Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

62.71

White's Seeds Produce

ANNUAL CATALOGUE
1916

D. A. WHITE & SONS

WHOLESALE AND RETAIL

FEEDMEN AND
SEEDSMEN

POULTRY AND BEE SUPPLIES

251-261 STATE STREET

SALEM, OREGON

INDEX

Garden Seeds Are Arranged in Alphabetical Order,
Starting on Page 3.

Alfalfa Meal	41	Kale	27
Alfalfa Seed	23	Kow Kure	42
Arsenate of Lead	31	Knox Weed	32
Barley	26	Lawn Grass	25
Barrels	23	Leg Bands	38
Bee Supplies	27-29	Lee's Poultry Supplies	42
Beef Scraps	41	Lice Killers	42
Beeswax	32	Milk Mash	34
Bird Seed	5	Mole Traps	30
Berry Crates	44	Nest Eggs	38
Berry Hallocks	44	Oats	26
Blood Meal	41	Onion Sets	14
Bluestone	32	Pig Meal	34
Bone	41	Plants	19
Bone Mills	38	Plant Setters	29
Brooders	36	Potato Planters	29
Buckwheat	27	Potatoes	20
Calf Meal	34	Poultry Punch	39
Charcoal	41	Poultry Foods	40-41
Cheat Seed	26	Poultry Supplies	35-40
Chick Boxes	39	Rape	27
Chick Feed	40-41	Rose Spray	32
Clover Seed	23	Rosin	32
Corn Planters	29	Rye	27
Conkey's Remedies	43	Seeders	29
Egg Boxes	39	Shells	41
Egg Foods	42-43	So-Bos-So	43
Farm and Field Seeds	26	Sprayers	29
Fertilizers	33-34	Spray Material	31-33
Field Peas	27	Spray Pumps	31
Flower Pots and Pans	22	Squirrel Poison	30
Flax Seed	27	Stock Food	35
Flower Seeds	20-22	Stone Jars	22
Fly Sprays	43	Sudan Grass	25-26
Fountains	37-38	Sulphur	32
Garden Seeds	3-19	Sunflower Seed	18
Gopher Guns and Traps	29-30	Thermometers	39
Grain Cleaner	44	Tobacco Dust	32
Grain Rolling	43	Traps	30
Grafting Wax	32	Tree Tanglefoot	33
Grass Seeds	24-26	Trowels	44
Grit	41	Vegetable Plants and Roots	19
Grit Boxes	37	Vetches	26
Hess Remedies	42	Vitrol	32
Hoppers	37	Whale Oil Soap	32
Hovers	36	Weeders	44
Incubators	35	Wheat	26
Incubator Supplies	39	Wire Nests	38
		Zenoleum	42

Greetings to Our Friends and Customers:

A NOTHER year has passed since you received a copy of our Annual Catalog; the receipt of such a book has come to be looked upon as a harbinger of Spring, which indeed it is, bringing with it, as it does, every suggestion of an awakening season. "There is a time to sow," and as the long Winter season comes to a close we all unconsciously begin to think of growing things—of bud and leaf and flower, and we are filled with a longing to be out-doors; and as we look out we detect a swelling of the buds on the trees, a shade of green showing on the sunny slopes of the hills, as if Nature, too, felt a quickening and was anxiously awaiting the signal to come forth and beautify the earth once more.

We come to you again to offer you the best in seeds that a wide experience can procure. We offer you the best of the standard varieties, and some new ones, all of which we believe are good, and we hope you will come to us for whatever you require in seeds, and come to us if you desire information as to the growing of them; and we thank you for your generous support in the past.

Trusting that you will again favor us with your valued orders, we remain,

Yours very truly,

D. A. WHITE & SONS.

Salem, Oregon, January 1st, 1916.

IMPORTANT INSTRUCTIONS

How to Send Money. Remittances should be made by Post Office or Express Money Order, Bank Draft or Registered Letter. Postage Stamps will be received for small amounts. Remittances in any other way at sender's risk.

Be Sure to Sign Your Name and give Post Office and State. And to avoid mistakes, do not write letters on same sheet with order.

Seeds Postpaid by Mail. We can send all vegetable and flower seeds in quantities of one pound or less by mail, postpaid, to any office in the United States at the price named in this catalog, unless otherwise stated.

Prepay Stations. When you send in orders to go by freight or express, be sure that you add money enough to pay freight charges if your station is a prepay, which is always where there is no regular agent.

Large Orders. Any dealer, market gardener, institution or individual, wishing seed in large quantities is requested to mail us a list of what is wanted, and we will promptly return it with the very lowest market price.

New postage rates—see page 2.

NEW PARCEL POST RATES

EFFECTIVE JANUARY 1, 1914.

Parcel Post Rates are based on Districts and Zones. The District includes the office where mailed and the rural routes therefrom.

A rate of 5 cents for the first pound and $\frac{1}{2}$ cent per pound for each additional pound up to 50 pounds (the district weight limit) is charged between points in districts.

The first zone covers a radius of 50 miles from the point of mailing; the rates are 5c for the first pound and 1 cent for each additional pound, up to the limit of 50 pounds.

The second zone covers a radius of 150 miles and the rate is 5c for the first pound and 1 cent for each additional pound; weight limit of 50 pounds.

A weight limit of 20 pounds applies to the 3rd, 4th, 5th, 6th, 7th and 8th zones.

Zone rates increase with the distance—See table.

WHEN YOU ORDER FROM SALEM look for the zone that corresponds to the distance you are away. Then note where the weight of your package is marked on the table of rates, on the same line under your zone will be shown the amount of postage to be added when ordering. We have catalogued the weight of most items mailable by parcel post, and by the aid of the table here shown you can always figure your postage.

First Zone—Local rate, 5 cents for first pound, ½c for each additional pound up to weight limit, 50 pounds.	WEIGHT	3rd ZONE 150 TO 300 MILES	4th ZONE 300 TO 600 MILES	5th ZONE 600 TO 1000 MILES	6th ZONE 1000 TO 1400 MILES	7th ZONE 1400 TO 1800 MILES	8th ZONE ALL OVER 1800 MILES
First and Second Zones—50 to 150 miles—Rate, 5c for the first pound and 1 cent for each additional pound up to the limit, 50 pounds.	1 pounds	\$0.06	\$0.07	\$0.08	\$0.09	\$0.11	\$0.12
	2 pounds	.08	.11	.14	.17	.21	.24
	3 pounds	.10	.15	.20	.25	.31	.36
	4 pounds	.12	.19	.26	.33	.41	.48
	5 pounds	.14	.23	.32	.41	.51	.60
	6 pounds	.16	.27	.38	.49	.61	.72
	7 pounds	.18	.31	.44	.57	.71	.84
	8 pounds	.20	.35	.50	.65	.81	.96
	9 pounds	.22	.39	.56	.73	.91	1.08
	10 pounds	.24	.43	.62	.81	1.01	1.20
SIZE AND WEIGHT. A Parcel Post package may weigh from 4 ounces to 50 pounds for the first and second zones—with a twenty-pound weight limit for third to eighth zones, and must not exceed size 72 inches in length and girth combined. Four ounces	11 pounds	.26	.47	.68	.89	1.11	1.32
	12 pounds	.28	.51	.74	.97	1.21	1.44
	13 pounds	.30	.55	.80	1.05	1.31	1.56
	14 pounds	.32	.59	.86	1.13	1.41	1.68
	15 pounds	.34	.63	.92	1.21	1.51	1.80
	16 pounds	.36	.67	.98	1.29	1.61	1.92
	17 pounds	.38	.71	1.04	1.37	1.71	2.04
	18 pounds	.40	.75	1.10	1.45	1.81	2.16
	19 pounds	.42	.79	1.16	1.53	1.91	2.28
	20 pounds	.44	.83	1.22	1.61	2.01	2.40

or less will be charged for at one cent per ounce or fraction thereof.

These rates now apply to Seeds, Scions, Plants, Roots, Bulbs and Cuttings the same as to other lines of merchandise. Weight and size within the Parcel Post Limit.

The eighth zone rate applies to Alaska, Mexico, Cuba, Hawaii, Panama and the Philippines and allows Full Weight, 20 pounds.

Postage to Canada on fourth-class packages of over four ounces and not exceeding four pounds, six ounces, goes at eighth zone rate.

WHITE'S SELECTED TESTED VEGETABLE SEEDS

DISCLAIMER

We use every precaution in procuring fresh, pure and reliable seeds, etc., but we, in common with other responsible seed houses, sell subject to the following disclaimer, it being that adopted by the American Seed Trade Association, i. e.—We give no warranty, express or implied, as to the description, quality, productiveness or any other matter of any seeds, bulbs or plants sent out, and will not be in any way responsible for the crop. If the purchaser does not accept the goods on these terms they are at once to be returned.

D. A. WHITE & SONS.

ASPARAGUS

Conovar's Collossal. One of the best varieties. Quality first class. Pkt. 5c; oz. 10c; lb. 65c; pospaid.

BEANS

If wanted by mail add parcel postage.

DWARF OR BUSH—GREEN PODDED

Stringless Green Podded. Without doubt the best green-podded variety on the market. Is very early; pods are long, rather round, very fleshy. Fine for market and home garden. Pkt. 10c; lb. 25c; 10 lbs. \$2.25.

Extra Early Red Valentine. A popular variety. Erect vine; pods of medium length, fleshy and with only slight strings. Pkt. 10c; lb. 20c.

Dwarf Horticultural. A very vigorous variety; used as green shelled as well as a string or dry bean. Pods medium length. Pkt. 10c; lb. 20c.

Castor Bean. Used for medicinal purposes and claimed to keep moles away. Pkt. 10c; lb. 35c.

Extra Early Refuge. An extra early, small speckled bean that is used for green pods, and also as a pickling bean. Pkt. 10c; lb. 20c.

REFUGEE, OR THOUSAND TO ONE

Of great value on account of its hardiness, vigorous growth and wonderful productiveness. Is not excelled by any other variety as a snap bean, and is considered the best for pickling or canning. Beans small, dark purple, veined brown. Pods of perfect form, dark green, veined purple. Pkt. 10c; lb. 20c; 10 lbs. \$1.50.

WAX PODDED BUSH BEANS

Davis White Wax. Rustless and very productive; hardy and one of the best for market gardeners. The dried bean is kidney shaped, clear white and a favorite for baking and canning. Lb. 20c; 10 lbs. \$1.90.

Golden Wax.—One of the most popular garden varieties in cultivation. Pods are long and a beautiful golden yellow, crisp and tender. Pkt. 10c; lb. 25c; 10 lbs. \$2.00.

BEANS—Continued

Challenge Black Wax. The earliest of all wax beans. Excellent quality and very productive. **Lb. 25c; 10 lbs. \$2.25.**

German Black Wax. Very vigorous and a heavy yielder. Pods fairly long, Golden yellow, very brittle and stringless. **Pkt. 10c; lb. 25c; 10 lbs. \$2.00.**

POLE BEANS—GREEN AND WAX PODDED

Kentucky Wonder, or Asparagus. The most popular of the pole beans for both garden and market. It grows luxuriantly and bears for a long time. Fine for table and canning. Pods are very long, very fleshy and deeply creased; green in color and stringless. **Pkt. 10c; lb. 20c; 10 lbs. \$1.50.**

Horticultural. An old favorite. Pods short, pale green splashed with red. Used green or dry shelled. **Pkt. 10c; lb. 20c.**

Lazy Wife. A green-podded variety bearing long pods in clusters. Stringless and of fine flavor. **Pkt. 10c; lb. 20c; 10 lbs. \$1.85.**

White Dutch Case Knife. A climbing variety with long flat pods which become creamy white as they mature. **Pkt. 10c; lb. 20c; 10 lbs. \$1.85.**

White Creaseback. An early green-podded variety; pods five to six inches in length deeply creased and borne in clusters; very fleshy and stringless. Beans white and can be used as a dry bean in winter. **Pkt. 10c; lb. 20c; 10 lbs. \$1.85.**

Scarlet Runner. The well known and old fashioned climber; bright scarlet flowers; also used as a shell bean. **Pkt. 10c; lb. 25c.**

LIMA BEANS

Burpee's Bush. The best dwarf variety. Very prolific. Pods and beans large; fine for green shelled. **Pkt. 10c; lb. 20c; 10 lbs. \$1.75.**

Large White Lima. A good variety of the pole kind. Is very prolific and of good quality. **Lb. 20c; 10 lbs. \$1.75.**

FIELD BEANS

Royal Dwarf Kidney. This bean is large, long and slightly curved, and pure white; it yields a heavy crop and is one of the very best either green shelled or dry. **Lb. 10c; 10 lbs. \$1.00.**

Lady Washington. This small white bean is a great improvement over the old navy bean; a heavy yielder and suitable for this climate. **Lb. 10c; 10 lbs. \$1.00.**

Navy Beans. We handle Oregon grown seed and you will find they yield well and ripen in this valley. **Lb. 10c; 10 lbs. \$1.00.**

B E E T S—Table Varieties

A light sandy loam is preferable for good shaped roots of good color. The soil must be rich and moist to get a quick growth which is essential to crisp, tender flesh. Prices are as follows on all table varieties: **Pkt. 5c; oz. 10c; ¼ lb. 25c; 1 lb. 90c postpaid.**

White's Improved Blood Turnip. We have this grown especially for us, and can recommend it as one of the very best table beets; a turnip-shaped variety with deep red flesh; tops green.

Extra Early Egyptian. One of the best known and most popular varieties. Is very early and of fine quality. Bright red with clear vermillion flesh.

Extra Early Eclipse. A fine, early table variety, tapering, globe shaped. Flesh deep crimson, zoned with pink.

Detroit Dark Red. One of the best table varieties. Globe shaped, bright but rich red flesh.

BEETS—Continued

Half Long Blood. Grows about eight inches long. Very rich, deep red flesh of fine color.

Long Dark Smooth Blood. The leading late variety, keeping well all the winter. Flesh deep purple, fine and sweet.

MANGEL WURZEL, SUGAR AND STOCK BEETS

Should be grown more extensively, as they afford an abundance of feed at a small outlay. Prices are uniform as follows: **Oz. 5c; ¼ lb. 15c; lb. 50c; 5 lbs. \$2.00.** Five pound lots add parcel postage.

Mammoth Long Red. Grows to a very large size and makes fine feed. Very uniform, smooth and of good shape. Often yields from 40 to 50 tons per acre. Should be grown in deep, loose soil.

Golden Tankard. A very large mangel growing about half out of the ground. Considered the best for dairymen.

French Sugar Beet. Flesh white and tender. Fine for table and stock feeding.

New Mangel Half Sugar. Fine for stock feeding. Does not yield as heavy as the mangels but makes better feed.

SWISS CHARD BEET

Cultivated for its stalks and leaves which are prepared and served similar to asparagus. Tender and delicious. **Pkt. 5c; oz. 10c; lb. \$1.00.**

BIRD SEED

Sunflower. Per lb. 10c.

Canary. Per lb. 15c.

Hemp. Per lb. 10c.

Rape. Per lb. 10c.

Millet. Per lb. 10c.

Cuttlebone. Per oz. 5c.

If wanted by mail add parcel postage.

BROCCOLI

Broccoli is very much like cauliflower in general appearance and growth, but is hardier and will stand more cold and frost. Produces fine heads from late in the fall until early spring, according to time plants are set out. Culture same as cauliflower.

Large White French. A valuable variety, with large heads, firm and of good quality. **Pkt. 5c; oz. 65c.**

St. Valentine. The finest of all Broccoli. This grand new strain introduced by us is a sure header of immense size, finest quality, and is ready for market in February. The large, solid, handsome, white heads remain in good condition longer than other varieties. **Pkt. 10c; ¼ oz. 40c; 1 oz. \$1.25.**

BRUSSELS SPROUTS

Dwarf Improved. A carefully grown variety, very hardy and giving compact round sprouts of large size and of good quality. **Pkt. 5c; oz. 10c.**

CABBAGE

CULTURE—For the earliest supply seed may be sown in September and the plants wintered over in coldframes, or seed started in hot beds of cold-

CABBAGE—Continued

frames early in the spring. For the fall crop seed should be sown early in June and the young plants transplanted to the rows during the latter part

of July. In planting be sure to set the young plants down to the first leaves. One ounce of seed will sow 300 feet of drill; four ounces sown thinly should provide enough plants for one acre.

EARLY VARIETIES

Early Jersey Wakefield. The favorite early cabbage with market gardeners. The heads are of good size, solid, a sure header and always give satisfaction. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 50c; lb. \$1.50.

Early Drumhead. Heads flattened. A good keeper. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 50c; lb. \$1.50.

Early York. Small, but is very early. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 50c; lb. \$1.50.

Early Winningstadt. Conical solid head. A fine keeper. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 50c; lb. \$2.

Henderson's Early Summer. The head is round and the largest of the early kinds. Is firm and of the best quality. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb.

Copenhagen Market. A splendid cabbage for home gardens. A new extra early globe shaped Cabbage slightly flattened. The large solid heads are very uniform, with few outer leaves; keeps well and stands handling. Copenhagen Market originated in Denmark, where it is the favorite market variety, and we recommend it to our customers as the best early round head. Gardeners should give it a trial: Our stock is direct from the originator. Pkt. 10c; oz. 35c.

Early Flat Dutch. Firm, fine grained and tender. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 50c; lb. \$1.50.

Charleston or Large Wakefield. Larger and a little later than the Jersey Wakefield. Pkt. 5c; oz. 15c; lb. \$1.50.

LATE CABBAGE

Premium Late Flat Dutch. Considered the best late cabbage for all purposes. A sure header. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 50c; lb. \$1.50.

Premium Late Drumhead. Has no superior for family or market purposes, either for medium early or late purposes. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 50c; lb. \$1.50.

Hollander or Danish Ball Head. Head of medium size, round and very solid. The finest cabbage ever sold on the market. Pkt. 5c; oz. 20c; $\frac{1}{4}$ lb. 50c; lb. \$1.75.

Autumn King or World Beater. A sure header, very solid, fine grained and tender. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 50c; lb. \$1.50.

Sure Head. A favorite with many. Certain to head. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 50c; lb. \$1.50.

Perfection Drumhead Savoy. A variety that is much prized in Europe and also by those who are familiar with it in this country. It is very sweet

CABBAGE—Continued

and always tender. Heads medium sized and fairly compact. Pkt. 5c; oz. 20c; $\frac{1}{4}$ lb. 60c; lb. \$2.00.

Succession, or All Seasons. Heads large, slightly flattened; grows low on the stem. Pkt. 5c; oz. 15c; lb. \$1.50.

Mammoth Rock Red. Used for pickling. The heads are very fine and a sure header. Pkt. 5c; oz. 15c; lb. \$1.75.

CARROTS

CULTURE—For early carrots for table use sow as early as the ground can be worked; for late crop until the latter part of July; early in August

for a winter crop. For the main crop sow from the middle of May to the first of July. Thin out in the row from five to six inches apart, rows from 12 to 14 inches apart. Hoe often and deeply between the rows. Light sandy loam, richly manured is best soil.

One ounce will sow about 125 feet of drill; four lbs. will sow an acre.

Earliest Short Horn, or French. Very early, reddish brown, globular and about two inches in diameter. Pkt. 5c; oz. 10c; lb. \$1.00.

Early Scarlet Horn. The best early kind for general use.

Fine quality. Pkt. 5c; oz. 10c; lb. \$1.00.

Chantenay. The market gardener's favorite. Fine cooking variety. Deep orange in color. Flesh very crisp and tender. Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 30c; lb. \$1.

Danvers Half Long. The smooth handsome roots are orange and of medium length. A heavy producer and a fine feed. Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 25c; lb. 90c.

Ox Heart. A thick carrot, 5 or 6 inches long and very blunt at lower end. A favorite carrot for market and home gardens. Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 25c; lb. 90c.

Long Orange. One of the best for stock feeding. Grows to a large size. Oz. 10c; $\frac{1}{4}$ lb. 25c; lb. 80c.

Large White Belgian. Grown for stock feeding. Very productive. Grows so much above ground that it is easily pulled by hand. Oz. 5c; $\frac{1}{4}$ lb. 20c; lb. 75c.

Large White Mastodon, or Short White. Roots half long, smooth, very heavy at the shoulder, but tapering regularly at the point. Very productive. Oz. 5c; $\frac{1}{4}$ lb. 20c; lb. 75c.

CHICORY

Large Rooted or Coffee. The favorite variety. Pkt. 5c; oz. 10c; lb. 75c.

CELERY

CULTURE—Sow the seed early in a hot bed or coldframe. As soon as the plants are three inches high, transplant in a prepared border, setting

them four inches apart. When grown six inches and fine stocky plants, set in richly manured, deep soil, in rows 3 feet apart and about 9 inches from plant to plant. Water if dry weather follows transplanting. One ounce produces about two thousand plants.

White Plume. The leading white celery. A handsome, crisp sort, of very easy cultivation. Pkt. 5c; oz. 20c; lb. \$1.75.

Golden Self Blanching. The best celery for early market use. Easily blanched. Pkt. 5c; oz. 75c; ¼ lb. \$2.50.

Celeriac, or Turnip Rooted Celery. Pkt. 5c; oz. 15c; ¼ lb. 50c.

CAULIFLOWER

CULTURE—The cauliflower succeeds well in any soil where cabbage will grow.

Large Algiers. A valuable late sort, sure to head, of the best quality, and very popular with market gardeners everywhere. One of the very best late varieties. Pkt. 5c; oz. 75c.

Early Snowball. The best and most popular variety grown. There is a vast difference in the strains of this variety offered, but what we offer is the best imported stock. Those who have had trouble with cauliflower should try this Snowball. Uniformly fine heads, even under adverse conditions. Pkts. 10c, 25c; ¼ oz. 75c; oz. \$2.

Oregon Wonder. A late variety, forming good, large, solid heads during the winter. This variety has given great satisfaction in Oregon wherever tried. Pkt. 10c; ¼ oz. 25c; oz. 75c.

CAULIFLOWER—Continued

Dry Weather. A strain of the Early Snowball type, which is especially adapted to drier climates. It is a Danish variety (the best cauliflower comes from Denmark), and is destined to become very popular in our climate. **Pkt. 10c; ¼ oz. 60c; oz. \$2.00; ¼ lb. \$6.00.**

Autumn Giant. The heads are white, large, compact and thoroughly protected by foliage. **Pkt. 5c; oz. 50c; ¼ lb. \$1.50.**

DON'T BUY cheap strains of cauliflower seed. Only the best select strains can be depended upon to produce a big percentage of large, white, solid heads.

COLLARDS

Used as greens. As the leaves are pulled off others grow in their places. **Pkt. 5c; oz. 15c.**

CRESS

Curled or Pepper Grass. Used as a salad dressing. **Pkt. 5c; oz. 10c.**

Water Cress. Forms a plant the leaves of which are used as a salad or dressing. Thrives only when the roots or stems are submerged in water. **Pkt. 5c; oz. 35c.**

CORN—Sweet, or Table Varieties**EXTRA GROWN STOCK—ESPECIALLY SWEET**

If wanted by mail add parcel postage.

EXTRA EARLY VARIETIES

Golden Bantam. Sometimes called Golden West or Golden Cream. One of the finest sweet corns grown. Very early, tender and extra sweet. Try it; we know you will like it. **Lb. 15c.**

Peep o' Day. The earliest sweet corn on the market. Sweet and very productive. Fine for market or garden. **Lb. 15c**

Mammoth White Cory. Larger and a few days later than the Early Cory but of the same excellent quality. Sweet, tender and fine for market. **Lb. 10c; 10 lbs. 90c.**

Early Minnesota. One of the best early varieties for market or garden. Stalks above five feet high. Ears long and 8-rowed. **Lb. 10c; 10 lbs. 90c.**

MEDIUM EARLY VARIETIES

Early Evergreen. Or Oregon Evergreen. Earlier than the famous Stowells Evergreen, but having all the good qualities of that great corn. Fine for second crop. **Lb. 10c; 10 lbs. 90c.**

Golden Cream. The flavor of Golden Cream is rich, nut-like and delicious, and better than other corns. It is good enough to eat raw. Golden Cream is early, prolific and a fine sort; seed yellow. **Pkt. 10c; lb. 15c.**

LATE VARIETIES

Stowells Evergreen. This is the most popular and best main crop sweet corn grown. It is especially adapted to the Pacific Coast, yields heavy, is sweet and very popular. One of the best corns for green feed and ensilage grown. Grows six to eight feet high and remains in condition to use for a long time. **Lb. 10c; 10 lbs. 90c.** Special prices on large lots.

CORN—Continued

FIELD CORN

EXTRA SELECTED STOCK

We have contracted with several of the most successful corn growers in the Willamette Valley for our seed corn and offer the best seed stock ever sold in this state. We also have eastern grown corn for ensilage and fodder purposes.

OREGON GROWN CORN.

Oregon Yellow Dent. All hand selected stock, showing high germination and purity. Well acclimated and ripens well with good growth of fodder. **Lb. not postpaid 5c; 10 lbs. 50c; 100 lbs. \$4.50.**

The prices on the following varieties are as follows: **Lb. 5c; 10 lbs. 50c; 100 lbs. \$4.50.** If wanted by mail, add parcel postage.

Pride of the North. The best variety for fodder and ensilage. Grows to a good height.

Leaming. A popular, tall-growing variety. Is early, stalks are leafy, making fine fodder or ensilage. Kernels are long and a deep golden yellow.

King Phillip. An extremely early red corn that does well here. Ears long and well filled. A sure cropper.

Champion White Pearl. A large, late variety with pearly white kernels. Very popular with dairymen on account of the great amount of feed that it makes.

Early Canada (Flint). An eight-rowed Yellow Flint corn; early and very productive. **Lb. 10c; 10 lbs. 60c.**

POP CORN

White Rice. The best variety for this climate. Ripens here. **Lb. 10c.**

CUCUMBERS

In this latitude it is useless to plant in the open ground until nearly the first of May. Make hills two feet in diameter and about six feet apart, and enrich with well-rotted manure. Plant a dozen or more seeds, covering half an inch deep. When all danger from insects is over, pull all but three or four of the strongest plants. One ounce for fifty hills; two pounds per acre when planted in hills. **Pkt. 5c; oz. 10c; lb. 75c.**

Early Short Green, or Early Frame. An excellent sort for both table and pickling. Small and early.

Early Cluster. Very early and productive. Fine for pickling.

Chicago Pickling. The great pickling variety. An old favorite.

Peerless White Spine. The best cucumber for all purposes, as it is good for table use and cannot be beat for pickling.

Improved Long Green. The old family favorite. Very productive and a fine cucumber for family or market.

ENDIVE

This is a hardy vegetable, cultivated principally for a winter salad. Sow from May until August for a succession of crops; tie the leaves closely together to blanch them.

Green Curled. A standard sort for fall and winter. Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 30c.

White Curled. A beautiful variety with curled, mossy leaves, for early use. Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 30c.

EGG PLANT

Early Long Purple. The earliest and hardiest. Pkt. 5c; oz. 25c.

KALE

Dwarfed Green Curled. Leaves curled and a bright green. Pkt. 5c; oz. 10c.

Tall Scotch—Green Curled. Grows about two feet high; leaves dark green curled and wrinkled; very hardy. Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 25c.

Thousand Headed. Grows very large. Used mostly for stock feeding. Pkt. 5c; lb. 50c. Postpaid.

KOHL RABI

Early White. Best table variety. Pkt. 5c; oz. 20c.

LEEK

Large Rouen. The favorite variety. Pkt. 5c; oz. 15c.

LETTUCE

Sow in the open ground as early as possible barely covering the seed. If the hotbed is used let it be started quite early. Give but little heat and plenty of water and air on fine days. Let plants in the bed be about four inches apart. As they increase in size thin them out or they will become weak. One-half ounce will sow one hundred feet of drill.

May King. A grand new butter lettuce. A large growing smooth leaf, richly flavored sort, which we believe to be the best of all smooth leafed lettuces. Plant is light green, with round leaves which form into a very solid, compact, round head, stands a long time without running to seed. Leaves are very thick, folded or puckered at base, inner ones branch to a rich golden yellow. Exceedingly rich, tender and buttery. Fine for open ground or forcing. Pkt. 5c; oz. 10c; lb. \$1.00.

Simpson's Early Curled. A leading market variety. Very tender. Pkt. 5c; oz. 10c; lb. \$1.00.

LETTUCE—Continued

Hanson. The leading head variety. Crisp, tender and well-flavored. Pkt. 5c; oz. 10c; lb. \$1.00.

Early Prize Head. One of the very best kinds for the garden. A large, loose head, tender and crisp. Pkt. 5c; oz. 10c; lb. \$1.00.

Grand Rapids. The best early kind for forcing. A favorite of gardeners. Pkt. 5c; oz. 10c; lb. \$1.00.

Brown Dutch. Forms a large, solid head, sweet, tender, and of good flavor. Outer leaves tinged with brown. Very hardy. Pkt. 5c; oz. 10c; lb. \$1.00.

Big Boston. A popular market variety, used largely in the South to grow winter lettuce for Northern markets. A light-green cabbage variety, slightly tinged with brown in the head. Has a particularly fine golden buttery head. Pkt. 5c; oz. 15c; lb. \$1.50.

MELONS

MUSKMELON OR CANTALOUPE

Plant in rich, wet land, using one ounce to 100 hills or two or three pounds to the acre.

Burrel's Gem. A medium sized, oval variety, deeply netted and having salmon or red flesh. Fine grain and fine flavored. Pkt. 5c; oz. 10c; lb. 85c.

Rocky Ford, or Netted Gem. The most largely cultivated variety in use. Fruit is slightly oval, finely netted and slightly ribbed. Flesh green, thick, very sweet and of fine flavor. Pkt. 5c; oz. 10c; lb. 75c.

Osage, or Miller's Cream. One of the finest flavored melons. The sweetest of all. Rich salmon color. Pkt. 5c; oz. 10c; lb. 75c.

Extra Early Hackensack. An early variety with almost globular fruit, which is heavily ribbed and netted; flesh thick and light green. Pkt. 5c; oz. 10c; lb. 75c.

Large Yellow Cantaloupe. The flesh is light yellowish green, very sweet, crisp and delicious. Pkt. 5c; oz. 10c; lb. 80c.

Small Green Nutmeg. The old favorite. Fine for home or market. Flesh thick and green. Pkt. 5c; oz. 10c; lb. 75c.

Emerald Gem. A salmon-fleshed variety of remarkably fine flavor and fine quality. Fruit medium-sized, globular, slightly flattened at the ends; skin only slightly netted; very thick and well ripened close to the rind. Pkt. 5c; oz. 10c; lb. 75c.

Casaba, True Stock. This is an excellent melon and much sought after. Large, rather oblong, well ribbed, skin thin, netted, and of greenish yellow color. Flesh 2 to 3 inches thick, delicious and melting. Pkt. 5c; oz. 10c; lb. \$1.25.

WATERMELON

Kleckley's Sweet, or Monte Cristo. A splendid sort for home use or near markets. Vine vigorous and productive; fruit of medium size, oval; color dark mottled green in two shades, forming indistinct stripes. Flesh a beautiful rich red, exceedingly sweet and tender. Pkt. 5c; oz. 10c; lb. 65c.

Ice Cream, or Peerless. A grand favorite and standard variety. Superior in every respect. Has beautiful crimson core, which is always fine grained, cannot be surpassed in flavor; very prolific, magnificent grower. Oz. 5c; lb. 60c.

MELONS—Continued

Sweetheart. This melon has become very popular as a shipping melon. Vine vigorous and productive, ripening its fruit early. Fruit large, oval, very heavy, uniformly mottled dark and very light green, rind thin but firm; flesh bright red, firm, solid but very tender, melting and sweet; fruit retains its good quality for a long time after ripening. **Oz. 5c; lb. 60c.**

Halbert Honey. A large, oblong variety of the best quality. Is especially sweet in flavor, crisp and brittle, and well ripened to a very thin rind. **Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 65c.**

Kolb's Gem. The well known shipping variety. The fruit is large, thick and oval, with flattened end; flesh bright red. **Oz. 5c; lb. 50c.**

Hungarian Honey. A very sweet variety and fine for home garden. **Oz. 5c; lb. 50c.**

CITRON

Red Seeded. Round and handsome for preserving only. **Oz. 10c; lb. 60c.**

MUSTARD

Southern Giant Curled. **Pkt. 5c; oz. 10c; lb. 50c.**

White English. Leaves mild and tender when young. **Pkt. 5c; lb. 35.**

ONIONS

PURE SEEDS. Highest tests. We pride ourselves on selling the very best onion seed that can be produced. Try it.

Oregon Yellow Danvers. This is a variety planted almost entirely in the Northwest, particularly in Oregon. The bulbs are large, of a half globe shape, with small necks. The best keeper and brings the highest prices in both Oregon and California. Our seed is from the best growers. **Pkt. 5c; oz. 20c; lb. \$2.50.**

Yellow Flat Danvers. A well known variety that does fine here. **Pkt. 5c; oz. 15c; lb. \$2.00.**

Yellow Globe Danvers. A very handsome globe shaped variety of large size, with thin, yellowish skin. White flesh, fine grained, mild, very firm and a good keeper. **Pkt. 5c; oz. 15c; lb. \$2.00.**

White Portugal or Silverskin. A good variety for table or market. Skin and flesh pure white; mild and flat shape. The best white onion. **Pkt. 5c; oz. 25c; ¼ lb. 75c; lb. \$2.50.**

Prizetaker. The genuine. The handsomest and largest globe onion. A perfect globe shape, with a bright straw colored skin. The necks are small and the onions always ripen up hard. **Pkt. 5c; oz. 15c; lb. \$2.**

Australian Brown. The skin is thick and the color a dark brown; the longest keeping onion on the market. **Pkt. 5c; oz. 15c; lb. \$2.**

ONIONS—Continued

Large Red Wetherfield. A standard variety; one of the most productive kinds, even in poor soil. Pkt. 5c; oz. 15c; lb. \$2.

Southport White Globe. A pure white, globe-shaped variety. Forms handsome, hard onions with wax-like, pearl white flesh. Is used a great deal for green onions, owing to the clear, white stem. Pkt. 5c; oz. 25c; ¼ lb. 85c; lb. \$3.00.

Extra Early Red. Very early. Very mild flavor and fine quality. Is much used for green onions. Pkt. 5c; oz. 15c; lb. \$1.75.

Extra Early Barletta. Is a white onion forming small onions about one inch in diameter. Fine for pickles. Pkt. 5c; oz. 20c

White Bermuda. A very early variety, used largely in the South as an early market onion, when the seed is sown in the fall and the onions harvested in the spring. It is mild and of particularly fine flavor. The color is a pinkish-straw color, and shape is flat. Pkt. 5c; oz. 25c; ¼ lb. 85c; lb. \$3.00.

ONION SETS

We make a specialty of onion sets, and have the largest trade in the city on same. On account of the market we do not quote prices, as the price is subject to changes. Write for prices or send in your order and we will fill it at market prices at time order is received.

PARSLEY

Used for flavoring soups, meats, and garnishing.

Double Curled. A curled variety, very hardy and easy to grow. Deep rich green, and by many preferred to the extremely curly varieties. Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 75c.

Extra Triple Curled. Very finely curled variety of dark green color. One of the best varieties for all purposes. Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 75c.

Hamburg, or Turnip Rooted. A plain leafed variety forming a long, thick edible root. Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 75c.

PARSNIPS

Hollow Crown. Root white, very tender, with smooth, white skin. Pkt. 3c; oz. 10c; lb. 40c. Postpaid 50c lb.

PEPPER

Sow the seed early in hotbeds, or later when the weather becomes warm, in open beds. When two or three inches high, transplant to a warm, mellow soil, in rows 18 inches apart and a foot apart in the rows. Guano and hen manure are excellent fertilizers and will greatly increase the yield. Pkt. 5c; oz. 25c; ¼ lb. 75c.

Ruby King. Very large, sweet and mild; bright scarlet.

Large Bell, or Bull Nose. Large, mild, thick-fleshed variety; one of the best for stuffed pickles.

Red Chili. A rather small, bright red variety about two inches long and pointed. The pods are used in making Chili sauce, and are very pungent and hot.

GARDEN PEAS

If wanted by mail, add parcel postage.

We offer a very choice selection of peas that are especially adapted for this climate. In planting, plant an early, medium and late variety and secure a succession of crops.

Alaska. An extremely early variety that can be planted either in fall or early spring. Grows from 20 to 30 inches in height and all mature at one time. Fine for early market. Lb. 15c; 10 lbs. \$1.25.

Gradus or Prosperity. An extra early pea with a large pod. Height, two feet. One of the very best early varieties. Pods well filled with large sweet, tender peas. Fine for market and home garden. Lb. 20c; 10 lbs. \$1.75.

American Wonder. One of the best known and best liked peas on the market. A good yielder, very early, and fine sweet peas. A great favorite for family use. Lb. 15c; 10 lbs. \$1.25.

Premium Gem, or Little Gem. One of the finest of the extra early peas. Peas are very sweet, wrinkled, tender and crisp. Dwarf. Lb. 15c; 10 lbs. \$1.25.

Nott's Excelsior. A fine early dwarf pea. Pods are always well filled with sweet, tender peas. Fine for market and home garden. Lb. 15c; 10 lbs. \$1.25.

MAIN CROP VARIETIES

Improved Stratagem. One of the best of the large podded sorts. The pods are of immense size, well filled with wrinkled peas of the finest flavor. We urge you to

try it as we know that you will like it. Lb. 15c; 10 lbs. \$1.25.

Yorkshire Hero. One of the largest sweet wrinkled varieties. Pods of a good size and well filled. Medium late; bears a long time. Height 30 inches. Lb. 15c; 10 lbs. \$1.15.

Telephone. The best mid season variety. Is tall and large; wrinkled peas of fine quality. Grown by gardeners as a main crop for market. Fine for home use. Lb. 15c; 10 lbs. \$1.25.

Champion of England. One of the most popular tall wrinkled late varieties. Is very prolific and hardy, and the peas are of fine, rich quality. Lb. 15c; 10 lbs. \$1.35.

Alderman. A new pea like Telephone, only better. The vine is extra vigorous and the pods of Alderman are dark green and always well filled with fine large peas. For a pea which should be staked there is none quite so good as Alderman. Pkt. 10c; lb. 15c.

Veitch's Perfection. This is one of the finest second early peas on the market. Large plump pods, well filled with delicious peas. Wrinkled peas of fine flavor. Lb. 15c; 10 lbs. \$1.40.

GARDEN PEAS—Continued

IMPROVED DWARF TELEPHONE

Our Own Select Strain.

Dwarf Telephone is the famous old Telephone without its long vines; of healthy, stocky growth; very productive; pods large, broad, straight and remarkably well filled with large, sweet peas of delicious flavor, very desirable. Eighteen to twenty inches high. Crop failure.

Melting Sugar, Edible Podded. The kind that you cook pods and all, the same as string beans. A pole variety. **Lb. 25c.**

Dwarf Melting Sugar. Same as above but a dwarf pea. **Lb. 25c.**

PUMPKIN

CULTURE.—Care should be taken to keep the different varieties apart, and also to keep them well separated from other vining plants, as they readily amalgamate and deteriorate.

Winter Luxury. The best flavored pie pumpkin grown; enormously productive; excellent keeper; medium size; color golden russet, finely netted; flesh, deep golden, sweet, tender and very thick; none better. **Pkt. 5c; oz. 10c; ¼ lb. 20c; lb. 60c.**

Large Yellow, or Connecticut Field. Large, round, deep glossy yellow. Vines vigorous and very productive; good keeper; grown extensively for stock feeding. **Oz. 5c; ¼ lb. 15c; lb. 50c.**

King of Mammoths. Grows to an enormous size. **Pkt. 5c; oz. 10c; lb. \$1.00.**

Large Sweet Cheese. A popular variety; fruit flattened, skin mottled light green and yellow; flesh yellow, thick, tender, very nutritious and of excellent quality; a most productive variety. **Pkt. 5c; oz. 10c; ¼ lb. 20c; lb. 60c.**

Sweet, or Sugar. A handsome and productive small pumpkin, 10 to 12 inches in diameter, round, flattened; skin orange, flesh deep yellow, fine grained and very sweet. **Pkt. 5c; oz. 10c; ¼ lb. 20c; lb. 60c.**

RADISH

Icicle. A handsome white variety, about five inches long, with sloping top and pointed root; quick growing, brittle and mild in flavor. **Pkt. 5c; oz. 10c; ¼ lb. 20c; lb. 60c.**

Crimson Giant. A new variety which will be a popular market and home variety, since it matures very early and remains firm and crisp much longer than other short varieties; color rose carmine, with white tip; it is top-shaped. **Pkt. 5c; oz. 10c; ¼ lb. 20c; lb. 60c.**

Scarlet Turnip, White Tipped, or Rosy Gem. One of the most popular and attractive short varieties it is globe-shaped, bright rose carmine, with bottom and tip clear, clear white stems and leaves small, very valuable for forcing as well as for the house garden and market. **Pkt. 5c; oz. 10c; ¼ lb. 20c; lb. 60c.**

Early Scarlet Globe. A popular forcing variety owing

RADISH—Continued

to its quick growth and fine scarlet color shape a trifle oblong. Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 20c; lb. 60c.

French Breakfast. A popular variety for market or forcing; it is about two inches long and decidedly stump rooted; color, bright rose, with bottom of root and the tail pure white. Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 20c; lb. 60c.

White Strasburg. A large white variety for late summer use; rather thick at the shoulder and tapering to about five inches in length; keeps firm and solid a long time. Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 20c; lb. 60c.

Half Long. The variety most largely used by gardeners in California; it is about three inches long with half slump root and sloping top; color carmine; quick growing and hardy. Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 20c; lb. 60c.

Long Scarlet Short Top. The best known and most popular long variety; color bright carmine, flesh firm, about six inches long, the top growing out of the ground about one inch. Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 20c; lb. 60c.

Brightest Long Scarlet. A very showy long variety, thick at the shoulder and tapering, bright rose scarlet with distinct white tops. Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 20c; lb. 60c.

Chartier. A very long variety, and larger in diameter and general size than Long Scarlet; keeps hard and crisp longer than most varieties, and is an excellent garden sort; color bright rose with lighter colored tips. Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 20c; lb. 60c.

WINTER RADISHES

China Rose Winter. Bright rose color; flesh white, firm and of superior quality. Pkt. 5c; oz. 10c; lb. 60c.

Mammoth White China. Roots from 10 to 12 inches long., and are solid, tender and crisp. Pkt. 5c; oz. 10c; lb. 60c.

Long Black Spanish. Flesh white; one of the latest and hardiest. Pkt. 5c; oz. 10c; lb. 60c.

RHUBARB OR PIEPLANT

Victoria, or Mammoth. Very large, finest cooking variety. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 40c; lb. \$1.25.

SQUASH

Mammoth Summer Crookneck. Flesh tender and of good quality. Pkt. 5c; oz. 10c; lb. 70c.

Mammoth White Bush Scollop. The best summer sort for the market. Pkt. 5c; oz. 10c; lb. 65c.

Hubbard. The best seller and most popular squash; keeps through the winter. Oz. 10c; lb. 80c.

Golden Hubbard. The same in size, shape and quality as the well known Hubbard squash, except that it is a bright red or golden color, and somewhat earlier; it is also a long keeper, vigorous and wonderfully productive; in flavor it has no equal. Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 25c; lb. 75c.

Sibley, or Pike's Peak. Shell smooth, thin and of a pale green color. Oz. 10c; lb. 80c.

New Delicious. This new fall and winter squash resembles the old Hubbard, having a dark, olive green, hard shell; average weight is between five and ten pounds. Seed cavity small, flesh exceedingly thick, compact, fine grained; color golden orange. The flesh is meaty, granulated, tender and almost of mealy dryness, cooking sweet and rich, whether steamed, baked, boiled or made into pies. Oz. 10c; lb. 85c.

SALSIFY OR VEGETABLE OYSTER

Mammoth Sandwich Island. The leading tender variety. Produces a large crop of straight, smooth roots. Pkt. 5c; oz. 10c; lb. \$1.

SUNFLOWER

Mammoth Russian. The favorite kind. Lb. 10c; postpaid 20c.

SPINACH

An easily grown plant, the seed of which may be planted in the fall to secure good spinach early in the spring. The soil should be rich.

Bloomsdale Savoy. A favorite market variety. Leaves large, round and thick. One of the earliest sorts. Pkt. 5c; oz. 10c; lb. 35c.

Long Standing. A deep green variety that stands a long time without going to seed. Pkt. 5c; oz. 10c; lb. 35c.

Victoria. A long-standing variety with round leaves. Deep green and hardy, and remains ready for use for a long time. Pkt. 5c; oz. 10c; lb. 60c.

TOBACCO

Connecticut Seed Leaf. Best adapted for general use. Does well here. Pkt. 5c; oz. 25c.

TOMATOES

Early Michigan. A smooth and very early tomato. Pkt. 5c; oz. 15c.

Perfection. One of the best; medium early; round and smooth. Pkt. 5c; oz. 20c.

Earliana. The earliest, large and smooth tomato; the most perfect of all tomatoes; of large uniform size, and beautiful red color. Pkt. 10c; oz. 15c; ¼ lb. 50c.

New Stone. The greatest canning tomato in the world; this variety has obtained great popularity with the canners, growers and market gardeners everywhere. Pkt. 5c; oz. 15c; ¼ lb. 50c.

Calk's Early Jewel. A wonderful new variety, in that it is early and bears continuously through the season; the fruit is large, smooth, uniform and well ripened clear to the stem, and flavor and quality are especially fine. Color is bright scarlet. Pkt. 10c; oz. 20c; ¼ lb. 60c.

Husk Tomato, or Ground Cherry. Used mostly for preserves. Pkt. 5c; oz. 30c.

**We Want More Than Trial Orders—That's Why We Always Aim to Please
Quality Is First With Us—Always Was—Always Will Be**

TURNIPS

For early use sow the small sorts as soon as the ground can be worked in the spring. For fall and winter use, sow during July, August and September.

EARLY GARDEN TURNIPS

White Egg. Is clear white, excellent flavor, sweet and mild. Favorite for table use. Pkt. 5s; oz. 10c; lb. 60c.

Early White Flat Dutch. Flesh white, firm, tender and sweet. Pkt. 5c; oz. 10c; lb. 60c.

Early Purple Top, Strap Leaved. The leading white-flesh variety, and one of the best for all purposes. Keeps good. Pkt. 5c; oz. 10c; lb. 60c.

Early White Milan. Pure white, sweet and tender. A leading market variety. Pkt. 5c; oz. 10c; lb. \$1.00.

Orange Jelly, or Golden Ball. One of the most delicate and sweet flavored yellow fleshed varieties introduced. Fine as a table variety. Pkt. 5c; oz. 10c; lb. 60c.

MAIN CROP TURNIPS

Purple White Top Globe. The favorite large variety, both as field and table variety. Handsome and of excellent quality. Pkt. 5c; oz. 10c; lb. 60c.

Pomerian White Globe. A very productive kind. Grows large and makes excellent feed for stock. Pkt. 5c; oz. 10c; lb. 60c.

Yellow Aberdeen. Round, medium size, light yellow. A great favorite with the dairymen. Pkt. 5c; oz. 10c; lb. 60c.

Cow Horn. Grows half out of the ground and is a rapid grower. Immense yielder. Delicate and well flavored. Pkt. 5c; oz. 10c; lb. 60c.

RUTA BAGAS

If wanted my mail, add 10c per lb. for postage.

Monarch or Tankard. Flesh yellow, fine grained, and heavy yielder. Oz. 5c; lb. 60c.

American Purple Top. A favorite variety; grows to a large size and produces immense crop. Oz. 5c; lb. 60c.

Sweet Russian. Most excellent for table and stock, sweet and rich. Pkt. 5c; oz. 10c; lb. 60c.

VEGETABLE PLANTS AND ROOTS

We handle the output of several large growers and can furnish fine transplanted plants during the season.

Transplanted plants are much stronger and better rooted and do far better than ordinary plants sold on the market.

We do not name the various named varieties that we handle, as it varies with the seasons, but will be glad to send you a list at any time when you are ready to plant.

For those wanting large lots, write for special prices, stating quantity wanted.

Cabbage. Any variety. Doz. 10c; 100 50c. Postpaid, doz. 20c; 100 65c.

Cauliflower. Doz. 15c; 100 \$1. Postpaid, doz. 20c; 100 \$1.15.

*All our Seeds
Are Tested*

VEGETABLE PLANTS AND ROOTS—Continued

Celery. Doz. 10c; 100 50c. Postpaid, doz. 15c; 100 65c.
 Tomatoes. Dozen 15c; 100 \$1. Postpaid, doz. 25c; 100 \$1.25.
 Pepper Plants. Doz. 25c; 100 \$1.75. Postpaid, doz. 30c; 100 \$2.
 Thousand Headed Kale. Doz. 10c; 100 40c. Postpaid, doz. 15c; 100 60c.
 Broccoli. Doz. 15c; 100 \$1. Postpaid, doz. 20c; 100 \$1.10.
 Sweet Potato Plants. We can supply good plants during the season but as the price varies will have to quote at time wanted.

ASPARAGUS ROOTS

Can usually supply the leading varieties at the following prices:

One-year-old plants. Doz. 25c; 100 \$1, postpaid.

Two-year-old plants. Doz. 35c; 100 \$1.50, postpaid.

RHUBARB ROOTS

Good strong roots, two years old. Each 10c; doz. 75c; 100 \$6. Postpaid, each 15c; doz. \$1.

SEED POTATOES

On account of the market changes we do not quote prices, but will do so at any time at your request. We mention a few of the different varieties that we usually have in stock. When ready to buy, send for list and prices.

Early Ohio. The old standard variety that is hard to beat. A heavy producer of fine potatoes.

Early Rose. One of the best known early varieties grown here and does well on all kinds of land.

American Wonder. This is the new Early White Potato that is taking the market the last few years. A heavy yielder of choice potatoes.

Early Sunrise. One of the extra early pink potatoes that gives universal satisfaction. Finely flavored and cooks mealy.

Burbank's. The old standby for the late market. One of the best potatoes ever grown anywhere. Brings the highest prices in the markets of the West and is a great cropper.

FLOWER SEEDS**THE "SPENCER" TYPE OF SWEET PEAS****Special Re-selected Stock for 1916**

By reason of their increased size, waved or fluted appearance and charming blendings of harmonious colors, the new "Spencer" type may be appropriately described as Truly Gigantic "Orchid Flowered." The flowers are not only of extremely large size, and attractively waved or crinkled, but are distinct also in having the outer edges of the standard and wings serrated. The standard is broad and tall; the wings are broad, well spread and generally held erect by the keel.

Apple Blossom. A truly giant flower. Color standard rose with deeper veinings, wings light carmine, ground color primrose. Pkt. 10c; oz. 30c.

Asta Ohn. Lavender suffused with mauve. Of perfect form, of largest size, 4 blossoms on long, strong stems; very vigorous. Pkt. 10c; oz. 30c.

Countess Spencer. Pink. Flowers extremely large, beautifully expanded, crumpled and waved. Color silvery white, suffused with soft shell pink, deeper at the outer edges. Pkt. 10c; oz. 30c.

Dainty Spencer. A pure glistening white with distinct margining of bright rose pink; comes four large blossoms on long stems. Dainty is all

FLOWER SEEDS—Continued

that its name implies and is the best picotee edge yet produced; very large and wavy. **Pkt. 10c; oz. 30c.**

King Edward Spencer. Bright crimson scarlet, largest size, wavy standard; dropping wings, very long stems; one of the finest bright reds. **Pkt. 10c; oz. 30c.**

Primrose Spencer. Color, true primrose. Very vigorous, free flowering, excels in beauty of form, length of stem and keeping quality. **Pkt. 10c; oz. 40c.**

White Spencer. A pure white flower of enormous size, beautifully crinkled and fluted, of splendid substance. **Pkt. 10c; oz. 30c.**

King White. The newest and most magnificent white; of perfect Spencer form; the immense petals gracefully frilled are pure white of wonderful substance. King White has the most enthusiastic endorsement ever accorded a sweet pea from the world's greatest sweet pea specialists of Europe and America. Be sure to order King White. **Pkt. 10c; oz. 35c.**

Illuminator. A glorious orange-salmon sweet pea. In dull light the color appears to be a "flat orange-scarlet," but when in brilliant sunshine or under artificial light the color is completely changed. It appears to be a bright salmon-cerise, sparkling with orange. When seen at its best one has to call it "glorious," fully appreciating the meaning of the adjective. **Pkt. 10c; oz. 30c.**

Margaret Atlee. The Spencer Supreme. Margaret Atlee is a rose-salmon-pink on a creamy buff ground; a rich, soft color, and extremely attractive, both as individual flowers and in the bunch. The standard is large and wavy and inclined to double under favorable conditions. The wings are equally large, wavy and well set. It runs almost uniformly four blossoms to the stem; well poised and graceful. In a field of three acres we seldom found a stem with less than four blossoms. In all respects it is the grandest sweet pea we have ever grown, either from foreign introduction or American varieties. **Pkt. 10c; oz. 30c.**

W. T. Hutchins. Buff and light primrose, shading to apricot at margins. **Pkt. 10c; oz. 30c.**

Capt. of the Blues Spencer. Clear purplish blue, lighter at edges. **Pkt. 10c; oz. 30c.**

Othello Spencer. Deep rich maroon, very dark. **Pkt. 10c; oz. 30c.**

Our Superb Mixture—True Spencers Only. A splendid mixture, carefully proportioned and blended to produce pleasing and harmonious combinations of color, containing the most beautiful shades and varieties of the wonderful Spencer type. These are not seedlings, but carefully selected named varieties that retain all their purity and brilliancy of color. **Pkt. 10c; oz. 25c; lb. \$3.**

Select List of Finest Large Flowering Sweet Peas, the Best of Their Color and Type.

We offer for this season a very fine selection of Grandiflora varieties. All at the uniform price of 5c per packet; 10c per oz., 35c per ¼ lb. and \$1 per lb., postpaid.

Dorothy Eckford. An extra large white variety.

Hon. Mrs. E. Kenyon. Primrose or light cream or yellow. Large, semi-hooded.

Prima Donna. The most popular clear pink hooded. Light pink.

King Edward. One of the very best pure red shades.

Lady Griesel Hamilton. Soft lavender, tinted with mauve in standard.

Navy Blue. Violet and light blue.

FLOWER SEEDS—Continued

Othello. Deep maroon. Hooded or shell shape.

Countess of Radnor. Soft, pinkish lavender self. Very large and wavy.

Lady Brisel Hamilton. Most attractive light lavender shading; flowers of large size.

Henry Eckford. A distinct orange scarlet of the finest form and largest size; as beautiful under artificial lights as in daylight.

Dainty. White ground; beautiful picotee edges of rose pink.

Blanche Ferry. Rose standard, white wings, tinted light pink.

Flora Norton. Bright blue with tint of purple.

White's Extra Fancy Grandiflora Mixed. A fine selection of the different varieties, carefully blended together to make a beautiful showing of the different colors in a harmonious effect.

NASTURTIIUM

Nasturtium. Fancy tall mixed. A fine selection of the different climbing varieties in all colors. Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 25c; lb. 75c.

Nasturtium. Tom Thumb or Dwarf. A fine selection of the dwarf variety. Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 25c.

On account of limited space in this catalogue we list only a few of the main flower seeds but we have a large stock of very choice, selected seeds, and will be glad to fill your order at any time, whether we catalogue the particular variety you want or not.

FLOWER POTS, FERN AND BULB PANS, SAUCERS

Hanging Baskets. These are well made, having scalloped edge and fancy design on the lower outside. Better than wire baskets, as plants do not dry out so quickly. 8 inch each 10c; 10 inch each 45c; 12 inch each 60c.

Flower or Azalea Pots or Bulb Pans. (All same price.)

Size	Each	Doz	Saucers	Size	Each	Doz	Saucers
2 inch....	\$0.02	\$0.20		8 inch....	\$0.15	\$1.75	\$0.10
3 inch....	0.03	0.25		9 inch....	0.25	2.50	0.15
4 inch....	0.04	0.40	0.02 $\frac{1}{2}$	10 inch....	0.40		0.20
5 inch....	0.06	0.60	0.04	12 inch....	0.60		0.35
6 inch....	0.10	0.90	0.05	14 inch....	1.40		1.00
7 inch....	0.12	1.20	0.07 $\frac{1}{2}$	16 inch....	2.25		1.25

Note—At the above prices we will pack the pots carefully, but buyer must pay freight or express.

Plant Tubs. These are well made of cedar, and will last a lifetime. Painted a green color. Suitable for shrubbery, large plants, small trees, etc. Size No. 1, \$1 each; No. 2, \$1.25.

STONE JARS

We carry a complete stock of stone pots and quote at the following prices. If to be shipped add 10c each for crating and packing.

1 gallon	\$.15, cover 10c	6 gallon	\$.90, cover 15c
2 gallon	.30, cover 10c	10 gallon	1.75, cover 35c
3 gallon	.45, cover 10c	15 gallon	2.65, cover 50c
4 gallon	.60, cover 15c	20 gallon	3.50, cover 70c
5 gallon	.75, cover 15c	1 gallon Stone Jugs,	20c each.

Compare Quality and You Will Always Find Our Goods of the Better Grade
We Advertise the Plain Truth at All Times—It Pays Best

BARRELS AND KEGS

We carry a complete stock suitable for meat, fish, cider, vinegar, kraut, etc.

5 gallon keg..\$.65	15 gallon keg..\$1.25	30 gallon barrel..\$1.60
10 gallon keg.. 1.00	20 gallon keg.. 1.40	50 gallon barrel.. 2.35

We Are Headquarters for Alfalfa, Clover and Grass Seeds IMPORTANT! READ CAREFULLY

Clover, Grass and Field Seeds are subject to market changes, therefore we cannot print prices good for any length of time. When ready to buy, write us for special prices, stating quantity wanted; or send in your order at catalogue prices. We guarantee that we will give you full value for the money sent, whether the price at the time you order be higher or lower, or if the difference is very great, we will notify you before shipment.

YOU WILL ALWAYS GET YOUR MONEY'S WORTH

ALFALFA

(*Medicago Sativa.*) One of the most valuable forage or pasture grasses, being very nutritious, both as a green feed and as a hay. Often bears four or five crops a year and with irrigation, six or more. It does well in most any climate and improves the soil that is sown with it. The western part of Oregon, including the Willamette Valley, Rogue River, Umpqua and other valleys, are now raising alfalfa successfully and it is proving a very profitable crop. Price per lb. 25c; postpaid 30c; 100 lbs. \$22.

CLOVER SEEDS

The Largest Dealers in the Willamette Valley in Clover Seeds

We make a specialty of handling the very best grass and clover seeds that can be obtained. We have a large power cleaner and clean all our seeds before offering them to the market. The days of sowing any old seeds are past, as the up-to-date farmer knows that it pays to seed only with the best on the market. You will find our prices are as low as seeds of like quality can be sold for; the quality of the seeds we handle is so much better than some dealers handle, that there is no comparison, and they usually want as much for seeds of inferior quality as we ask for seeds of the HIGHEST QUALITY, the only kind that we handle. Add parcel postage if sent by mail.

Red Clover. (*Trifolium Pratense*). The standard clover for all purposes. Yields the heaviest crop of any variety, except alfalfa, makes superior hay, especially mixed with timothy. Lb. 20c; postpaid 30c; 100 lbs. \$20.

Mammoth Red Clover. Similar to Red Clover, but coarser, taller and more hardy. Lb. 25c; postpaid 30c; 100 lbs. market price.

Alsike Clover. Alsike succeeds on wet, cold and stiff lands, as well as growing any place that red clover will grow. Makes fine hay, as it is not as coarse as red clover. Lb. 20c; postpaid 30c; 100 lbs. \$19.

White Dutch. (*Trifolium Repens*). Dwarf spreading vine-like variety, with white blossoms; used largely for bee pasture. It is also an excellent

CLOVER SEED—Continued

pasture plant for either sheep or cattle; also makes a beautiful lawn. Sow 10 pounds to the acre. **Lb. 60c; postpaid 70c.**

White Clover. For pasture. We usually carry in stock a mixed White Clover suitable for pastures and pasture mixtures. Mixed with Alsike Clover. **Lb. 35c; 100 lbs. \$33.** If wanted by parcel post, add postage.

Sweet Clover. Sweet Clover is coming into its own. Instead of being the despised roadside weed that it once was, it is now being planted extensively, as few plants grow better in heavy clay soil, alkali ground and many other places where the ordinary grasses cannot exist. Sweet Clover will provide more feed per acre than any other form of grass. **Lb. 35c; 100 lbs. \$32.**

GRASSES

Add parcel postage for all grass seeds ordered by mail; prices below do not include postage. All prices subject to market changes.

Orchard Grass. One of the most valuable pasture grasses; produces an immense quantity of forage, and hay of best quality. After being sown comes up very quickly and yields very heavy. Suitable to sow under trees as it does well in the shade. Fine for burnt lands, as it will catch if sown in the ashes. **Lb. 25c; 100 lbs. \$21.**

Timothy. We have secured some very fine Timothy seed from Idaho; Idaho having the reputation of growing the finest seed obtainable. As we buy direct we are in a position to quote low prices. If you are going to need any quantity write for special prices. Timothy makes the finest and best quality hay, bringing the highest prices on the market. It produces a larger crop than any other grass and always has a ready sale. In former times Western Oregon was a great timothy producing country but in recent years it has been neglected. **Lb. 10c; 100 lbs. \$9.50.**

English Rye Grass. Perennial. One of the best grasses for this country, as the moist climate is adapted to its growth. It grows rapidly and makes a good showing within a month from the time of sowing. Does fine both on hill and bottom land. A good lawn grass but a little coarse. **Lb. 15c; 100 lbs. \$10.**

English Rye Grass, Oregon Grown. We have some very choice rye grass and are offering it at low prices, as it is extra select, new crop seed. **Lb. 10c; 100 lbs. \$9.**

Italian Rye Grass. A quick growing grass attaining a height of 2½ feet to 4 feet. Thrives best on soils that are slightly moist, and will even stand considerable overflow. Grows easily and makes an abundance of hay or pasture. Lasts from 2 to 6 years. Sow 15 to 20 lbs. to acre. **Lb. 15c; 100 lbs. \$10.**

Mesquite, or Velvet Grass. This is one of the most hardy grasses grown here and makes an abundance of pasture both early and late in the season. Also used for hay quite extensively. Fancy hulled seed. **Lb. 20c; 100 lbs. \$16.50.**

Kentucky Blue Grass. This grass is now being used quite extensively for pasture, it having proved to be a natural grass for this climate. We would recommend that you mix a little in any mixture for pasture that you may sow. Also, makes one of the finest lawns, either alone or mixed with other grasses. We have some extra fine, heavy seed. **Lb. 25c; 100 lbs. \$2.25.**

Creeping Bent Grass. Makes the finest lawn of any grass we have ever seen. The smooth, velvet lawns that every one admires. Either used alone or mixed with other grasses. **Lb. 60c.**

GRASSES—Continued

Red Top, Fancy. Sown for pastures and lawns, either alone or as a mixture. Very desirable for wet lands and considered next to timothy as a grass hay. **Lb. 25c; 100 lbs. \$22.**

Meadow Fescue, or English Blue Grass. (*Festuca Pratensis*). A valuable grass for permanent pastures, and for meadows for cutting which are rather damp. Makes a quick second growth, but does not do well on dry soils. Often sown in mixtures. Sow 20 lbs. per acre. **Lb. 20c; 100 lbs. \$17.**

FANCY LAWN GRASS SEED

More fine lawns in the city have been made from our mixture than any other. We use only the choicest, recleaned, heavy grass seeds. This mixture of ours will produce a fine velvety thick lawn in a few weeks' time, if the ground is properly prepared and the seed sown properly. Do not buy cheap seed; it means only a poor lawn. Sow our seed at the rate of one pound to 400 square feet of space. **Lb. 40c; 10 lbs. \$3.75.**

Shady Nook Lawn Grass. This is a special mixture for shady places, like under trees, in the shade of a house or similar places. **Lb. 50c; 10 lbs. \$4.50.**

MIXED GRASSES

We will mix any seeds that you may want as you want it. Send us a list of what you want or what you want it for, and we will quote you accordingly.

Pasture Mixture. We have a fine mixture put up for pastures, consisting of English Rye Grass, Orchard Grass, Alsike Clover, White Clover, Red Top, Mesquite, etc., and offer it at a very low price, considering the quality. **Lb. 15c; 100 lbs. \$10.**

SUDAN GRASS A NEW FORAGE CROP OF IMMENSE VALUE TO THE MIDDLE WEST

Sudan Grass was introduced in the United States in 1909 from Sudan under the name of Garawi. One-half pound of seed was received and the results were so very promising that plans were immediately made for testing it out thoroughly in all parts of the United States.

Sudan Grass is strictly an annual and dies each year like Millet and must be seeded again each spring. This makes it fit admirably into any system of rotation and while it does not benefit the soil like legumes it does afford a change in crop and this is a good thing for the soil.

It is the hay crop, however, which will be of far greater importance. Sudan Grass yields a good crop of first-class hay. All stock relish the hay and thrive on it. The quality of Sudan Grass hay is much superior to Millet hay and said to be equal to Timothy hay. Yields of from two to four tons per acre are common and under irrigation they run as high as eight to ten tons per acre.

Seeding.—Sudan Grass should not be planted until the soil has become warm in the spring. Planting in cold soil only delays germination and dwarfs the early growth. It can be sown any time during the summer as a catch crop so long as 70 to 80 days intervene before the date of the first expected frost. Sudan Grass can be sown in rows 18 to 42 inches apart and cultivated like corn, or it can be drilled in with a grain drill or sown broadcast by hand. In the semi-arid sections it is much more profitable to seed it in rows and cultivate, and even in the humid regions a small amount of cultivation appears to give added vigor to the plants. The rows should be as close together as the tools available for cultivation will permit. Seeded in rows 36 to 42 inches apart, 2 to 3 pounds per acre of good seed

GRASSES—Continued

are sufficient. In rows 18 to 24 inches apart 4 to 6 pounds, and drilled or broadcast 16 to 24 pounds per acre are required.

Harvesting.—Sudan Grass is easy to cut with a mower and cures readily, so that the haying process is much the same as that of millet or any other hay grass. Where it is harvested for seed an ordinary grain binder is best suited for handling the crop. When cut for hay it is best to cut just after full bloom, so that it will have as much time as possible for a second growth. After cutting it renews its growth promptly when moisture conditions are favorable, and in about 40 to 50 days another cutting is ready. The grass stools abundantly after first cutting and the second and third cuttings are very fine stemmed. In 1912 four cuttings were secured at Chillicothe, Texas. Ordinarily two or three cuttings may be expected from the central United States southward, and one cutting north of the middle.

It is interesting to note that while Sudan Grass is very drought resisting and makes good yields in dry sections, it also does exceedingly well under irrigation and under the latter conditions makes enormous yields of hay.

Summing it all up, Sudan Grass is a hay green feed crop which seems to be especially adapted to the drier regions of the middle western states.

Every farmer in the middle west should plant at least an acre or two of Sudan Grass. It is very important, however, that the seed should come from a reliable grower, as there is always danger of having the seed mixed with Johnson Grass.

Price, per lb. 25c; postpaid 35c.

FARM AND FIELD SEEDS

We want to call your attention to our stock of Farm and Field Seeds. We are making a special effort to please those who want GOOD SEEDS and PURE SEEDS. We have at a large outlay installed a large power cleaner, equipped with all the latest cleaning devices, to handle this trade right. We clean all our seeds and seed grain thoroughly before offering on the market. Buy our recleaned seed grain and seeds, and sow nothing but clean seed; you have enough foul seeds now without sowing any more.

Seed Wheat. Our stock varies at the different seasons so that we would advise you to write or call for prices when you are ready to buy. In that way we can quote you on what we have in stock and send samples if desired.

Seed Oats—White Spring. We have in stock several varieties of well-known Seed Oats, including some new varieties that it would pay you to try.

Fall and Winter Oats—Grey. Usually have in stock some choice grey Oats for seed purposes. When in the market for seed oats of any kind, write for prices and samples.

Seed Barley. Have some choice stock. Prices on application.

White Hulless, or Bald Barley. A grand barley for stock feeding. Grain plump, heavy and when threshed is hulless like wheat. A heavy cropper. When grown and cut for hay it produces a magnificent fodder, which is very rich and almost equal to a grain feed. Much relished by horses and stock of all kinds. An excellent hog feed. Culture same as common barley. 100 lbs. \$2.50.

Seed Vetch. We handle several cars of Vetch Seed each season and have some very choice seed in stock at present. This is one of the most profitable crops grown for hay and pasture, and it pays any farmer to raise it. Also used for fertilizer by plowing under. 100 lbs. \$4. Write for prices on large lots.

Cheat Seed. During the seeding season we carry a large stock at market prices.

FARM AND FIELD SEEDS—Continued

Buckwheat (Japanese). Is earlier than the other varieties. Is excellent for bee pasture. **Lb. 6c; 100 lbs. \$5.**

Buckwheat (Silverhull). A very good and popular variety. Grain is of a light color, rounder than the common variety, thinner husk, earlier and yields more. **Lb. 6c; 100 lbs. \$5.**

Flax Seed. Recleaned for planting. Flax should be grown more as it is a profitable crop at the prices that it has been selling for the last few years. **Lb. 10c; 100 lbs. market price.**

Seed Rye. Rye is one of the most profitable crops in the grain line. It is a sure cropper and produces a good crop every season. Fine for pasture. Recleaned seed, **\$2.25 per 100 lbs.**

Sowing Rape. This great forage crop is becoming more popular every year. Yields an immense amount of green feed. **Lb. 15c; 100 lbs. \$12.**

Thousand Headed Kale. One of the most valuable forage crops for this valley ever introduced. It produces a mass of thick, curly green leaves, rich and succulent, which are eagerly eaten by sheep, cattle, horses, poultry and hogs. Especially recommended for green feed during the dry summer and also during the cold weather of winter, as it is good at all times. Makes the most rapid growth if sown in the spring, but can be sown in summer and fall for winter feed. **Pkt. 5c; oz. 10c; lb. 50c by mail postpaid.**

FIELD PEAS

Field Peas are very profitable crop and are grown here very extensively. They can be grown alone or with oats. When planted with grain and cut green they make a large amount of very rich feed; also valuable for enriching the soil if plowed under. The dry peas make excellent hog feed and are quite fattening. Sow, if alone, 120 pounds to the acre; if with other grain, 60 pounds.

White Canadian. A leading kind; seed almost white; a heavy cropper. **Per lb. 10c; 100 lbs., write for price.**

BEE SUPPLIES

Description and prices. Order by numbers. Five hives same rate as ten.

Dovetailed Pine Hives. No. 1. Dovetailed hive, complete with one super. Consists of one bottom board, one body, one super, one cover, eight Hoffman Brood Frames, one division board, six section holders, 24 sections and foundations started for frames, and sections and nails. Nailed, **\$2 each; per 5, K. D. flat, \$9.50.**

No. 2. Hive is the same as No. 1, less sections and foundation starters. Nailed **\$1.80 each; per 5, K. D. flat, \$8.50.**

Dovetailed Supers. No. 1. Pine with sections, foundation starters. Nailed, **90c each; per 5, K. D. flat, \$4.**

No. 2. Pine, less sections and starters. Nailed, **75c each; per 5, K. D. flat, \$3.**

No. 0. Empty, pine or cedar, Nailed, **40c each; per 5, K. D. flat, \$1.75.**

BEE SUPPLIES—Continued**SECTION HONEY BOXES**

Our No. 1 Sections are made of the choicest white basswood lumber and are perfect in finish, and free from defects. They are not all snow white, but vary from that to a light cream color. Choice honey shows off to best advantage in a section not too white, as it is the honey rather than the wood that the consumer looks to. Price, per 100 75c; 500 \$3; 1000 \$5.75.

Our No. 2 Sections, selected from our best grade, sell at a price considerably less than our No. 1, and are correspondingly lower in quality. Most of them are equal to No. 1, except in color; some have dark spots, saw marks, or other blemishes which exclude them from No. 1 grade. Price, per 100 65c; 500 \$2.75; 1000 \$5.25.

SECTION HOLDERS

Six section holders, with separators, one follower and wedge, are put in each super, and each holder holds four 1-lb. honey boxes. The bottom strip is $1\frac{1}{4}$ inches thick, and is cut out to fit in sets of sections, $1\frac{1}{8}\times 18\frac{1}{2}$ inches, slotted. Per 100 \$2.40. Bottoms only, $1\frac{1}{8}$ inches wide, slotted, per 100 \$1.50.

COMB FOUNDATION

Packed in 1, 2, 3 and 5-pound paper boxes, of 25 pounds in a case. Light standard brood grade, 6 to 7 square feet per lb., price per lb. 70c; Light section grade, 11 to 12 square feet per lb., price per lb. 75c. If foundation is wanted by mail, add 6c per lb. up to two lbs., and 2c per lb. over 2 lbs.

HOFFMAN BROOD FRAMES

The Hoffman Improved Foundation Fastening Frames are the latest and best brood frames out. The top bar is made with a beveled strip which holds the foundation absolutely in place, perfectly straight and exactly in center of top bar. Anyone can put foundation in these new frames very rapidly. Price, Hoffman Frames, per 10 35c; per 100 \$3.

HIVE PARTS

Division boards, each 10c; 10 90c. Followers and wedge, each 5c; 10 35c. Tightening springs, each 1c; 10 8c.

SEPARATORS

One separator should always be placed between each section holder so that the bees will build the honey comb even in each section. Slotted wood separators $4\frac{1}{2}\times 18$, per doz. 15c; per 100 \$1.

BEE VEILS

Hat Veils. These veils have a rubber band around the top so as to fit the hat snugly. The lower end is bound, to prevent fraying. The kinds of material are given below. Price list (postpaid): No. 2 Veil, cotton tulle, with silk tulle face, 65c; No. 3 Veil, cotton tulle throughout, 50c.

Globe Veils. Each \$1.

BEE ENTRANCE GUARDS

Root's or Tinker's. These are to admit workers and exclude drones. After the drones are all out, fix the guards over the entrance, and at night the drones can be destroyed. Price 15c; by mail 20c.

TINNED WIRE

No. 30. Per spool, 10c postpaid.

BEE SUPPLIES—Continued**BEE SMOKERS**

Clark's Cold Blast. Probably the most popular smoker in use today is the Cold Blast, although many are now changing to the hot blast, claiming that they are more effective. The Clark is the best low-priced smoker. Price 75c; by mail 80c.

Root Smoker. It is neat in appearance and does not topple over easy. Makes a good strong blast, with little work. Very substantial. Price, standard, 3 1/4 inch, \$1; by mail \$1.10.

A B C Bee Culture. For the veteran as well as the beginner. While the book is in a true sense an A B C of Bee Culture, in that it is adapted to the requirements of the beginners, no veteran, no matter how extensive his experience, can afford to be without a work of this kind, containing as it does, a carefully prepared treatise on every late method of practice known to the business. 500 pages, postpaid \$2.15.

OTHER BEE SUPPLIES

We handle a great many supplies not listed here, but will be glad to quote you prices at any time. Send us a list of what you want.

BROADCAST SEEDERS

Cahoun Seeder. The most popular and convenient hand machine on the market. Sows very accurate. Good for grain or grass seeds. Price, each \$3.50.

Little Giant. The handiest small seeder on the market. Very convenient. Price, each \$2.

PLANT SETTER

Master's. For planting cabbage, kale, celery, etc. With this little planter you can plant, water and fertilize ten thousand plants a day. Price, each \$4.50.

CORN PLANTERS

Crescent. A two-handed planter; strong and durable. Price \$1.

Rotary. Very accurate in planting. Price \$1.75.

POTATO PLANTERS

Peerless. This is the lightest and best tubular planter made. With the planter one man can plant several times as much ground without getting a lame back as he can plant by hand. The planter locks itself as it is lifted out of the ground, so that the next potato may be dropped in at once, and opens automatically as the top of it is moved forward in walking. Price, \$1.50.

SPRAYERS

Hand Sprayer. This is a little hand sprayer and is used to apply Lice Killers, Fly Sprays, Insecticides and other sprays where you use a light spray and do not have to throw the spray only a short distance. Heavy tin, 50c each; brass, \$1 each, postpaid.

GOPHER GUNS

We have a safe and improved gun. Simple and easy to handle. Each \$1.75; postpaid \$1.85.

SQUIRREL POISON

We handle a reliable brand of squirrel poison that does the work. Can 30c.

**SURE DEATH TO
GOPHERS, SQUIRRELS, PRAIRIE DOGS,
RABBITS, RATS AND MICE.**

GOPHERGO is a combination that **never falls** they are sure to get either the grain or the raisins. It has been tested and endorsed by the State Experimental Stations, and is sold in twenty-two States in 25c., 50c., \$1.00 cans and \$2.50 buckets by drug, seed and general stores everywhere. Ask your dealer for it; if he does not have it, we will advise him the nearest place to get it. Or write to us yourself, giving us your dealer's name, and we will send you our book, **"GROUND PESTS AND HOW TO EXTERMINATE THEM."** It will cost you nothing and save you money. **GOPHERGO IS READY FOR USE,** cheap and guaranteed to do the work or money refunded.

**THE KNOX MANUFACTURING CO.
PASADENA, CAL.**

A combination of raisins, wheat and barley. Ready for use, cheap and guaranteed to do the work. Small can 25c; Medium sized can 50c; Large can \$1.

GOPHER AND SQUIRREL EXTERMINATOR

Non-Poisonous—Non-Explosive

Comet Gas Balls are non-poisonous, non-explosive, inexpensive and always ready for use. Comet Gas Balls are positive in action, can be used successfully at any season while the burrows are open, and the gopher must take the dose. Price 35c a dozen; 30c, gross lots.

TRAPS

Reddick Mole Traps. The best trap for catching moles on the market. Each 75c; postpaid 85c.

THE CINCH POCKET GOPHER TRAP

The only safe and successful device for catching this pest. No dangerous gun; no ammunition. Easy to operate and when set properly is a "cinch" sure enough. Any boy can clean the ranch with them. Will also catch moles, rats, etc. Price 75c, with scoop for opening holes. Sold several hundreds of these traps the past season and they all gave fine satisfaction. Guaranteed to do the work or money back. Postpaid 85c. State whether for moles or gophers.

OUT O'SIGHT MOLE TRAP

One of the best. Sure to "get them." Price 75c; postpaid 85c.

TO FRUIT GROWERS

Look over our list of spray materials. We buy in very large quantities and secure the very lowest prices. You secure that low price by buying your supplies of us. All the latest spray materials on the market.

BUCKET SPRAY PUMPS

We have a very handy and convenient sprayer that throws a good stream of spray for ten to twenty feet. Well made and if kept properly will last years. Fine for small trees, bushes, hen houses, etc. Price \$3.75.

SPRAY MATERIAL

We carry the largest stock of the most reliable spray materials in the city. You will find that our prices are the lowest that can be made on first-class goods. You do not want to use anything but the best, as it is money thrown away to use poor spray material.

Sulphur and Lime Solution. We handle the Dependable brand of spray, and can recommend it very highly. It is sold to conform with the state laws, and is guaranteed to test as marked. For winter spraying use one gallon of the spray to nine gallons of water. Ready for use. Prices, 1 gal. in bulk 25c; with can 30c; 5 gal. in bulk \$1; with can \$1.20; per barrel \$8, with allowance of \$1 for return of barrel in good shape. If to be shipped in cans, allow 10c extra for one-gallon cans and 20c for 5 gallons for crating and packing.

Nico-Fume Liquid. A 40 per cent Nicotine Solution for spraying or vaporizing. One to two teaspoonfuls of solution makes a gallon of spray. $\frac{1}{4}$ pint 50c.

Arsenate of Lead Paste. The best and latest insecticide for all leaf-eating insects, it will not burn the foliage and stays on the trees longer than any other spray made. 1-lb. can 25c; 2-lb. can 40c; 5-lb. can 85c; 10 lbs. \$1.50; 20 lbs. \$2.70; 50-lb. keg \$5.50; 100-lb. keg \$10.

S-W Dry Powdered Arsenate of Lead. Realizing the advantages of a dry powdered form of Arsenate of Lead over the bulky paste material the Sherwin-William Company has developed a product which represents without question the highest point of perfection in insecticide manufacture today. Sherwin-Williams Dry Powdered Arsenate of Lead is an exceedingly finely divided fluffy powder which is greater in bulk per given weight than any other powdered Arsenate of Lead on the market. This product stays in suspension almost indefinitely. S-W Dry Powdered Arsenate of Lead has maximum killing power, speedy action and unquestioned

effectiveness in controlling all leaf eating and chewing insects. It can be used with absolute safety to the fruit and foliage. This product is put up in sift proof impervious packages. Prices are as follows: Lb. 30c; 5 lbs. \$1.50; 10 lbs. \$2.50; 25 lbs. \$5.75; 50 lbs. \$11; 100 lbs. \$20. Subject to market changes. Cannot be sent by mail.

S-W Fungi-Bordo. This perfect Dry Bordeaux mixture is a dry powder which comes in sift proof, impervious packages. After mixing with water, this spray stays in suspension well, adheres to the foliage and will give more accurate and certain results than the haphazard home-made mixtures or the commercial paste Bordeaux mixtures. This product can also be used in combination with Paris Green, Arsenate or other insecticides with an extraordinary degree of safety. S-W Fungicide Bordo represents a new era in fungicide manufacture and we recommend it highly to all thinking growers and farmers. It comes in 1 and

SPRAY MATERIAL—Continued

5-lb. cartons, 10, 25 and 100-lb. sift proof drums and in barrels. Prices are as follows, f. o. b. Salem, Oregon: 1 lb. 30c; 5 lbs. \$1.15; 10 lbs. \$2; 25 lbs. \$4.50. Cannot be sent by mail. Prices subject to market changes.

Whale Oil Soap. An excellent summer wash for Aphis, etc. Lb. 10c; 25 lbs. \$2; postpaid 15c lb. 100 lbs. market price.

Tobacco Powder for Dusting. For destruction of Green Fly, Aphis, etc., where fumes cannot be confined. 1 lb. 10c; 10 lbs. 75c.

Sulphur. A good grade of sulphur for spraying etc. Lb. 5c; 10 lbs. 40c; 110 lbs. \$2.40.

Refined Sulphur. For spraying grapes, etc. Lb. 5c; 10 lbs. 50c; 100 lbs. \$3.

Lime. The famous Roche Harbor Lime is the best grade on the market for all purposes. 10 lbs. 20c; 100 lbs. \$1.50; barrel \$2.

Bluestone. The best grade for spraying. Lb. 15c; 100 lbs., subject to market.

Grafting Wax. ¼-lb. bar 10c; ½-lb. bar 20c; 1 lb. 35c; postage 6c per pound.

Beeswax. Lb. 40c; postpaid 45c lb.

Rosin. Lb. 10c; 10 lbs. 75c; postpaid 15c lb.

Rose Spray. This is a tobacco spray, ready to mix with water for aphids, etc. In bottles 25c each. Cannot be sent by mail.

Knoxweed. This is a great spray for killing all kinds of weeds like dandelion, plantain, etc. Comes in a can like an oil can and is ready for use. Price per can 50c.

SPRAY WITH "BLACK LEAF 40"

What "B. L. 40" Is. "Black Leaf 40" is a concentrated solution of nicotine sulphate, guaranteed under the National Insecticide Act to contain 40 per cent nicotine. When used according to directions it neither burns nor stains fruit or foliage. It is perfectly soluble in cold water and cannot clog the nozzles.

Combined Sprays. "Black Leaf 40" is being used in various districts in combination with such spray chemicals as Lime-Sulphur, Arsenate of Lead, Arsenite of Zinc, and Iron Sulphide for the control of sucking insects, chewing insects and fungus diseases—three sprays at one application—a great saving of expense to all fruit growers. Investigations to date strongly indicate that "Black Leaf 40," in combination with Bordeaux mixture, may be used without injury in any case where Bordeaux alone can be used. Having no control over the preparation of other insecticides and fungicides, we do not "guarantee" combined sprays.

Black Leaf 40 is the best spray on the market for Green and Rosy Aphis, Plant Lice, and all soft bodied sucking insects.

SPRAYING WITH "BLACK LEAF 40" TO CONTROL APHIS AND RED SPIDER ON HOPS

Black Leaf 40 has proven by far the best hop spray ever used for Aphis and Red Spider. Last year the hopmen after using all other sprays without result, sprayed with Black Leaf 40 and killed all the Aphis and saved their hops when applied in time.

Send for special circulars and directions for use. Prices are as follows, f. o. b. Salem, Oregon: 1 oz. 25c; ½ lb. can 75c; 2 lb. can \$2.50; 10 lb. can \$10.75. Must be sent by freight or express. Cannot be sent by mail.

SPRAY MATERIAL—Continued

LILLY'S SOLUBLE
SULPHUR SOLUTION

This is the famous Niagara Sulphur Spray in dry form, now manufactured on the Pacific Coast under label "Lilly's." Successfully used four years. Saves freight. A 100-lb. drum makes 500 gallons winter or spring spray. No sediment, no crystallization, no heavy barrel to handle. Dissolves readily in cold water. Always ready for instant use. Used the same way and for the same purpose as Lime-Sulphur Solution. It should be used on all fruit trees and shrubs in spring as a scale control and general clean up. Ten pounds make 50 gallons spray. 1-lb. can 25c; 5-lb. can 75c; 10-lb. can \$1.25; 25-lb. can \$2.50; 50-lb. can \$4; 100-lb. drum \$7.50.

TREE TANGLEFOOT

For Caterpillars, Moths and
Worms. Protects Against
All Climbing Insects.

One pound makes a band nine feet long. Prices: Lb. can 30c, postpaid 35c; 3 lbs. 85c, postpaid 95c; 10 lbs. \$2.65, postpaid \$2.80.

FERTILIZERS

Our stock of fertilizers is manufactured by one of the best and most reliable firms, and will run true to analysis. Special price on quantity lots.

General Fertilizer. An all-around fertilizer, which can be used on any crop, but especially adapted for grain and general farm crops. Price, 100 lbs. \$2.25; per ton —

Fruit. For all kinds of fruit, especially strawberries, blackberries, raspberries, etc. Price, 100 lbs. \$2.25; per ton —

Lawn Dressing. The finest lawn fertilizer that you can get; 100 lbs. to the city lot. N, weeds; all fertilizer. 10 lbs. 50c; 25 lbs. 85c; 50 lbs. \$1.35; 100 lbs. \$2.50.

Nitrate of Soda. For immediate results Nitrate of Soda is the very best; for stimulating and forcing the growth of plants and other crops. Per lb. 10c; 100 lbs. \$5.

Superphosphate. This is a concentrated form of phosphoric acid, and is the cheapest way to buy it. Per lb. 5c; 100 lbs. \$1.75.

Ground Bone. Pure bone, finely ground, is one of the best fertilizers. 10 lbs. 35c; 100 lbs. \$2.50.

Ground Lime Rock. Being used very extensively in the valley this season. We have some very high-grade ground lime rock. Price, 100 lbs. 50c; ½ ton \$4.50; 1 ton, at warehouse, \$8.25. Drayage to depots 50c a ton.

FERTILIZERS—Continued

Land Plaster. Made from pure gypsum, free from clay or other foreign matter. Fine for clover, vetch, etc. 100 lbs. 60c; per ton \$11.

Hop and Onion Fertilizer. A fertilizer made especially for hops and onions; very rich in potash, and when used freely has been known to double the yield. 100 lbs \$2.50; ½ ton —; ton —. Special prices on quantity lots and to outside points direct shipment.

Fish Guano. Do not carry in stock, but will order at any time. 100 lbs. \$2.50; ton \$45; subject to market changes.

Other Fertilizers. Any kind not listed above will be ordered at market prices at any time.

BLATCHFORD'S STOCKFEEDS

some of the proofs of these country-wide results.

Blatchford's Calf Meal is the only complete milk-equal having all the elements of whole milk and costing you less than the value of skim milk. It comes in 25-, 50- and 100-pound bags and 100 pounds makes 100 gallons of complete milk-equal.

Now what's to hinder you from selling all the milk you get and raising your calves at a good profit besides? You know what both beef and veal are worth.

Send in your name and address for a copy of the booklet and for prices.

IT would take a real big book to tell you of all the accomplishments of *Blatchford's Calf Meal*. But this little booklet will show you in picture and in testimonial

WE want you to know also about *Blatchford's Pig Meal*, the complete milk-equal for weaning and raising "baby" pigs.

If you have any "runts" put them by themselves on this "baby food" and then watch 'em catch up with the best lookers in the litter.

It will cost you less than four cents a gallon. Get the booklet.

ALSO read up on *Blatchford's Milk Mash*, for raising "baby" chicks without the old dread—bowel trouble; and for raising milk-fed poultry without milk.

You can double your profits by using this (dry) milk-equal, because it contains all the ingredients found in whole milk and costs you less than half the value of skim milk. Doesn't that sound good?

Blatchford's Calf Meal. Retail prices, 25-lb. sack \$1.25; 50-lb. sack \$2.25; 100-lb. sack \$4.50.

Pig Meal. Retail prices, 25-lb. sack \$1.25; 50-lb. sack \$2.25.

Milk Mash for Baby Chicks. Retail prices, per lb. 10c; 10 lbs. 50c; 100 lbs. \$4.50.

MOLASSES—DRIED BEET PULP

Just plain beet pulp and beet molasses dried. It is preferred by many feeders not only for dairy cattle, but for fattening as well. Has all the feeding value of plain Dried Beet Pulp with the addition of molasses. Being sweetened, cattle eat it with relish. It is put up in the same way as the plain and sold on the same basis. We do not recommend feeding over 5 pounds daily.

POULTRY SUPPLIES

We ARE AUTHORIZED AGENTS FOR
CYPHERS COMPANY INCUBATORS

Genuine

Patented

MADE IN THREE STYLES—EIGHT DIFFERENT SIZES

For the season of 1916 we offer our customers the Cyphers Incubator Company's complete line of Incubators. These three styles of high-class guaranteed hatching machines, running through eight different sizes, represent all that is efficient, convenient and reliable in incubator construction. In buying a Cyphers Company Incubator you take no chances.

STANDARD CYPHERS INCUBATORS

These are machines that for sixteen years and more have been recognized as the "Standard hatchers of the world." Tens upon tens of thousands of them have been sold and are in successful use in every civilized country on the globe. They are used by more Government Experiment Stations, on more large, practical poultry plants, on more successful duck and egg farms, and by a larger number of foremost poultry breeders than all other makes combined. They are the last word to date in incubator building, not a penny being spared anywhere in their construction to make sure of their doing satisfactory work in all climes, under widely different conditions, in the hands of all sorts of people. They are built to hatch and to last. With ordinary care they should last an ordinary lifetime. Every Standard Cyphers Incubator is guaranteed by the manufacturers to do first-class work in the hands of every purchaser who will give it a fair trial. Are built in four popular sizes and at prices as follows: 70 eggs, price complete, \$16; 140 eggs, price complete \$24; 244 eggs, price complete \$36; 390-400 eggs, price complete \$23. Fully Guaranteed.

MADE IN TWO
SIZES.

390-400 Egg Standard Cyphers Incubator. Price, complete, \$42.

COLUMBIA HOT-AIR INCUBATORS

Are built to meet the wide-spread demand for large-capacity, lamp-heated machines that can be sold at surprisingly low prices and yet be guaranteed to do high-class work. Have wooden cases, attractively finished in dark green, with brass trimmings and double walls. Seamless bottom lamp bowls, best quality brass burners, zinc and steel Standard Cyphers toggle-joint thermostat and same regulating equipment as used on highest priced machines. Fume proof, forced draft heater, asbestos covered and metal banded. Automatic in ventilation and embodies diffusive principle. Roomy chick nursery under egg trays. Are made in two sizes: 130-140 eggs, price complete \$17; 240-250 eggs, price complete \$23. Fully Guaranteed.

MADE IN TWO
SIZES.

240-250 Egg Columbia Hot-Air Incubator. Price complete \$23.

SUPERIOR HOT-WATER INCUBATORS

These machines are exactly what the name says. They are heated by hot water, instead of with hot air and are "superior" in every detail. The water boiler and tank (tubular) are of heavy-weight copper. Lamp has seamless bowl; burner is best on market. Incubator case is of wood, attractively finished in golden brown, with brass trimmings (hinges, buttons, etc.) and has double walls, with air space insulation. Are equipped with Standard Cyphers zinc and steel, toggle-joint thermostat and knife-edge regulator. Have forced water circulation and are automatic in ventilation. Roomy chick nurseries. Are built in two sizes: 60-65 eggs, price complete \$12.50; 120-130 eggs (see illustration), price complete \$17. Fully Guaranteed.

MADE IN FOUR
SIZES

120-130 Egg Superior Hot-Water Incubator. Price complete, \$17.

Write for large, complete catalogue of Cyphers Incubators and Brooders.

Small Size Superior Incubator. Capacity 65 Eggs. Price, complete, \$12.50.

POULTRY SUPPLIES—Continued

CYPHERS ADAPTABLE HOVER

Cyphers Company Adaptable Hover.
Patented, Fire-Proofed, Insurable,
Self-Ventilating and Self-Regulating.
Side View of Combined Fire-Proof
Heater and Standard Adaptable
Hover, ready for use.
Price, each \$9.50

Adapted for use anywhere that is suitable for confining or yarding chicks or ducklings.

Cyphers Adaptable Hover is self-ventilating and self-regulating—every one bearing the Fire Underwriters' "Inspected Brooder" label; it is used in each of the four styles of individual brooders manufactured by the Cyphers Incubator Company for 1916. It is also intended to be used separately as a brooding device in colony coops, in Portable houses, and in home-made brooders such as goods boxes, piano boxes or organ cases, and can be adapted to other makes of brooders, provided they are twenty-six inches high and of fairly large dimensions otherwise.

CYPHERS PORTABLE HOVER

Invented in 1910; used two seasons on Cyphers Company Poultry Farm; placed on market January 1, 1913. Self-Regulating, Self-Ventilating, all metal and will last a lifetime. Capacity, 50 to 75 newly hatched chicks. Should be used indoors during winter weather. Unexcelled for use in colony houses, roosting coops and large-sized, home-made brooder cases during April, May and June.

The Cyphers Portable Hover is the only self-regulating and self-ventilating Portable Brooding Hover thus far invented, and we guarantee it to be the best brooding device of the kind on the market. As it is equipped with the same high-grade thermostat as the Cyphers Incubators and the Cyphers Adaptable Hover, it maintains a steady and uniform heat. It is positively and infallibly automatic in ventilation, preventing the trapping of "dead" air or poisonous gases underneath the curtain. A continuous supply of fresh warmed air is automatically forced beneath the hover. This Portable Hover, as its name indicates, can be picked up at any time, all complete, and moved about without hindering its operation. Very convenient for cleaning and moving. Rated capacity 75 newly hatched chicks, or 50 chicks that are 10 days to 6 weeks old. Price of Cyphers Portable Hover \$9.50.

ALFALFA MOLASSES—This great Dairy Feed is becoming more popular every year. Try it.

POULTRY SUPPLIES—Continued

CYCLE INCUBATOR

This is the famous Philo System of Incubation, that has made such a reputation in the East the past two seasons.

It is a small metal hatcher holding 50 eggs. It uses about one gallon of oil to a hatch, and will run two weeks on one filling of the tank. Easy to operate and easy to regulate and seems to be very satisfactory to all that have used them. Price, hatcher only, complete, **\$6.00**; special prices on lots of five or more; Combined Hatcher and Brooder, complete, **\$8.00**

MISCELLANEOUS POULTRY SUPPLIES

Cyphers Fountains. A handy two-piece fountain; low priced; easy to clean. Will last for many years. Quart size 25c; 2-quart size 35c; 1-gallon size 50c; Duck Fountains 60c.

Wall Fountains. One of the handiest fountains for both chickens and ducks made. Made to hang up against the wall or

any post, and have a hood to protect the water from becoming dirty. Well made out of durable, galvanized iron. One-gallon size 50c; 2-gallon size 60c.

Dry Food Hoppers—Cyphers. This is a food saving and labor saving device that soon pays for itself in the amount of feed saved. Well made out of durable material. They will last a life-time with ordinary care. Holds about six quarts. Each 75c.

Cyphers Grit and Shell Box. Similar to the Dry Food Hopper shown above, but containing three compartments. Most economical way of feeding bone, shell, grit, beef scraps, etc. size 75 cents.

Each 60 cents. Large

Boston Dry Food Hoppers. We believe that this hopper is the best device of the kind on sale for the thrifty, up-to-date poultry raisers. Boston Dry Food Hoppers are made in four sizes, two for adult fowls and two for chicks. Prices, Large Dry Feed, holds one-half bushel, **\$1.**

POULTRY SUPPLIES—Continued

All-Rite Fountains and Self Feeders. The handiest fountain and feeder on the market. Uses a common Mason jar, either one or two quart size. Price, 10c each.

Wire Covered Feeding Troughs. Very convenient for young chicks. Two sizes, Small 25c; Large 35c.

Sanitary Stone Fountains. These are strong and well finished and made in two parts, and are easily kept clean. Half-gallon 35c; gallon 50c.

Egg Testers—X-Ray. This is made to use on a lamp and fits a No. 2 burner. Each 25c, by mail 30c.

Cyphers Lice-Proof Perch Supports are manufactured of cast iron and with ordinary care will last a life-time. They are cheap in price, easily put up and if once tried will always be used. They are attached with screws. The oil cup is covered with a cap to prevent an accumulation of dust. Fill each cup with Cyphers Lice Paint or with ordinary kerosene oil. When the little cup contains the oil or lice paint, it is impossible for lice to pass from the walls of the buildings to the roosts, or from the roosts to the building. Prices of Wall Support, per pair 35c, postpaid 45c per ½ doz. single hangers \$1.05; per doz. single hangers \$2.

Leg Bands. It pays to mark your chickens and keep track of the different stock, and also of the hens that lay. Several styles; send for list. Prices, doz. 15c; 25 for 25c; 50 for 40c; 100 for 65c.

Wire Nests. The handiest and most convenient nest made. Easy to clean; gets rid of all vermin. Each 20c; 6 for \$1.

Petty Chick Markers. Smaller than Cyphers, but a favorite. Each 25c.

Nest Eggs. Two for 5c; per dozen 25c.

Medicated Nest Eggs. Used extensively as a lice killer. Each 10c; 3 for 25c; per dozen 75c.

CYPHERS SAFETY BROODER STOVE

The safety water pan on the Cyphers Safety Brooder Stove holds nearly a quart of water, and extends out over the entire surface of the oil bowl, thus placing a sheet of cold water between the oil bowl and the flame jets. We have sold thousands of these to persons who build home-made brooders, and they give general satisfaction. Height, 7½ inches; greatest width, 10½ inches. Price of Cyphers Safety Brooder Stoves, each \$2.

BONE MILLS

Wilson Dry Bone Mills. This mill can be used for grinding dry bones, shells, old dishes, etc. Well made and durable. Price \$5.

Mann Green Bone Mills. The favorite size of these well known mills is the No. 7. This is the most popular mill sold and gives the very best of satisfaction. Price \$15. We also sell all other sizes and will send you the large catalogue on request.

POULTRY SUPPLIES—Continued

INCUBATOR AND
BROODER SUPPLIES

Cyphers Tested Incubator Thermometers. The best that we know of. Each 65c.

Brooder Thermometers. Tested. Each 50c.
Cyphers Incubator Lamps. No. 0, with burner and wick, \$1; No. 1, 2 or 3, \$1.25 each. May also be used for brooders if desired.

Incubator Lamp Burners. No. 0, each 35c; No. 1, 50c; No. 2 and 3, 60c. Postpaid.

Oil for Incubators and Brooders. We carry the best oil for this purpose. Prices, 5-gallon can \$1.25; case, 10 gallons, \$2.40; subject to market.

Wafer Regulators. Each 75c.

Lamp Wicks. Two for 5c; per dozen, 20c postpaid.

CYPHERS
POULTRY
MARKER

This punch is so simple in construction that it will appeal to all as a practical tool. It makes a

good, clear, clean cut, and does not mutilate the web, as do many cheaper punches. These punches are made expressly for us, and we guarantee them to meet all requirements. Price of Cyphers Poultry Marker 50c.

Folding Egg Boxes. The best crate made for shipping eggs to be used for hatching purposes. Well made and will stand lots of knocking about. 15-egg size 15c; 30-egg size 25c; 50-egg size 40c. Special prices in dozen lots.

Chick Boxes. These are well made chick boxes for shipping day-old chicks. They are well ventilated and chicks can be shipped anywhere in them. Used by all the poultry people that make a specialty of day-old chicks, as they find that the chicks arrive in better shape than when shipped in any other way. 25-chick size 15c; 50-chick size 25c; 100 chick size 40c. Special prices in dozen lots or more.

EGG BOXES FOR PARCEL POST

The Boxes Offered Below Are Substantial, Light, Safe and Serviceable.
They Pack Flat for Returning Empty.

This shipping package is so constructed that each egg is separated by a thickness of corrugated board and the entire contents are surrounded by a double wall of air-cushioned corrugated board. Absolute protection is therefore assured, as the box possesses sufficient strength and durability to stand the usual rough handling in transit. Their extreme light weight, when compared with other packages, will in many cases, save the postage for an extra pound. Fold flat for shipment.

POULTRY SUPPLIES—Continued

For shipment in Zones each egg must be wrapped in cotton, excelsior, newspapers, tissue paper or material of similar nature when shipped in our boxes, and box wrapped so that nothing can escape from the package. Any commercial wrapping paper is acceptable.

Prices

1 dozen size, each 7½c; per dozen, \$.60; weight per dozen, 5 pounds
 2 dozen size, each 10c; per dozen, .85; weight per dozen, 9 pounds
 5 dozen size, each 15c; per dozen, 1.60; weight per dozen, 17 pounds

"HUMPTY DUMPTY"

The best, the cheapest, the most convenient Egg Carrier. The "Humpty Dumpty" is light but strong, being almost indestructible. Can be folded flat for shipping empty. The most satisfactory egg carrier. Holds 12 dozen. Price, each 50c.

READY-MIXED POULTRY FOODS**PRICES SUBJECT TO MARKET**

The Standard Food for Poultry of All Ages, for All Purposes—Specially Mixed and Balanced Chick Food, Developing Food, Laying Food, Scratching Food, Analyzed and Tested by Government Analysis and Guaranteed.

Golden Rod Chick Food. This is one of the best chick foods we have ever sold and once tried, always used. It is complete and will make your chicks grow in first-class shape. 10 lbs. 35c; 25 lbs. 85c; 50 lbs. \$1.60; 100 lbs. \$3.

Golden Rod Scratch Food. This is a mixture made especially for grown chickens and is a proper blending of different grains, meat scraps, oat groats, etc., to produce the best results. 100 lbs. \$2.25.

Golden Rod Laying Mash. A balanced ration, ready mixed for the daily feed. A proper mixture to produce eggs and it certainly does the work. May be fed either as a mash feed or as a dry mash. 10 lbs. 30c; 50 lbs. \$1.30; 100 lbs. \$2.50.

Golden Rod Developing Food. This is a dandy mixture to feed after the chicks are too large for chick food and before they are big enough to feed grain. Lb. 3c; 50 lbs \$1.30; 100 lbs. \$2.50.

Albers Scratch Food. A mixed feed that is mixed to produce results and runs very high in feed value. Contains a high per cent of protein feeds. 50 lbs. \$1.25; 100 lbs. \$2.25.

DIAMOND CHICK FOOD

A Complete Balanced Ration that will make chicks grow and keep them healthy.

For Young Turkeys, Pheasants and all young fowls DIAMOND CHICK FOOD is unexcelled. The only complete, safe and satisfactory food.

The Making of Diamond Chick Food

The select grains that are used in the preparation of Diamond Chick Food are cut by a special process screened to a uniform size and run through a Fanning Mill to remove the dust and meal, which is the fatal element in most Chick Foods. After this

READY MIXED POULTRY FOODS—Continued

process the ingredients are carefully weighed and mixed in correct proportions. **No guess work.**

By using Diamond Chick Food you are giving the chicks just what **Nature intended they should have**, a food composed of grains (cracked), small seeds, grit, bone, dried sweet meat (to take the place of insects and bugs), charcoal, etc., mixed in the right proportions to produce a quick and profitable growth without loss. It's so convenient, so handy, always ready for use, and you can raise so many more chicks by feeding it that it is the cheapest food you can buy. A trial is all we ask.

Ask for descriptive pamphlet or directions for feeding in each sack or package. **Price, 10 lbs. 35c; 25 lbs. 85c; 50 lbs. \$1.50; 100 lbs. \$3.**

DIAMOND SCRATCH FOOD.

The most successful "up-to-now" ready-mixed complete food. Makes hens sing, and singing hens lay. A perfect working ration for fowls. Grains, Grit, Shell, Beef, Bone and Charcoal carefully prepared in the correct proportion; a veritable "hen's" delight, and a great egg producer. **Price, 100 lbs. \$2.25.**

Granulated Bone. Our bone is of the best quality and is something that should be kept before the chickens at all times. Best grade, **10 lbs. 35c; 100 lbs. \$3.** Ordinary grade, **10 lbs. 30c; 100 lbs. \$2.75.**

Beef Scraps. This is one of the most valuable feeds on the market to bring results. Is a great egg producer and also fine for growing chicks.

Best grade, **10 lbs. 50c; 25 lbs. \$1.10; 100 lbs. \$4.** Standard grade, **10 lbs. 50c; 25 lbs. \$1; 100 lbs. \$3.75.**

Fish Scraps. This feed is becoming very popular and is fast taking the place of other meat feeds. **Lb. 5c; 25 lbs. \$1; 80-lb. sack \$2.80.**

Fish Meal. This is the same as above only ground fine and is used for mashes, etc. Price, same as Fish Scraps.

Shredded Fish Fibre. This is prepared in a different way and some consider it superior to the scraps and meal. **Lb. 5c; 100 lbs. \$4.**

Blood Meal. A very highly concentrated egg producer. Fine for young chicks. **1 lb. 10c; 10 lbs. 50c; 100 lbs. \$4.**

Eastern Oyster Shells—Crushed. We offer good clean shells, free from dirt and waste. You should keep shells before your hens at all times. In two sizes, poultry and chick. **10 lbs. 20c; 50 lbs. 75c; 100 lbs. \$1.25.**

Soy Bean Meal. This is a great poultry food, containing a heavy percentage of protein. **10 lbs. 30c; 100 lbs. \$2.**

Grit. Should be kept before your poultry at all times, as they must have "teeth." Our grit is good and hard, and is what they need. **10 lbs. 20c; 50 lbs. 60c; 100 lbs. \$1.**

Charcoal. Made especially for poultry. Two sizes, chick and hen. **Lb. 10c; 10 lbs. 50c; 50 lbs. \$1.75.**

Alfalfa Leaves and Blossoms. Fine for winter feed. Supplies the green feed needed. **10 lbs. 25c; 25 lbs. 50c.**

Poultry Pepper. **Lb. 25c; by mail postpaid 30c.**

Grain for Feed. We handle all kinds of grain—wheat, oats, corn, barley, either whole, rolled or cracked as wanted.

Mill Feed. Always have in stock, bran, shorts, etc.

POULTRY AND STOCK REMEDIES, TONICS, ETC.

INTERNATIONAL STOCK AND POULTRY TONICS

International Stock Tonic. One of the best on the market. Pkgs., 25c, 50c and \$1.; 25-lb. pail \$3.50.

International Poultry Tonic. This well known article has been on the market for many years and gives good satisfaction. 25c and 50c a Pkg.

LEE'S POULTRY SUPPLIES

Lee's Germozone. The great remedy for roup and colds. Liquid 50c a bottle. Tablets 50c pkg., postpaid.

Lee's Lice Killer. Liquid. This is the best selling article on the market. Qt. 35c; ½ gal. 60c; 1 gal. \$1.

Lee's Lice Powder. A good powder, especially for small chicks. 25c; postpaid 30c.

Lee's Egg Maker. A favorite tonic with many poultrymen. 25c and 50c a pkg.; 25-lb. pail \$2.50.

ZENOLEUM

The best disinfectant and germicide on the market. Recommended by all the Agricultural Colleges. Mix with water. Qt. can 50c; ½ gal. 90c; gal. \$1.50; 5 gal. \$6.25.

Zenoleum Lice Powder. A strong lice powder that every one says does the work. 25c pkg.; postpaid 35c.

DR. HESS' FAMOUS REMEDIES

Dr. Hess' Stock Tonic. 2½ lbs. 25c; 7 lbs. 65c; 12 lbs. \$1; 25-lb. pail \$2.25.

Poultry Pan-a-ce-a. 1½ lbs. 25c; 5 lbs. 85c.

Instant Louse Killer. Lb. pkg. 25c.

Dr. Hess' Heave Powders. This is a great remedy for heaves and if taken in time will cure. Pkg. 50c; postpaid 60c.

Dr. Hess' Worm Powders. One of the best remedies we have ever sold. Pkg. 50c; postpaid 60c.

CYPHER'S LICE POWDERS

One of the best lice powders to use on small chicks, as it will not burn like some kinds do. 25c pkg.

DAIRY ASSOCIATION GOODS

This is the best line of dairy remedies sold on the market and those who use any of their goods always continue to do so.

Kow Kure. This is the best known cow remedy on the market and it pays to use it. 50c and \$1 a can; postpaid, 55c and \$1.10 a can.

Garget Cure. A sure cure for garget. 50c a pkg.; postpaid 55c.

Bag Balm. This is a great salve for udder troubles, caked bags, etc. 50c a can; postpaid 55c.

POULTRY AND STOCK REMEDIES, TONICS, ETC.—Continued

CONKEY'S CELEBRATED LINE OF POULTRY REMEDIES

HATCHED RIGHT?

Look out now for that white, pasty symptom called **White Diarrhea**.

It may occur anytime from the 3rd day to the 4th week of the hatch. Incurable? Not now! We have **Conkey's White Diarrhea Remedy** this season, a new discovery. Saves chicks even badly affected. Better have a package, price 50c. Use it anyway, in the drinking water as a preventive. It's Chick insurance; you lose from 65 to 100 per cent of the hatch?

Conkey's Laying Tonic. Gives fine satisfaction. A great egg producer. Pkg. 25c, 50c, \$1; 12-lb. pail \$1.75.

Conkey's Lice Killer. Liquid. Guaranteed to kill 'em. Qt. 35c; ½ gal. 60c.

Conkey's Lice Powder. One of the best powders we ever sold. Pkgs. 25c and 50c; postpaid 35c and 60c.

Roup Remedy. Pkg. 25c and 50c.

Cholera Remedy. Pkg. 25c and 50c.

Bronchitis Remedy. Pkg. 50c.

Poultry Worm Remedy. Pkg. 50c.

White Diarrhoea Remedy. Pkg. 25c and 50c, postpaid.

Gape Remedy. Pkg. 50c.

Scaly Leg Remedy. Pkg. 25c and 50c.

Rheumatism Remedy. Pkg. 50c.

Poultry Tonic. Pkg. 25c.

Limber Neck Remedy. Pkg. 50c.

Poultry Laxative. Pkg. 50c.

FLY SPRAYS

So-Boss-So. This is one of the best things that we have ever sold. It keeps them off. Gal. \$1.25.

Conkey's. We first introduced this several years ago and it gives the very best of results. One of the best fly sprays we have handled. Qt. 35c; ½ gal. 60c; 1 gal. \$1; 5 gals. \$4.

GRAIN ROLLING AND CHOPPING

Farmers and feeders generally find it far more economical to roll all grain before feeding.

All stock will do better, and it is a large saving in feed, as it does not take over 75 per cent as much as in the whole grain.

We have installed a large roller and are prepared to take care of your custom work in first-class shape and on short notice.

Our mill is equipped with large suction fan and cleans the grain before it is rolled so that your stock gets the clean feed and not the dust and dirt as from the usual milling process.

SEED TESTING

We have our own seed testing plant and test all our seeds for germination. We comply with the new Oregon State Seed Law in every particular. When you are in the store ask to see our new Standard Seed Tester; it's built for business and certainly does the work.

GRAIN AND SEED CLEANING

Old style farming is going out of fashion, as it is proving unprofitable. The habit of sowing grain or seeds just as it is harvested, weed seed and all, was one of the worst habits of many farmers.

They are finding that to produce the best results they must sow the best seeds that can be obtained and that means seed that is recleaned in first-class shape; all the weed seed and foreign seeds being removed from the grain or seeds that they intend to sow.

In order to take proper care of those who desire the best results we have installed a first-class power cleaner.

Our charges are reasonable and we guarantee the quality of our work.

FEED DEPARTMENT

We have one of the largest retail feed businesses in the state and carry a complete stock of Hay, Grain, Mill Feed, Oats, Wheat, Barley, Rolled Grain of all kinds, Corn, Cracked Corn, Feed Meal, Oil Meal, Salt, etc. As we buy in very large lots you will find our prices are the lowest.

FLOUR DEPARTMENT

We carry the leading brands of Hard Wheat and Valley Flours, including Whole Wheat Flour, Graham Flour, Corn Meal, Rolled Oats, Germea, Farina, etc.

You will always find our prices the lowest in the city.

BERRY HALLOCKS

We handle the best of the folding hallocks and have the largest trade in the city. We buy in large lots and in that way secure the very lowest prices. You secure the benefit by buying from us.

Prices quoted are today's market price and subject to the market changes. When in the market, write for prices, stating quantity wanted.

BERRY CRATES

We carry the regular crate for the above hallocks, holding 24 hallocks. Prices are as follows: Each 10c; in lots of 25 or more, knocked down 7c each. Prices are subject to market changes.

GARDEN TROWELS

A strong, well-made, durable trowel, that is very handy to work around flowers and in the garden. No. 3 15c each, postpaid 20c; No. 4 20c each, postpaid, 25c.

ROSELAWN

This is a fertilizer put up in a nice 10-pound pail, and is used for lawns, roses, shrubbery, plants, etc. Try a pail and see the difference in the appearance of your lawn and flowers. 50c the pail.

WEIGHTS OF VARIOUS ARTICLES PER BUSHEL

	Lbs.		Lbs.		Lbs.
Flax Seed	56	Peas, Smooth	60	Wheat	60
Charcoal	22	Peach Pits	48	Vetches	70
Corn, Shelled	56	Orchard Grass	14	Timothy	45
Clover Seed	60	Onion Sets	32	Speltz	40
Cheat	32	Oats	32	Red Top, solid seed.	42
Canary Seed	60	Millet	50	Red Top	14
Blue Grass—		Meadow Fescue	24	Rye	56
English	24	Lawn Grass	20	Rape	60
Kentucky	14	Hungarian	48	Potatoes	60
Buckwheat	48	Hemp Seed	14	Perennial Rye	20
Beans	60	Grass Seed (unless		Peas, Wrinkled	56
Barley	48	otherwise stated).	14		

QUANTITY OF SEED TO PRODUCE A GIVEN NUMBER OF PLANTS AND SOW AN ACRE

	Per Acre.		Per Acre.
Artichoke, 1 oz to 500 plants.	.6 oz	Grass, Orchard, Perennial, Rye,	
Asparagus, 1 oz to 800 plants.	1 lb	Fowl Meadow, Wood Meadow	
Asparagus roots	5000 to 10,000		20 lb
Barley	.2 to 2 ½ bu	Horse Radish roots.	10,000 to 15,000
Beans, dwarf, 1 lb to 100 ft		Kale, 1 oz to 2000 plants.	.2 oz
drill	.1 bu	Kaffir Corn, in drills.	.6 to 8 lb
Beans, pole, 1 lb to 100 hills.	½ bu	Kohl Rabi, 1 oz to 2000 plants.	.4 oz
Beet, garden, 1 oz to 100 ft		Leek, 1 oz to 100 ft of drill.	.4 lb
drill	.7 lb	Lettuce, 1 oz to 150 ft of drill.	.3 lb
Beet Mangel, 1 oz to 75 ft drill.	.5 lb	Millet, for seed	20 lb
Broccoli, 1 oz to 2000 plants.	.4 oz	Millet, for hay	30 lb
Brussels Sproutes, 1 oz to 2000		Melon, Musk, 2 oz to 100 hills	
plants	.4 oz		.2 to 3 lb
Broom corn, in drills	15 lb	Melon, Water, 4 oz to 100 hills	
Buckwheat	½ to 1 bu		.3 to 4 lb
Cabbage, 1 oz to 2000 plants.	.4 oz	Oats	.2 to 3 bu
Carrot, ½ oz to 100 ft of drill.	.3 lb	Okra, 1 oz to 100 ft of drill.	.8 lb
Cauliflower, 1 oz to 3000 plants.	.3 oz	Onion Seed, for sets.	.60 to 85 lb
Celery, 1 oz to 5000 plants.	.4 oz	Onions, 1 oz to 150 ft drill.	.3 to 4 lb
Cheat	.2 bu	Onion set, 1 qt to 40 ft drill.	.8 bu
Chicory	.4 bu	Parsnips, 1 oz to 150 ft drill.	.3 lb
Clover, Alsike and White.	8 to 10 lb	Parsley, 1 oz to 150 ft drill.	.3 lb
Clover, Alfalfa	15 to 20 lb	Peas, Field	.2 bu
Clover, Crimson Trefoil.	10 to 15 lb	Peas, Garden, 1 lb to 100 ft of	
Clover, Red	10 to 12 lb	drill	.1 to 2 bu
Collards, 1 oz to 2000 plants.	.4 oz	Pepper	.1 oz to 1000 plants
Corn, Pop (shelled).	.8 to 10 lb	Pumpkin, ½ lb to 100 hills.	.3 to 4 lb
Corn, Sweet or Field, hills...		Radish, 1 oz to 100 ft drill.	.10 lb
.....	12 to 20 lb	Rape	.3 to 8 lb
Corn, for soiling, drills	.2 bu	Rye	1 ½ to 2 bu
Cress, ¾ oz to 100 ft of drill.	.1 lb	Salsify, 1 oz to 100 ft drill.	.6 lb
Cucumbers, 1 oz to 100 hills.		Speltz	100 lb
.....	2 to 3 lb	Spinach, 1 oz to 100 ft drill.	.8 lb
Egg Plant, 1 oz to 2000 plants.	.4 oz	Sugar Cane, in drills	10 lb
Endive, ¼ oz to 100 ft drill.	.4 lb	Sunflower	8 lb
Flax, broadcast	¾ bu	Squash, Summer, 4 oz to 100	
Grass, Blue, Kentucky.	.2 bu	hills	.3 lb
Grass, Meadow Fescue	.1 bu	Squash, Winter, 8 oz to 100	
Grass, Mixed Lawn	.5 to 6 bu	hills	.4 lb
Grass, Red Top, chaff	.2 bu	Tomato, 1 oz to 2000 plants.	.4 oz
Grass, Red Top, solid seed.		Tobacco, 1 oz to 4000 plants.	.3 oz
.....	12 to 15 lb	Turnip, 1 oz to 150 ft drill.	.2 to 3 lb
Grass, Timothy	12 to 15 lb	Vetch	1 ½ to 2 bu
		Vetch with grain	.2 bu

The Largest
Poultry Supply House
In the Willamette Valley

STATESMAN PUB. CO., PRINTERS
SALEM, OREGON