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Murphy's
SEED

STORE

Catalog
1920

ALBANY, OREGON

Murphy's

SEED STORE

ALBANY is the natural center of a Fertile Garden which stretches away to the mountains on the East, to the Sea on the West and for a score of miles both to the North and to the South.

By reason of our being located in Albany, we feel that we are in a position to serve the many families, living in this Great Garden, more promptly, more effectively and more cheaply than can other firms not so favorably situated.

We like to think of this as OUR territory and are striving to serve the families in this territory so efficiently that we can consistently claim them as our customers.

We KNOW this territory, know the soil and its needs, and have selected our stock of Seeds, Fertilizers, Etc., with a view of always furnishing the variety and kind which is best adapted to our soil and climate. By doing this, we feel sure that we are rendering a real service to our customers.

We realize that we make mistakes—they seem unavoidable—but we are endeavoring to overcome them, and wish to assure our customers that we will promptly and gladly correct any error when our attention is called to it.

We invite your criticism as well as your praise—be friendly and when in Albany come in and see us; make our store your headquarters, and feel assured that we appreciate your patronage.

Sincerely yours,
MURPHY'S SEED STORE.

How To Order By Mail

We want to make it just as easy to order by mail as to come to our store to trade. Enclosed you will find Order Blanks and Self Addressed Envelope. Just fill one out, pin your check to it and mail it to us and your order will be filled immediately. Prices quoted do not include postage.

Parcel Post

There is a Special Rate on Garden Seed of $\frac{1}{2}$ c per ounce, weight limit 8 ounces.

The parcel post rate within 150 miles of Albany is 5c for the first pound and one cent for each additional pound. Weight limit 70 pounds.

Over 150 miles and within 300 miles of Albany, rate 6c for first pound and two cents for each additional pound. Weight limit 70 pounds.

Grain and Seed Cleaning

We are quite proud of our Warehouse and Seed Cleaning equipment, and have reason to be, as it is one of the best plants in the state. Two Clipper Cleaners, one of which is specially fitted for cleaning beans, having the clay crushing rolls and special fan. The other machine is capable of handling the lightest and smallest seed grown in the valley. Then we have a Phoenix Bean polisher, the Skirvin Plantain machine and the Vetch machine which separates vetch from wheat perfectly.

We are glad to have our customers examine our equipment and investigate our methods.

We are prepared to pay the highest market price for CLOVER and OTHER SEEDS.

NOTE.—There are so many contingencies to be encountered in growing plants from seed and in setting out plants, trees, etc., that are dependent on the weather and other conditions over which we have no control that success is not altogether dependent on the seed or plant, therefore while we use every precaution in procuring fresh pure and reliable seeds, etc., we, in common with other responsible seed houses, sell our goods subject to the following disclaimer, it being adopted by the American Seed Trade Association, i. e.; We give no warranty, express or implied, as to description, quality, productiveness, or any other matter of any seeds, bulbs, trees 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 to be returned at once.—Murphy's Seed Store.

ASPARAGUS.

Asparagus is one of the earliest spring vegetables, and would be in universal use were it not for the mistaken idea that it is difficult to grow. In reality it can be produced very easily and cheaply. A bed 15x50 feet, requiring about 100 plants, should give an abundant supply for the ordinary family.

Culture.—Soak the seeds 24 hours in warm water, and sow in drills one foot apart. An ounce of seed will sow about 300 feet of drill. Keep the soil mellow and free from weeds. After one year's growth, transplant into permanent beds. A warm sandy soil is the best, and one which has for some years been cultivated in garden crops and heavily manured is greatly preferred to a fresh soil. But at no period of its growth should the asparagus crop be allowed to lack for manuring. From one to three year's time can be saved by buying roots of us.

Conovers Collosal.—A standard variety for all purposes, especially for canning. It makes large thick white shoots of delicious flavor. Pkt. 5c; 1oz. 10c; ¼lb. 30c; 1lb. 90c.

Palmeto.—The most popular variety grown for general garden purposes. Shoots are light green and tinted slightly with pink. Pkt. 5c; 1oz. 10c; ¼lb. 30c; 1lb. 90c.

Asparagus Roots.—Best varieties. 25c a dozen; \$1.00 per hundred.

ARTICHOKE.

Artichokes are cultivated for the edible bud, which later blossoms into a flower, which later resembles a giant thistle. The plants want a very rich soil and plenty of moisture. Sow early in drills and when about ten inches high transplant into rows four feet apart each way. It will produce only a small crop the first year, but will continue in good bearing for five years. Cut before the buds open.

Large Green Globe.—The well known French vegetable; the undeveloped flower heads, when properly prepared make a most delicious dish. Pkt. 10c; 1oz. \$1.25.

BEANS.

Culture.—The soil best adapted for growing beans is a light, rich, well-drained loam, which was well manured for the previous crop. If the ground is too freshly manured, the plants are apt to run to vines and set few blossoms. Plant in drills about two inches deep and from eighteen inches to two feet apart, as soon as the ground is dry enough. Beans are very sensitive to cold and wet before they have sprouted, but are not so liable to be damaged after they are above ground.

DWARF OR BUSH VARIETIES. GREEN POD.

New Stringless.—The finely shaped, long green pods are absolutely stringless, and are ready to market two weeks earlier than any other green-podded bean. It is of immense value, not only to the market gardener, but also for those who seek early beans of a rare quality for the home table. Lb. 25c; 10lbs. \$2.00.

Early Red Valentine.—This improved strain has a healthy, vigorous growth. The beans are small, but the pods are thick, round and fleshy; very tender, rich, and quite stringless. A popular bean for canning green. Bush grows to a height of fifteen inches and is very prolific. Lb. 25c; 10lbs. \$2.00.

Early Long Yellow Six Weeks.—A long podded green variety. Plants strong and vigorous and leaves large of fair quality. Seed long, kidney shaped, light-yellow with darker marks about the eyes. Lb. 25c; 10lbs. \$2.00.

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. Lb. 25c; 10lbs. \$2.00.

DWARF OR BUSH VARIETIES—WAX OR YELLOW POD.

Davis' White Wax.—The most hardy and productive wax podded variety. The pods are very long and yellow and while not stringless, is a remarkably good bean. Seed white and splendid for a shelled bean in winter. Lb. 25c; 10lbs. \$2.00.

Golden Wax.—Hardy and productive. A good second early variety of good quality. Pods are long, nearly straight broad and flat and golden yellow. Seed white, more or less covered with two shades of purplish red. Lb. 25c; 10 lbs. \$2.00.

Black Wax.—The earliest of wax beans. Very vigorous and prolific, pods fairly long golden yellow very brittle and stringless. Seed black. Lb. 25c; 10lbs. \$2.00.

CLIMBING OR POLE BEANS.

Kentucky Wonder Wax.—One of the very best pole beans. The pods are long very thick and meaty. Entirely stringless and bright yellow in color. Seed deep brown. Lb. 30c; 10lbs. \$2.50.

Kentucky Wonder.—A vigorous climber; very prolific; bearing in clusters; extremely long and very fleshy, bright yellow succulent pods, flat, thick and remarkably tender. A first-class pole variety. Lb. 25c; 10lbs. \$2.00.

Lazy Wife.—Pods are from four to five inches in length, produced in large clusters in great abundance. Dark green, thick, fleshy and stringless; of unusually rich flavor. Dry beans, pure white; excellent for winter use. Lb. 25c; 10lbs. \$2.00.

London Horticultural or Cranberry.—An old favorite. Pods short, green splash with red. Seed bluish pink, spotted with red. Used shelled, green or dry. Lb. 20c; 10lbs. \$1.50.

LIMA BEANS.

King of the Garden.—The most popular Lima bean. A pole bean medium early and has long pods which are well filled with four or five good-sized beans. Pods are very straight. Vines bear abundantly. Lb. 35c; 10lbs. \$3.00.

Burpee's Bush Lima.—The best late dwarf variety. Plants 18 to 24 inches high. Beans as large and as fine in quality as the pole varieties. It is also a heavy yielder. Lb. 40c; 10lbs. \$3.50.

FIELD BEANS.

Lady Washington.—Sturdy, bushy plant, erect habit. The bean is a great improvement over the old "Navy," being earlier, a little larger, and a very heavy yielder, being especially adapted to our western soils, and is entirely free from disease. Bush attains a height of about fourteen inches, and beans mature in September. 10lbs. \$1.20; 100lbs. \$10.00.

White Navy.—Grown extensively for marketing dry shelled. The best known small white bean. Dwarf in growth and very productive. 10lbs. \$1.20; 100lbs. \$10.00.

Mexican Tree.—Slightly larger than the small navy bean, in shape a little more round. A strong grower in tree shape. Advantage over navy is earliness and habit of growth, in which the pods are clear of the ground. 10lbs. \$1.20; 100lbs. \$10.00.

SPECIAL PRICES to Market Gardeners where a quantity of seed is wanted.

DON'T Practice false economy by buying low-priced seed. It doesn't pay. Our motto: Quality first, price as low as we can make it.

BEETS.

Culture.—The beet is hardy and may be planted as soon as the ground can be well prepared, doing best in rich, sandy soil, sown in rows sixteen inches apart, covered one and one-half inches deep. The seed will sprout better if soaked twenty-four hours in warm water before planting. Thin out by using the largest ones when they are sufficient size, continuing until they are six or eight inches apart in the rows. For field crop, the rows should be far enough apart to permit the use of a horse cultivator.

Extra Early Egyptian.—The best variety for forcing, and for market gardeners, being very early with small tops. Roots very dark red, round on top, but flat beneath, with very small tap roots. Pkt. 5c; 1oz. 15c; $\frac{1}{4}$ lb. 35c; 1lb. \$1.00.

Detroit Dark Red Turnip.—A fine beet for bunching for market; tops exceptionally small and uniformly upright. The roots are perfect turnip shape, with small tap roots. One of the deepest red beets. Quality is of the finest; sweet and tender; best beet for home garden. Pkt. 5c; 1oz. 15c; $\frac{1}{4}$ lb. 35c; 1lb. \$1.00.

Early Eclipse.—A fine early table beet, top shaped or tapering globe shaped. Flesh deep crimson zoned with pink. Crisp, sweet. Pkt. 5c; 1oz. 15c; $\frac{1}{4}$ lb. 35c.

Half Long Blood.—A half-long variety about eight inches long and tapering abruptly. Very rich, deep red flesh of fine quality. Pkt. 5c; 1oz. 15c; $\frac{1}{4}$ lb. 35c; 1lb. \$1.00.

MANGEL WURZEL.

These are grown extensively for stock feeding, and afford large quantities of fresh, nutritious and wholesome food during the winter months, in connection with grain and dried forage. Sugar beets are rich and sweeter than Mangels, but the latter will generally produce one-third to one-half heavier crops per acre, and hence are preferred by many farmers.

Golden Tankard.—Considered indispensable by many dairy farmers. They state that they are able to obtain a higher price for milk when feeding cows on Golden Tankard. Sheep thrive on it. Golden Tankard is of a rich, deep yellow throughout. A half long variety. Early, hardy and a heavy cropper; on account of its shape the roots can be left standing close in rows. 1oz. 10c; $\frac{1}{4}$ lb. 25c; 1lb. 75c.

Mammoth Long Red.—An improvement on the Long Red. Grows to a very large size, and will yield 50 tons per acre with ordinary cultivation. Very uniform, smooth and of good shape. Should be grown in deep loose soil. 1oz. 10c; $\frac{1}{4}$ lb. 30c; 1lb. 80c.

Giant Half Sugar.—Valuable for feeding purposes, it being very rich. Yields as much per acre as the best Mangels, and twice as much per acre (bulk of roots) as the rich sugar beet. Roots large, very smooth, with few rootlets; creamy white in color, with medium sized taps. 1oz. 10c; $\frac{1}{4}$ lb. 30c; 1lb. 85c.

Yellow Giant, Intermediate, or Gate Post.—Roots very large, growing over one-half out of the ground; flesh white, zoned with yellow, sweet and tender; tops bright green, comparatively small; neck small, short. An enormous cropper. 1oz. 10c; $\frac{1}{4}$ lb. 25c; 1lb. 75c.

French White Sugar.—Popular for stock feeding as well as sugar production. Combines a heavy yield with more than ten per cent sugar. 1oz. 10c; $\frac{1}{4}$ lb. 30c; 1lb. 80c.

Klein Wanzleben.—The Standard variety grown for the production of sugar. 1oz. 10c; $\frac{1}{4}$ lb. 30c; 1lb. 80c.

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. It is a very profitable crop, and is now being planted extensively. Culture same as for cauliflower. For fall use, sow in April and May, and for winter and spring cutting sow in June or July.

St. Valentine.—The Finest of all Broccoli. This grand new strain is a sure header of immense size, finest quality, and ready for market in February. The large, solid, handsome, white heads remain in good condition longer than other varieties. Pkt. 10c; $\frac{1}{4}$ oz. 35c; 1oz. \$1.00; $\frac{1}{4}$ lb. \$3.00.

Large White French.—A variety with large, white heads, firm and of good flavor. Pkt. 10c; 1oz. 75c; $\frac{1}{4}$ lb. \$2.00.

BRUSSELS SPROUTS.

The plants, which are very hardy, grow two or three feet high, and produce from the sides of the stalk, numerous little sprouts, which resemble very small cabbages one or two inches in diameter. The leaves should be broken down in the fall, to give the little heads more room to grow. They should be treated in all respects like winter cabbage or kale.

Dwarf Improved.—The leading variety. Very hardy and giving compact, round sprouts of large size and good quality. Grows 2 to 3 feet high. Pkt. 5c; 1oz. 25c; $\frac{1}{4}$ lb. 75c.

CAULIFLOWER.

Culture.—The Cauliflower succeeds well in any soil where cabbage will grow. But best results are obtained in rich soil with an abundance of water. By sowing early varieties in a hot bed in February or March, and later in a cold frame, fine heads can be obtained quite early. For a later supply sow seeds in a prepared bed in May, choosing a cool, moist place. When large enough, transplant, making the rows about two and a half feet apart and eighteen inches between the plants. In dry seasons the crop must be watered.

Early Snowball.—Handsome large white solid heads. Recommended for either early or late planting. Pkt. 10c; $\frac{1}{4}$ oz. \$1.00; 1oz. \$3.00.

Early Paris.—A hardy variety, quite easy to grow and forming good heads. This is between the extra early sorts and the late varieties. It is medium late. Pkt. 10c; $\frac{1}{4}$ oz. 60c; 1oz. \$2.00.

California Wonder.—Large solid heads. Leaves large and long, and may be tied over heads for protection. Late and of fine quality. Pkt. 10c; $\frac{1}{4}$ oz 50c; 1oz. \$1.50.

Autumn Giant.—A large late variety, very hardy. The large leaves protect the heads well. Pkt. 10c; $\frac{1}{4}$ oz. 50c; 1oz. \$1.50.

CABBAGE.

Culture.—The requisites for complete success are: First—Good seed. There is no other vegetable where the seed has so much influence on the quality of the product, and gardeners should always use the best procurable. Second—Rich, well prepared ground. Third—Frequent and thorough cultivation. A heavy, moist and rich loam is most suitable, which should be highly manured and worked deeply. The early sorts should be sown very early in hot beds, hardened off by gradually exposing them to night air, and as early as the ground is in good condition transplanted, setting 18 to 36 inches apart, according to size of variety. The later autumn and winter varieties may be sown from the middle to the last of spring and transplanted when four to six inches high. Shade and water the late sowings in dry weather to set them up.

Early Jersey Wakefield.—Grown more extensively for market than any other early cabbage. Has but few outside leaves; a reliable header and always gives good satisfaction. Pkt. 5c; 1oz. 35c; $\frac{1}{4}$ lb. \$1.00.

Charleston, or Large Wakefield.—Larger and a little later than the Early Jersey Wakefield. Fine for fall sowing in the open for early spring plants. Pkt. 5c; 1oz. 50c; $\frac{1}{4}$ lb. \$1.50.

Copenhagen Market.—A new early globe-shaped cabbage, slightly flattened. The large solid heads are very uniform. Keeps well, and stands handling. Pkt. 5c; 1oz. 50c; $\frac{1}{4}$ lb. \$1.50.

Early Winnigstadt.—Very conical solid heads. A sure header. Keeps better than most varieties. Pkt. 10c; 1oz. 50c; $\frac{1}{4}$ lb. \$1.50.

SPECIAL PRICES to Market Gardeners where a quantity of seed is wanted.
If you grow Cabbage, Kale Cauliflower, Celery—You need a Master's Planter.

LATE VARIETIES.

Autumn King or World Beater.—A sure header, very solid, fine-grained and tender. Color, dark green, with a slight bronze or brownish tinge to the outer leaves. The heads are remarkably thick through, and will attain a great weight. Has short stems, grows near the ground. Pkt. 5c; 1oz. 60c; $\frac{1}{4}$ lb. \$1.80.

Premium Late Flat Dutch.—This is superior to any other late cabbage in cultivation, when large areas are planted for shipping. It possesses all the good qualities of Late Flat Dutch, a sure header. Pkt. 5c; 1oz. 35c; $\frac{1}{4}$ lb. \$1.00.

Danish Ball Head or Hollander.—This is one of the hardiest cabbages in cultivation and endures both frost and drouth that would destroy other varieties. Matures quite late, keeps well, and is considered by many the best cabbage for spring markets. Color bluish green. Pkt. 5c; 1oz. 40c; $\frac{1}{4}$ lb. \$1.25.

Mammoth Red Rock.—Used for pickling. The heads are very fine and remarkably sure heading. Pkt. 5c; 1oz. 40c; $\frac{1}{4}$ lb. \$1.20.

Chinese or Celery Cabbage.—The culture of Wong Bok is the same as for winter cabbage. The seed should be sown in July or early August and early in September the plants should be transplanted. They should be set one foot apart in the row and pushed down one and one half inches in the ground. When well grown the plants should be blanched by tying closely with burlap. Any good soil is sufficient. Wong Bok has a mild cabbage flavor, makes delicious slaw; also a very fine salad. When cooked Wong Bok makes greens delicately cabbage flavored. Pkt. 10c; 1oz. 50c; $\frac{1}{4}$ lb. \$1.50.

CARROTS.

Culture.—A sandy loam is the best soil for the carrot, but any good land, if thoroughly and deeply worked, will produce satisfactory crops. Sow as early in the spring as the ground is fit to work, though good crops may be grown from sowing as late as June 15th. For table use, sow the smaller kinds in rows 16 to 18 inches apart, and for field culture prepare the ground thoroughly and sow in drills 18 to 24 inches apart. Cover one-half to one inch deep and see to it that the soil is well firmed above the seed.

Early French Forcing.—The earliest variety in cultivation, and best suited for forcing. Roots, reddish brown, globular and about two inches in diameter; should be used before full grown. Pkt. 5c; 1oz. 10c; $\frac{1}{4}$ lb. 30c; 1lb. \$1.00.

Oxhart.—A thick carrot, five or six inches long and very blunt at the lower extremity. It grows very rapidly and the root attains a weight of more than a pound. It is tender and of good flavor. Pkt. 5c; 1oz. 10c; $\frac{1}{4}$ lb. 30c; 1lb. \$1.00.

Chantenay.—The Market Gardener's Favorite. Tops, medium size; necks, small; roots, tapering slightly, but uniformly stump-rooted and smooth; color, deep orange red; flesh, very crisp and tender. Although this is a medium early sort, it furnishes roots of usable size as early as any; is a heavy cropper, and is undoubtedly one of the best for both the market and private garden, while its great productiveness makes it very desirable as a field sort. Pkt. 5c; 1oz. 10c; $\frac{1}{4}$ lb. 30c; 1lb. \$1.00.

Danver's Half Long.—Grown largely on account of its productiveness and adaptability to all classes of soil. Tops, medium sized, coarsely divided. The smooth, handsome roots are of medium length, tapering uniformly to a blunt point; flesh, sweet, crisp, tender; deep orange in color. Although the roots of this variety are short, they produce as large bulk as the longer field sorts, and are more easily harvested. Pkt. 5c; 1oz. 10c; ¼lb. 30c; 1lb. \$1.00.

STOCK CARROTS.

Large White Belgian.—Extensively grown for stock feeding; very productive. Grows so much above the ground that the entire crop can be pulled by hand. 1oz. 10c; ¼lb. 30c; 1lb. \$1.00.

Yellow Giant.—This new carrot originated at the Sydney, Australia, Experiment Station and has proved itself to be the earliest and most productive stock carrot yet produced. It is a half long variety, with an immense broad shoulder. The carrot penetrates less than one-half the depth into the ground, which saves about one-half the expense of harvesting the crop. The color is of bright yellow. 1oz. 10c; ¼lb. 30c; 1lb. \$1.00.

CRESS.

True Water.—This is quite distinct from the former, and only thrives when its roots and stems are submerged in water. It is one of the most delicious of small salads, and should be planted wherever a suitable place can be found. The seed should be sown and lightly covered in gravelly, muck lands, along the borders of small, rapid streams, and the plants will need no subsequent culture, as under favorable conditions they increase very rapidly by self-sown seed and extension of the roots. Pkt. 5c; 1oz. 60c.

Curled, or Pepper Grass.—This salad is much used with lettuce, to which its warm, pungent taste makes an agreeable addition. The seed should be sown in drills about 16 inches apart, on very rich ground, and the plants well cultivated. It may be planted very early, but repeated sowings are necessary to secure a succession. Keep off insects by dusting with Pyrethrum Powder. Pkt. 5c; 1oz. 15c; ¼lb. 40c.

CELERIAC.

Grown for the edible root and not for greens. Start seed like celery and transfer to garden. Bleaching is not necessary.

Large Smooth Prague.—Forms a good thick root as much as four inches in diameter. Makes delicious flavored salad. Pkt. 5c; 1oz. 25c.

CELERY.

Culture.—Sow the seeds early in a hot-bed or cold frame. When three inches high, transplant, setting them four inches apart. When grown six inches, and fine, stalky plants, set in richly manured, deep soil, in rows three and a half feet apart and about nine inches from plant to plant. Water if dry weather follows transplanting. During the next two months all the attention that is required is to keep down the weeds. Afterward, earth up a little, and continue doing so at intervals until only the tops of the leaves are visible late in the autumn. Never hoe up the earth when plants are wet. One ounce of seed produces about six thousand plants.

White Plume. The Leading White Celery.—A handsome, crisp sort, of very easy cultivation. Naturally its stalks and portions of its inner leaves and heart are white, so that by closing the stalks either by tying or by simply drawing the soil up against the plant and pressing it together, the work of bleaching is completed without the troublesome process of “banking” or “earthing up”. It is the earliest celery known. Pkt. 5c; 1oz. 25c; ¼lb. 90c.

Golden Yellow Self-Bleaching.—This is no doubt the best celery for early spring market use. Plants of a yellowish green color when young, but as they mature the inner stems and leaves turn a beautiful golden yellow, which adds much to their attractiveness and makes the work of bleaching much easier. Pkt. 5c; ¼oz. 45c; 1oz. \$1.40.

CORN.—SWEET.

Sweet Corn is a delicious Garden Vegetable and a very profitable field crop. Nothing quite equals is.

As Corn is very sensitive to frost, it cannot be planted with any degree of safety until after the first of May. Moist rich soil is best for Corn and frequent hoeing or cultivating improves it. Plant hills three feet each way. Thin to three plants to the hill.

Golden Bantam.—The earliest variety. The ears are small, but are thickly set with delicious yellow kernels. The quality of this variety is superb, and it has become a general favorite early Sweet Corn with all who have tried it. Pkt. 5c; 1lb. 25c; 10lbs. \$2.35.

Early Evergreen. The Best Second Early Sweet Corn.—In the New Early Evergreen we have a selection possessing every good quality of Stowell's Evergreen, and resembling it in every respect, except that the stalk is about one foot shorter, more closely jointed, and that it will mature for market ten to fourteen days earlier. Pkt. 5c; 1lb. 30c; 10lbs. \$2.50.

Stowell's Evergreen.—Remarkable for remaining a long time in a fresh condition suitable for the table. Hardy and productive, and the best late variety for general use. Sixty per cent of stalks in the field carry two perfect ears. They are of faultless shape, invariably filled well to the tips. Pkt. 5c; 1lb. 30c; 10lbs. \$2.50.

FIELD CORN.

Pride of the North, or Yellow Dent.—Recommended after repeated tests, by the Agricultural College, as the best for Oregon, Washington and Idaho. A quick growing dent variety, thriving well where the summers are not very long. Bright golden color. 10lbs. \$1.20; 50lbs. 10c per pound.

Champion White Pearl.—A large, white dent variety; very popular with our dairymen on account of the great amount of green feed it makes. 10lbs. \$1.20; 50lbs. 10c per pound.

Long Yellow Flint.—An early very desirable corn of the eight row variety. Long slender ears with small cobs. Great corn to grow suckers, making it desirable for feeding purposes. 10lbs. \$1.20; 50lbs. 10c per pound.

Golden Glow.—A very fine strain of yellow dent. Not as large a stock grower as Pride of the North, but produces fine ears of a deep golden color. 10lbs. \$1.20; 50lbs. 10c per pound.

CUCUMBERS.

Culture.—Cucumbers need a warm, rich soil, and should not be planted in open ground until the weather is settled, as otherwise they will not thrive. Plant in hills four feet apart each way, thinning to three or four of the strongest plants, after danger from insects is passed. As fast as the cucumbers attain suitable size they should be taken from the vine, whether required for use or not, as their ripening soon destroys the vine's usefulness.

Early Cluster.—Fine, vigorous, producing the bulk of the crop near the root and in clusters. Fruit short, with uniformly thick end, dark green, but paler at the blossom end. A very productive sort. Pkt. 5c; 1oz. 15c; ¼lb. 45c.

Long Green.—The leading large variety. Fruit from 10 to 12 inches long. Dark green crisp and tender. Pkt. 5c; 1oz. 15c; ¼lb. 45c.

Short Green, or Early Frame.—An excellent sort for both table use and pickling. Fruit straight, small at each end, bright green, with crisp, tender flesh. Comes into use a little later than the Early Cluster and keeps green a long time. Pkt. 5c; 1oz. 15c; ¼lb. 45c.

White Spine.—One of the best sorts for table use. Vines vigorous, fruiting early and abundantly. Fruit uniformly straight, light, bright green in color with a few white spots. Flesh crisp, tender and excellent. Pkt. 5c; 1oz. 15c; $\frac{1}{4}$ lb. 45c.

Gherkin.—An extremely small fruited variety, grown exclusively for pickles. It has no value for slicing. It is very prickly, but tender and crisp if pickled when young. Seed germinates slowly. Pkt. 5c; 1oz. 25c; $\frac{1}{4}$ lb. 75c.

Cool and Crisp.—A fine garden Cucumber, deep green and crisp. It is of the White Spine type, pure white when ripe. Pkt. 5c; 1oz. 15c; $\frac{1}{4}$ lb. 45c.

Boston Pickling.—A great producer. Bright green. The fruits average four to five inches in length, and are of excellent quality. Pkt. 5c; 1oz. 15c; $\frac{1}{4}$ lb. 45c.

CORN SALAD.

Fetticus or Lamb's Lettuce.—A hardy winter salad, the small leaves being served like lettuce during the cool fall and early winter months. Does not succeed during warm weather. Sow seed thinly, in drills, during August, September and October. Pkt. 5c; 1oz. 25c; $\frac{1}{4}$ lb. 75c.

ENDIVE.

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

Broad Leaved Batavian.—Large heads or broad, thick leaves which can be bleached as a salad or makes excellent cooked greens. Pkt. 5c; 1oz. 15c; $\frac{1}{4}$ lb. 45c.

EGG PLANT.

Should be started in a hot-bed and transplanted when the weather is settled and the ground thoroughly warm. They will thrive with the same treatment as that given the tomato.

New York Purple.—The principal market variety; plants are large and spreading. Fruit large and of deep purple. Pkt. 5c; 1oz. 45c.

KOHL RABI.

Hardy and of easy culture. Grown from plants the same as Cabbage.

Early White Vienna.—Very early; bulb white; best table variety. Pkt. 5c; 1oz. 30c.

KALE OR BORECOLE.

A species of cabbage, forming a mass of leaves. Some varieties being very beautiful and curly. The leaves are cooked as greens. The seed should be planted in September and plants will be ready to use in the winter.

Emerald Isle.—Medium height, very vigorous, throwing out new shoots as fast as the leaves are used. Pkt. 5c; 1oz. 30c; $\frac{1}{4}$ lb. 90c.

Tall Curled Scotch.—Grows about two feet high, leaves dark green and wrinkled. Pkt. 5c; 1oz. 30c; $\frac{1}{4}$ lb. 90c.

Thousand Headed.—A tall variety with smooth leaves. Especially used for stock. Sow in drills 26 to 30 inches apart and thin out so as to stand 16 or 18 inches apart in rows. Use $\frac{3}{4}$ lb to acre. Can be sown broadcast, using $1\frac{1}{2}$ lbs to the acre. Pkt. 5c; 1oz. 10c; $\frac{1}{4}$ lb 30c; 1lb. 90c.

LETTUCE.

Culture.—Lettuce requires very rich soil, plenty of water, a cool growing season and intense culture to produce the best results. If the earliest varieties are planted out in the spring, and the weather turns dry and hot, they will run up to seed without heading. The same seed sown in the fall or with cooler growing weather would develop perfectly. At a temperature of 40 degrees or lower lettuce will not thrive. At 65 degrees and upward it has a tendency to run up and not head perfectly. For outside planting sow the seed in shallow drills from one to two ounces to the 100 yards. Lettuce matures in forty to sixty days from time of planting.

New York or Wonderful.—This is the mammoth head lettuce so popular in California from whence it is shipped to the Northern markets, arriving in splendid condition. The immense heads are solid, heavy, beautifully blanched to a creamy white with bright green outer leaves. Pkt. 5c; 1oz. 30c; $\frac{1}{4}$ lb. \$1.00.

Hanson. Improved Hard Heading Stock.—One of the very best. Heads green outside and white inside; grow to a remarkable size, very solid, and is delicious sweet, crisp, tender. Stands the hot sun well. Pkt. 5c; 1oz. 15c; ¼lb. 45c

Early Prize Head.—Standard sort; one of the best thin leaved, clustering varieties. The very large leaves are savoyed or crimped, bright green, tinged with red, and are exceedingly tender, crisp and sweet, forming a large, loose head. Pkt. 5c; 1oz. 15c; ¼lb. 45c.

California Cream Butter.—A popular variety for autumn and winter use. Forms large heads which are very buttery and a rich golden yellow inside. The leaves are thick and bright green slightly tinged with brown on top of head. Pkt. 5c; 1oz. 15c; ¼lb. 45c.

Big Boston.—Plants large, hardy and vigorous. Leaves broad and wavy at edges, bright green, slightly tinged with reddish brown. Pkt. 5c; 1oz. 15c; ¼lb. 45c.

Grand Rapids—For Early Forcing.—As a lettuce for greenhouse forcing, this variety undoubtedly stands at the head of the list. Of quick growth, and stands for some days after being fit to cut. The plant is upright, and forms a loose head or cluster of forage, light yellowish green leaves. Pkt. 5c; 1oz. 15c; ¼lb. 45c.

MUSKMELONS.

Culture.—Plant in hills four to six feet apart each way, after danger of frost is past and the ground is warm; enrich well with well-rotted manure and plant the seeds just under the surface, not too deep. One ounce to fifty hills; two to three pounds per acre.

Melons thrive best on warm, light soils, but good crops are obtained on heavy ground if it is rich and well drained; in cultivating, hill up by drawing the soil toward the plant. Use lime, slug shot or land plaster for destroying insects.

Bay View.—A standard variety. Fruit large (6 pounds) oblong heavily ribbed and netted. Flesh light green and of good flavor. Pkt. 5c; 1oz. 15c; ¼lb. 40c.

Burrell's Gem.—Has a tough, thin rind, well arched ribs, covered with a closely interlaced gray netting; shape elongated, being about 4½ inches in diameter by 6 inches long, flesh of a reddish orange, very thick, fine grained

and spicy, seedheld firmly in a triangular cavity. This is the secret of a good shipping melon. If the seeds shake loose easily a melon will quickly decay. Pkt. 5c; 1oz. 15c; $\frac{1}{4}$ lb. 40c.

Rocky Ford or Netted Gem.—The most popular and best seller among muskmelons. The fruit is oval, slightly ribbed, densely covered with coarse netting. Flesh thick, green, very sweet and highly flavored. The fruit is wonderfully uniform in shape and quality. Grown largely in Colorado and shipped in carload lots all over the country. The favorite with market gardeners everywhere. Pkt. 5c; 1oz. 15c; $\frac{1}{4}$ lb. 40c.

Early Hackensack.—Melons of good size. Heavily ribbed and netted. Thick, light-green flesh of fine flavor. Pkt. 5c; 1oz. 15c; $\frac{1}{4}$ lb. 40c.

Small Green Nutmeg.—A variety ripening early. Flesh green, fine and sweet. Superior for the early market or family garden. Pkt. 5c; 1oz. 15c; $\frac{1}{4}$ lb. 40c.

Persian.—A large Muskmelon, and heavy for its size. Heavily netted and globular. Its color is bright orange. The flavor is different from other melons and comes out delightfully when the melons are well ripened. Pkt. 5c; 1oz. 15c; $\frac{1}{4}$ lb. 40c.

WATERMELONS.

Culture.—Watermelons thrive best on light, well-drained soils, but give good results on any good rich garden soil that is properly drained and cultivated. Plant after the weather is settled and ground warm. Hills should be eight feet apart each way and with well rotted manure well worked into each hill. One ounce of seed will plant thirty hills.

Sweet Heart.—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. Pkt. 5c; 1oz. 15c; $\frac{1}{4}$ lb. 30c.

Tom Watson.—Has thin dark green rind and deep red flesh, crisp and sugary. Is hardy and stands handling. Pkt 5c; 1oz. 15c; $\frac{1}{4}$ lb. 30c.

Fordhook Early.—A fine extra early melon. Fruit of good size, skin dark green; flesh bright and crisp, sweet and good quality; rind thin but tough. Pkt. 5c; 1oz. 15c; $\frac{1}{4}$ lb. 30c.

Halbert Honey Watermelon.—Ripens perfectly in the cooler sections where other varieties fail. The average length is eighteen to twenty inches, both ends being blunt and fully rounded out. The rich, dark glossy green, the thin rind and the bright crimson center make the new Halbert Honey the most attractive watermelon. Pkt. 5c; 1oz. 15c; $\frac{1}{4}$ lb. 35c.

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 distinct stripes. Flesh, a beautiful bright rich red; exceedingly sweet and tender. Pkt. 5c; 1oz. 15c; $\frac{1}{4}$ lb. 35c.

MUSTARD.

Mustard is used alone as greens or with cress as salad. Sow any time in the spring, in rows, and thin out as necessary.

Fordhook Curled.—Beautiful dark green, finely curled leaves that are of distinctive flavor. Superior to spinach as greens. Pkt. 5c; 1oz. 15c; ¼lb. 45c.

Southern Giant Curled.—True curled leaf variety so popular in the south for planting in the fall to furnish early spring salad. Pkt. 5c; 1oz. 10c; ¼lb. 30c

ONIONS.

Culture.—The onion thrives best in a rather deep, rich, loamy soil, and unlike most vegetables, succeeds well when cultivated on the same ground for successive years. The best culture requires that the ground should be deeply dug and heavily manured with well rotted manure a season or two previously. Sow as soon as the ground can be prepared in the spring.

Australia Brown.—Early and hardy variety. The skin is thick and in color a rich brown. It is especially noted as a long keeper. Pkt. 5c; 1oz 20c; ¼lb. 60c; 1lb. \$2.00.

White Bermuda.—A very early variety. It is mild and of particularly fine flavor. Color pinkish straw and shape is flat. The seed we offer is grown in Teneriffe, Canary Islands, and is a fine pure strain. Pkt. 5c; 1oz. 35c; ¼lb. \$1.00; 1lb. \$3.50.

Prizetaker.—A very large globe shaped variety, with light yellow skin and white flesh of mild flavor. It is a heavy cropper and a fairly good keeping onion, and is very popular as a market variety. Pkt. 5c; 1oz. 25c; ¼lb. 75c.

Red Wethersfield.—A well known and most widely used red variety. In shape it is flattish, but thick, with very fine flesh. Is an excellent keeper as well as a heavy cropper. Pkt. 5c; 1oz. 25c; ¼lb. 75c; 1lb. \$2.25.

ONIONS—Continued.

Southport White Globe.—Large, globular, pure white skin and flesh. The handsomest onion grown, very productive and of fine quality. Is used a great deal for green onions owing to the clear white stem. Pkt. 5c; 1oz. 25c; $\frac{1}{4}$ lb. 75c

Yellow Globe Danvers.—A very handsome, round or globe-shaped variety, of large size, with thin, yellowish skin white flesh, fine grained, mild, very firm and the best keepers. It ripens early. Pkt. 5c; 1oz. 25c; $\frac{1}{4}$ lb. 75c; 1 lb. \$2.25. Carco Vegetable Spray will keep your garden free of worms and insect pests.

ONION SETS.

Bottom Onion Sets.—Small onions grown from seed that have been sown too thickly to attain a large size. The small onions (about $\frac{1}{2}$ inch in diameter) thus obtained are planted out and are ready in a short time to pull as green onions for the table or bunch for the market. If left to stand they make ripe onions of the best quality, and come to maturity some six weeks earlier than a crop grown directly from the seed. Lb. 15c; 10lbs. \$1.25.

OKRA OR GUMBO.

Improved Dwarf Green.—An early dwarf and prolific variety, with thick green pods. The long tender pods are very delicious when sliced and cooked in soups. While this is its chief use, it is also boiled and served like all other vegetables. Should be planted in hills, or in rows about three feet apart. Plant in any good soil when ground is in condition. The pods should be gathered when very young and then are tender. Pkt. 5c; 1oz. 10c; $\frac{1}{4}$ lb. 25c.

PARSLEY.

Very useful for flavoring soups, meats and for garnishing. The green leaves are used for flavoring or they may be dried crisp, rubbed to a powder and kept in bottles until needed.

Culture.—Parsley succeeds best on rich, mellow soil. The seed is even slower than parsnips in germinating and should be sown as early as possible in the spring in drills and when the plants are about three inches high, cut off all the leaves; the plant will then start a new growth of leaves which will be brighter and better curled.

Champion Moss Curled.—A compact growing, finely cut and much curled variety of a bright green color. Pkt. 5c; 1oz. 15c; $\frac{1}{4}$ lb. 40c.

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; 1oz. 15c; $\frac{1}{4}$ lb. 40c.

PARSNIPS.

The Parsnip is nutritious and wholesome, with a sugary sweetness peculiar to itself, and is desirable both for the table and stock feeding. It yields a large crop, and is said to be more valuable for dairy cows than either the carrot or turnip. As the seed germinates very slowly, sow as early in spring as possible in drills fifteen inches apart on deeply cultivated, rich, loamy soil. Keep clear of weeds and thin to three or four inches apart. The roots are improved by freezing.

Hollow Crown.—A variety with a hollow or cup shaped top where the leaf stem begins. The most popular and best variety for all purposes. Skin smooth and white, and flesh tender while the root grows 18 to 20 inches long. Pkt. 5c; 1oz. 15c; $\frac{1}{4}$ lb. 45c.

Long Smooth or Long Dutch.—A very long variety, with full crown, very smooth white skin. Pkt. 5c; 1oz. 15c; $\frac{1}{4}$ lb. 45c.

PEAS—GARDEN.

Culture.—For early peas the soil should be light and warm. Avoid fresh manure and rich, mucky soil. The peas will give quicker returns if covered only one inch deep but larger pods and more of them will be produced if the seed is planted in trenches three to six inches deep and covered with only an inch or two of soil. When the plants are five inches high fill the trench level full. This will secure deep rooting, prevent mildew, and prolong bearing season. If peas are covered to full depth at first, or water be allowed to stand in the trench, they will not germinate or grow well.

Alaska or Earliest of All.—A smooth Pea, well suited for Fall and Early Spring planting, as it will not rot in cold wet ground. Vines two and a half feet tall, pods small. Pkt. 10c; 1lb. 25c; 10lbs. \$2.25.

American Wonder.—One of the earliest of the wrinkled Peas. Vines about twelve inches tall, bearing short well filled pods. Though small, the peas are very sweet, tender and well flavored. Pkt. 10c; 1lb. 40c; 10lbs. \$3.50.

Premium Gem.—One of the earliest dwarf varieties, coming in a little later than the American Wonder; grows taller, much more productive and continues in bearing longer. The quality of the pea is very superior. Height fifteen to eighteen inches. Pkt. 10c; 1lb. 35c; 10lbs. \$3.00.

Carter's Daisy or Dwarf Telephone.—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. Twenty-four inches high. Pkt. 10c; 1lb 40c; 10lbs. \$3.75.

Gradus.—This early, wrinkled pea bears pods of large size, and combines quality with earliness. It is very hardy; can be planted fully as early as the smooth peas; growth, vigorous and healthy; vines 2½ feet in height; very prolific. The quality and flavor are delicious, and the peas remain tender and sweet for a long time. Pkt. 10c; 1lb. 40c; 10lbs. \$3.50.

Yorkshire Hero.—One of the largest, sweet, wrinkled kinds; vines strong and spreading; pods of good size and well filled; much in use, and has enjoyed a long popularity; medium late; bears a long time; height, two and one-half feet. Pkt. 5c; 1lb. 35c; 10lbs. \$3.25.

Laxton.—A fine early tall variety, similar to Gradus, but more hardy and not quite so early. It is also a little darker in color and has large blunt pods, that fill well with peas of the finest quality. Pkt. 10c; 1lb. 40c; 10lbs. \$3.75.

Telephone—Tall.—Immensely productive, of the finest quality and excellent, sugary flavor, vines strong; the pods are of large size, filled with large, luscious peas; height four feet. Pkt. 10c; 1lb. 45c; 10lbs. \$4.25.

Stratagem.—A semi-dwarf variety with large leaves and large pods. The vines bear well and the pods are long, thick and well filled. Pkt. 10c; 1lb. 40c; 10lbs. \$3.75.

Champion of England.—One of the most popular tall late varieties. Is very prolific and hardy and the peas are of especially fine rich quality. Pkt. 10c; 1lb. 40c; 10lbs. \$3.50.

Blue Bantam.—A medium dwarf vine pea, early in bearing and having splendid long pods well filled with peas of a deep green color. Pkt. 10c; 1lb. 40c; 10lbs. \$3.50.

Senator.—Especially good for the home garden, on account of its abundant yield, earliness and good quality. Has large, slightly curved pods, always well filled and easy to pick. Pkt. 10c; 1lb. 40c; 10lbs. \$3.50.

PEPPER.

Sow the seeds early in hot beds; or later, when the weather becomes warm, in open beds. When two or three inches high, transplant to a warm, mellow soil, in rows eighteen inches apart and a foot apart in the rows. Guano and hen manure are excellent fertilizers and will greatly increase the yield.

New Chinese Giant Sweet.—The largest and best of the mild Red Peppers. The fruits are four to five inches in diameter, born in clusters on the thick stocky bushes that are well branched, and grow about two feet high; color, brilliant, deep red; vigorous and about as early as Ruby King. Pkt. 5c; 1oz. 70c

Large Bell or Bull Nose.—Large mild, thick fleshy variety. One of the best for stuffed pickles. Pkt. 5c; 1oz. 70c; $\frac{1}{4}$ lb. \$2.00.

Chili.—Pods small and pointed; brilliant scarlet; very pungent when ripe. Pkt. 5c; 1oz. 80c.

Pimento Pepper.—This is a small pepper which you will enjoy eating in salad, either fresh or canned. Very thick flesh, wonderfully mild flavor. Pkt. 5c; 1oz. 60c.

PUMPKINS.

Culture.—Pumpkins will grow on any good farm land, but their size and quality will depend on the culture and fertility of the soil. Plant early in May, in hills six to eight feet apart. One pound of seed will plant about 300 hills. Care should be taken to keep the different varieties well apart, also away from other vining plants, as they mix and deteriorate very rapidly.

Sweet, or Sugar.—A handsome and productive small pumpkin ten to twelve inches in diameter; round flattened; skin, orange; flesh, deep yellow, fine grained and very sweet. Pkt. 5c; 1oz. 15c; $\frac{1}{4}$ lb. 40c; 1lb. \$1.25.

Connecticut Field.—Large round; deep, glossy yellow. Vine vigorous and very productive; good keeper. Grown extensively for stock feeding. Pkt. 5c; 1oz. 15c; $\frac{1}{4}$ lb. 35c; 1 lb. \$1.00.

Mammoth King, or Potiron.—The best large pumpkin in use. Forms immense globular melons, flattened a little at the end; skin reddish yellow in color and flesh rich orange. 1oz. 20c; $\frac{1}{4}$ lb. 40c; 1 lb. \$1.25.

RADISHES.

To secure Radishes with crisp, tender flesh, grow them quickly, in rich, loose soil, and gather before reaching full size. Our Radish Seed is strictly of the finest grade, being grown from carefully selected roots. Frequent planting should be made for succession, so that a supply of fresh, tender radishes in the finest condition may be had at all times.

White Icicle.—A handsome white variety, about five inches long, with sloping top and pointed root. Quick growing, brittle and mild in flavor. Pkt. 5c; 1oz. 15c; $\frac{1}{4}$ lb. 40c.

White Strasburg.—A large white variety for late summer use. Rather thick at the shoulder and tapering to about five inches in length. Keep firm and solid a long time. Pkt. 5c; 1oz. 15c; $\frac{1}{4}$ lb. 45c.

Long Scarlet.—This bright scarlet, small topped variety is uniformly straight, smooth, brittle and crisp, and is a standard and excellent sort for private gardens or market use. Pkt. 5c; 1oz. 15c; $\frac{1}{4}$ lb. 45c.

Lady Finger, or White Vienna.—Of rapid growth and beautiful shape. Skin and flesh snowy-white; very juicy, firm, crisp and tender; the finest Long White Radish. Pkt. 5c; 1oz. 20c; $\frac{1}{4}$ lb. 60c.

Early Crimson Giant.—The Largest Early Scarlet Turnip-Shaped Radish. A new, early radish, double the size of any of the turnip-shaped type, but notwithstanding its immense size, does not get hollow and pithy. The flesh is a sparkling white, solid, crisp, juicy and of the mildest flavor. The shape of the bulb varies from round to almost oval, but the bright deep crimson color of the skin remains quite constant. Excellent for both forcing and open ground. Pkt. 5c; 1oz. 15c; $\frac{1}{4}$ lb. 45c.

Early Scarlet Turnip.—A small, round, red turnip-shaped radish, with small top and of very quick growth; very early; rich color and crisp, tender flesh. Pkt. 5c; 1oz. 15c; $\frac{1}{4}$ lb. 45c.

French Breakfast, or Half Long.—Medium size, quick growth, crisp and tender; lower end and tap root white. Pkt. 5c; 1oz. 15c; $\frac{1}{4}$ lb. 45c.

RADISHES—WINTER.

California Mammoth White China.—This is the largest of all radishes. Roots grow ten to twelve inches long and are solid, tender and crisp. Keeps well through winter. Pkt. 5c; 1oz. 20c; $\frac{1}{4}$ lb. 60c.

Black Spanish Long.—Standard winter sort, has good flavor, and keeps well. Pkt. 5c; 1oz. 20c; $\frac{1}{4}$ lb. 60c.

RHUBARB OR PIE PLANT.

Culture.—Rhubarb should have deep, rich soil. Sow in drills an inch deep and thin out the parts to six inches apart. In the fall transplant the young plants to very highly manured and deeply stirred soil, setting them four to six feet apart each way and give a dressing of coarse manure each spring. The stalks should not be plucked until the second year and the plant never allowed to exhaust itself by running to seed.

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

Giant Linnaeus.—A large early variety, very tender and of fine flavor. Pkt. 5c; 1oz. 15c; $\frac{1}{4}$ lb. 40c.

Rhubarb Roots save one years time. (See Plants.)

SALSIFY OR VEGETABLE OYSTER.

Salsify is a nutritious and wholesome vegetable, having the appearance of a small parsnip; in flavor closely resembling oysters, for which it is, in that respect, a good substitute. It is rapidly coming into more general use. Sow early in spring, in drills a foot apart, and when two or three inches high thin out to three or four inches. Its general culture is the same as that recommended for carrots. The roots are perfectly hardy and may remain in the ground during the winter, or may be stored in dry earth or sand.

Mammoth Sandwich Island.—The leading variety; produces a large crop of straight, smooth roots. Pkt. 5c; 1oz. 30c; $\frac{1}{4}$ lb. 90c.

SQUASHES.

Culture.—The plants are very tender and sensitive to cold, and planting must be delayed until settled warm weather. The general principles of culture are the same as those for cucumbers and melons, but squash is less particular as to soil. The summer varieties should be planted four to six feet apart each way, and the winter sorts eight to ten feet. Three plants are sufficient to a hill.

SUMMER VARIETIES.

Yellow Summer Crookneck.—Early, prolific, solid, curved neck; skin yellow, thin, hard and warty; flesh tender and of good quality. Twice as large as the ordinary Crookneck and several days earlier. Pkt. 5c; 1oz. 15c; $\frac{1}{4}$ lb. 40c; 1lb. \$1.00.

Vegetable or Italian Marrow.—The earliest of all Squashes. Usually eaten when quite small, but still good for the table when nearly full grown. Has a distinct flavor. Color dark green at first, but changes to a light green as it matures. Pkt. 5c; 1oz. 15c; $\frac{1}{4}$ lb. 40c; 1lb. \$1.00.

White Bush Scallop.—A well known variety of dwarf habits and upright growth. Color, creamy white. Excellent for table use while young and tender. Pkt. 5c; 1oz. 15c; $\frac{1}{4}$ lb. 40c; 1lb. \$1.00.

WINTER VARIETIES.

New Delicious.—This new fall and winter squash resembles the old Hubbard; average weight is between five and ten pounds. Seed cavity small; flesh exceedingly thick, compact, fine grained; color, golden orange. The flesh is mealy, granulated, tender and almost of mealy dryness, cooking sweet and rich, whether steamed, baked, boiled or made into pies. Pkt. 5c; 1oz. 15c; $\frac{1}{4}$ lb. 40c; 1lb. \$1.25.

Boston Marrow.—A popular variety with large oval fruit. Skin bright reddish orange with light netting. Flesh orange, fine grained and of excellent quality. Pkt. 5c; 1oz. 15c; $\frac{1}{4}$ lb. 35c; 1lb. \$1.15.

Banana.—This Squash gets its name from its shape and color. Grows eighteen to twenty-four inches long and eight to ten inches in diameter. Flesh golden yellow, thick and delicious. Is grown extensively by market gardeners and finds a ready sale. Pkt. 5c; 1oz. 15c; $\frac{1}{4}$ lb. 35c.

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. One of the very best fall and winter sorts yet introduced. Maturing before the frosts; is vigorous and wonderfully productive. In flavor it has no equal. Pkt. 5c; 1oz. 20c; $\frac{1}{4}$ lb. 60c; 1lb. \$1.75.

True Hubbard.—The best early seller and most popular variety on our list. Rind dark green, warty and very hard. Flesh light orange, very dry, sweet and rich flavored. Has no superior. Keeps perfectly through the winter. Pkt. 5c; 1oz. 20c; $\frac{1}{4}$ lb. 60c; 1lb. \$1.75.

Mammoth Chili.—The largest of all squashes, growing to an enormous size, often weighing over 200 pounds, while its rich, fine flavored flesh insures its value for all purposes. Its size makes it valuable for stock feeding. Pkt. 5c; 1oz. 15c; $\frac{1}{4}$ lb. 45c; 1 lb. \$1.25.

SPINACH.

This is an important gardener's crop, of easy culture. For spring and summer use, sow either broadcast or in drills one foot apart and one inch deep, as early as the ground can be worked, and every two weeks for a succession.

Improved Thick Leaved.—Variety which grows very rapidly, forming a cluster of large, very thick, slightly savoyed leaves of fine color, and quality, when cooked. Best for market gardeners. Pkt. 5c; 1oz. 10c; $\frac{1}{4}$ lb. 25c.

Bloodsdaile Savoy.—Leaves large, round and thick, very much savoyed and rich deep green. One of the earliest varieties. Splendid for shipping. Pkt. 5c; 1oz. 10c; $\frac{1}{4}$ lb. 25c.

Long Standing.—A deep green variety with rather elongated smooth leaves. Seed round. Stands a long time without running to seed. Pkt. 5c; 1oz. 10c; $\frac{1}{4}$ lb. 25c.

TOMATOES.

The newer types of hardy, prolific Tomatoes are better adapted to the cool coast climate than the older sorts; and splendid crops are now being grown where heretofore it was thought Tomatoes would not thrive. A good plan is to try several varieties and find which is best suited to your special conditions.

Culture.—Sow early in hot-beds, and as soon as they have four leaves transplant into shallow boxes. Harden off, and set out as soon as danger of frost is past. An ounce of seed will produce 3,000 to 4,000 plants.

Bonny Best.—An early scarlet fruited variety which has proven very popular. Is about ten days earlier than Chalks Early Jewel, which it resembles. It is smooth and very even in size, solid and prolific. Pkt. 5c; 1oz. 35c; ¼lb. \$1.20.

Chalk's Early Jewel.—Large bright red, smooth round fruits, very deep and colored evenly up to stem; very solid, almost seedless and of the finest flavor. Vines are vigorous, not subject to blight, and yield fully equal to or better than Earliana, but ten days later. Pkt. 5c; 1oz. 35c; ¼lb. \$1.00.

Earliana (Sparks).—The earliest tall variety. The fruit is large, smooth of a bright scarlet color and of fine quality. Pkt. 5c; 1oz. 35c; ¼lb. \$1.00.

Early Detroit.—A new Tomato of merit. Fruit smooth, uniform, nearly globe shaped, firm and fine quality; color purplish-pink. Season early. Pkt. 5c; 1oz. 35c; ¼lb. \$1.00.

Perfection.—One of the best medium early, round, uniformly smooth; vines very productive; fruit deep scarlet, firm and of excellent quality. Vines continue long in bearing. Pkt. 5c; 1oz. 35c; ¼lb. \$1.00.

Ground Cherry, or Husk Tomato.—Grows to great perfection under ordinary culture, yielding abundantly; very much prized for preserving; should be in every garden. A small variety that is covered by a loose covering or husk. The true edible variety is yellow. Pkt. 5c; 1oz. 35c.

Stone.—A very fine Tomato, large, smooth and solid. Bright red in color and a good yielder, but it is quite late. Pkt. 5c; 1oz. 35c; ¼lb. \$1.00.

Dwarf Champion.—Forms a strong, erect, bushy plant two feet high, often sold as tree tomatoes. Fruit smooth, medium sized, solid, of good flavor, of purplish carmine color. Pkt. 5c; 1oz. 35c; ¼lb. \$1.00.

TURNIPS.

EARLY GARDEN TURNIPS.

For early use sow the small sorts as soon as the ground can be worked in the spring, in drills fourteen inches apart. As the seed is very fine, it should be covered but slightly, except in very dry weather. For fall and winter use, sow the early kinds during July, August and September.

Purple Top Strap Leaf.—A leading white-fleshed variety, and one of the best, either for family, market garden or field crop. It is medium size, and produces a large crop. The flesh is firm, but tender, and of a superior rich buttery flavor. Pkt. 5c; 1oz. 15c; $\frac{1}{4}$ lb. 45c.

Purple Top Flat Dutch (Strap Leaf).—An early variety, white with purple top. Probably the most popular garden variety. It matures quickly and has fine grained flesh of mild flavor. Pkt. 5c; 1oz. 15c; $\frac{1}{4}$ lb. 45c.

Early Snowball.—Early round turnip, maturing in seven weeks, is of perfect form, snowy whiteness, crisp, solid and of fine flavor. Pkt. 5c; 1oz. 15c; $\frac{1}{4}$ lb. 45c.

Yellow Globe.—Undoubtedly one of the most delicate and sweetest yellow-fleshed turnips yet introduced. Not of large size but firm, hard and most excellent flavor. Keeps well and is superior as a table variety. It is extensively used by market gardeners. Pkt. 5c; 1oz. 15c; $\frac{1}{4}$ lb. 40c.

MAIN CROP TURNIP.

Purple Top White Globe.—A large, globe-shaped variety; purple above the ground. It is handsome and of excellent quality, and recommended both for the family garden and field crop. Pkt. 5c; 1oz. 15c; $\frac{1}{4}$ lb. 35c; 1lb. \$1.15.

Pomeranian White Globe.—One of the most productive kinds, and in good, rich soil roots will frequently grow to twelve pounds in weight. It is of perfect globe shape; skin white and smooth; leaves dark green and of strong growth. Pkt. 5c; 1oz. 15c; $\frac{1}{4}$ lb. 40c; 1lb. \$1.20.

Cowhorn.—Sometimes called Long White. Slightly crooked. Pure white except a little shade of green at the top. Grows half out of the ground and is of very rapid growth. Is delicate and well flavored. Has proved itself one of the best stock turnips ever introduced in Oregon, as it is an immense yielder. Pkt. 5c; 1oz. 15c; $\frac{1}{4}$ lb. 45c; 1lb. \$1.50.

Yellow Aberdeen.—A medium sized variety, generally used for stock feeding. It is yellow with a purple top. Flesh light yellow. A winter variety. Seed can be sown in summer. Pkt. 5c; 1oz. 15c; $\frac{1}{4}$ lb. 40c; 1lb. \$1.25.

RUTA BAGA OR SWEDES.

American Purple Top.—The leading standard variety, being very distinct in type, attaining a wonderfully large size; immense yielder. The flesh is yellow, very firm, and superior in every way, valuable alike for all purposes. Pkt. 5c; 1oz. 15c; $\frac{1}{4}$ lb. 35c; 1lb. \$1.15.

White Sweet Russian.—This variety is most excellent, either for table or stock. It grows to a very large size; flesh white, solid, of firm texture, sweet and rich; an excellent keeper. Pkt. 5c; 1oz. 15c; $\frac{1}{4}$ lb. 40c; 1lb. \$1.25.

SEED POTATOES.

A deep mellow loam, rich in humus, furnishes ideal conditions for growing potatoes, but good crops are raised on both heavier and lighter types of soils. Early varieties may be planted as soon as the ground can be prepared. Late varieties May 20 to June 20, rows $3\frac{1}{2}$ feet wide, 20 inches in row, cut to 2 eyes. To prevent blight, soak potatoes before cutting for two hours in a solution of 1oz. Formaldehyde to two gallons of water. The following varieties are best adapted to our soil and conditions.

Prices on potatoes are subject to market changes. Ask for quotations on larger lots.

Earliest of All.—A handsome shallow eyed, white skinned potato of finest table quality. Is a healthy vigorous grower not subject to blight or disease. Keeps as well as any late potato. Price: 10lb. lots. 75c. Write for prices.

Early Rose.—Our stock of this variety is an improved strain; is very vigorous and extremely early. 10lbs. 75c. Write for prices.

Early White Prizetaker.—A handsome early white potato, one of the finest of fall early sorts, being oblong in form, four or five inches in length, with white smooth skin and few eyes. It is a very superior cooking potato either baked or boiled, cooking up dry and fluffy. 10lbs. 75c.

American Wonder.—The American Wonder is one of the best all-round white potatoes in cultivation. It is practically blight-proof, a strong grower, a great producer; tubers white, uniform in size; elongated; of excellent quality. It is a potato sought after. 10lbs. 65c; 100lbs. \$5.50.

Netted Gem.—One of the very best main crop potatoes, rather long, smooth, and the light russet skin is finely netted. The flesh is very white, floury, and they bake quickly. 10lbs. 65c; 100lbs. \$5.50.

Burbank.—A standard commercial variety. We offer a splendid strain of select Burbanks, not the "run-out" stock generally seen, but the genuine article, which is really a good potato. 10lbs. 65c; 100lbs. \$5.50.

PLANTS.

STRAWBERRY PLANTS.

The strawberries here offered have all stood the market test and you will be safe in selecting any one of them that will suit your conditions and requirements. They are the best varieties obtainable.

Get our prices on large lots.

Gold Dollar.—One of the earliest berries on the market. Fruit medium size and attractive; rather tart, fine flavor. Foliage heavy, large and spreading, which protects the blooms from early frosts. Doz. 25c; 100 \$1.00.

Oregon.—One of the most satisfactory berries. They are large and fine, rich dark red, and of delicious flavor. Ripen early. Doz. 25c; 100 \$1.00.

Marshall.—A very popular variety. Berries not so large as others but very solid, attractive and excellent flavor. The leading canning variety. Doz. 25c; 100 \$1.00.

Magoon.—Berries large, fine and excellent. Subacid flavor. Bears heavily throughout the season. Doz. 25c; 100 \$1.00.

VEGETABLE PLANTS AND ROOTS.

We are prepared to furnish in season choice transplanted plants, which are well rooted and easy to grow. We supply all the leading varieties.

Cabbage.—Per dozen, 10c; per hundred, 75c.

Cauliflower.—Per dozen, 15c; per hundred, \$1.00.

Celery.—Per dozen, 15c; per hundred, 75c.

Tomatoes.—Per dozen, 15c; per hundred, \$1.00.

Asparagus Roots.—Per dozen, 25c; per hundred, \$1.50.

Rhubarb Roots, 2 years old 10c each; per dozen, 75c.

If any of these plants are wanted in large lots, ask for prices, stating variety and amount wanted.

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.

There are many varieties of grass and forage plants offered by Eastern seedmen (often under new names) that will not give profitable crops in our climate, and to avoid disappointment, we refer you to the following list, which has been carefully selected and contains the most desirable varieties for the general and special purposes.

ALFALFA.

The land should be prepared by deep plowing and thorough harrowing, and should be well drained, for Alfalfa will not stand moisture too close to the surface. It can be drilled or broadcasted in and from 15lbs to 25lbs per acre is required. It is best to sow in the fall, after the first rain, but can also be sown in the spring.

Dry Land Alfalfa is the principal variety used in the valley, as it does not require irrigation, and produces large profitable crops of hay and excellent pasture. 10lb. lots, 40c per pound. Write for prices on larger quantities.

CLOVER

Crimson or Italian Clover.—An annual variety, growing 20 to 30 inches high and having long crimson blossoms. Grows quickly in cool weather and is of great value to sow in the fall as a cover crop to turn under in the spring. 10lb. lots, 70c per pound. Write for prices on larger quantities.

Sweet or Bokhara Clover.—Grows three to five feet high, covered with small white flowers of great fragrance. Very valuable for bee pasture. 10lb. lots, 36c per pound. Write for prices on larger quantities.

Red Clover.—The standard Clover for all purposes. Hardy and succeeds well on any good soil. Makes superior hay—especially if mixed with Timothy—either for dairy cows or for general use. Fancy, 10lb. lots, 62c per pound; 100lbs, \$60.00. Write for prices on larger quantities.

White Dutch Clover.—A small variety, having a white blossom. Of a vining nature, spreading rapidly. Superior for pasture and unsurpassed for the production of honey. It makes a beautiful lawn when mixed with Blue Grass. Per pound 70c. Choice seed slightly mixed with Alsike, Per pound 45c. Ask for samples.

Mammoth Red Clover.—Grows very large and is used almost exclusively for plowing under for manure. 10lb. lots, 61c per pound. Write for prices on larger quantities.

Alsike or Swedish Clover.—A perfectly hardy perennial variety which is rapidly growing in popular favor. Excellent for hay and pasture. Valuable for bees. Resists both drouth and excessive moisture. The hay of this variety is greatly preferred by some to that of Red Clover, for the reason that it is generally finer, brighter and not so dusty, making it better for horses. Fancy, 10lb. lots, 62c per pound; 100lbs, \$60.00.

GRASS SEEDS.

Kentucky Blue Grass.—As this grass takes some time to become established it is preferably sown in mixtures for pasturage. It is truly perennial and prefers lime soils for pasturage, sow 50lbs. to the acre. 40c lb.; 10lbs. \$3.50

For Lawns.—Blue Grass is used very extensively for lawns and is found in all lawn grass mixtures. Sow 1lb. to 200 square feet if used alone.

English Rye Grass.—A strong growing, hardy perennial grass, noted for its nutritive qualities. It is equally valuable for both grazing and hay. Valuable for planting early on dry hillside, as it grows very quickly. A good lawn grass, but a little coarse. 10lb. lots, 20c per pound; 100lbs. \$18.00.

Italian Rye.—A quick-growing grass, attaining a height of 2½ to 4 feet; very desirable for temporary meadows or pastures. Sown in the fall will produce an excellent hay crop the following season, but lasts only one year. Thrives best on soils that are slightly moist, and will even stand considerable overflow. Grows easily and bears an abundance of foliage that makes the best and sweetest hay imaginable. Sow 40 pounds per acre. 10lb. lots, 22c per pound; 100lbs, \$19.00.

Sudan Grass is an annual plant with fibrous roots like the cultivated sorgums. In growing seasons, where the growing period is long, one can secure as many as four cuttings. It has been grown successfully on almost every class of soil, and after a thorough trial has proven its adaptability to Oregon soil and climate. **Sudan Grass Hay** is superior to millet hay and is said to be equal to timothy. On account of its upright growth, it would be excellent grown in combination with legumes. The seed should not be planted until the soil has become warm. Two to four pounds of seed will be required per acre if seeded in rows 36 to 40 inches; sixteen pounds if sown broadcast. 10lb. lots, 21c per pound. Write for quantity prices.

English and Italian Rye Grass (Oregon Grown).—Almost pure English Rye Grass seed, excellent for pasture purposes. Sow 30 pounds to acre... 16c per pound in 10 lb. lots; 100lbs. \$14.00.

Timothy.—This is the most valuable of all grasses for hay. Thrives best on moist, loamy soil. Sow early in the spring or fall. Not adapted for pasture as there is little growth after cutting, and tramping of stock soon destroys it. Sow 15 to 20 pounds per acre. Choice Idaho seed. 10lbs. \$2.00; 100lbs. \$18.00.

Orchard Grass.—One of the most valuable of all the cultivated grasses, blooming with Red Clover, and making with it admirable hay. As a pasture grass it is more productive than any other, and does best under close feeding. It succeeds well in quite shady places. Sow 28 pounds per acre. 10lbs. \$4.00; 100lbs. \$37.00.

Mesquite.—Also known as Velvet Grass is of little agricultural value, except for pasture on light sandy or marshy soils, where other grasses will not grow. Is used extensively on slashings or burns. Sow 15 pounds per acre of hulled seed. 10lb. lots, 25c per pound; 100lbs. \$22.00.

Red Top.—A good perennial grass. Generally sown for permanent pasture. Does best on moist or even marshy land. If the ground is not overflow land it is advisable to mix it with Meadow Fescue, Orchard Grass or Alsike Clover. Sow 28 pounds per acre chaff seed; 14 pounds hulled. **Choice Hulled**, a very superior grade of Red Top that is free from chaff and light seed. 10lbs. \$2.10; 100lbs. \$18.00.

Meadow Fescue, or English Blue Grass.—A valuable grass for permanent pasture 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. 10lb. lots, 50c per pound; 100lbs. \$47.00.

Creeping Bent Grass.—Being of fine texture, this grass is most valuable for lawns, and permanent pasture. Specially adapted to moist situations. It is of rapid growth and spreading habit. Per pound 40c.

Tall Meadow Oat Grass.—Of rapid luxuriant growth, recommended for soiling and in permanent hay mixtures. Also for winter grazing. It is best sown with other grasses and should not exceed one-fifth of the total amount of seed sown. Per pound 50c; 10lb. lots, 45c per pound.

FIELD AND MISCELLANEOUS FARM SEEDS.

BUCKWHEAT.

Buckwheat is a valuable crop and can be easily grown wherever wheat will grow, producing a good yield even on light or poor soil and under favorable conditions is very profitable, being in big demand for milling—and is also the best "Bee pasture." Sow late in spring when the ground is warm.

Silver Hull.—Of a light gray color, rounder than the common; has a thin husk; matures earlier and yields heavily. An excellent milling variety. Per pound 10c; 100lbs. \$8.00.

BARLEY.

As barley is a shallow rooted crop, the soil should be made very fine and firm with plenty of available plant food. Barley is a crop that will succeed best when sown about corn planting time.

Beardless.—The earliest barley known. The straw is about the height of the Common Barley, but better, and will stand up on any land; with good season and land, has produced 80 bushels per acre. Sow as early as you can; frost does not hurt it. Many farmers will not grow barley on account of the long hard beards which are so disagreeable in threshing, although it is a profitable crop. This is beardless, and as easy to grow and handle as oats. It is becoming more popular each season. \$5.00 per 100lbs, subject to change.

Common, or Bearded Barley.—We endeavor to have a nice clean stock of good Seed Barley on hand at all times. This is the common 6 row bearded type. \$5.00 per 100lbs. subject to change.

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 the same as that of Common Barley. \$5.50 per 100lbs. subject to change.

Hannchen.—A new variety, recommended by the O. A. C. Sown about the tenth of April. Will yield more than fifty bushels to the acre. It is the two row bearded variety. \$5.00 per 100lbs. subject to change.

CHEAT SEED.

Cheat yields a good crop of hay, especially on low or moist soil and will stand considerable overflow without harm. It makes an excellent hay for cows or horses, but should be cut before it gets too ripe. Sow in the fall same cultivation as oats and about 100 pounds per acre. Write for prices.

FIELD PEAS.

Field Peas are a 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 very 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. 10lb. lots 8c per pound; 100lbs. \$6.00.

Blue Prussian Peas.—Very much like the above, except in color. This variety is largely sold for soup peas. 10lb. lots, 10c per pound. Write for prices on larger quantities.

COW KALE.

(Or Thousand Headed Kale).

The great demand for this wonderful forage plant proves it to be the most valuable green feed for Pacific Coast dairy and stockmen; endorsed by Agricultural Colleges and Government Stations. Cow Kale should be grown in the same manner as cabbage. Make the rows 4 feet, plant 3 feet apart in the row. Can be set as late as July. Seed 1oz. 10c; 1lb. 90c. Plants, 100, 50c; 1000, \$4.00.

MILLETS.

Sow in April, May or June, 12 to 15 pounds for seed or 20 to 30 pounds for hay per acre.

German or Golden.—An improved variety, yielding a larger crop of seed than the Common Millet. It is also taller than the Common, and yields a heavy crop of hay. 10lbs. \$1.15; 100lbs. \$9.50.

Hungarian.—A dwarf annual Millet. It is finer than the Common or German Millet, but produces a closer stand and yields almost as much per acre as the taller varieties. Superior for hay. 10lbs. \$1.20; 100lbs. \$9.50.

Common.—A variety growing from three to four feet high, having rather broad blades and strong stalks. 10lbs. \$1.20; 100lbs. \$9.50.

RYE.

Winter.—Grown for hay by dairymen, but principally for grain. Is also planted with Vetch and in combination makes an excellent fodder. 10lbs 70c; 100lbs. \$5.00.

Spring Rye.—Can be used late in the spring, when too late to plant Fall Rye. Does not stool as much as Fall Rye, but makes good growth with heavy yield of seed. 10lbs. 70c; 100lbs. \$5.00.

EMMER OR SPELTZ.

A grain somewhat resembling barley. Is adapted to any land which will raise oats. Yields 40 to 60 bushels to the acre and an immense amount of fine straw. A splendid hog and chicken feed. 100lbs. \$5.00.

VETCH OR TARES.

(Greatest Forage Plant).

Common or Winter.—A plant resembling pea vines and valuable for forage or green manure. It is usually sown with oats, wheat or rye to hold them up. Sow.... 60 pounds per acre with grain or 80 to 100 pounds if sown alone. It is very hardy and makes a fine winter growth. 10lbs. \$1.00. Write for prices on larger quantities.

White Spring or Pearl Vetch.—Can be sown when it is too late to sow the winter vetch. Makes a good growth when sown as late as April. Use same amount of seed and sow in same manner as the winter vetch. 10lbs. \$1.25. Write for prices on larger quantities.

RAPE, DWARF ESSEX.

One of the best forage plants, producing immense quantities of green feed when grass and other crops are dried up. Per pound 14c; 25lb. lots, 12c per lb.

SEED WHEAT.

Write us for quotations when you are ready to buy seed wheat. We carry the best varieties adapted to our climate and soil, and will quote you the lowest market price, quality considered.

Early Wonder.—An excellent variety for sowing either spring or fall. Is early and yields well. 100lbs. \$5.00.

Forty Fold.—A favorite winter variety in many localities. Is quite early, resembles Blue Stem, and is in good demand for milling. 100lbs. \$4.00.

Early Baart.—A bearded spring wheat. Has large white grains of the finest milling quality. Is fully as early as Marquis. 100lbs. \$5.00.

Marquis.—A beardless spring wheat, which is a cross of Red Fife and Hard Calcutta. Produces heavy heads, shorter straw than Red Fife. 100lbs. \$5.00.

SEED OATS.

We offer select, recleaned, well-matured seed oats of standard varieties, suitable for this section.

Three Grain.—One of the best varieties for spring planting. The oats are large and plump. 100lbs. \$4.00.

Gray Winter.—This oat is planted extensively throughout the Northwest as a fall or winter oat. Is well and favorably known, being a good yielder, and the oats are large and plump. 50lb. lots, 5c a pound; 100lbs. \$4.50.

Shadeland Challenge.—A side oat of great value. One of our customers secured a yield of 37 sacks to the acre. Part of this was fall planting, the balance, spring planting, from the same lot of seed. The yield of both lots was almost equal. Grains are short and plump. 100lbs. \$4.50.

Write for special prices on larger lots.

Blatchford's Calf Meal

The complete milk-equal—contains all the elements of milk and is just the thing for weaning the calves as soon as they can be taken away from the cow. Then all the milk may be sold and you get the benefit of the high creamery prices.

It is the only calf meal that is thoroughly cooked and prepared for digestion.

Sold in 25-lb., 50-lb., and 100-lb. bags

Blatchford's Pig Meal

Weans your little pigs easily, quickly and safely. It keeps them growing sturdily, rapidly and profitably, bridges the critical weaning period and always *makes the runts catch up.*

Sold in 25-lb., 50-lb., and 100-lb. bags

Blatchford's Milk Mash

Indispensable for fattening broilers, roasters and capons, and putting show birds in the pink of condition for poultry shows.

Five pounds raises one chick from the shell up to three months old.

Sold in 25-lb. and 100-lb. bags and 4-lb. cartons

Blatchford Booklet No. 17 describes fully the Blatchford products. It's free for the asking.

EMPIRE CREAM SEPARATORS

We are exclusive agents for the Empire Line of Cream Separators, Mechanical Milkers and Gas Engines. We do not have the space to tell you the many good points of these goods. When you are in the market for any of these supplies, drop us a card, and we will send you full description and prices. We carry extras, such as bowl rubbers, neck bearing springs, etc.

FLOWER SEEDS.

We have a very complete line of flower seeds in 5c and 10c packets, but for lack of room in our catalogue cannot list them. Send us your orders for flower seeds and we will see that they are promptly and carefully filled.

The new "Spencer" type has lovely waved and fluted flowers of gigantic size, and in exquisite colorings, length of stem and lasting qualities are much superior to the older types. "Spencers," however, are very shy seeders and require much careful selection to develop fixed types. The seed is therefore scarce, and cannot be cheaply produced. We carry the following varieties in bulk and sell as little as 5c worth, at 50c per ounce. Any variety.

SPENCER SWEET PEAS.

Ethel Roosevelt.—Primrose, with light pink flakes and stripes. Most beautiful deep cream pink sweet pea.

Fiery Cross—Brilliant flame color.

Illuminator—Brilliant orange scarlet.

Sterling Stent—Metallic Salmon.

Masterpiece—Large wavy lavender tinted mauve.

Afterglow.—Violet blue and rosy amethyst.

Blue Picotee.—White with narrow edging of blue.

American Spencer—Red and White.—The largest and finest of its class, pure satiny white, striped and splashed brilliant crimson; flowers of perfect form borne on long stems.

Apple Blossom Spencer—Rose and Pink.—A truly giant flower; color, standard rose with deep veining, wings light carmine, ground color, primrose.

Countess Spencer—Pink.—The first Sweet Pea of the Spencer type. Flowers extremely large, beautifully expanded, crumpled and waved, color silvery white suffused and tinted with soft shell pink, deeper at the outer edges.

Othello Spencer.—Very deep maroon, of largest Spencer Type; wings very wavy, large and drooping; the finest of its color.

King Edward Spencer.—Bright Crimson Scarlet, largest size, wavy standard, drooping wings, very long stems; one of the finest bright reds.

Primrose Spencer.—Truly primrose color. Very vigorous, free-flowering, excels in beauty of form, length of stem and keeping qualities.

Captain of the Blues.—Clear purplish blue, light at edges.

Duplex Cream.—Color a deep cream. The standards are larger, bold and beautifully curved.

Asta Ohn.—Lavender, soft pinkish shade. Very large and wavy.

King White.—The newest and most beautiful white, of perfect type.

Mixed Spencers.—This splendid mixture contains nearly all varieties of the Spencer type, mixed for the benefit of those who wish all varieties, but do not care to keep them separate. The flowers are the same as those produced by the straight varieties. **Royal Mixed.**—35c per oz.

CUPID OR DWARF SWEET PEAS.

These grow from four to six inches high, and are beautiful grown in pots or planted for borders. White, Pink, Scarlet, Primrose, Lavender, Striped, Maroon or Mixed. Price, Pkt. 5c; 1oz. 35c.

NASTURTIIONS.

Nasturtions are hardy annuals, of easy cultivation and flower best where the soil is not too rich. The new hybrids include variols shades of rose, salmon, bright red, pale yellow, etc., either self-colored or spotted, striped and margined

For covering trellises, fences, arbors, piazzas, trailing from vases, over rock-work, for bedding, etc., nothing can equal the gorgeous effect produced by their marvelous wealth of bloom, born in uninterrupted splendor from early summer until cut down by frost. Pkt. 5c; 1oz. 10c.

FARM TOOLS.

Masters' Plant Setter.—For planting Cabbage, Tobacco, Celery and small plants of any kind. With this handy tool you can set, water and fertilize ten thousand plants per day. It is simple, durable, practical and sure in its work. Price each, \$5.50.

Potato Planters—Peerless.—This is the lightest and best tuber planter made. With this 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. (See cut). Price each, \$2.00.

Corn Planter—Acme.—A two-hand planter; light, strong and durable. Especially adapted for planting in heavy, cloddy or stony soils. The seed dropper of the Acme is a straight slide, which vibrates horizontally and will drop seeds ranging from pop corn to large kidney beans. Made with spring, brass cut-off and steel blades. (See cut). Price each, \$1.75.

Gordon Automatic (one hand).—Much easier to operate than the Acme. Requires only one hand, either right or left. Puts the right number of kernels just where you want them. Price each \$3.00.

FERTILIZERS.

The best results are obtained by applying fertilizers in the late fall or early spring. The average amount used is 600 to 1000 pounds per acre, but two or three times this amount is often used to advantage by market gardeners.

NOTE.—As Fertilizers are sold on a small margin, prices are subject to market changes, but you will always get full value for your money.

Gromore.—A highly concentrated fertilizer containing 6% Nitrogen, 9 to 10% Phosphoric Acid, 5% Potash. One pound sufficient for 50 foot row of vegetables. Ask for booklet which gives valuable instructions for growing garden crop. Price, 2lb. package, 35c; 25lb. bag, \$2.35.

Land Plaster—Sulphate of Lime is a combination of lime, sulphuric acid and water, which combination is known as Gypsum. Lime is not a direct fertilizer in itself, but it takes the place of potash in certain chemical combinations existing in the soil, thereby releasing the potash and rendering it available as a plant food. For clover or other forage crops apply 40 to 50 pounds to the acre. Apply when growth begins in the spring or half at that time and the balance when there is a growth of a few inches.

Apex Brand (made in Oregon). 100lbs. 75c; ton lot, \$13.50.

Winner Brand No. 1.—For orchards, Berries, Grain, Corn, Grass, Clover and early truck crops. Nitrogen, 2%, Phosphoric Acid, 10%, Potash, 2%. Price, 10lb. lots, 3½c per pound; 100lbs. \$3.10.

Winner Brand No. 2.—For Vegetables, Cabbage, Tomatoes, Sugar Beets, Onions and Potatoes. Nitrogen, 1%, Phosphoric Acid, 10%, Potash, 3%. Price, 10lb. lots, 3¾c per pound; 100lbs. \$3.25.

Winner Brand No. 3.—For Strawberries, Melons, Squash, Spinach, Asparagus, Lettuce, Peas, Beans and Orchard. Nitrogen, 3%, Phosphoric Acid, 10%, Potash, 1%. Price, 10lb. lots, 4c per pound; 100lbs \$3.35.

Nitrate of Soda, 6c per pound; 100lbs. \$5.40.

Superphosphate, 3c per pound; 100lbs. \$2.40.

Sheep Guano, 3c per pound; 100lbs. \$2.40.

Kelp Charcoal, 3c per pound; 100lbs. \$2.40.

Lime Rock, 3c per pound; 100lbs. \$1.25.

Roselawn.—A splendid concentrated fertilizer for lawns and roses. 10lb. buckets, each 85c.

Plant Food.—For house plants and ferns. Odorless, ½lb. package, 25c.

SPRAYS, PUMPS AND SPRAYERS.

Aspinwall Sprayer.—One of the most convenient and economical hand sprayers for applying liquid lice-killers, sprays, etc. Nothing cheap but the price. Weight, 1¼lbs. Price, 60c.

Myers Lever Handle Bucket Pump.—The lever handle and large air chamber make this the most powerful bucket pump and the easiest to operate. All working parts are solid brass with brass ball valves and patent agitator. Fitted with graduating Vermorel nozzle to throw a fine or coarse spray or a solid stream. Weight, 8lbs. Price, each \$8.00.

Acme Compressed Air Sprayer.—A 3-gallon galvanized iron tank tested to 60 lbs. Brass pump, bronze ball check. Self-cleaning nozzle. Gives a finer spray than any other pressure pump. Price, \$7.50.

SPRAYS, SPRAY MATERIAL AND WASHES.

Black Leaf 40.—Destroys Aphis, Thrips, Leaf Hoppers on all tree, bush and vine fruits, vegetables, field crops, flowers and shrubs without injury to the foliage; 1oz. to 6 gallons of spray. 1oz. 25c; ½lb. \$1.00; 2lbs. \$3.25; 10lbs. \$13.75.

Dry Lime Sulphur.—It is not a substitute for Lime Sulphur Solution, but is the actual material in dry powdered form. It possesses all the advantages of Lime Sulphur Solution with none of its disadvantages. It is very simple to use as it goes into solution in water almost instantly and the spraying operations can be started immediately. It is simply a case of dumping the desired amount of powder into the spray tank, filling the tank with water and the spraying operations starts. Use 10lbs. to 50 gallons of water. 1lb. 30c; 10lbs. \$1.70; 25lbs. \$3.25; 100lbs. \$11.00.

Lime Sulphur Solution.—The best of this kind to be had is what we handle. Tests 30 Baume scale. 1 gallon, 50c; 5 gallons, \$1.75; 50 gallons, \$12.25.

Bordeaux Mixture, Dry.—Mixed with water according to directions makes a standard Bordeaux mixture. 1lb. packages, 40c.

Arsenate of Lead.—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. ½lb. 30c; 1lb. 50c; 5lbs. \$2.50; 10lbs. \$4.50; 25lbs. \$8.75.

Bluestone (Vitrol).—1lb. 20c; 6lbs \$1.00.

Whale Oil Soap.—For aphids, plant lice, etc. 1lb. 25c; 10lbs \$1.50.

Sulphur, Powder.—1lb. 5c; 100lbs. \$3.00.

B-K. is a Bacteria destroyer, which has ten times the power of undiluted Carbolic Acid for killing germs of disease. It is colorless, contains no poison or acid, imparts no taste or smell to vessels purified with it, is cheap. A gallon of diluted solution ready to use costs about one-fifth of a cent. Mixes immediately with water. 1oz. B-K to 1 gallon of water. Every Dairyman should use it. Single gallon, \$2.50; Quart, 85c. Ask for circular and letters of endorsement.

Carco Vegetable Spray.—A wonderfully successful spray for destroying maggots, grubs and worms which infest Turnips, Radishes, Beets, etc. To get best results, the ground should be sprayed freely before planting, then again as soon as the vegetables come up. Dip Cabbage plants in a solution of Carco before planting. Carco is highly concentrated. Use 1 pint Carco to 100 to 125 parts of water. Price: ½ pint, 20c; pint, 30c; quart, 50c; ½ gallon, 90c.

Hygeno A.—The Greatest Disinfectant Known.—For use in the home, in the barn, in the poultry houses and hog pens, as a cure of and preventative for disease. Ask for convincing proofs of its value. 1 quart, 50c; ½ gallon, 85c; 1 gallon, \$1.50.

Cendor Wood Preserver.—Unexcelled for dipping posts and poles for preserving sills or timbers that come in contact with the ground or dampness. Prevents dry rot. An excellent Spray for Chicken Houses. Disinfects and kills all insects. 65c per gallon.

HATCHING EGG SHIPPING BOXES

Made of corrugated straw board. Will comply with all requirements of the Parcel Post Law.

15 Egg size, 30c. 30 Egg size, 35c. 50 Egg size, 45c.

LIVE CHICK SHIPPING BOXES

25 Chick size, 25c; per dozen \$2.40. 50 Chick size 30c; per dozen \$3.00
100 Chick size 45c; per dozen \$4.80

BUCK EGG CRATE

Holds 12 dozen Eggs, each 60c.

HOPPERS AND FOUNTS.

The hopper method of feeding is both practical and economical. The chickens cannot waste the feed and still it is always ready for them. Our line is made of heavy galvanized iron—nothing cheap or shoddy, yet our prices are reasonable.

Dry Mash Hopper.—Holds 12 quarts, has lids which cover both the top and also the feeding space, is provided with slots so that it can be hung up. Very serviceable. Price, \$1.00.

Grit, Bone and Shell Hopper, 3 Compartment.—If allowed to have their own way about it, fowls are extremely wasteful, especially of grit, oyster shell, etc. These shell boxes not only will enable you to stop this loss, in large part, but they possess true sanitary value, because their use prevents poultry—both adult fowls and growing chicks, from picking up and swallowing unsanitary substances. Price each, \$1.00.

Grit, Bone and Shell Hoppers, 4 compartments, each \$1.50.

Wall Fount.—A splendid Fount, made of heavy galvanized iron, can be hung on the wall of the poultry house out of the litter. Has removable bottom, so that all parts can be easily cleaned. 1 gallon capacity, each 85c.

Star Fount and Feeder.—Will fit pint, quart or half-gallon Mason jars. Made of one piece non-rusting metal. Without jar, each 15c.

Round Baby Chick Feeders.—Can be used for feed, water or milk. 6 inches in diameter, each 25c; 8 inches in diameter, each 40c.

Chick Food and Water Holders.—Especially recommended for use in feeding mashers of any kind. Saves twenty-five per cent of feed. The guard lifts out of pan, making them easy to clean. Small, 4x10 inches, 35c; Medium, 5x18 inches, 60c.

Otis Rat Exterminator for use in poultry houses and yards. Each, \$1.00.

BUCKEYE INCUBATORS.

A Remarkable Incubator, at a Remarkable Price.

The case is made of California red-wood, and beautifully finished like a piece of furniture. It has perfectly insulated double top, and the walls are so constructed that the necessary temperature can easily be maintained in any location—even if it be freezing or up to 100 degrees.

A Standard Buckeye Metal Thermostat regulates the temperature to a fraction of a degree. With this device it is only necessary to regulate the temperature when the hatch is started—then you forget it—because the regulator stays where you put it and the temperature of the egg chamber cannot change.

The tank is an improved design that absolutely insures a uniform temperature throughout the egg chamber. This means that the temperature of each and every egg will be exactly right, and if there's a chicken in the egg—you'll get it.

(Every Buckeye Standard Thermometer is guaranteed correct within one-fifth of one degree.)

The Improved Egg Tray is built to stay and will wear like iron.

Write for special catalog.

No. 14.—capacity 65 eggs, \$17.50.

No. 17.—capacity 210 eggs, \$ 37.50.

No. 16.—capacity 120 eggs, \$27.50.

No. 5.—capacity 600 eggs, \$110.00.

THE STANDARD COLONY BROODER.

Nothing to Break or Wear Out.—A Brooder that enables any poultryman to care for 1,000 chicks with about the same amount of time and labor that it formerly took to care for 100. A Brooder that provides a constant, correct temperature, a constant supply of pure, fresh air, plenty of exercise and no possible chance for crowding—every essential for the welfare of the growing chicks—with such automatic regularity that all possibility of the many unfavorable conditions so commonly found in other brooders are entirely eliminated.

A Brooder that burns hard or soft coal and entirely eliminates all the labor worry that have always attended the older types of lamp-heated brooders.

A Brooder that will care for 100, 500 or 1,000 chicks with the same uniformly satisfactory results.

Booklet Free on Request.

Price Complete

500 chicks, \$22.50.

1000 " \$27.50

QUEEN INCUBATORS.

Queen Incubators.—A well known and very popular make of hot water machine.

An incubator which owes its 25 years of success to the wonderful HOT WATER system used which gives a perfect balance of temperature, moisture and ventilation so necessary to perfect incubation. Heating the egg chamber without cooking all the moisture out of the air is responsible not only for the abundant supply of natural moisture, but at the same time the soft, radiated heat from the hot water tank provides an absolutely uniform temperature and permits the perfect ventilation of the egg chamber.

REQUIRES NO ARTIFICIAL MOISTURE.

REGULATION OF TEMPERATURE PURELY AUTOMATIC.

REQUIRES NO WATCHING.

OPERATED IN ANY TEMPERATURE REGARDLESS OF SUDDEN CHANGES.

HIGHEST TYPE OF CONSTRUCTION.

We have sold these machines for 3 years and have a number of customers who speak only words of praise for the "Queen," and they have proved very satisfactory.

The prices of these machines are as low as it is possible to make for a reliable incubator. To buy a cheap machine is to throw your money away.

The difference between incubators should not be estimated by the hatch, but by the condition of the chicks. It is better to pay a few dollars more for an incubator and have good sturdy chicks.

Drop in and examine this incubator and get a catalogue.

85 Egg capacity, \$26.50. 135 Egg capacity, \$39.50. 180 Egg capacity, \$45.00.

275 Egg capacity, \$57.50. 400 Egg capacity, \$67.50.

BIRD SEED.

Sunflower.....	Lb. 15c	Mixed bird seed, Lb. 10c	Millet.....	Lb. 10c
Canary.....	Lb. 25c	Rape.....	Lb. 10c	Cuttle Bone.....
Hemp.....	Lb. 15c			Oz. 5c

We carry the celebrated Max Geisler's Bird Foods and Tonics. Imported German Roller Seed, Pkg. 25c. German Bird Biscuit, per carton, 15c. Bird Manna Food and Medicine Combined—a combination, per cake, 15c.

SUNFLOWER SEED.

Mammoth Russian.—The largest and most productive variety. It makes one of the very best of foods for poultry. A great egg producer. Pkt. 5c; $\frac{1}{4}$ lb. 10c; 1 lb. 20c.

Charcoal.—Should be before the chickens at all times. Two grades, medium and coarse. In small quantities, 7c per lb; 50lbs. \$3.00.

Beef Scrap.—The three best brands manufactured. Best grade, 10lb. lots, per pound 8c; 100lbs. \$7.75.

Fish Scrap.—Made from clean dried fish. Per lb. 7c; 100lbs. \$6.50.

Alfalfa Meal.—The best substitute for green for Winter feeding. Mix with the mash. Price, 100lb. sack \$2.50.

Poultry Pepper.—A red pepper compound. A splendid tonic for the chickens. Mix in the dry mash. Price per pound 35c.

Soya Bean Meal.—Rich in Protein, excellent for use in the mash. Lee's Meat Scrap is needed when Soya Bean Meal is used. 10lbs. 60c; 100lbs. \$5.40.

We have many other poultry foods and supplies which we cannot list for lack of space. Send us your order—if we haven't the article in stock you ask for, we will gladly get it for you.

These prices are subject to change up or down. You will get your money's worth in either case.

BEE SUPPLIES.

DOVETAILED PINE HIVES.

Dovetailed Hive.—8 frame, consists of 1 bottom board, 1 body, 1 cover, 8 Hoffman brood frames, 1 division board, enough brood foundation for the brood frames, wire, nails, etc. Set up, each \$2.40. 5 not nailed, \$10.00.

Super.—8 frame, consists of 1 Super, 6 section holders, 6 slotted separators, 24 Bass Wood sections, 1 Super follower, 2 tightening springs, enough foundation starter for the 24 sections, nails, tins, etc. Set up, each \$1.30; 5 packed flat, \$6.00.

Dovetailed Hive.—10 frame, same equipment as 8 frame Hives. each set up \$2.55. 5 not set up, \$10.75.

Super.—10 frame, same equipment as 8 frame Super, each set up \$1.60. 5 packed flat, \$7.00.

Section Honey Boxes.—Our No. 1 Sections are made of the choicest white Baswood lumber, and are all perfect in finish and free from defects. Price per 100, \$1.25; 500 for \$5.50.

Comb Foundation.—Light Standard Brood, sheets $7\frac{3}{4} \times 16\frac{7}{8}$, No. per lb., 7; per pound 85c.. Light Section, sheets $3\frac{7}{8} \times 15\frac{1}{2}$, No. per lb., 28; per pound 90c.

Hoffman Brood Frames.—Per 10, 70c; 100 \$6.00.

Section Holders.—Six section holders, one follower and spring are put in each super and each holder holds four one-pound honey boxes. The bottom strip is $1\frac{1}{4}$ inches thick and is cut out to fit inserts of sections $1\frac{1}{8}\times 18\frac{1}{2}$ inches, slotted. Each 4c; per 100 \$3.50.

Division Boards, each 15c; per 10, \$1.00.

Separators.—One separator should always be placed between each section holder so that the bees will build honey comb even in each section. Slotted wood separators $4\frac{1}{2}\times 18$, 10 for 15c; 100 \$1.00.

Tightening Springs, each 1c.

Alley's Queen and Drone Traps.—A non-swarmer device that works very successfully. Simple and easy to use. For 8-frame hive, 85c; for 10-frame hive, 90c.

Porters Bee Escape.—Makes taking off supers a pleasure. When in position it permits the bees to leave the supers but prevents their return. Price 20c. Mounted, 8 or 10 frame, each, 75c.

Honey Shipping Cases.—Glass front, corrugated non-dripping packing, 24 pound Eastern, nailed, each 55c.

Honey Boards.—Used to confine Queen to the brood chamber. Wood and wire, 8 frame each 80c; 10 frame each 85c.

Spur Wire Embedder.—Each, 40c.

Smokers.—The improved Cornell Smoker has proven very satisfactory. Standard size, \$1.50; Jumbo, \$1.75.

Foundation Fastener.—The VanDeusen Wax tube fastener is very simple and convenient, 35c.

Bee Veils.—The hat veil made of silk tulle and having a rubber band round the top, so as to fit the hat snugly, seems to be the most popular veil. Price \$1.50. Cotton Tulle, Silk Face, each, \$1.25.

TINNED WIRE NO. 30

1lb. Spool.....	Each 60c	$\frac{1}{4}$ lb. Spool.....	Each 25c
$\frac{1}{2}$ lb. Spool.....	Each 40c	$\frac{3}{4}$ oz. Spool.....	Each 10c

MODERN HIVES.—We particularly wish to impress upon you the importance of putting your bees into good hives. With few exceptions almost every new frame put into the hive this year will be wired and have full sheets of foundation. This should not be overlooked by the amateur beekeeper for his results will more than repay him.

We cannot list everything in the line of bee supplies, which we carry in stock, but will be glad to quote you prices and fill your order for anything you may want, even if we do not have it in stock, we will get it for you, without additional charge to you above the usual catalog prices.

SUGGESTIONS FOR THE AMATEUR.

The soil for a vegetable garden should be free from stones and easily cultivated. Wet land, that cannot be drained, should be avoided, as all crops suffer more from too much water than from drouth. Land which has a gently rolling or undulating surface, with a southern exposure, is the most desirable for general gardening operations, since it receives the full sunlight and allows the most perfect control of the water that falls upon it. A garden should be cultivated often, as cultivation prevents evaporation and so saves the moisture. Water should not be applied unless the crop is suffering for it. Whenever the garden has been irrigated, it should be cultivated as soon as possible to prevent the soil from baking. The water must be applied enough to nicely moisten the land, but avoid getting it water-soaked. The crops should be rotated to avoid insect enemies, to deepen the soil, and to use the plant food in the land to best advantage, since crops vary very much in the amount of the different elements which enter into their composition. Some plants feed largely near the surface, while others take their food mostly from a lower level. Root crops should not follow root crops, nor should vines follow vines for many years in succession on the same land. Nitrogen, phosphorus and potash are the most important elements in the composition of our cultivated plants, and must be furnished to the ground in a great quantity if good crops are expected.

By the proper cultivation of the garden we accomplish three things: (1)—The weeds are kept out so they do not shade the young plants, neither take away any plant food or moisture. (2)—The surface of the soil is brought into the best condition to resist drouth and to take in all the moisture from rains. (3)—The inert plant food in the soil is made soluble by the combined actions of the sun and the air.

In order to secure a good germination of the seeds, they should be sown in mellow soil, and this packed around them just firm enough to bring it in good contact. Unless the seed is carefully and properly placed and covered, the crop cannot get a good start. Seeds will not sprout in the absence of air and on that account, seeds that are sown too deep fail to come up.

In planting the garden it is important to put all the perennial crops, or all crops maturing at about the same time together, so as to render the work of cultivating easier. Seeds have to be put in the ground at different times in the spring. Some can be sown as soon as the ground can be worked, while others, such as beans, corn and all vines must not go in until danger of frost is passed and the ground is warm.

Most people sow the seeds too deep, and then blame the seedman for selling poor seeds, when the fault is theirs. All small seeds, like cabbage, lettuce, onions, etc., should not be sown deeper than $\frac{3}{4}$ inch, and, in a good many cases when the spring is rather wet, $\frac{1}{2}$ inch would be better. Beans will do best if sown about 2 inches, while sweet corn should be covered 1 to $1\frac{1}{2}$ inches deep. Peas are the only crop that will do well if planted more than 2 inches deep.

DON'T Practice false economy by buying low-priced seeds. It doesn't pay. Our motto: "Quality first, price as low as we can make it."

SPECIAL PRICES to Market Gardeners where a quantity of seed is wanted.

QUANTITY OF SEED REQUIRED

	Quantity per Acre.		Quantity per Acre.
Alfalfa	8 to 15 lbs.	Grass, Lawn, 1 lb. to 300 square ft.....	145 lbs.
Artichoke, 1 oz., to 500 plants.....	6 oz.	Hemp	40 to 50 lbs.
Asparagus, 1 oz. to 500 plants.....	1 lb.	Horse Radish Roots.....	15000 to 20000
Asparagus Roots.....	5000	Kale, 1 oz. to 150 feet of drill.....	1 lb.
Barley	100 lbs.	Kale, Thousand Headed	1 lb.
Beans, Dwarf, 1 lb. to 100 feet of drill.....	50 lbs.	Kohlrabi, 1 oz. to 150 feet of drill.....	2 lbs.
Beans, Tall, 1 lb. to 150 hills.....	25 lbs.	Kaffir Corn	6 to 8 lbs
Beet, Garden, 1 oz. to 50 feet of drill.....	5 lbs.	Leek, 1 oz. to 100 feet of drill.....	4 lbs.
Beet, Sugar, 1 oz. to 50 feet of drill.....	5 lbs.	Lettuce, 1 oz. to 150 feet of drill.....	3 lbs.
Beet, Mangel Wurzel, 1 oz. to 50 feet of drill.....	5 lbs.	Melon, Musk, 1 oz. to 60 hills.....	2 to 3 lbs.
1 oz. to 2000 plants.....	4 oz.	Melon, Water, 1 oz. to 30 hills.....	3 to 4 lbs.
Brussels Sprouts, 1 oz. to 2000 plants.....	4 oz.	Millet	30 lbs.
Broom Corn	12 lbs.	Nasturtium, 1 oz. to 50 feet of drill.....	15 lbs.
Buckwheat	45 lbs.	Oats	75 lbs.
Cabbage, 1 oz. to 1500 plants	½ lb.	Okra, 1 oz. to 100 feet of drill.....	8 lbs.
Carrot, 1 oz. to 125 feet of drill.....	3 lbs.	Onion, 1 oz. to 100 feet of drill.....	8 lbs.
Cauliflower, 1 oz. to 2000 plants.....	3 oz.	Onion, for sets	30 to 80 lbs.
Celery, 1 oz. to 5000 plants	1 lb.	Onion Sets, 1 lb. to 75 feet of drill.....	400 lbs.
Cheat	100 lbs.	Parsley, 1 oz. to 300 feet of drill.....	3 lbs.
Clover, White and Alsike	6 to 10 lbs.	Parsnip, 1 oz. to 200 feet of drill.....	6 lbs.
Clover, White, for Lawns.....	25 to 100 lbs.	Peas, Garden, 1 lb. to 50 feet of drill.....	200 lbs.
Clover, Red, Mammoth and Crimson	12 to 20 lbs.	Peas, Field	150 lbs.
Collards, 1 oz. to 2000 plants.....	4 oz.	Pepper, 1 oz. to 100 plants.....	
Corn, Sweet, 1 lb. to 200 hills.....	15 lbs.	Potatoes	400 lbs.
Corn, Field	12 to 20 lbs.	Pumpkin, 1 oz. to 30 hills.....	3 to 2 lbs.
Corn, Fodder	125 lbs.	Radish, 1 oz. to 100 feet of drill.....	10 lbs.
Corn, Pop	8 to 10 lbs.	Rape, Dwarf Essex	5 to 10 lbs.
Cress, ¾ oz. to 100 feet of drill.....	1 lb.	Rutabaga, 1 oz. to 150 feet of drill.....	2 lbs.
Cucumber, 1 oz. to 60 hills.....	2 to 3 lbs.	Rye	90 to 120 lbs.
Egg Plant, 1 oz. to 2000 plants.....	4 oz.	Salsify, 1 oz. to 50 feet of drill.....	8 lbs.
Endive, 1 oz. to 100 feet of drill.....	4 oz.	Speltz	100 lbs.
Flax, for seed 30 lbs. to acre. For fiber	50 lbs.	Spinach, 1 oz. to 100 feet of drill.....	8 lbs.
Grass, Kentucky Blue, Canadian Blue	20 lbs.	Squash, Summer, 1 oz. to 25 hills.....	3 lbs.
Timothy	25 lbs.	Squash, Winter, 1 oz. to 12 hills.....	4 lbs.
Red Top, in chaff 60 lbs. Solid.....	30 lbs.	Sugar Cane	10 lbs.
Rye Grass, Oat Grass, Fescue Grasses	30 lbs.	Sunflower	8 lbs.
Orchard Grass	40 to 60 lbs.	Tobacco, 1 oz. to 10000 plants	
		Tomato, 1 oz. to 2000 plants	4 oz.
		Turnip, 1 oz. to 150 feet of drill.....	2 lbs.
		Vetches, Spring	60 to 90 lbs.
		Vetches, Winter	30 to 60 lbs.
		Wheat	90 to 120 lbs.

USUAL DISTANCE FOR PLANTING

Apple Trees, 20 to 30 feet each way.	Melon, Water, 7 to 8 feet each way.
Asparagus, 3 to 4 by 2 feet.	Onions, drills 14 to 20 inches apart.
Beans, Bush, drills 2 to 3 feet apart.	Parsnip, drills 18 to 36 inches apart.
Beans, Pole, 3 to 4 feet each way.	Peach Trees, 18 to 24 feet each way.
Beets., Early, drills 12 to 18 inches apart.	Pear Trees, standard, 20 to 25 ft. each way.
Beets, Late, drills 2 to 3 feet apart.	Pear Trees, Dwarf, 12 to 15 feet each way.
Blackberries, erect growing, 6 to 9 by 4 feet.	Peas, drills 2 to 3 feet apart.
Blackberries, Mammoth and Himalaya, 8 by 24 feet.	Pepper, 15 to 18 inches by 2 to 2½ feet.
Cabbage, Early, 16 by 30 inches.	Plum Trees, 15 to 20 feet each way.
Cabbage, Late, 24 by 30 inches.	Potatoes, 12 to 18 inches by 2½ to 3 feet.
Carrots, drills 1 to 2 feet apart.	Pumpkin, 8 to 10 feet each way.
Corn, Sweet, 3 to 3½ feet by 9 to 24 inches.	Quince Trees, 15 feet each way.
Corn, Field, 3½ to 4 feet each way.	Radish, drills 10 to 18 inches apart.
Cucumber, 4 to 5 feet each way.	Raspberries, 6 to 8 by 3 feet.
Currants, 5 by 3 feet.	Rhubarb, 2 to 4 by 4 feet.
Celery, rows 3 to 4 feet 6 inches in row.	Salsify, drills 19 to 24 inches apart.
Cauliflower, 2 by 2 by 2 by 3 feet.	Spinach, drills 12 to 18 inches apart.
Cherry Trees, 15 to 20 feet each way.	Squash, Bush, 3 to 4 feet by 4 feet.
Egg Plant, 3 by 3 feet.	Squash, Running, 12 feet each way.
Gooseberries, 5 by 3 feet.	Strawberries, Hills, 36 by 18 inches.
Grapes, 8 by 8 to 10 by 12 feet.	Strawberries, Matted Rows, 48 by 12 inches.
Lettuce, drills 18 inches apart.	Sweet Potatoes, 2 feet by 3 to 4 feet.
Melon, Musk, 5 to 6 feet each way.	Tomato, 4 feet by 4 to 5 feet.

SPECIAL PRICES to Market Gardeners where a quantity of seed is wanted.

Murphy's SEED STORE

ALBANY, OREGON