ensilage, and dairy cattle prefer the hay to that of red clover. The yield of cured hay is from one

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 in June. It is generally sown at the rate of 60 to 100 pounds per acre, with about 50 pounds of oats, rye, wheat, or barley to support the vines. Price subject to change; see supplement following page 48,



Common Vetch

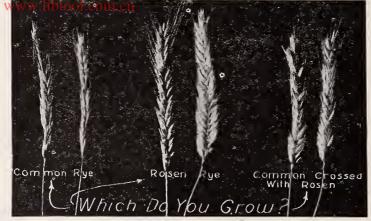
To insure a crop of Vetch, or other legumes, inoculate the seed with Farmogerm.



Rye has been called the "Grain of Poverty" because it is better adapted to poor soil than any other cereal.

The illustration below shows our contract crop of Rosen Rye grown by Dunlap & Gallacher, Mount Vernon, which yielded

18,249 pounds of grain off 10 acres.



E. B. Stookey, County Agent for Thurston County, writes us:

"It is by far the best variety of rye which has been grown at the Experiment Station, at Puyallup, and should rapidly replace other varieties."

We recommend farmers to sow Rye in 1921. It is a reliable cropper and yielder. ORDER EARLY

Rosen Rye

Rosen is a high yielding, heavy stooling, stiff-strawed, hardy winter rye of wide adaptation. Developed from a Russian importation, it was first grown at the Michigan Agricultural College in 1908. The heads of Rosen are large and full bodied with beards of medium length. The kernels are exceptionally large and plump and of light greenish color. As compared to Common varieties of rye, Rosen heads stands at a more uniform level in the field at harvest, resembling wheat in this respect. Common rye has many sterile glumes, resulting in partially filled heads. Rosen has few vacant places in the head but tends to develop a large plump kernel wherever there is room for one.

There is room for one. Rosen Rye produces yields greatly superior to the Common varieties. In 1908 the first Rosen Rye occupied 20 square feet of ground at the Michigan Agricultural College. The 1920 area of Rosen Rye is estimated at 1,000,000 acres. Only a very small per cent is pure. Growers should demand pure Rosen, grown under conditions which prevent crossing by Common Rye. The stock we offer is excellent pure Rosen Wa

The stock we offer is excellent pure Rosen. We recommend early ordering as the demand is sure to be heavy and seed of equal quality will be hard to replace.

Price subject to change; see supplement following page 48.

Petkuser

Our original seed stock was imported from Sweden. From that seed we have grown splendid crops and now have a good stock of seed which is thoroughly acclimated to the Northwest. 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. Price subject to change; see supplement following page 48.

Common Seed Rye

Our seed is specially recleaned, and only the largest and heaviest kernels are retained. Rye is a valuable and hardy crop, providing green foliage 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.



Price subject to change; see supplement following page 48.

Rosen Rye





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, ensilage, or soiling. The grain is a splendid food for hogs, and makes hog-raising possible in this section where it is difficult to mature comproperly. Pea-fed pork is unex-celled. Peas are also the most satisfactory crops for "hogging down". down.

Peas do best when sown very early in Spring. They are sometimes sown in fall west of the Cascades. When sown early they will mature in July, in time to plant the ground to some other crop. They are usually drilled or sown broadcas. some other crop. They are usually utilied of sown broadeners at the rate of one hundred pounds per acre, together with about one hundred pounds of oats, wheat, rye, or barley to support the vines. They produce twenty-five to thirty bushels of grain, or two to four tons of hay per acre.

Like clover, alfalfa and vetch, peas are legumes and valuable as a fertilizer. When peas are grown on land for the first time, the seed should be inoculated with Farmogerm to insure presence of nitrogen gathering bacteria.

Yellow Canadian

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

For prices see supplement following page 48.

Green, or Bluebell

The seed is larger than the Yellow Canadian, and it has a bluish color, but is very similar in all other respects. For prices see supplement following page 48.

Bangalia

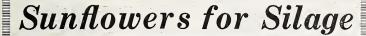
A comparatively new variety which has become quite popular east of the Cascades, as it does better than other varieties on dry land. The seed is rather small, slightly dented or wrinkled, and is of a brownish-green color. For prices see supplement following page 48.

Whip-Poor-Will Cow Peas

Cow Peas are grown extensively in the south for fodder and to plow under for fertilizer. They may be grown in Eastern Washington and Eastern Oregon, but should not be sown until the ground becomes thoroughly warmed in spring. They cannot be grown successfully west of the ascade Mountains.

For prices see supplement following page 48.

GROW



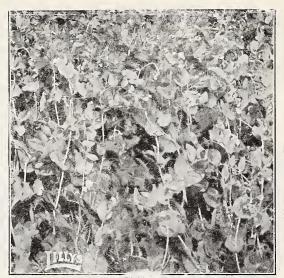
Although the sunflower (Helianthus annus) is a native of North America and has grown in nearly every garden in this country, it is only in recent years that it has been recognized as a forage plant. The earliest record of sunflower cultivation is found in Spain about 350 years ago. In Oregon and Washington some sunflowers were grown in an experimental

way in 1918. The results were such as to stimulate interest, and in 1919 a considerable acreage was planted for silage purposes. The yields were in general very satisfactory, varying from 10 tons per acre, under dry land con-ditions, to 50 tons per acre. In the higher altitudes and under dry farming conditions, the average yields per acre were greater than with any other crop. Our illustration shows a crop grown, from seed supplied by us, on Grant & Reids Farm, Wynooche Valley, on rich, sandy clay loam. Seed sown the middle of May in rows 3 feet apart—plants 6 to 8 inches apart in rows. The crop was cultivated twice during the summer and yielded

31 tons per acre-

The variety we offer is Mammoth Russian. or Giant

For prices see supplement following page 48.



Field Peas

Emmer, or Speltz Produces Good Crops Where Other Grains Fail

It is a species of wheat, resembling two-rowed barley in appearance, and is extremely hardy and drought resisting, making it especially valuable for stock food, either as grain, hay or forage, in dry regions or on poor soils.

It will produce fair crops under almost any condition of soil or climate, but its greatest value lies in its ability to 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 accompanying cut. It is generally sown in spring in the same manner as wheat or barley at the rate of about 100 lbs. to the acre.

For prices see supplement following page 48.





See Supplement Following Page 48 For Prices on Large Quantities

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 twenty pounds per acre; for seed to twelve to fifteen pounds is sufficient. It produces two to five tons per acre of very good hay.

Golden

lden Millet

A medium early variety, growing four to five feet high, and making a very good quality of hay or forage. It will thrive in almost any soil or climate, and

sometimes produces as much as five tons of hay and seventy bushels of seed per acre. Pound, 10c; Postage additional.

Japanese

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. Pound, 10c; Postage additional.

Siberian

A comparatively new variety, imported from Russia; earlier than Hungarian, and very hardy, withstanding more heat and drought than any other variety. It makes a rank growth, with abundance of leaves, and produces immense crops of excellent hay. Pound, 10c; Postage additional.

Hungarian

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 Golden Millet, and requires less moisture. Pound, 10c; Postage additional.

Miscellaneous Field and Forage Seeds

Feterita

A non-saccharine sorghum of special val. ue in the dry farming sections. It is similar weeks earlier. It makes excellent fodder or produces a good yield of grain. Pound, 15c; Postage additional.

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, Pound, 10c; Postage additional.

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. Pound, 10c; Postage additional.

Japanese Buckwheat

Excels all other varieties. The grain is large, it yields heavy, ripens early, stands up well, and the flower is fairly equal to any other. It remains a long time in bloom and is excellent for bee pasture. Pound, 15c; Postage additional.

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Sunflower

The seed is excellent poultry food, when mixed with grains, and should be more generally grown by poultrymen. Pound, 15c; Postage additional.

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.

Pound, 15c; Postage additional.

Early Amber Sorghum

hum syrup, also a splendid summer for. age cop for cows; very sweet, rich and succulent. Should not be planted until the weather is thoroughly warm in spring. Pound, 15c; Postage additional.

Soja, or Soy Bean The beans are valuable for both human

and stock food, also for the oil which they contain. They are not yet grown very ex-tensively in this country, but great quan-tities are imported from Asia. The plants are also grown for forage and green man-ure, similar to Cow Peas.

Pound, 15c; Postage additional.

"OURS POPS"-AND POPS LARGE

Corn for

Remember the children-Let them have some corn to pop. Ours is the earliest variety and is thoroughly matured grain for the Popping purpose. Pkt. 15c, 1 lb. 25c, Postpaid.



TO SPORTSMEN

Game Commissioners and

Owners of Game Preserves

Wild Rice

Wild Celery

Seeds and Plants YOU need these plants to

Seeds may be sown in Early Fall or Spring-Plants may be set out in May or June. We can make

WRITE FOR PRICES AND FULL

CULTURAL INSTRUCTIONS

prompt shipment from growers.

other Waterfowl.

attract Wild Ducks and

Farmer Freeman Says MORE RO

It is a regrettable fact that Farmers and Stock raisers in this Western country do not fully appreciate the great value of Mangels for feeding Cattle, Sheep and Hogs. There is no question whatever as to the desirability for their more general use. In Great Britain and in Nact all other Office of every farm. Mangels are considered indispensable where stock of any kind is kept. From an econominangers are considered indispensable where stock of any kind is kept. From an economi-cal point of view the Mangel crop is one of the most profitable on the farm as is amply dem-onstrated by the immense yields which are produced from an acre at very little outlay either in material or labor. 18 to 20 tons of roots per acre is not unusual, some of the roots weighing from 20 to 30 lbs. each. We earnestly recommend every farmer to put in an acre or two of Mangels this season as we are confident the results will more than justify the outlay.

Ruta Baga, or Swedish Turnip King of Swedes

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 de-sirable for table use. Its large size, productiveness, hardiness and splendid keeping qualities make it the most valuable variety for winter feed for stock. Pkt., 10c, Oz., 20c, ¹/₄ lb., 45c lb., \$1.25, 10 lbs., \$12.00, Postage extra.

American Purple-Top Improved

An excellent variety for either table use or stock. The fiesh is yellow, solid and weet. It is of nearly globular shape, very large, immensely productive, and a good keeper. Pkt. 5c, Oz., 15c, ½ lb., 40c, lb., \$1.26, 10 lbs., \$11.50, Postage extra.

Monarch, or Tankard Ruta Baga

Rotate Your Crops -Grow

Roots This

Year

tankard shaped, with small neck and tops. The color is purplish-red above ground, yellow below. The flesh is yel-low, fine grained and sweet. Very productive and a good keeper.

Pkt., 5c, Oz., 15c, ¼ lb., 40c, 1 lb., \$1.25, 10 lbs., \$11.50, Postage extra.

Garden Helps

The planting and cultiva. tion of root crops, as well as tion of root crops, as well as garden vegetables, is made easy and pleasant, and the expense is reduced, by the use of the Hudson Garden Implements listed else-where in this catalog. They do away with the back-breaking labor, do the work more quickly, and do it better. They will do more than

more than pay for t h e m selves the first season.

> Protect Your Root Crops with ILLY'S Maggot Bait See Page 86

King of Swedes

The Best Variety for Stock Feeding

Lilly's Select Stock Mastodon Carrot is undoubtedly the best variety for stock feeding. It is immensely productive, and on account of being half-long is much

easier to harvest than the long varieties. The roots are seven to nine inches long, reasonably smooth, very heavy at the shoulder, tapering regularly to a point. The color is creamy white. The flesh is white, solid, crisp, and of excellent quality for stock feeding. Not recommended for table use. Carrots require rich, well tilled soil, and under favorable con-ditions often yield as much as twenty-five to thirty tons per acre. They

are splendid stock food, and should be more generally grown for that purpose. Pkt., 5c, Oz., 15c, ¼ lb., 35c, lb., 95c, Postpaid. 10 lbs., \$9.00, Postage extra.

Write for prices on large quantities.





Mangel

The stocks we offer are grown by ourselves on Puget Sound, therefore we know they are true to name and type. We have found that the Puget Sound country produces very high grade root seeds, quite equal, and in many respects superior, to those formerly imported from Europe. There is no need for you to plant imported seeds from other sources local when you can get home grown stock of such excellent quality as we offer in this catalog. Help us encourage local industry.

www.libtool.confeet Danish Sludstrup 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 variety, and is undoubtedly the best variety grown. Our original seed stock was procured from Denmark, where the variety has been awarded a first-class certificate by the Danish Government. 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..30c, | lb..45c, 10 lbs., \$4.20, 25 lbs., \$9.50 100 lbs., \$35.00, Postage or freight additional.

Giant Intermediate, or Gate Post

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., 33c, 1 lb., 50c, 10 lbs., \$4.25, 25 lbs., \$10.00, 100 lbs., \$38.00, Postage or freight additional.

Half Sugar Mangel

Combines the size of mangel with the great food value of the sugar beet. The flesh is white, firm, crisp and is greedily eaten by stock.

Pkt., 10c, 1/2 lb., 35c, 1 lb., 55c, 10 lbs., \$5.00,

Postage additional.

Long Red

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, 1/2 lb., 35c, 1 lb., 55c, 10 lbs., \$5.00, Postage additional.

Golden Tankard

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

Pkt., 10c, 1/2 lb., 35c, 1 lb., 55c, 10 lbs., \$5.00,

Postage additional.

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., **35c**, 1 lb., **55c**, 10 lbs., **\$5.00**, Posterge additional

Postage additional.

Royal Red

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, 1/2 lb., 35c, 1 lb., 55c, 10 lbs.. \$5.00,

Postage additional.

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, 1/2 lb., 38c, 1 lb., 60c, 10 lbs., 55.50,

Postage additional. YELLOW GLOBE Noted for its small top and as it almost sits on the soil lifting the crop involves the minimum of expense The skin is an attractive golden yellow. The flesh is fine grained and nutritious.

Pkt., 10c, ½ lb., 35c, 1 lb., 55c, 10 lbs., \$5.00, Postage additional.



A crop of THY'S Danish Sludstrup Mangel showing roots ready for selection



Golden Giant

FORAGE CROP SEEDS

You can't grow a crop that will pay you better profits than Rape. As a forage crop, this great annual is in a class by itself. Hogs and sheep take to it eagerly and put on big gains rapidly. It is usually ready for feeding seven weeks after planting and will produce first-class pasture long after all other green forage has been destroyed by frost, it is particularly useful when other green food is scarce during the dry season in summer and early fall. Rape is easily grown and thrives in almost all soils in the United States and Canada. It can be sown at any time from early spring until August. Planted in cornfields at the last cultivation, it grows to a height of 18 or 28 inches and furnishes splendid fall feed. It thrives best in cool weather and is especially adapted to our climate on the Pacific Coast. It is also frequently sown with oats and other small grain and does not interfere with either the yield or harvesting the grain, but produces a splendid rape crop afterwards; 3 to 5 lbs. of seed is usually sown to the acre. Sow some

of it this year and get big yields of succulent forage for your live stock. 1 lb., 15c, 10 lbs., \$1.35, 25 lbs., \$3.25, 100 lbs., \$12.00,

A fine crop of Thousand Headed Kale

Postage or freight extra.

Ask for TILLY'S CROP BOOK FREE with orders

🕮 Thousand Headed Kale

Supplies Green Food for Cows, Sheep, Hogs, and Poultry During Winter Supplies Green food for Lows, Sneep, flogs, and Foultry 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 feeding. 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. Feeding this plant by stripping off the lower leaves is not recommended as regular practice, as it is extremely laborious, especially during wet

weather, puddles the soil badly and causes the stripped plants to suffer from frost. Oz., 10c, ¼ lb., 25c, | lb., 80c, 10 lbs., \$7.50, Postage extra.



is better equipped than ever to serve you. OUR A generous stock of all leading varieties of seeds is available for immediate supply YAKIMA STORE throughout the sowing season.

1921 Annual

Marrow Cabbage (Chou moellier) White Stemmed

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. Oz., 20c, 1/4 lb., 60c, 1 lb., \$2.25, Postage extra.

Produces Great Weight of Leaves

Grows the Same Weight of Stem as Kohl Rabi

Marrow Cabbage



FEED THE SOIL THAT FEEDS YOU FEEDS Y

WHAT ARE COMMERCIAL FERTILIZERS

There are ten essential plant food elements. No plant will thrive unless all of these are present in the soil. They are: CARBON, HYDROGEN, OXYGEN, IRON, MAGNESIUM, SULPHUR, CALCIUM, NITROGEN, PHOSPHORIC ACID and POTASH. Of these Carbon, Hydrogen and Oxygen are obtained freely by the plants from the air and water in the soil. Iron and Magnesium are volund antity in all soils, while Nitrogen, Phosphoric Acid and Potash are generally not very plentiful in available form in either water or soil. From this we see that we are really little concerned with the first five elements, that the sixth and seventh are only occasionally of importance, but that the last three NITROGEN, PHOS-PHORIC ACID and POTASH should have our constant attention. It is these three elements that you are interested in when you buy Commercial Fertilizers.

WHY USE THEM? THIRD:

FIRST: Because it costs 10 more to plant, cultivate and harvest a full crop than if does a half croo. and COMMERCIAL FER-TILIZER properly used Insures humper crops.

SECOND:

Because if a crop is healthy and makes a vig-orous growth it is not nearly so likely to be hampered by attacks of insects and other pests.

Because where COM-MERCIAL FERTILIZER is used the yleid is not only greater in volume but also invariably of much better quality and there-fore of higher market value.

FOURTH:

Because COMMER-CIAL FERTILIZER re-leases and makes avall-able much plant food that is already in the soil thru its chemical action.

FIFTH:

Because every crop takes from the soil a certain from the soil a certain amount of each element of plant food. If this is replaced by applying COMMERCIAL FERTIL-IZERS the soil will be improved each year instead of deteriorating.

Chemical Fertilizers

Chemical Fertilizers contain only the one element and are consequently not complete fertilizers. They produce wonderful results when properly used, but you should experiment and study the matter carefully before investing in large quantities. Many persons know only of SUPERPHOSPHATE as a commercial fertilizer and apply it promiscuously on any soil or crop and if it does not produce the desired results they condemn commercial fertilizers in general. Most soils contain sufficient quantities of one or two of the three elements necessary and by experimenting you can ascertain which is lacking and add only that one.

Nitrate of Soda

Guaranteed Analysis: Nitrogen, 13%

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. pr 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 vege-tables, 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 questy. An arcce on the use of Nitrate of Soda is con-tained in our crop book, a copy of which will be furnished with any order if requested. Packed in 200-lb, bags.

For price see supplement following page 48.

Sulphate of Ammonia

Guaranteed Analysis: Nitrogen, 20%

Slower in action than nitrate of soda but more suitable for application during wet weather. Should be used only on soils that contain plenty of lime. Packed in 200-lb. bags. For price see supplement following page 48.

Superphosphate

Guaranteed Analysis: Phosphoric Acid, 17%

This is what is known as acid phosphate, being phosphate rock treated with acid to make the phosphoric acid avail-able. While the Phosphoric Acid in this is not so valuable as that in Bone Meal, it is more quickly available and in some cases more useful. Superphosphate is recommended as a top dressing for grass lands and grains. It is general-ly used at the rate of 300 to 600 lbs. per acre. Packed in 125.lb. bags.

For price see supplement following page 48.

Muriate of Potash

Potash Salts are especially valuable in Western Wash-ington and the Willamette Valley, where most of the soil is very deficient in potash. It is much used by fruit growers, especially for berries, and in addition to increasing the yield, makes a marked improvement in the quality and color of the fruit. As it makes the fruit more firm, it stands shipping better.

Stable manure contains only a small percentage of potash, and the efficiency is greatly increased by adding potash salts.

An average application for most purposes is about 200 lbs. per acre.

Contains 50% pure Potash. Packed in 200-lb. bags. For price see supplement following page 48.

Lime in Soils

The application of lime to soil brings about beneficial results in several ways, it stimulates the proper decomposition of the organic matter in the soil, neutralizes acids, supplies growing plants with calcium, improves the physical conditions of heavy soils by its chemical action, and makes dormant plant food available.

Ground Lime Rock

This is the best form of lime for sweetening sour soil. It is fully 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, and until the acid is neutralized with lime, fertilizers will be of little benefit. For ordinary cases a ton of ground lime rock per acre will be sufficient. In case of extreme acidity larger quantities will be required. Packed in 100-lb. bags only.

For price see supplement following page 48.

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 an unavailable form, and is very beneficial to clover, alfalfa, peas, beans, and other legumes, because of the sulphate it contains. It is sown broadcast at the rate of one hundred to five hundred pounds per acre. Packed in 100-lb. bags only.

For price see supplement following page 48.

Hydrated Lime

This is ordinary Lime stone that has been air-slaked. Packed in 50-lb. sacks only. For price see supplement following page 48.



AN INVESTMENT Fertilizers INCREASE PROFITS NOT AN EXPENSE Fertilizers ALWAYS RELIABLE

Animal fertilizers, being made from animal matter, add warmth and life to the soil. Most of them contain both ni-trogen and phosphoric acid, but do not contain potash, so that to make them complete it is necessary to add the proper proportion of chemical fertilizer. Many people think that any kind of commercial fertilizer will give the desired result but that is wrong. For instance, on certain soils and crops nitrogen and phosphoric acid as found in blood and bone is most valuable while under other conditions superphosphate and nitrate of soda are much better. To decide which to use requires study and experience.

ww.libtool. Animal Fertilizers

📖 Sheep Guano

Guaranteed Analysis: Nitrogen, 2%; Phosphoric Acid, 2% Pure sheep manure is the best and strongest natural fer-

tilizer. It contains a high percentage of nitrogen and phosphoric acid, and a liberal supply of potash. To retain this high value, it must be properly handled, or the value will be lost. It is kiln dried and finely pulverized, making it very concentrated and convenient to use. Packed in odd weight bags. For price see supplement following page 48.

Bone Meal

Guaranteed Analysis: Nitrogen as Ammonia, 2½ to 3%; Phosphoric Acid, 18 to 22%

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. The amount to apply depends upon the purpose for which it is used. Packed in 10-lb. cartons and 100-lb. bags.

For price see supplement following page 48.

Complete Fertilizers

Complete Fertilizers are those containing the correct proportions of the three essential plant food elements, Nitrogen, Phosphoric Acid, and Potash, required for the average crop on ordinary soil. Different crops require greater or lesser quantities per acre but the proportion usually remains the same. For best results and the convenience of our customers we mix different ANIMAL and CHEMICAL FERTILIZERS into a complete Fertilizer known as LILLY'S MORCROP FERTILIZER (described on inside back cover) which is strongly recommended for best results in general farm and garden uses. Then when experience proves that the crop we are growing draws excessively on one element or that the soil is deficient in one or more elements the required Chemical Fertilizer can be added as found necessary.

Government Experiments with Commercial Fertilizer

Experiments in the use of commercial fertilizer on vegetables by the Department of Agriculture brought out some remarkable comparisons. On one acre of cabbage without commercial fertilizer 910 prime heads were se-cured, and when commercial fertilizer was applied 7580 perfect heads were the result. The extra cost was \$7.00 per acre or \$54.00 profit 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. Advance a step in your knowledge of commercial fertilizer this year, make use of a sack or a ton or more according to whether you feel you are experimenting or getting results.

Fish Fertilizer

Guaranteed Analysis: Nitrogen, 10%; Phosphoric Acid, 8% Made from salmon fish scraps, and will produce wonderful results on any crop where an abundance of surface growth is desired. It is splendid for lawns, though the odor is somewhat objectionable. Usually applied at the rate of 400 to 800 lbs. per acre. In 100-lb. bags only.

For price see supplement following page 48.

Blood and Bone

Guaranteed Analysis: Nitrogen as Ammonia, 4%; Phosphoric Acid, 11%

A quick fertilizer and for that reason more valuable than bone meal for some purposes, although the effect is not so lasting. It should not be applied a great length of time before the seed is planted, and is most useful as a top dressing. It is usually applied at the rate of 500 to 1000 lbs. per acre. Packed in 100-lb. bags only.

For price see supplement following page 48.

Dried Blood

Guaranteed Analysis: Nitrogen as Ammonia, 15%

A very effective and quick acting form of nitrogen, gen-erally 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.

For price see supplement following page 48.

INSURE YOUR CROP

If you are going to plant legumes such as Alfalfa, Clover, Peas, Beans, Vetch, etc., you can insure a catch and vigorous growth by the use of nitrogen gathering bacteria of the right kind.

The Standard Inoculation



is a pure culture or growth of nitrogen fixing bacteria is a pure culture or growth of nitrogen hing 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 are the plants as they grow supplied with nitrogen but large quantities are left in the ground for the following crops. We can furnish it for Alfalfa, Red Clover, Alsike, White Clover, Sweet or Bokhara Clover, Garden Peas, Field Peas, Sweet Peas, Cow Peas, Vetches and Beans. When ordering he sure to mention which of these

When ordering be sure to mention which of these you intend using it on, this is important. Write for Write for pamphlet of information.

Garden size. 50c; Acre size, \$2.00; 5-Acre Price: size, \$8.00. Postpaid.

Farmogerm is put up in glass bottles with patented stoppers which keep these cultures strong and virile indefinitely.





Dairy Feeds

Produce the Maximum Milk at the Minimum Cost

libtool.com.cit's the quality that determines the price

Investigators have been conducting tests for many years in order to learn the amount of digestable protein, carbohydrates and fat best suited to dairy cows under average conditions. The results from various foods and varying amounts have been studied in thousands of animals. Taking into consideration the findings of the experimenters, we have been able to put upon the market Dairy Feeds second to none. They are designed especially to increase the production of milk to the maximum by supplying the necessary amount of protein, carbohydrates and fat required to bring the average farm roughage to a balanced ration. They are palatable, nutritious, and are easily digested, and will keep cows in the best of condition, all during the lactation period.

"The Edelweis Dairy of Portland, Oregon, feed it exclusively to their entire herd of the entire Northwest for milk production at the Northwest Live Stock Exposition in Portland last year while feeding it."

Until Lilly's Dairy Feeds have been used, it is impossible to estimate their value, and the price is so reasonable that they should always be used instead of plain mill feeds. They have from ten to twenty per cent greater food value than shorts or bran, and are manufactured from high grade products. They are uniform in quality and can be depended upon to give excellent results. Lilly's Dairy Feeds have found a ready sale among dairymen, and our trade has increased steadily ever since they were first put on the market. For prices see supplement following page 48.

📖 Alfalfa Meal

Lilly's Alfalfa Meal is prepared especially for us from the best grade of Alfalfa kiln dried and ground to a coarse meal. It is very high in protein, about the same as mill feed, and is a splendid adjunct to the grain ration. It may be fed alone or mixed with other foods, either dry or moistened with water or steamed. Packed in 100-lb. sacks only.

For price see supplement following page 48.

📖 Steam Dried Beet Pulp

Beet pulp has become a staple food for stock and poultry. It is a great producer of milk and eggs, when judiciously fed in connection with other foods. It has a particular value in the fact that it may be quickly con-verted 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. It is best fed moist. In 100-lb. sacks only. For price see supplement following page 48.

Whole Feed Barley

Good Barley is recognized among feeders as equal to corn for the feeding of all kinds of live stock. Packed in 100-lb. sacks only.

For price see supplement following page 48.

Rolled Barley

Good clean plump barley rolled to help mastication and make it more easily assimilated by the animals. Packed in 80-lb. sacks only.

For price see supplement following page 48.

Eround Barley

Dairymen know the value of ground barley in the ration. It is high in milk producing elements, and is especially beneficial to cows fed heavily on roots or silage since it counteracts their laxative influence. Considered equal to corn for hog feeding. Being a heavy feed, it is best mixed with other less concentrated feeds. Packed in 100-lb. sacks only.

For price see supplement following page 48.

📖 Corn Feed Meal

Corn Meal is a heavy rich feed, and should always be mixed with other less concentrated feeds. It is a more economical fattening feed than whole corn, and is relished by live stock and poultry. Packed in 100-lb. sacks only. For price see supplement following page 48.

📖 Alfalfa Molasses Feed

This is the best grade of Alfalfa Meal mixed with a high quality of feed molasses. In this manner both the palatability and the feeding value are increased to a remarkable degree.

Under the Washington State Feed Laws it is unlawful to sell Alfalfa Molasses Feed in the state, as it contains more than 10% crude fibre and is classed with the mixed feeds. __Shipments from our Portland, Oregon, Branch feeds. Shipments from our only. Write them for prices.

📖 All Grain Chop Feed

Only the best oats, barley and corn go into our chop, for we know that it does not pay to economize by feeding poor chop. Packed in 80-lb. sacks only.

For price see supplement following page 48.

Whole Feed Oats

Whole Oats show a higher percentage of digestible pro-tein than does corn, and is usually preferred as horse feed. Packed in 100-lb. sacks only.

For price see supplement following page 48.

Rolled Feed Oats

Is a better feed than whole oats for hogs and dairy cows. We roll only good plump oats. Packed in 70-lb. sacks only.

For price see supplement following page 48.

Ground Oats

Has a very high value as a milk producing feed, and ten per cent greater fattening qualities than mill feed. It is better than whole oats for hogs and cows, and is best mixed with other feeds. Packed in 80-lb. sacks only. For price see supplement following page 48.

Naturally we sell for less in large quantities. If you can use a ton or a carload of any kind of feed let us quote you a special quantity price. We grind and mix all our own feeds. WRITE US-IT PAYS.



Stock Feeds ILLYS CALF MEAL

Cheaper and Better Than Milk

Weaning time for calves often proves their undoing. This is not to be wondered at when we consider the drastic charge that usually takes place at that time from a diet of mother's milk to the food commonly supplied. Calves eat Lilly's Calf Meal with great relish, and thrive upon it even better than upon whole milk. If fed in a sanitary manner, they will not be troubled with scours or constipation. The use of Lilly's Calf Meal has become very general, and is increasing rapidly. We have never heard of a case where a farmer after using Lilly's Calf Meal has reverted to the old method of raising calves. Lilly's Calf Meal is made from the best materials, correctly blended, thoroughly cooked, and the food values and constituents are about the same as of whole milk, 25% protein, and the food values and construents are about the same as of whole mink, 27% protein, 50% carbohydrates. One pound of Lilly's Calf Meal makes one gallon of milk substitute fully equal to whole milk for raising calves. A valuable instruction sheet on raising calves without milk is enclosed in every sack or will be sent free upon application. Packed in 25-lb. and 100-lb. sacks. For price see supplement following page 48

ILLY'S LAMB MEAL

Saves the Orphans

Ever since Lilly's Lamb Meal has been in use, it has become increasingly popular with sheep breeders. The use and benefits of Lamb Meal are quite similar to Calf Meal. The quantities fed and the number of meals per day vary according to whether the lambs are to be raised entirely on the meal or whether it is used only as an auxiliary feed. We number many large sheep men among the enthusiastic feeders of Lilly's Lamb Meal, and can point to some of the finest prize winners as Lilly's Lamb Meal Babies. Feeding in-structions in each sack. Packed in 25-lb and 100-lb. sacks.

For price see supplement following page 48



Makes Weaklings Thrifty

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 Lilly's Fig Meal is a perfect substitute for sows milk. It is appending, the pigs like it, and they will thrive upon it and continue to grow without any check. Produces rapid growth of bones, muscles 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. Feed as much as the pigs will eat greedily, or enough to keep them in good growing condition, commence feeding a little before the sow is ready to wean the pigs and continue until they are able to thrive upon other foods, reducing the quantity gradually. Feeding instructions in each sack. Packed in 25-1b and 100 the carbs. 100-lb. sacks. For price see supplement following page 48

MAKEMFAT HOG FEED

Makes Big Hogs of Little Pigs

Lilly's Makemfat is a high protein feed, contains abundance of mineral nutrients, more fat than in farm grown grain, and our tests have proven it superior to any other hog feed we have heretofore offered. It is palatable, has the proper laxativeness which is essential and prevents constipation usually resulting when wheat, barley, corn or other grains are fed alone. This feed is highly digestible, reasonable in price and contains well balanced proportions of digester tank-age, oil meal, grain and cereal products. Many of the larger hog raisers use and boost LILLY'S Makemfat Hog Feed, which proves conclusively that the re-ults obtained prove our claims for it. Packed in 100-lb. sacks only.

For price see supplement following page 48

DIGESTER TANKAGE

Digester Tankage is very high in concentrates, and it takes but a very small amount to balance a ration up to the proper protein content. It is used to a 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. Packed in 100-lb. sacks only.

For price see supplement following page 48

GROUND FLAX SEED

Flax seed has been a favorite conditioner among horse and cattle men from time immemorial, and is without cuestion one of the safest. Lilly's 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. Packed in 100-lb. sacks.

For price see supplement following page 48

COCOANUT MEAL

Used extensively by dairymen along the Pacific Coast. It may be used with advantage for swine and sheep, serving also as a part of the work horse ration. Packed in 100-Ib. sacks only.

For price see supplement following page 48



OIL CAKE MEAL

Oil Cake Meal is another highly concentrated 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 overfeed any food that is high in protein. It makes a sleek coat and is slightly laxative. It should be mixed with other foods. Packed in 100-lb. sacks.

For price see supplement following page 48

SOY BEAN MEAL

Soy Bean Meal averages forty per cent protein, and should be a part of every ration fed to all live stock, on every farm in this section, for nothing we can offer will show a higher food value in proportion to its cost. 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 a fine meal for mixing in mashes. Sheep and poultry men should write us for prices on large quantities. Packed in 100-lb. sacks.

For price see supplement following page 48

PRICES OF LILLY'S FEEDS CHANGE

The prices of all Lilly's feeds change with the markets and those shown on our supplement may not prevail when your order reaches us. It is always best to get current prices before ordering. A postal brings them.



THE BEST CALF MEAL

MADE-ALWAYS FIRST



100 LBS

I have been using your Chick Food and I never saw anything like it. The best yet for chicks. J. E. VAN HORN, Mar. 16, 1920. Aberdeen, Wash

Poultry Feeds

HOLLY CHICK FOOD Results Have Proven Its Value

In selecting a ration for baby chicks, it must be borne in mind that they are infants, and that their digestive organs are extremely delicate. We cannot expect them to thrive income foods that are unsuitable, unpalatable, and hard to digest. The food must be easily digested, must not contain anything that will be irritating, and must contain the correct elements to build bone, muscles, blood and feathers, without forcing of fattening. Wheat is the basis of our chick food—not corn and millet as many use. Lilly's Holly Chick Food is undoubtedly the most popular on the market today, it is the original dry grain chick food. The foundation of our success in manufacturing mixed poultry foods and the standard by which every other chick food is judged. Lilly's Holly Chick Food is composed of cracked grain graded to the proper size for baby chicks, and contains correct elements in the right proportion to form an ideal and complete ration when fed in connection with Lilly's Chick Mash. Full directions for caring for baby chicks are contained in builetin number 100, which will be sent free upon request to any address. Packed in 10, 25 and 100-lb. sacks. For price see supplement following page 48

GROWING FOOD Keeps Growing Birds Active

Lilly's Growing Food is a mixed scratching ration composed of the proper grain feeds in the correct proportion. Can be converted into bone, muscle and flesh in the shortest possible time, and consequently with the least expense. Growing food should be fed beginning about the fourth or fifth week, depending largely upon the size and vigorousness of the chicks. At that age, they have 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 Growing Mash. These are to be fed together as the combination will produce broilers or laying pullets in the least possible time at a minimum expense. Practical poultry men know the value of this, and realize that their profits depend upon feeding growing food and growing mash at this stage of the chick's life. Bulletin No. 100, telling how to feed it, free upon request. Packed in 10, 25 and 100-lb. sacks. For price see supplement following page 48

SCRATCH FOOD The Standard Mixed Grain Food

The term "Scratch Food" as applied to poultry feeds was originated by Lilly's and our Scratch Food is composed of clean, whole grain properly proportioned to supply the necessary protein, carbohydrates and fat according to season. In summer when the weather is warm, we cut down on the corn and other heat and fat producing grains. In the winter time we increase these amounts. Attention is paid to the number of yclks and whites a ton of Lilly's Scratch Food will produce, and if scratch is varied in any manner, Lilly's Egg Mash is also changed accordingly so that the poultry men feeding our egg foods are assured of a real balanced ration. Care should be taken not to feed too heavily of scratch food, so that fowls will clean up every grain. If fowls are fed so heavily as to leave barley and kaffir corn untouched, it is because they are securing sufficient food in the way of corn and wheat. Do not let the fowl feed according to her man's care on a forced ration, she can be made to produce up to 300 eggs or over per year. This ought to be sufficient reason for scientific feeding. Insist on Lilly's Scratch Food, it is easily the cleanest scratch on the market. Packed in 10, 25 and 100-lb. sacks. For price see supplement following page 48

RECLEANED FEED WHEAT

Contains only bright, well ripened grain. Packed in 125lb. sacks only.

For price see supplement following page 48

CLIPPED BARLEY

Recleaned whole barley with the beards closely clipped for poultry feeding. Packed in 110-lb. sacks only. For price see supplement following page 48

POULTRY OATS

A special grade of short, plump, high germinating oats with thin hulls especially selected for sprouting and poultry feeding. Packed in 100-lb. sacks only. For price see supplement following page 48

📖 KAFFIR CORN

Clean, ripe, kaffir for poultry feeding. Packed in odd weight sacks only. For price see supplement following page 48

FEED BUCKWHEAT

A good grade of buckwheat recleaned for feeding purposes. Packed in odd weight sacks only.

For price see supplement following page 48

HOLLY PIGEON FOOD

is composed of various grains and feeds pigeons relish and thrive upon. This mixture contains no grit, shell, charcoal or salt. Packed in 10, 25 and 100-lb. sacks. For price see supplement following page 48

WHOLE CORN

Good, heavy, yellow, Eastern grown corn. Packed in 110lb. sacks only.

For price see supplement following page 48

CRACKED CORN

Crushed yellow, Eastern corn with all the fine particles cleaned out. Packed in 100-lb. sacks only.

For price see supplement following page 48





Poultry Mashes LILYS CHICK MASH

An Ideal Starting Mash for Chicks No poultry man should attempt to raise chicks without the use of Lilly's Chick Mash. No poultry man should attempt to raise chicks without the use of Lilly's Chick Mash. With modern methods of raising chicks in large numbers, comes the necessity of sys-tematizing methods that labor and expense may be reduced, to accomplish this, the poultry men have generally adopted mash in connection with grain food. Lilly's Chick Mash is carefully prepared from suitable ground grain and animal matter for the require-ments of tender chicks. This mash is designed to be fed dry in hoppers, but if pre-ferred, a moist mash can be fed every day or so. Add just enough water or buttermilk to make it crumbly. (Ask for free bulletin number 100 on baby chicks, contains much valuable information.) Packed in 10, 25 and 100-lb. sacks.

For price see supplement following page 48

GROWING MASH Makes a Quick, Healthy Growth

After the chicks are five to seven weeks old, they can assimilate a somewhat more fibrous food, and a change should gradually be made from Lilly's Chick Mash to Lilly's Growing Mash. Mash foods are easily assimilated by the growing chicks, and consequent-ly maximum growth is secured in the quickest time by the feeding of mash. Packed in 10, 25 and 100-lb. sacks. For price see supplement following page 48.

EGG MASH For Maximum Egg Production

All authorities agree that in order to secure the maximum number of eggs from fowls, it is absolutely necessary that mashes high in protein constitute at least fifty per cent of their food. Composed as it is of clean, fresh, easily digested foods such as fish meat meal, soy bean meal, cocoanut meal, feed corn meal, pea meal and cereal products, no poultry man get the maximum amount of eggs, unless he uses it. Fed with Lilly's Scratch Food, it is only necessary to supply green food, grit, shell, charcoal and water to complete the ration for maximum results. Packed in 10, 25 and 100-lb, sacks. For price see supplement following page 48

MILK MASH The Great Health Food

Will give you maximum results throughout the lifetime of your birds. For growing chicks and laying hens, it is un-excelled, because it insures health and vigor in the flock. The lactic acid in the buttermilk besides being easily digested and highly nutritious acts an an appetizer tonic and stimulant, and is an excellent conditioner. It is economical and safe to feed, as the buttermilk we use in preparing this mash, does not contain chemical preservatives, and is thoroughly wholesome. Put up in 100-lb. sacks only. For price see supplement following page 48

MOLTING MASH

A great need has been felt for years for some prepared food that would aid chickens in growing feathers after the annual molt. We have prepared a molting mash that will assist materially in bringing hens through the molting period easily and quickly. Packed in 100-lb. sacks only.

For price see supplement following page 48

BLOOD MEAL

Blood Meal is richer in protein content than any other food used for poultry, therefore it is necessary to use great care in feeding it. Packed in 100-lb. sacks only.

For price see supplement following page 48



FATTENING MASH

HIGH PROTEIN

MANUFACTURED BY

THE CHAS. H. LILLY CO.

PORTLANS

SEATTLE

Lilly's Fattening Mash consists of the correct materials in the right proportion to produce the greatest amount of flesh in the shortest possible time, and at the same time keeps the birds in perfect health. It is to be fed in the form of a soft mash. Packed in 100-lb, sacks only.

For price see supplement following page 48

Darling's HIGH PROTEIN MEAT SCRAPS

These were the first high grade meat scraps manufactured and among the few to be maintained at their standard of excellence. The protein content is guaranteed by us not to be less than fifty per cent. Packed in 100-lb, sacks only.

For price see supplement following page 48

I MEAT SCRAPS The Quality Meat Food

When confined, birds must be provided with animal matter in some form. The most convenient and usually the cheapest form is a good grade of meat scrap. Lilly's Meat Scrap is the best grade of Western commercial scrap that it is possible to get. Packed in 10, 22 and 100-lb. sacks.

For price see supplement following page 48

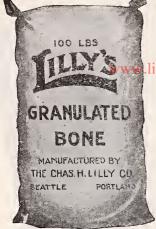
FISH MEAT MEAL

High in Protein, Low in Cost Fish Meat Meal is an excellent and economical meat food for poultry. It is used by most of the prominent poultry men, and is endorsed by the ex-periment stations. Lilly's Fish Meat Meal is a clean, wholesome product, very high in protein, considerable higher than most meat scraps, and all the protein that it contains is in available form. Packed in 10 and 100-lb. sacks. For price see supplement following page 48

LESSONS

As the name implies, these are the leaves and blossoms of Alfalfa stripped from the stems, dried and finely cut for poultry feeding. 50-lb. sacks only. For price see supplement following page 48





Grit, Shell, Bone and Charcoal

GRANULATED BONE

For Eone, Muscle and Feather Building

btoolily 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 sizes for poultry. The moisture is extracted, leaving the phosphates, lime, protein and fats. It will keep indefinitely if stored in a dry place. Scratch food size. Put up in 10 and 100-lb. bags.

For price see supplement following page 48.

GRANULATED CHARCOAL

For Poultry, Hogs and Other Stock

Charcoal is valuable as a regulator, blood purifier, aid to digestion, and a preventative of bowel trouble. It is equally valuable for hogs and other stock. Made from soft wood. It is screened to two sizes: Coarse Granulated Charcoal for hens, hogs, etc., and fine Granulated Charcoal for chicks and other young poultry, and for mixing with mash foods. Please state which is wanted. Put up in Cartons (about 4 lbs.), and 50-lb. bags.

For price see supplement following page 48.

CRYSTAL GRIT Aids Mastication

Lilly's Crystal Grit is as hard as flint, clean and of uniform size. 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 two sizes, fine for chicks and ducks; coarse for mature fowls. Put up in 10 and 100-lb. bags.

For price see supplement following page 48.

ILLY'S EASTERN OYSTER SHELL

Lime In Its Best Form

Shell is valuable in proportion to the amount of lime it contains. Our Eastern Oyster Shell carries a very high percentage of pure lime and to those poultry men who believe the best is none too good, this very fine grade of shell will appeal. Free from dirt and fine particles. Put up in 10. 25 and 100-lb. bags.

For price see supplement following page 48.



Poultry Books

	paid.
Profitable Culling & Selective Flock Breeding	\$1.50
American Standard of Perfection	3.00
Use of Artificial Light to Increase Winter Egg Pro-	
duction	1.50
How to Feed Poultry for Any Purpose with Profit	1.25
Poultry Houses & Fixtures-Up to Date	1.00
Artificial Incubating & Brooding	1.00
Diseases of Poultry	1.00
A to Z of Pigeons & Bantams	.95
Cali of the Hen	2.25
Egg Record & Account Book	.40
The Chick Book	

	paid.
The Plymouth Rocks	\$1.00
The Wyandottes	1.00
Rhode Island Reds	.75
The Leghorns	1.00
The Asiatics	.50
The Campines	.75
The Orpingtons	
Ducks & Geese	
Turkeys: Their Care & Management	.75
Successful Poultry Keeping	1.00
Rabbit Culture & Standard	1.00



Pet Stock Foods

HOLLY BIRD SEED

A Quality Mixture

Holly Bird Seed is carefully prepared from sound, ripe seeds mixed in proportion to suit canaries and other hard-billed seed eating birds. It always gives complete satisfaction because it supplies the variety that birds crave. A package of Bird Gravel

I lb. Package.....15c

ILLYS CUTTLE FISH BONE Small pieces only. Per lb., 40c FLAX SEED A good conditioner. Per lb., 15c

SICILY CANARY SEED Bright, recleaned, sound seed, Per lb., 20c; 50 lbs., 13c per lb, BIRD RAPE Large, plump grains relished by birds. Per lb., 10c; 50 lbs., 8c per lb. BIRD MILLET Well ripened millet for song birds. Per lb., 10c: 50 lbs., 8c per lb. HEMP SEED Meaty kernels good for growing birds. Per lb., 10c; 50 lbs., 7c per lb. SUNFLOWER SEED Sound, recleaned seed full of meat. Fine for parrots, Per lb.. 15c

SPRATT'S PET STOCK FOODS AND REMEDIES

Carton .

Carton



We are selling agents for these famous preparations which have the endorsement of the big breeders and fanciers, and are the standard in their line. We can only list a few items in this catalog, but will mail, for a stamp, to dog owners, Spratt's "Dog Culture," which gives reliable advice and information on the care of dogs, and tells about Spratt's preparations.

Spratt's DOG CAKES The standard dog food. Used at the leading kennels and dog shows throughout the world. A staple and consistent feed for all breeds of dags.

Prices: Carton. 45c; 10 lbs., \$1.70; 25 lbs., \$3.80; 100 lbs., \$14.85, F.O.B. Seattle.

Spratt's PUPPY CAKES A perfect and whole food for puppies of all kinds.

Prices: Carton, 45c; 10 lbs., \$1.75; 25 lbs., \$4.00 Spratt's FIBO Can be fed with fine results as a staple diet, especially for the smaller breeds, or makes an excellent especially for the success change in diet for any dog. Prices:

Prices: Carton, 45c; 10 lbs., \$2.10 Spratt's TONIC AND CONDITION TABLETS To build up Spratt's DISTEMPER TABLETS Also good as a preventative

Spratt's WOFM CAPSULES The best expellent of round,





-----45:

The finest grade of rice corn. Selected for its excellent poping qualities. Put up in one pound cartons, 20c each; 25 lb. sacks, \$2.75 each.

Unless Otherwise Stated, Prices Quoted are F.O.B. Seattle or Portland

STOCK	AND	DAIRY	SALT
(Pr	ices subje	ect to change)

Banner DAIRY SALT The highest grade of pure white salt for dairy and cooking purposes. Put up in 50-lb sacks only.

Leslie's BRICK SALT 5-lb. bricks of pure white lick salt for farm animals.

Per case of 20 bricks.....\$2.50

HALF GROUND SALT Used for livestock, salting hay, ice cream freezing, etc.
50-lb. sacks
100-lb. sacks
Write for prices in quantities.
Careyized STOCK TONIC SALT LICKS Large bricks of medicated salt for livestock. Intended for use on the range
or grazing lot. 50-lb. bricks\$1.75 each





Spratt's DIARRHOEA TABLETS To relieve diarrhoea,

Spratt's PATENT WHITE DOG SOAP Entirely free from

poison, and at the same time most effective in the de-structiontion of lice and fleas. Leaves the coat smooth

Spratt's BIRD TONIC For the prevention and cure of all

diseases of cage birds......25c

Spratt's BIRD LICE DESTROYER For dusting the feathers 25c Spratt's COD LIVER CIL NESTLING FOOD For feeding young birds and old birds in the moulting season. A tonic and a flesh and bone maker. Unequalled as an aid to feather

Spratt's MILK CAT FOOD For kittens and invalid cats.

HOLL



ILLY'S

LICE OINTMENT HEAD LICE ON CHICKS

NS ON BAC

SCALEY LEGS

LILEYS TILLYS

ILLY'S Poultry Remedies

Satisfaction Guaranteed

LICE AND MITE LIQUID

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 in-sects get a start. Qt., 60c; ½ gal., 90c; gal., \$1.70; 5 gal., \$5.00.

LICE OINTMENT

Effectually Destroys Head Lice on Young 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. Per can, 25c.



LICE POWDER

Powder is best. Before a hen is set, she should be 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.

Carton (about 1 lb.), 30c

INTESTINAL AND LIVER REMEDY

For White Diarrhoea, Worms, Liver and Intestinal Trouble

Prevents and cures the ailments of the liver and intestinal tract of Baby Chicks. Before offering LILLY'S In-testinal and Liver Remedy we con-vinced ourselves positively that it would do the work. There are di-rections on each bottle. It is a liquid and cannot be mailed. Price, 7.oz. bottles, each, 25c

ROUP REMEDY

Roup is the most common and most easily contracted of all diseases among poultry. It is a germ disease and the source is usually a cold. If colds are attended to promptly they can be easily cured, but if neglected they are liable to develop into roup. The symptoms of roup are froth and bubbles in the corners of the eyes, sneezing, and a watery dis-charge from the eyes and nose. When charge from the eyes and nose. 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 diphtheric roup. It is highly contagious. Lilly's Roup It is highly contagious. Remedy prevents and cures Roup, Black-head, White Comb, Canker, Sore Head, and other bacteria diseases.



Prices Quoted are F.O.B. Seattle or Portland

Price. 25c.

POULTRY PEPPER

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. Price: Carton (about ¾ lb.), 25c

SODIUM FLUORIDE

is recommended by the U. S. Government as the best all is required for each fowl if used dry. It is also soluble in water and is probably more generally used as a dip on large chicken ranches. Directions on each package. 4-oz. pkg., 25c; 8-oz. pkg., 50c

PRE-EGG-SERVER-WATERGLASS

Waterglass is recommended by the U. S. Agricultural Depart-ment and by that of foreign countries as the best method of keeping eggs. The package shown in this cut contains sufficient material to keep about 15 dozen

eggs in a five gallon crock. With eggs as high as they have been for the past several years, no one is overlooking the opportunity of putting up a few dozen or more during the spring when the price is at its lowest point. Price, 20c





Fly Liquid Comfort for Stock, Profit for the Owner

If dairymen could only realize the enormous losses caused by flies they would quickly exert every effort to exterminate the pests. Nothing is more loathsome and filthy than the common fly; nothing, is sacred to his germ-laden feet and antenae. Even the most tenderhearted 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 more to keep them in condition when annoyed by flies. They are a nuisance to the housewife, and much sickness must 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 or other stock once or twice a day, flies will not annoy them. By spraying screens, stable doors, manure piles, garbage cans, and other places where flies congregate, they will be eliminated and breeding curtailed.

Unless you protect your stock you are spending money for feed to fight flies and mosquitoes. It is impossible to get away from this fact. Part of it the flies get by sucking the blood and the rest with the energy they spend fighting pests. Therefore, these same flies keep milk out of your pail, keep your stock scrawny, discontented and make it unpleasant for all concerned. Price F.O.B. Seattle or Portland. Qts., 60c; ½ gal., 90c; gal., \$1.70; 5 gal., \$5.00









PRATT'S ANIMAL REGULATOR

This is the original and pioneer Stock Regulator of America. It keeps horses well and strong, improves their wind, and makes their coat sleek and glossy.

Cows give more and richer milk, and their calves are strong and healthy. Steers fatten in half the time.

Hogs are raised and fattened quickly Pkgs. 30c, 60c, \$1.20; 12-1b. pails, \$3.00; 25-1b. pails, \$4.25; 100-1b. bags, \$12.00. Write for Pratt's Poultry Book—free.

PRATT'S HEAVE, COUGH AND COLD REMEDY It cures by strengthening the digestive and respiratory organs, and counteracts the inflammation and irritation.

Per pkg., 70c

PRATT'S DISTEMPER AND PINK EYE REMEDY It goes direct to the cause of the disease. Per pkg 75c.



Pratt's POULTRY DISINFECTANT

A good disinfectant is almost as much of a necessity on the poultry plant as poultry feed. Used regularly it keeps the buildings and equipment in sanitary condition, it maintains the health of the flock and pre-vents disease loss—it saves worry and trouble. All this at ridiculously low cost. Qt., 70c; 1/2 gal., \$1.35; gal., \$2.50

PRATT'S HEALING OINTMENT

A splendid antiseptic ointment for man or beast. Keep a box on hand for cuts, burns, sores, galls, corretebes eczema, etc. Per pkg., 35c

PRATT'S HEALING POWDER

A guaranteed remedy for harness galls, sores, grease heel, bleeding ulcers, etc. It will arrest hemorrhage and check blood flow. Dirt and dust cannot get into wounds, as the Per pkg., 30c Powder forms a coating over them.



PRATT'S ROUP REMEDY

A sure preventive and guaranteed cure for roup, colds, canker, catarrh and similar dis-eases. (Tablets or Powder) Per pkg., 30c

PRATT'S LINIMENT

For man or beast. The best thing in the world for lameness, sprains, bruises, thrush, kicks, shoe boils, etc. Bottle, 35c

PRATT'S BAG OINTMENT Especially valuable for healing "caked udder" in cows. Per box,40c

PRATT'S DIP AND DISINFECTANT

An all-year round necessity on every farm and in every Prevents contagious diseases, killing the germs. Dehome. stroys insects and vermin on livestock, in barns, poultry houses, etc. Qts., 70c; 1/2 gal., \$1.35; gal., \$2.50

PRATT'S WORM POWDER

ls a special preparation for destruction of all kinds of worms in horses, cows, hogs and sheep. Per pkg., 60c

PRATT'S COW REMEDY Nature's unrivalled assistant to

make and keep cows well, to increase the flow of milk and to prevent Abortion, Barrenness, Garget, Milk Fever, Scours, Indigestion, Liver and Kidney Complications.

Per can, 65c, \$1.30 and \$3.00

FIFTY YEARS THE STANDARD PRATT'S POULTRY REGULATOR

A positive tonic and conditioner for poultry of all kinds and ages. A health-builder and health-preserver. Not a food, Pratt's Poultry Regulator makes and keeps poultry healthy, vigorous and pro-ductive. It shortens the molt, sharpens the appetite, improves digestion and circulation, hastens growth and increases egg-production. It saves feed by preventing waste due to poor digestion. It prevents disease by keeping the birds in condition to resist the common ailments.



Per pkg., 30c, 60c, \$1.20; 12-lb. bags, \$1.75; 25-lb. bags, \$3.25; 50-lb. bags, \$5.25; 100-lb. bags, \$9.50. Write for Pratt's Almanac—free.

PRATT'S LICE SALVE

One application is effective for a considerable time. Tubes, 30c

PRATT'S HEAD LICE OINTMENT A mild, but efficient, ointment for use on young chicks.

Per can, 35c PRATT'S RED MITE SPECIAL

A sure-death liquid for exterminating the blood-sucking mites. Qt. cans, 65c

PRATT'S POWDERED LICE KILLER

A fine powder for dusting old and young stock. Per pkg., 30c and 60c

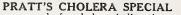
PRATT'S SCALY LEG REMEDY This disease not only impairs the vitality of the birds but, also, ruins their appear-ance. Pratt's remedy will keep the legs clean and healthy. Per pkg., 35c

PRATT'S CONDITION TABLETS An easy and effective remedy for "run-down" birds. Keeps show birds in condition and prevents colds, roup and liver trouble. Per pkg., 30c

PRATT'S BRONCHITIS REMEDY A quick and effective remedy, fully guaranteed.

Per pkg., 30c

Pratt's WHITE DIARRHOEA REMEDY Guaranteed to save the chicks and to cure completely when used promptly. A valuable help in preventing the heavy chick losses usually experienced. Per pkg., 30c



A sure remedy for cholera, indigestion, sour crop, dysentery, diarrhoea and bowel trouble. Guaranteed to satisfy or money refunded. Per pkg., 30c

PRATT'S CHICKEN-POX REMEDY

Don't risk having your entire flock ruined. Per pkg., 35c

PRATT'S GAPE REMEDY Guaranteed to bring prompt relief. Per pkg., 35c

PRATT'S HOG TONIC

For steady growth and quick fattening.

lts use insures more weight and in a shorter period of time with corresponding saving in feed, etc. These results are guaranteed. Test it at our risk.

Per pkg., \$1.20; 25-lb. bags, \$2.50; 100-lb. bags, \$9.50.

All Prices are F. O. B. Seattle or Portland







Pratts.

COW REMEDY

Pratt Food Co

Prices Quoted are F.O.B. Seattle or Portland

Incubators THE QUEEN LINE

The construction is of California Redwood which is conceded by au-thorities to be less effected by moisture and heat than either pine or cypress.

It is double walled throughout and heavily insulated between the walls. The Hot Water Heating Tank is of heavy copper "not copperized tin" and has the center crosspipe to insure even distribution of heat and elimimate cold spots so troublesome in some makes of machines.

The Regulator is simple in construction, accurate to the fraction of a degree and easily adjusted by anyone.

The Thermostat Wafer, which is the heart of the regulator, is of the double type, four-inch size, and is extremely sensitive which is very important.

The Lamp, which is the best type of incubator lamp on the market. is suspended in a heavy galvanized iron jacket which eliminates any danger of fire and helps greatly to conserve heat and keep a uniform temperature.

	Queen Incubators are Made in Eight Sizes:	
No. 1— 85	Egg-The Baby Queen, weight 80 lbs\$ 3	2.00
No. 2- 135	Egg -The Beginner's Queen, weight 95 lbs 4	5.00
No. 3- 180	Egg -The Farmer's Favorite, weight 105 lbs 5	5.00
No. 4— 275	Egg -The Duck Queen, weight 142 lbs 6	7.50
No. 5- 400	Egg -The Money Maker, weight 185 lbs	1.00
No. 25- 600	Egg -The Hatchery Favorite, weight 248 lbs 12	0.00
No. 35- 800	Egg -The Jumbo Queen, weight 325 lbs 15	5.00
No. 45-1000	Egg -The Mammoth Queen, weight 450 lbs 19	0.00

THE STYLE K QUEEN

The Style K line of Incubators, while made by the Queen Incubator Co., is not of the same high standard as the regu-lar Queen line, though they embody all the principles that have made the Queen line so successful and famous. How-ever, they are built to sell at a lower price to people to whom price is an important consideration price is an important consideration. They are built only in the three sizes generally in demand

in this type of construction,

No.	21-130	Egg	Capacity,	Weight	85	lbs	00
INO.	22-220	Egg	Capacity,	Weight	120	lbs 45.	00
				DES NO. OR DESC	-		

EGG TESTER

Simple, convenient, practical, and cheap. Used to test the fertility of eggs after a week's incubation. It may be used on any lamp with a No. 2 burner, or over an electric light or candle.

CERTIFIED INCUBATOR THERMOMETER

We handle the famous and reliable Tyco brand of thermometers. Guaranteed for accuracy. Can be sus. pended on a wire or used



with a stand. Four-inch black oxidized brass scale, with engraved mercury filled tube. Packed one in a box with certificate.

No. 1007-Price, each.....\$1.00

STANDARD INCUBATOR THERMOMETER

A thoroughly tested and dependable instrument, and of

METAL-BACK BROODER THERMOMETER

Four and one-half inch silvered brass scale, black filled figures and graduation, plain mercury filled tubes. Approx-imate scale range 10 degrees to 100 degrees. Packed each in a box.

STANDARD BROODER THERMOMETER On a half round wood frame, 8 inches long, silvered brass scale, black filled figures and graduation. Magnifying mercury filled tubes. Approximate scale range 60 degrees to 140 degrees. Packed each in a box. No. 1062—Price, each.....\$1.00



THE FARMER'S FAVORITE **BABY CHICKS**

1 Pileton

If you wish to buy baby chicks let us know. We have purchased the output of a number of hatcheries in and around Seattle and will be able to give you baby chicks from the very best of stock.

Baby chicks are very likely to be quite scarce when spring comes. As this catalog goes to press a great many of the large hatcheries are booked up for the major portion of their output. This applies especially to March and April deliveries as most people prefer to have their chicks at that time. Get in touch with us early and avoid disappointment. A postal brings our prices.

THE IDEAL INCUBATOR

Is a Hot Water machine with copper tank and coil built especially for Pacific Coast conditions and is designed to meet the requirements of the small poultry man who wishes to hatch only a few chicks but wants them all at one time and does not care to wait for hens to become broody. It is also used a good deal by hatchers having larger machines to set at the same time and who transfer the eggs to the larger machines after the unfertile eggs have been candled out. Capacity, 60 eggs. Shipping weight, 65 lbs. F.O.B. Seattle or Portland, \$15.00

TYCO'S INCUBATOR HYGROMETER



The importance of a correct percentage of moisture during incubation, has made the Tyco Incubator Hygromater, as necessary as the Tyco Incubator Thermometer. Neither takes the place of the other, but together they give the practical poultry man all the facts required for successfully regulating the heat and moisture of an incubator. Stands $3\frac{9}{4}$ inches high and $4\frac{1}{2}$ inches wide over all.

Packed each in a box. Price each \$1.75

UPRIGHT INCUBATOR THERMOMETER

It is preferred by many poultrymen because the bulb is at the same level as the egg, and the scale is plainly visible

ELECTRIC INCUBATOR THERMOMETER

It is a great convenience, to be able to read the ther-mometer at night, or where the lighting is poor. It can be used in any make of incubator. Complete with battery. No. 1006—Price, each.....\$3.50

Brooders

THE KRESKY BROODER STOVE or PRIDE OF PETALUMA

The stove that gets results from the South Sea Islands to Alaska's frigid shores. Burns coal oil, gasoline or any kind of fuel oil, is equipped with patented Automatic Oil Regulator. The heat is released from the ventilating cone center of the stove between two radiators and applied by the action of fresh Air as a means of heat conveyance. Will successfully brood up to 1500 chicks without any danger of crowding or pilin- up. If interested write for special book-

62.50

INCUBATOR AND BROODER LAMPS

Number One Lamp. Consists of metal chimney with mica window, galvanized oil fount and sun hinge burner and %-inch wick. Diameter of fount, 6 inches; depth, 2% inches; height over all. 9 inches; weight, one pound.

No	1300-Lamp complete as described \$	
No	1310—Fount only	.75
No.	1320—Burner only	.40
No	1330 Chimney only	34

No 1330—Chimney only No 1340—Wicks, %-inch wide, per doz..... No 1350—Fount collar, per doz..... .25 .35

Number Two Lamp. Same as above; takes 1-inch wick. Diameter of fount, 7 inches; height

over all 10 inches; weight, 1 ½ pounds.	
No 1301-Lamp complete, as described\$	
No. 1311-Fount only	.80
No. 1321—Burner only	.50
bo 1331-Chimney only	.45
No. 1341-Wicks, 1-inch, per doz	.35
No. 1351-Collars, per doz.	.50

Number Three Lamp. Same as above. Ta	akes
1 1/2 - inch wick. Diameter of fount, 8 1/2 inc	
height over all, 12 inches; weight, 2 pounds	
No. 1302-Lamp complete. as described \$	2.25
No. 1312—Fount only	.90
No. 1322—Burner only	.80
No. 1332—Chimney only	.55
No 1342—Wicks, 1½-inch, per doz	.40
No. 1352-Collars, per doz.	1.00

Neversmoke or Chimneyless Brooder Lamp. Sc constructed that it does not require a chimney. There is an open reservoir on top of the oil fount that can be filled with water as a pre-caution against fire. Diameter of fount, 6 inches;

No. 1226 Dumon and	1.00
No. 1325-Burner only	.80

ECONOMY 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 eco-nomical and more convenient. The Economy Brooder Hover is complete in itself and can be used in any room or building. No platform, false floor,

or other preparation is necessary. Made in two sizes. No. 1-Economy

Brooder Hover-75 chicks, 14 lbs.\$9.50

No. 2-Economy Brooder Hover-150 chicks, 32 lbs.\$13.00

OAKES ELECTRIC HOVER

Where electricity is available this is the safest, simplest, most convenient and economical hover. The current consumption is very low

All Prices are F.O.B. Seattle or Portland

PRIDE OF PETALUMA

and cuts off entirely when the desired degree of heat is attained. lt is made entirely of metal except the insulation and curtain and will last for many years. Diameter. 22 incles; capacity 125 to 150 chicks. Price (shipping weight, 30 lbs.)......\$22,00

RELIABLE BLUE FLAME COLONY BROODER

Burns Coal Oil, is self-regulated, economical, simple and convenient to operate. Has a visible oil feed. is wickless, therefore does not smoke or cause trouble; it has an automatic ventilator at the top of the canopy

which always insures pure air for the chicks. Size 00—Diameter, 18 in.; Weight, 12 lbs.; Capacity 150 chicks....\$11.00 Size 0—Diameter, 30 in.; Weight, 40 lbs.; Capacity 350 chicks....\$11.00 Size 1—Diameter, 42 in.; Weight, 45 lbs.; Capacity, 500 chicks... 23.50 Size 2—Diameter, 52 in.; Weight, 55 lbs.; Capacity, 1000 chicks... 27.50

OUEEN COLONY BROODER

The Queen Colony Brooder is a new and improved design of coal The Queen Colony Brooder is a new and improved design of coal burning brooder stove. It is self-regulating by thermostat and once adjusted needs very little attention. The check draft rests on top of the stove and opens outward when fire is too warm, thus giving a gentle inflow of air to retard the heat. While the opening of the draft to in-crease the fire is located at the top of the stove, it opens into the fire at the base through an opening extending down the side to the bottom. This feeds the draft into the fire from underneath with no opening below the hover.

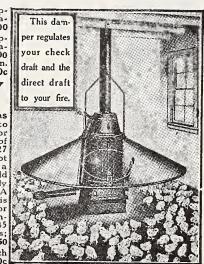
No. 1-Diameter, 42 in.; Ship-ping Weight, 75 lbs.; Capacity, 600 chicks \$27.00

No. 2—Diameter, 52 in.; Ship-ping Weight, 90 lbs.; Ca-pacity, 1200 chicks... 33.00 4-inch Stove Pipe, per 24-in.

length, each......50c

MARVEL COLONY BROODER

Burns Coal, Coke or Gas The Marvel we believe to be the best stove made for this purpose. It is made of heavy cast iron, stands 27 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 style of building is not necessary, any room or building may be used. Diam-eter, 52 inches; Weight, 85 lbs.; Capacity, 1000 chicks; Price, each\$26.50 3-inch stove pipe per 24-inch length, each......50c





Poultry Feeders

STAR JAR FOUNTAIN AND FEEDER



Will fit pint, quart or one-half gallon Mason jar. Manufactured of one piece of non-rusting metal. No Leaking impossible. Con-venient, cheap and sani-tary. Provides greater drinking surface than the round fountain. Little chicks can't get drowned. Can be used for feed as well as water. Manufac-

tured in one size only. If by mail 5 cents each extra for postage and packing. No. 1232— o jar; Weight, doz., 4 lbs.; Price, each, 15c;

\$1.50 Doz.

SANITARY FEEDING TROUGHS

Can be used for feed. mash or water. Barrel top prevents wasting of feed and if used for water, does away with the little chicks drowning. The feed saved by using this trough will more than pay for itself in a few weeks. Made of the best grade galvanized iron in three sizes:

No. 1221—Size, 12 in. long; Weight, 1 lb.; Price, each....\$.70 No. 1222—Size, 18 in. long; Weight, 2 lbs.; Price, each.... .95 No. 1223—Size, 24 in. long; Weight, 3 lbs.; Price, each... 1.25

AUTOMATIC FEEDER AND EXERCISER

Increases egg production and fertility of the eggs. Automatic Feeders save more time and more feed than any other appliances in the poultry yard. The chickens scratch and exercise in order to get it; therefore, you can rest assured that you will get the maximum efficiency out of your hens at a minimum expense. Manufactured in two sizes, as follows:

No. 1252--Size, 8-qt.; Weight, 8 lbs.; Price, each\$1.85 No. 1253-Size, 1/2-bu.; Weight, 6 lbs.; Price, each 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 inexpensive compartment boxes. Can also be used as a feed hopper for little chicks. Made of heavy galvanized iron in three sizes

No. 1245-For Baby Chicks, square bottom, two compartment; Wt.,

bottom, three compartment; Wt.,

3 lbs. ea.; Price, each......\$1.45 No. 1290—For Grown Birds, round bottom, four compartment; Wt., 4 lbs. ea.; Price, each......\$1.80

ROUND BABY CHICK FEEDER

Pure food for the baby chicks. A great feed saver, as the little chicks cannot get into it and contaminate the feed. Cannot be upset. Can also be used for dry or moist mash. This is a practical, well-made feeding device that will last Manufactured of galvanized iron in two sizes. If by mail 5 cents for years.



each extra for postage and packing.

- No. 1211-Size, 6in. diameter; Wt., doz., 5 lbs; Price, each, 30c; Doz., \$3.00.
- No. 1212-Size, 81/4 in. in diameter; Wt., doz., 10 lbs.; Price, each, 45c; Doz., \$4.50

FEED AND WATER DISH

Made of galvanized iron. Rolled-in top pre-vents wasting. Dish held to the floor by simple locking device easy to remove for cleaning. lmpossible to tip over.

No. 1246 --- Weight, doz., 7 lbs.; Price each, 40c; Doz., \$4.50.



SCRAPER AND CLEANER

Manufactured of one piece galvanized iron. Just the thing for cleaning out brood coops, nests, and dropping boards.



Holds about one pint and hangs straight when applied to the coop. Can be attached to any exhibition or shipping coop. One size only. No. 1261—Weight, doz., 8 lbs.; Price, each, 25c; Doz......\$2.75

POULTRY VEGETABLE RACK

Manufactured from galvanized iron and wire. For feeding roots, beets, cabbage, sprouted oats, etc. A big time and feed saver. Every breeder needs one or more.

No. 1244-Weight, 1 lb.; Price, each



DRY MASH HOPPER

The curved bottom of the Hopper keeps the feed within easy reach of the birds. The gradual enlargement from the top to base prevents clogging. The wire grid and wires run-

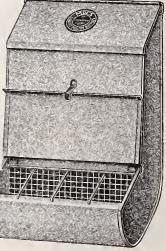
ning from the flange through the wire grid prevent any chance of the fowls throwing out or wasting the feed. The sloping cover pre-vents the birds from roosting on the Hopper, and when both covers are closed, it is rat and mouse proof. A trial will convince you that it is a Hopper of the greatest merit. Manufactured of heavy galvanized iron in three sizes:

No. 1235—Size, 8½ in. wide; Wt., 4 lbs.; Price, each......\$2.10

No. 1236-Size, 12 in. wide; Wt., 5 lbs.; Price, each

.....\$2.75 No. 1237-Size, 24 in. wide; Wt., 12

Ibs.; Price, each\$4.20



Prices are all F. O. B. Seattle or Portland



Poultry Fountains

WALL FOUNTAIN



A convenient style of fountain. Very popular with some breeders. Can be hung upon the walls of the poultry house, out of the litter.

Made with removable bottoms so that all parts can be easily cleansed, greatly adding to their sanitation and durability. Easily filled. Manufactured of galvanized iron.

Size No. Weight Price ea. 1226 About 2 lbs. 95c I gal.

This style made with permanent bottoms. Lay down A strong, substantial wall fountain at a low to fill. This fountain appeals to many breeders and is price. of galvanized iron. Manufactured

Size Weight No. Price ea. 1274 5.gal. 6 lbs. \$2.50

SOUARE BROOD COOPS

A complete home for the hen and her brood. Manu-factured with removable bottoms for sanitation. A com-A combination door for ventilation, to keep the hen inside, give the little chicks their liberty, for absolute protection



BOTTOM-FILL FOUNTAIN

Made in two pieces. Easily cleaned and owing to its shape it will not burst from freezing. This fountain fills the breeders needs for an inexpensive fountain. Made of the best grade of galvanized iron, in three sizes:

No.	Size	Weight	Price ea.
1219	quart	1 1/2 lbs.	\$0.45
1220	1/2 gal.	2 lbs.	.55
1224	l gal.	2½ lbs.	.95

TOP-FILL FOUNTAINS

Fill in the morning and your chicken's have an all day's supply of pure water at just the right temperature.

The double wall keeps water cool in summer and retards freezing in winter. No valves to get out of order. Thoroughly sanitary and as easily cleaned as an ordinary pail. Fills from the top. Does away with slopping over when being filled. Can be hung up out of the litter. The square pan also affords



ea.

drinking facilities for two pens at the same time. The most popular fountain on the market.

Manufactured of heavy galvanized iron in three sizes, and packed in individual containers.

No. 1201	Size l gal.	Weight 4 lbs.	Price e \$2.20
1202	2 gal.	5 lbs.	3.10
1204	4 gal.	8 lbs.	4.15

BROODER FOUNTAINS

Sets in corner of brooder. Takes up little room. Can't be upset. Absolutely sanitary, as you can get at any part of it to clean.

No. 1200-1 quart capacity, each.......\$0.55

DROP BOTTOM WALL FOUNTAIN

Manufactured from Galvanized lron. May be hung up on the wall out of the dirt and litter. Nothing to get out of order. Easy to fill and easy to clean. When filled, two, back to back, may be carried in each

hand.		
Size	Weight	Price ea.
2 quart	1 1/2 lbs.	\$1.10
l gal.	2½ lbs.	1.35
2 gal.	3½ lbs.	1.65



AUTOMATIC FAUCET FOUNTAIN

No.

1240

1241





Poultry Supplies

POULTRY PUNCHES



For marking little chicks by punching holes in various arrange. ments between the toes. It is light, strong, cuts clean, and fits be-

tween the chick's toes without bruising.

TRAP NEST FRONT



This new, inexpensive and useful device meets a popular demand, and has proven a wonderful seller. It places trap nests within the reach of all. They are simple in operation with no small parts to get out of order. The front works on hinges, making it easy to remove the birds or clean the nest. They also give the breeder the opportunity of using the size nest best adapted to his birds with a uniform trap feature suitable for any breed. Manufactured from galvanized iron. 11 in. wide, 12 in. high.

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. folds flat when not in use. making it convenient to store, and minimizing express charges when returned empty. Furnished in two sizes.

No. 1084-12x12x22 for one large or two small birds, weight

No. 1085-20x22x22 for two large birds, weight 10 lbs., each\$2.00

GILT EDGE EGG SCALE



Grade your eggs with this handy scale, and get more money for them. Price, each\$2.00

BONE AND SHELL MILL

Is a combined roughing roll and plate grind-ing mill ,designed to grind dry bone, oyster shell, crockery, charcoal etc., and at the same time will grind shelled corn and other grains into coarse meal.

The grinding parts of the mill are made of hard white iron, and will last for years.

Shipping Weight 35 lbs.

Humphrey Dry Bone and Shell Mill......\$9.00

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 distance and in any reasonable weather. We can furnish them in 25 and 100 chick sizes. If wanted in large quantities write

CHINA NEST EGGS

The best grade or china nest eggs. No. 1019-Weight, ¾ lb. per dozen: Doz., 35c; Gross, \$4.00

HATCHING EGG 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.

						dozer	\$3.00
No. 1013-30	Egg	Size,	each	60c;	per	dozen	6.00
No. 1014-50	Egg	Size,	each	95c:	Der	dozen	9.50
No. 1102-36	Egg	Size.	each	60c:	Der	dozen	6.00
No. 1104-60	Egg	Size,	each	\$1.00	; pe	r dozen	10.00

MARKET EGG CARTONS

For marketing eggs in a convenient, attractive manner. The best low priced carton obtainable, Not adapted for Parcel Post shipping. Weight: Dozen, 2 lbs.; per 100, 15 lbs.



Per 100\$2.00

EGG CARRYING CRATES

A very handy egg carrier holding 12 dozen eggs and suitable for parcel post or express shipment. Strongly constructed, iron bound, will last a lifetime. Price, each

WIRE HEN'S 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.

CAPONIZING SETS

Caponizing is being more extensively practiced by Northwestern poultrymen each year, and a good market for capons is being developed in this section. These sets consist of atting Knife, Spreader, Cutting Film Hook, Testicle Spoon, Probe, Cord with Hooks, and complete instructions.

No. 1026-Farmers' Set\$3.75 No. 1025-Special Caponizing Set 5.00

Prices are all F.O.B. Seattle or Portland.



Beehives and Apiarian Equipment

LEWIS BEEWARE

Is manufactured at Watertown, Wisconsin, and is guaranteed to be the finest quality and workmanship made anywhere, and has been recognized as such for 47 years.

The line is a complete one and we carry an ample stock of the full line at all our Stores and Branch Houses.

To fully illustrate and describe the complete line would take too much room from the other subjects in this catalog so we issue a "SPECIAL BEE SUPPLY CATALOG" of forty pages which we are glad to send free to any bee keeper or interested person.

This special Bee Supply Catalog is a complete beekeepers' guide and should be in the hands of every beekeeper. Every article is illustrated, described and priced and the average Western beekeeper can glean a priceless fund of knowledge and information from its pages. Write for your copy today.

BEE BOOKS

Bee Primerby	Dadant\$.20
Thousand Answers to Beekeeping Questionsby	
	Phillips 2.25
Productive Bee Keepingby	Pellett 2.25
	Pellett 1.10
	Hutchinson 1.10
	Dadant 2.75
Beginner's Bee Bookby	Pellett 1.10
ABC & XYZby	Root 2.75
	Miller 1.10
Out Apiariesby	Dadant 1.10
	Pellett 2.75
	Comstock 1.65
Scientific Queen Rearingby	Doolittle 1.10
First Lessons in Beekeepingby	Dadant 1.10

BROOD AND COMB FOUNDATION

We are carload dealers in pure wax Comb-Foundation, and would be pleased to quote you prices on your requirements anytime, and positively know that we can save you money. Naturally we handle only the very best "WEED PROCESS" FOUNDATION, and will be gled to send you a sample on request. Buy your Foundation early this year and make use of your spare time now getting ready for the busy season. We strongly urge the use of full sheets of Foundation "wired in" for all brood and extracting frames, because it insures straight, uniform combs and does away entirely with surplus "DRONE COMB."

1921

Annual



WESTERN MADE BEE HIVES

For those of our customers who must have low priced equipment we have added a line of Hives, Supers, Brood and Extracting Frames, etc., that are locally manufactured from Western pine.

The material and workmanship is not as high quality as our Lewis Beeware, but when the saving, due to lessened material and transportation costs, is figured it makes very low priced equipment.

Write for Special Western Bee Hive Price List.





1921 Annual

Spray Pumps

JUNIOR SPRAY PUMP

This pump is to be used with a bucket or barrel, and may be inserted through the burg hole in a barrel. It requires no foot-rest, clamps or fastening of any kind. The up-ward stroke is made by, a spring. The brass suc-tion working within a brass cylindar, with brass valves, does away entirely with packing. All parts except handles and hose are brass. Will throw solid continuous stream and fine round spray. Weight, 4 lbs. Price, F. O. B. Seattle or Portland.....\$4.50

HUDSON BELLOWS GUN

This Dust Sprayer is a popular favorite, and is used for dusting all insecticides in their dry state. Made of the best materials obtainable. Has hard-

YANKEE BARREL PUMP

MIDGET SPRAYER



A small, well made sprayer for general purposes, and especially adapted for use in and about the home. Will han-dle all kinds of liquids satisfac-

torily; carefully tested and packed, and will give entire satisfaction.

PUMP-1¼ in. diameter, 10 in. long. Leakless plunger leather and heavy rod.

TANK-3 in. diameter, 3 in. long; capacity about 3/4 pint. Length over all, 14 in. Shipping weight, each 1 lb. Price. each. F. O. B. Seattle or Portland. 45c.

AUTO SPRAY NO. 5

Knapsack Sprayer or Bucket Pump for General Spraying This is a splendid outfit for general spraying. 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 small orchard or garden spraying, as there is no bucket to move around.

The pump is made entirely of ass. It has two ball valves so brass. arranged that they may be in-stantly cleaned. The pump is stantly cleaned. The pump is double acting and will generate a pressure of 180 lbs. It is equipped with $3\frac{1}{2}$ ft. of $\frac{3}{8}$ in. suction hose and a heavy strainer.

A curved extension is furnished tra when desired. The knapextra when desired. sack tank is also extra, and is essential where the sprayer has about. Auto Spray No. 5, pump, hose, nozzle and lbs. Price, \$5.50. Galvanized Iron 5-

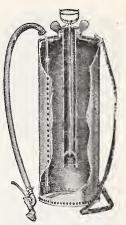
gal. Knapsack. Wt. ¹/₂ lbs. Price...\$3.25 Curved 14-in. brass 100 extension. Wt. 1 lb.

Price..... 75

PERFECTION COMPRESSED AIR SPRAYER

Have you ever considered just why certain features are neces-sary in the high pressure compressed air sprayer?

For handling high pressure safely, a strong tank must be provided, one which will not leak or blow out. The riveted and soldered head, side and bottom seams of the Perfection take care of this point. A good strong pump is needed to develop high In our Perfection we pressure. use an all-brass pump 134 inches diameter and 15 inches long, with which the operator can



quickly and easily pump up the amount of pressure he desires. To handle spray solutions successfully under high pressure, an automatic shut-off nozzle which is sure and safe must be used. The Perfection Automatic Shut-off Nozzle is built for high pressure work. It is equipped with a heavy spring which will close the nozzle tight under all pressures. With it there is no loss of solution and consequent damage to surroundings

It is just the thing for general work around the house, in gardens and small farms. Used for potato spraying, whitewashing, spraying disinfectants, cold water paints, etc. Seams are all riveted and soldered, giving the great strength necessary for the high pressure it develops, and which is necessary for good results.

HOLLY SPRAYER



Our Old Standby. The best selling quart size sprayer. Made of good stock and carefully tested. The pump passing carefully tested. The pump passing through the top of the can makes it very strong. By using this construction the



......





The second secon



Insecticides

ARSENATE OF LEAD

Forest City Dry Powdered Arsenate of Lead is very finely divided and fluffy, making it practical for use either as a wet spray or for dry dusting. As the result of a new process in manufacture, it has greater bulk per given weight than ordinary Arsenate or Lead. V. 11 touises readily with water, stays in suspension almost indefi-nitely and will adhere to foliage for the longest possible time. This material will not clog the spray nozzle and insures a most uniform distribution of the poison.

Forest City Arsenate of Lead contains from 31% to 33% Arsenic Oxide, thoroughly combined with Lead. This gives maxi-

Arsenic Oxide, thoroughly combined with Lead. This gives maximum killing power and quick action in the control of leaf-eating insects, while absolutely preventing any danger of burning the future of vegetables in any way. Growers can use it with every assurance of safety and results in fighting tuch pests as Caterpillar, Curculio, Leaf Skeletonizer, Gouger, Slug, Canker Worm, Codling Moth, Leaf Roller, Currant Worm, Berry Moth, Vine Flea Beetle, Cabbage Worm, Potato Bug, Crown Borer, Root Worm and many other similar potents on Fruit: Vegetables and Stubbery with the control of the second se

pects	on Fru	its, Vegel	aoles and	d Shru
1-lb.	Carton,	each		65c
5.lb.	Carton.	each	5	2.65

PRICES F. O. B. SEATTLE OR PORTLAND

BLUESTONE

Blue Vitriol used in making Bordeaux Mixture, treating seed grain for smut, etc. If wanted in large quantities, ask for price. Per lb., 15c.

TREE TANGLEFOOT



Tree Tanglefoot is a sticky compound similar to that used in making Tangle-foot Fly Paper. It is easily applied and is the most effective and economical protec-tion for fruit, shade and orna-mental trees against all crawling insects.

Onmatured fruit trees and all shade trees it is applied directly to tree trunks: on young fruit trees over strips of manila paper. One pound

makes about 10 lineal feet of band, remains

sticky three months and longer, effective rain or shine. Won't soften, won't run or melt, yet always elastic, expanding with growth of tree. Applied with a wooden paddle. Will not injure trees.

For tree surgery, Tree Tanglefoot is superior to anything on the market.

Price:	I-lb.	Pail\$0.50	5-1b.	Pail\$2,40

BORDEAUX MIXTURE

Contains at least 16% copper and is therefore more effec-tive and less expensive than any other and can be combined with any insecticidal poison without losing any of its strength. By the simple addition of water according to directions either the 4-4-50, the 5-5-50 or the 3-3-50 formula is quickly made.

BORDO-ARSENATI

The Two-in-One Spray

This product combines the killing properties of Arsenate of Lead and the fungus preventative qualities of Bordeaux Mixture and controls both external leaf-eating insects and fungus diseases at the same time. Full directions for use

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

FUMIGATING TOBACCO POWDER

CRUDE SULPHUR

Crude or lump sulphur if wanted in quantity write for prices. 100-lb. Sacks.....\$3.25

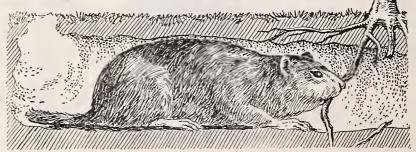
POWDERED SULPHUR

Fine ground sulphur for fertilizing Alfalfa, spraying and fumigating. We are importers, and can furnish it in large quantities and at lowest prices. Write for prices, stating quantity wanted. Per lb., 5c; 100 lbs., \$3.50. COLLECT LAND

WOOD-LARK SQUIRREL AND GOPHER POISON Ready for Instant Use-Never Fails

Is guaranteed the most reliable and destructive agent yet devised for the extermination of Squirrels, Gopher, Field Mice and Crows. Every kernel is warranted to kill. We will cheerfull refund the purchase price in every case in which it fails to satisfy. Should be used early in the Spring when green food is scarce. Place a few kernels near the burrowing place of the animals. Care should be used in placing it so as not to destroy song birds.

Price: 1.1b. Cans, each......\$0.50 10.lb. Cans, each.....\$4.50







Spray Materials TOBACCO AND SOAP COMPOUND

A liquid tobacco and soap compound for the destruction

LIME AND SULPHUR SOLUTION Best of the Old Style Sulphur Sprays

For those who prefer the old style sulphur spray we can furnish 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.

It is a clear, cherry-like solution, free from sediment, and tests 30 to 32 degrees Baume, which is about as concentrated as it is possible to make a lime and sulphur spray which will remain in solution.

One gallon	can	 	5.75
Five gallon	can	 	2.75
		Seattle or Portla	

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, also as a spreader for the tobacco sprays. 50-lb. box, \$7.50; 1-lb. wrapped bars, each, 20c.

Spray Hose

Only the best for the purpose is offered by us. Samples will be mailed upon request.

FOR POWER OUTFITS	
Electric, %", per foot	40c
Electric, %", per foot Electric, ½", per foot	47c
FOR HAND PUMPS	
Lilly's 4-ply Red, 3%", per foot	14c
Lilly's 4-ply Red, ¾", per foot Lilly's 4-ply Red, ½", per foot	17c

NIAGARA SOLUBLE SULPHUR COMPOUND

(In Powder Form)

An efficient, economical, practical and convenient insecticide and fungicide for spraying all kinds of trees, shrubs and bushes. Assures clean "top-of-the-market" fruit; makes the orchard produce real money profit. We believe it absolutely the best and most econ-omical spray material on the market for the control of

San Jose Scale, Peach Leaf Curl and many other orchard troubles. It has been in general use among thousands of the best fruit growers in America for eight years.

Considering the convenience of its use it is 25 per cent cheaper than Lime and Sulphur Solution. It does cent cheaper than Lime and Suphur Solution. It coes not deteriorate with age, is not mussy, leaky and cum-bersome to handle, is not harmed by freezing, weighs only one-sixth as much as the same quantity of So-lution and comes packed in 1, 5, 10, 25 and 100-pound, air-tight cans. Easily dissolved in hot or cold water and contains absolutely as endiment or grit to clog and and contains absolutely no sediment or grit to clog and wear out spray pumps and nozzles, which is so trouble-some in most other sprays. For DORMANT SPRAYS to control San Jose Scale, Oyster Shell Back Louse, use 12½ lbs. to 50 gallons of water. For Leaf Curl use 10 lbs. to 50 gallons of water, etc. For Summer Spray less is required and the amount used is conversed by local is required and the amount used is governed by local conditions which vary a good deal. Write for Spray Calendar.

1-lb. can, 25c; 5-lb. can, \$1.10; 10-lb. can, \$1.85; 25-lb. drum, \$3.25; 100-lb. drum, \$12.00.

Prices Ouoted are all F.O.B. Seattle or Portland

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. Directions for using accompany each can. Being a poison, it cannot be shipped by parcel post.

NICO-FUME TOBACCO PAPER

For fumigating greenhouses and other places where fumes can be confined. Considered indispensable by our most successful greenhouse men.

Can of 24 sheets, \$1.25; can of 144 sheets, \$5.00; can of 288 sheets, \$9.50.

NICO-FUME LIOUID

A 40 per cent Nicotine Solution for spraying or vaporizing. One to two teaspoonfuls of solution makes a gallon of spray. Cannot be mailed.

1-lb. tins, \$2.00; 4-lb. tins, \$7.50; 8-lb. tins, \$14.50.

NIKOTEEN

is a very powerful solution, 30% chemically pure nicotine, and will kill all insects affected by tobacco.

Saires freight on

Se Leakave

In greenhouses and conservatories It is vaporized by painting on steam pipes or by blowing live steam through . solution containing Nikoteen. For most outdoor work, and sometimes under glass, it is applied by spraying. Cann be shipped by parcel post. 8-lb. bottle, **\$12.50**. Cannot





Liquid

FREE SHORES

NO BUSCOMONN REFLACE SCAPERA





Nursery Supplies

PRUNING SHEARS

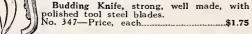
Swiss Pattern. Full polished, best quality crucible steel blades, tempered, ground con-vex, adjusting nut and regulating ratchet; longitudinal double brass spring; removable handle clip. Length, 9 inches; exactly as illustrated. Each shear packed with an extra blade. No. R85-Swiss Pattern, per pair ______\$3.25

California Pattern, with adjusting nut and regulating ratchet; polished tool steel blades, tempered, volute spring; length, 9 inches. No. R50—California Pattern, per pair......\$1.75

California Pattern, with adjusting nut but no regulating ratchet; tool steel polished and tempered blades, volute spring; length, 8 inches. No. 50—California Pattern, per pair.....

.....\$1.40 Ladies Rose Pruner, forged from high-grade steel, polished and nickel plated. Its attractive finish and handy size help make it particularly desirable. Length, 6 inches. Ladies Rose Pruner, per pair\$1.85 -----

All Prices Quoted are F.O.B. Seattle or Portland



Pruning Knife, handy grip handle, curved, polished tool steel blade; a high-grade article. No. 333—Price, each......\$2.00



RAFFIA

Natural color, for nursery and garden work, also used for making baskets. Price: 1 lb., 25c; 25 lbs. or more, 20c; in bale lots (225 lbs.)

write for prices.

PEERLESS GLAZING POINTS

For greenhouse and hot-bed sash. Only two required for each pane of glass, and so constructed that glass cannot slide; 1,000 to a pound. Price, per lb.....\$1.00

TREE LABELS

For labeling trees, plants, etc. Made of white pine. Furnished either with or without wire; $3\frac{1}{2}$ inches long, $\frac{5}{2}$ -inch wide.

	Weight		Price
Style	1000	100	1000
Notched, not wired	. 6 oz.	20c	\$1.85
Copper wired	. 7 oz.	35c	3.20

ILLY'S GRAFTING WAX

Our own make, very superior quality. Packed in onepound packages only.

Per lb. 45c

NEPONSET PAPER POTS

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

	Wei	ight	Price	
Size	100	00 1		000
2¼ inches	15 1	lbs. \$.60 \$	5.50
2½ inches		lbs.	.70	6.50
3 inches		lbs.	.95	9.00
4 inches		lbs. 1	1.50 1	4.00



PERMANITE The Proven Answer to Your Glazing Problem

When thousands of people will buy the same thing year after year—when the great majority of buyers insist on having one particular material to the exclusion of all other brands—that product has proven its worth. You can never go wrong when you buy it.

There are many such products to be found in various lines of trade. In the greenhouse field the material of undisputed merit the one that never goes wrong is Permanite. Permanite Never Hardens

Permanite films over on top when exposed to the air, but below the film you will always find it soft and pliable, for Permanite is elastic.

Permanite Will Never Run No Matter How Intense the Heat

While Permanite is elastic and does not become hard, nevertheless it will never run from the surface.

Permanite is thoroughly fabricated with long, staple asbestos. Every particle of gum is so completely reinforced that it can never separate even when exposed to the most intense heat.

Permanite Is Easily Applied

We have perfected a new, one handed glazing machine that will apply Permanite easily, quickly and with the smallest possible con-sumption of material. Many of our customers have no difficulty in glazing 350 feet of glass with one gallon of Permanite.

I-gal, cans Permanite, each	\$ 2.25
5-gal. kegs Permanite, each	
15-gal. kegs Permanite, each	31.50
20-gal. kegs Permanite, each	42.00
¹ / ₂ -bbl. Permanite (40 gal.), each	80.00
Permanite Machine (new style), each	6.75

Write for complete circular covering Permanite,



Garden Supplies

OUT O' SIGHT MOLE TRAP

This has been the Standard Mole Trap for many years. It is absolutely reliable.

GARDEN STAKES

CREOLA



The White Disinfectant Paint. A powder to which you simply add cold, warm or hot water and it's ready for use. Can be applied with a brush or spray pump and will positively not clog the nozzle as it is readily soluble in water. Dries snow white and is a disinfectant and white-wash combined, which is easily and economically applied. Makes Poultry Houses, Barns, Stables, Hog Houses, Sheds, Cellars, Dairies, etc., light and sanitary. It does not flake or peel off like ordinary whitewash and other preparations.

5-lb. Package, ea	ch\$ 0.75	
100-lb. Box, each	\$13.00	



AGRICULTURAL SULPHUR

From Bulletin No. 163, Oregon Agricultural College: "It has been known for many years that sulphur is one of the elements absolutely necessary for plant growth. Chemists have found by carefully conducted experiments that no plant can be grown to maturity without this element."

Experiment plot of Alfalfa 2 x 8 rods. gave these results:

1st Year—(per acre)—2nd Year No fertilizer _____2,990 lbs. Alfalfa 960 lbs. Alfalfa 300 lbs. Sulphur _____10,020 lbs. Alfalfa 10,760 lbs. Alfalfa

"Plots which received the various sulphur fertilizers produced enormous increases in yield, amounting to more than 1000 per cent in some of the plots during some seasons."

"By actual weight the hay from the unfertilized plots contained 61 per cent of weeds, while the plots fertilized with sulphur were almost entirely free from weeds."

Apply 300 lbs. per acre on Alfalfa every 2 or 3 years. Packed in 100 lb. bags. Price, each......\$3.00

BOOKS ON GARDENING Postpaid

	\$1.00
Cabbage, Cauliflower and Allied Vegetables	1.00
Celery Culture	
Gardening for Profit	2.35
Gardening for Pleasure	2.35
Greenhouse Construction and Equipment	2.00
Home Vegetable Garden	1.40
Making Horticulture Pay	2.00
	1.75
The New Onion Culture	1.00
The Potato	1.25
The New Rhubarb Culture	1.25
Tomato Culture	1.00
Vegetable Forcing	2.50
Strawberry Culturist	

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, $2\frac{1}{2}$ lbs.

Price, each\$1.50

POT LABELS

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

	Wei	ght	Pri	ce
Size		00	100	1000
4 x 5/8 inches		oz.	\$0.20	\$1.75
5 x 5/8 inches	6 (oz.	.25	2.25
6 x 5% inches		oz.	.30	2.80
10 x 5% inches		oz.	.75	7.00
12 x 5% inches	20 «	oz.	.90	8.00

HOT BED THERMOMETER

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

No. 1068-Shipping weight, 1 lb. Price.....\$2.50

PURITAN LIME



CAHOON BROADCAST SEEDER

The Cahoon Broadcast Seed Sower is a compact, easily operated machine and is guaranteed to give satisfaction in every way. Can be used for both grains and grasses and full instructions for use accompany each machine. Malleable iron frame and gears, steel shafts, sheet steel hopper and breastplate, heavy duck seed bag, seamless brass dis-

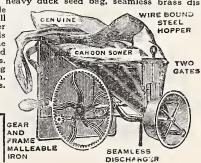
charger. Double seed gate, a small one for Clover and grass seeds and a large one for grains and coarser seeds. Packed in strong carboard carton. Weight 6 pounds. Price, each, \$5.00.

All Prices

are F.O.B.

Seattle or

Portland





Planters and Cultivators

ACME TUBULAR POTATO PLANTER

ACME CORN PLANTER



No. 309 No. 306

ACME ROTARY AUTOMATIC CORN PLANTER

Used in One Hand Like a Walking Stick

No. 300 No. 302

THE MIDGET SEEDER

The Midget is all metal construction but is extremely light and easy to lift about or to empty. It operates very simply; the coverr swings free and does its work nicely. The Midget will handle accurately almost any kind of garden seed from turnip to peas and beans. The hopper holds one pint yet it will drill out clean a FIVE CENT PACKAGE OF SEED just as accurately as a hopper full. It has few parts and the adjustments are easily made. It can be easily

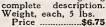
PACKAGE OF SEED just as accurately as a hopper full. It has few parts and the adjustments are easily made. It can be easily attached to any single wheel cultivator, having $5\frac{1}{2}$ inches or more space between the shank and wheel, or can be operated with the single handle as shown in the illustration. Packed one in a carton. Wt., 6 lbs. No. 1—Midget Seeder only (no

No. 21

MASTER PLANT SETTER

One man with one of these plant setters will plant, fertilize and water more plants in a day than three men can, and will do it easily, without stooping. Every plant is well set and securely, rooted by absorption which is nature's way, so that it has a chance to grow. The machine is durably constructed, and is entirely practical; with it you need not wait for rain before

setting out your plants, as the machine automatically waters each plant while setting it. Write for circular giving complete description.





No. 20. Showing Midget Seeder attached. This makes a fine combination for the back lot gardener at small cost.

No. 1

STANDARD SINGLE WHEEL GARDEN CULTIVATOR

No. 1-H

This is a handy and most efficient cultivator. It runs easy, steady and in perfect balance on the light, strong 24-inch steel wheel. Has bent bak handles and is adjustable to suit the height of the operator or to regulate the depth of cultivation and due to the special shape of the shank the attachments always set at the proper angle regardless of the depth it is run.

No. 20—With one double-end steel shovel, one moldboard plow with landside, one combined rake and belvel-ponted hoe, and wrench. Weight, packed for shipment, 20 pounds.

Price, complete\$ 6.25

No. 21-With Midget Seeder, as illustrated..11.20



Hudson Drills and Cultivators

COMBINATION GARDEN SEEDERS

In the No. 201 Combination Machine we have practically a 100% perfect seeder. This is due to the fact that the seed regulator is made entirely of brass. The openings are die cut instead of being cast or moulded. As a result it can be regulated perfectly. The seed flow adjustment is the heart and soul of a seeder, for if the seed is not dropped uniformly, the crop is irregular and pool. It will sow any seed large or small, and is a practical It will sow any seed. large or small, and is a practical combination which can be changed in a moment from sowing in rows to dropping in hills, spacing the hills from 4 inches to 24 inches apart.

A brush force feed of selected bristles is used, and is guaranteed not to injure the most delicate seeds. The seed flow is always in plain sight so that the operator can tell instantly when the hopper is empty. The seeding parts can be detached by removing two bolts, and the seeder then becomes a single or double wheel cultivator, rake, plow or hoe as desired.

rake, plow or hoe as desired. The handles have a plow handle grip and are adjustable to the height of the operator. Wheel is 16 inches in diameter, light and strong. Hoes, shovels and plow are of special high grade steel, all shanks are of malleable iron. Frame is of malleable iron with tubular arch. The No. 201 Combination Seeder consists of Hill and Drill Seeder with the following cultivating attachments: 2 hoes, 2 rakes, 2 plows, 2 vine lifters, 4 cultivator teeth. 2 short axles, and 1 extra

2 short axles, and 1 extra wheel to make double wheeled cultivator, and a "fit all" cultivator, and a "fit all" wrench. All packed in wood box, handles bundled sepa-rately. Weight, 60 pounds.

No. 201-Combination Seeder.

Price, each\$20.60

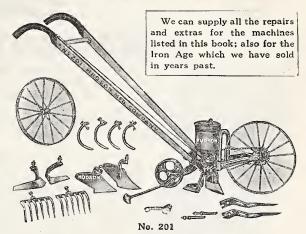
No. 203—Same as No. 201, but has only one wheel. Weight, 55 pounds.

Price, each\$19.30

No. 205—This machine is the seeder only, as shown in cut 201. No cultivating tools are furnished, but they can be added any time they are wanted. Weight, 45 pounds.

Price, each\$17.20

No. 210



SINGLE WHEEL CULTIVATORS

No. 216-Combination Cultivator

A single wheel cultivator, Hoe, Plow and Pulverizer. This tool is designed for use where the operator desires a machine complete at a lower cost than the double wheel outfit; but can at any time be converted into a double wheel cultivator or Hill and Drill Seeder by adding the different attachments shown with our No. 201.



4 cultivator teeth, landside plow, vine lifter and wrench.
No. 216—Weight, 35 lbs.
Price, each\$10.00
No. 218—Same as 216 ex- cept there are no rakes. Weight, 32 pounds.
Price, each\$9.25
No. 220—Same as 216 with hoes only. Weight, 27 lbs.

Consists of 2 hoes 2 rakes,

Price, each\$8.50

DOUBLE WHEEL CULTIVATORS

No. 210-COMBINATION CULTIVATOR

A double wheel cultivator, hoe, plow, pulverizer, hiller, etc. This tool is designed especially for use when the plants are small to work astride the row, thereby getting closer and obtaining correspondingly better results. By removing one wheel it becomes a single wheel tool for use between rows after the

Price, each\$11.10 No. 214-Combination Cultivator, has hoes and vine

lifters only. Weight, 29 pounds. Price, each\$9.25

Prices are all F.O.B. Seattle or Portland



No. 212-Combination Cultivator, same as No. 210, e-cept no rakes are furnished. Weight, 40 pounds.



For the last three years we have been fighting pests in an endeavor to get a crop of turnip, beets, WHAT radishes, etc. Noting your advertisement about "MAGGOTBATE" we thought we would spend 25c and give OTHERS it a trial. We have had absolutely no trouble with root maggots since using it. SAY

Our first crop of radishes, turnips, etc., was already through the ground when maggots began to get busy and we simply sprinkled "MAGCOTBATE" over the top and it was effective. About two weeks later we repeated the dose.

On the last crop we used "MAGGOTBATE" at the time of sowing. Considering the small price and the effectiveness of "MAGGOTBATE" no one, whether a large or small gardener, can afford to be without it. J. R. HULSE, Nov. 4, 1920.

5504 46th S. W., Seattle, Wn.

SEMI-SOLID BUTTERMILK

Thick Like Butter

Makes every chick a chicken and every pig a hog. Semi-solid Buttermilk is fresh creamery buttermilk taken direct from the churn at the creamery and super-soured by the assistance of a Lactic Culture (Bacillus Bulgaricus), then condensed by a special vacuum system at a tempera-ture of 150 degrees F. to the consistency of thick butter. It is absolutely pure, fresh, and sanitary and free from any foreign acids or preservatives. Besides containing all the foreign acids or preservatives. Besides containing all the food and tonic elements of fresh buttermilk it is pasteurized

and the lactic acid is developed to a high degree. Lactic acid is a great germicide which, by destroying the disease forming bacteria in the intestines, prevents the many diseases common to chickens, calves and hogs. It is positively the safest and cheapest health insurance for growing animals. To feed it simply mix with feed or water as desired. Full instructions with each shipment. Put up in 10-gal. kegs and 52-gal. barrels only.

PRICES F. O. B. SEATTLE OR PORTLAND

52-gal.	barrel,	weight	400	lbs\$	28.00
10-gal.	keg, we	ight 90	lbs.,		8.25

AGRICULTURAL BOOKS

Postnaid

105	.paid
Beginners' Guide to Fruit Growing (By Waugh)	1.25
Principles and Practices of Pruning (By Kains)	2.50
Small Fruit Culturist (By Fuller)	
How to Make a Country Place (By Sawyer)	
Irrigation Farming (By Wilcox)	
Landscape Gardening (By Waugh)	1.25
First Principles of Soil Fertility (By Vivian)	1.40
Federal Farm Loan System (By Myrick)	1.40
Forage Crops Other Than Grasses (By Shaw)	2.00
Farm Grasses of the U.S. (By Spillman)	2.00
A. B. C. of Agriculture (By Weld)	1.00
The Business of Dairying (By Lane)	2.00
Swine Husbandry (By Coburn)	2.00
The Shepherd's Manual (By Stewart)	1.75
The Farmers' Veterinarian (By Burkett)	2.00
Bookkeeping for Farmers (By Atkeson)	.60

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Planting Table for Vegetable Garden

arra				Dist.	Apart		1
SEED	Quantity Required	Per Acre	Depth			When to Sow	Ready for Use
				Rows	In Row		
Artichoke, Globe, Seed	l oz. for 500 plants.	6 oz.	l in.	I ft.	3 in.	Spring	Second summer
Globe, Plants	17 plants for 100 ft.			3 ft.	2 ft.	Spring	Summer
Jerusalem	. 3 lbs. for 100 feet	600 lbs.	3 in.	3 ft.	2 ft.	Early spring	
Asparagus, Seed Plants	l oz. for 500 plants.	4 lbs.	l in.	l ft.	3 in.	Early spring	Third Spring
Plants	50 plants for 100 ft.			4 ft.	14 in.	Spring	
Beans, Dwarf	. I lb. to 100 feet	60 lbs.	2 in.	2 ft.	4 in.	Late Spring	45 to 65 days
Pole]b. to 200 hill 3	30 lbs.	2 in.	4 ft.	3 ft.	Late Spring	75 days
Beets, Table	I DZ (tor) 5.0 feetl. CI	6 lbs.	l in.	I ft.	3 in.	Early spring	65 days
Broccoli	l oz. for 2000 plants		½ in.	2 ft.	12 in.	Spring	
Brussels Sprouts	l oz. for 2000 plants	3 oz.	$\frac{1}{2}$ in.	2 ft.	18 in.	Early spring	Fall and winter
Cabbage	I oz. for 2000 plants	3 oz.	½ in.	2 ft.	18 in.	Early spring	90 to 150 days
Carrot	1 oz. for 125 feet	4 Ibs.	$\frac{1}{2}$ in.	1 ft.	2 in.	Early spring	Early summer
Cauliflower	l oz. for 3000 plants	2 oz.	1/4 in.	2 ft.	18 in.	Early spring	110 days
Celeriac	l oz. for 3000 plants	2 oz.	1/8 in.	2 ft.	5 in.	Early spring	Fall and winter
Celery	l oz. for 3000 plants	2 oz.	½ in.	3 ft.		Spring	6 months
Chervil	l oz. for 100 feet		¾ in.	l ft.	4 in.	Early spring	Summer
Chicory Collards	4 oz. for 100 feet	4 lbs.	½ in.	l ft.	3 in.	Early spring	4 months
Collards	¹ / ₄ oz. for 100 feet	3 oz.	$\frac{1}{2}$ in.	18 in.	14 in.	Spring	Fall
Corn, Sweet	I lb. for 200 hills	15 Ibs.	2 in.	3 ft.	3 ft.	Late Spring	80 to 100 days
Corn Salad	l oz. for 50 feet		$\frac{1}{2}$ in.	l ft.	3 in.	Early spring	100 days
Cress, Peppergrass	l oz. for 150 feet	" 12 lbs.	½ in.	l ft.	3 in.	Spring	Summer
Cucumber	l oz. for 100 hills	3 Ibs.	l in.	6 ft.	4 ft.	Late Spring	3 to 4 months
Egg Plant	l oz. for 2000 plants	4 oz.	¼ in.	2 ft.	18 in.	In hot bed	160 days
Endive	l oz. for 400 feet	4 Ibs.	½ in.	18 in.	8 in.	Spring	
Horseradish, Roots	. 70 roots for 100 feet	15,000 Roots	4 in.	2 ft.	12 in.	Spring	
Kale	l oz. for 200 feet	2 lbs.	½ in.	18 in.	12 in.	Spring or fall	45 days
Kohl-Rabi	1 oz. for 150 feet	4 lbs.	½ in.	18 in.	6 in.	Spring or fall	
Leek Lettuce	oz. for 200 feet	4 lbs.	$\frac{1}{2}$ in.	14 in.	4 in.	Early spring	Late summer
Lettuce	oz. for 400 feet	4 lbs.	¼ in.	18 in.	8 in.	Early spring	
Melon, Musk	oz. for 60 hills	3 lbs.	l in.	6 ft.	4 ft.	Late Spring	
Water	l oz. for 30 hills	3 lbs.	l in.	8 ft.	6 ft.	Late Spring	
Okra, or Gumbo	l oz. for 100 feet		l in.	4 ft.	2 ft.	Late Spring	
Onion, Seed	l oz. for 300 feet	4 lbs.	½ in.	l ft.	3 in.	Early spring	
B J	1 lb. for 40 feet		l in.	I ft.	$l \ge in$.	Early spring	
Parsley	1 oz. for 500 feet	3 Ibs.	$\frac{1}{8}$ in.	1 ft.	4 in.	Early spring	
Parsnip Peas	1 oz. for 400 feet	3 lbs.	$\frac{1}{2}$ in.	18 in.	3 in.	Early spring	
Peas	I ID. for 50 feet	60 to 125 lbs.	3 in.	3 ft.	2 in.	Early spring	
Pepper Potato Pumpkin	1 oz. for 1500 plants	3 oz.	1/4 in.	2 ½ ft.	18 in.	In hot bed	
Potato	J IDS. for 100 feet	500 to 700 lbs. 4 lbs.	4 in.	$2\frac{1}{2}$ ft.	18 in.	Spring	
Pumpkin	1 oz. for 50 hills	4 IDS.	2 in.	8 ft.	8 ft.	Late Spring	4 to 5 months
Radish	l oz. for 100 feet		$\frac{1}{2}$ in.	l ft.	2 in.	Early spring	30 to 45 days
Rhubarb, Seed	35 plants for 100 ft.	1 lb.	$\frac{1}{2}$ in.	l ft.	4 in.	Spring	2 years
Plants	log for 150 fr.	2000 plants	6 in.	4 ft.	3 ft.	Spring	lyear
Ruta Baga Salsify	1 02. 10r 150 feet	3 lbs. 8 lbs.	$\frac{1}{2}$ in.	15 in.		Spring & summer.	
Salsity	l oz for 100 feet	8 lbs. 8 lbs.	$\frac{1}{2}$ in.	l ft.	2 in.	Early spring	months
Spinach Buch	l oz for 25 bill-	o IDS.	$\frac{1}{2}$ in.	l ft.	3 in.	Spring & fall	45 days
Squasb, Bush	l oz. for 12 hills	3 lbs. 3 lbs.	2 in.	4 ft.	4 ft.	Late Spring	65 days
winter	1 02. 101 12 hills	J 1D 3.	2 in.	12 ft.	12 ft.	Late Spring	125 days
Tomato, Seed Turnip	1 02 for 150 feet	2 oz. 3 lbs.	$\frac{1}{4}$ in. $\frac{1}{2}$ in.	1.6		In hot bed	
Turnip	1 02. 101 150 leet	J 105.	½ in.	I ft.	5 in.	Spring & summer.	to 15 days

QUANTITY OF FARM SEEDS USUALLY SOWN

	Lbs. Per Acre		Lbs. Per Acre
Alfalfa	8 to 12	Grass, Meadow Fescue	20 to 25
Alsike		" Brome	15 to 20
Artichokes, Jerusalem		" Crested Dog's Tail	
Barley		" Tall Meadow Oat	
Beet, Mangel or Sugar		" Velvet, or Mesquite	
Broom Corn	6 to 8	" Sheep's Fescue	
Buckwheat		" Fine Leaved Fescue	
Carrot, Stock		" Hard Fescue	
Clover, Alsike		" Red or Creeping Fescue	
" Sweet		Pasture Mixture	
Red		Hay Mixtures	
Mammoth Red		Sudan	
Crimson		Hemp	
white, for pasture		Kale, Thousand Headed	
Corn, Field		Kaffir Corn	
"Fodder, in drills		Mangel Wurzel	
" Pop		Millet	
Emmer, or Speltz		Oats Peas, Field	
Feterita		Potatoes	
Flax, for seed for fiber		Rape, Dwarf Essex	
Grass, Kentucky Blue, for pasture		Ruta Baga	
"Canadian Blue, for pasture		Rye	
" Timothy		Soja Beans	
" Red Top, Unhulled		Sorghum, in drills	
" Red Top, Hulled		Turnip	
" English or Perennial Rye	20 to 30	Vetch, Common or Spring	
" Italian Rye		" Hairy or Winter	
" Orchard		Wheat	





VEGETABLE SEEDS

		VEGETABI	LE SEEDS		
Anise	Caulifower 10 Celery 11 Chervil 11 Chrevil 11 Chicory 11 Chicory 11 Chicory 11 Chicory 11 Chicory 11 Chirons 19 Collards 15 Corn Salad 15 Cress 15 Cucumber 14	DII 15 Egg Plant 15 Endive 15 Fennel 15 Herb Seeds 15 Horehound 15 Kale 17 Koln Rein 15 Lavoider 15 Leek 15 Lettuce 15 Lettuce 15 Lettuce 16 Hoshroom 18	Muskmelon 18 Mustard 19 Okra 19 Onion 20-21 Onion Sets 22 Parsley 22 Parsley 22 Parsley 22 Peas 24 Potatoes 27 Ponnpkin 23 Radish 28-29	Bhubarb 23 Rosemary 15 Rota Baga 32-59 Sage 15 Salsify 23 Spinach 29 Squash 30 Summer Savory 15 Swiss Chard 5 Tansy 15 Thyme 15	Tobacco 31 Tomato 31 Turnip
		FLOWER			
Ageratum 33-37 Ahyssunu 33-37 Antirrhinum 37 Arabis 37 Arabis 37 Arabis 37 Babys Breath Babsan 37 Baby's Breath 40 Balsan 37 Bachelor's Button 38 Bellis 37 Calendula 37 Calliopsis 38 Candy Bird Bine 38 Candy Bird Bine 39 Canterhury Bells. 40	Carnation 38 Castor Bean 43 Celosia 38 Centaurea 38 Chrysanthemum. 38 Cobaea scandens. Scoradous 38 Cockscomh 38 Cornflower 38 Cornflower 38 Congo and Saucer Vine Vine 38 Delphinium 40 Devil-in-a-Bush 41	$\begin{array}{llllllllllllllllllllllllllllllllllll$	Lady's Slipper	Petunia 41 Pholx 44 Pinks 43 Poppies 39-41 Portulaca 43 Pot Marlgold 37 Primose 43 Pyrethream 43 Pyrethream 43 Richus 43 Rock Cress 37 Salpiglossis 43 Salvia 43 Salvia 43 Stocks 47	Sunflower 44 Sun Plant 43 Sweet Alyssum. 33-37 Sweet Peas. 33-37 Sweet Plant 33-37 Sweet Plant 44 Tagetes 41 Verbenas 44 Violets 44 Walldower 44 Wild Cucumber 39 Wild Flower Gar den 44 Zinnias 44
		GRASS AND C	LOVER SEEDS		
Alfalfa45Alsike46Blue Grass47Bokhara Clover46Brome Grass47Canadian BlueGrass	Clover, Crimson 46 Clover, Mammoth Red	Crested Dog's Tail 48	Italian Rye Grass 48 Kentucky Bluc Grass 47 Lawn Mix- turesFront Cover	Orchard Grass 48 Pasture Mixtures. 49 Red Fescue 49 Red Top 47 Rye Grass 48 Sheep's Fescue. 49 Sudan Grass 49	Sweet Clover 46 Tall Meadow Oat Grass 48 Timothy 47 Velvet Grass 48
		FARM	SEEDS		
Barley 51 Beets, Stock 60 Beets, Sugar 60 Broom Corn 58 Buckwheat 58 Carrot, Stock 60	Celery, Wild 58 Chou Moellier 61 Corn, Fleld 54 Corn, Popping58-69 58 Emmer 57 Feterita 58	Flax Seed 58 Kaffir Corn 58 Kale 61 Mangel Wurzels. 60 Marrow Cabbage. 61	Oats	Soya Beans58Sorghum58Speltz57Sunflower57-58Turnip, Swedish.59Vetch55	Wheat 50
		FERTI	LIZERS		
Blood and Bone. 63 Bone Meal 63 Dried Blood 63	Farmogerm 63 Fish Fertilizer 63 Ground Lime Rock 62		Lilly's Mor- eropBack Cover	Nitrate of Soda 62 Superphosphate 62 Sheep Guano 63	Sulphate of Am- monia
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For The Farm Use 600 to 1200 lbs. per acre.



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Apply to the lawn at the rate of one hundred pounds to each 2,000 square feet. For new lawns use 100 lbs. to each 1,000 square feet. Morcrop is nearly odorless and easy to handle. Two or three applications of lesser quantities at intervals throughout the year are more effective than applying above quantity all at one time.

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Analysis

Price

(Subject to char	nge.)
Package (about 11/2 lbs	s.) 25c
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