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Fresh, Pure, Tested

**Vegetable, Field and
Flower**

SEEDS

Bulbs of the Hardest Sorts

ANNUAL CATALOGUE
1903

THE
OTTUMWA SEED CO.

OTTUMWA, IOWA

G. L. BISSELL, Mgr.

GENERAL LIST

....OF....

Vegetable Seeds

TO THE SEED BUYING PUBLIC:

IT is with pleasure we present this Retail Seed Catalogue. It has been prepared and printed largely for the use of market gardeners and others who plant bulk seeds. It is not especially intended for the amateur or one who wishes to test novelties.

Our List of Seed is amply sufficient to meet the above demand, as it contains a complete list of standard seeds and new varieties that have proven to have genuine merit.

Our Seeds.—We trust we shall not fall into the folly of so many catalogue seedsmen of claiming that no other seeds put on the market have the **WORTH OF OUR SEEDS**; that there are none others so pure, so strong in vitality, or will produce as many bushels or pounds to the acre, and so on through a long list of misleading superlatives. Neither is this catalogue filled up with illustrations of impossible vegetables, nor filled with expressions more suitable for a circus poster than for a legitimate seed catalogue. We trust we recognize the fact that there are other good seedsmen and other good seeds as well as ours. The beneficent Creator sends the rain and sunshine on their fields as well as ours, but we do want to assure the seed buying public that it will find our seeds as good and pure and reliable as the best. With our excellent facilities for caring for and cleaning seeds, our method of testing, we are putting out to our customers only choice seeds—pure, strong, healthy—and he who plants them may rest assured that in so far as the seeds have to do with it he will reap abundant crops. We realize that it is the worst form of robbery to sell trashy seeds to the man who is depending on his crops for the support of a family.

Prices.—The price of seed is of importance, to be sure, but it is secondary to quality.

Ottumwa Seed Co.

OTTUMWA, IOWA.

FRESH, PURE, TESTED SEEDS

Retail Catalogue

GARDEN SEEDS

Cheap, unreliable Seeds are dear as a gift. Don't risk your crop by buying them. Our seeds can be depended on as to growing and quality

OUR MOTTO: Best Varieties, Purest Stocks, Highest Tests, Strongest Vitality, Not Lowest but Honest Prices.

VEGETABLE SEEDS

ASPARAGUS

CULTURE—Sow the seed thinly in rows one foot apart in April or May, and keep down all weeds. To secure strong healthy plants thin out the seedlings to three or four inches in the rows, saving only the strongest. The one-year-old plants should be set out in spring, in a rich sandy loam, dug eighteen inches deep, into which has been worked plenty of well rotted manure. If a stiff clay soil is all that can be had add plenty of sand and sifted coal ashes to loosen it up, and also see that it is well underdrained. In planting for private use, set out in beds five feet wide, three rows in a bed, the outer being one foot from the edge and allow twelve inches in the rows; set the plants at least six inches below the surface.

	Per oz.	¼ lb.	Per lb.
Conover Colossal. The most approved and standard sort; large.....	\$0 10	\$0 15	\$0 40
Palmetto. Of southern origin; a very desirable bright green asparagus; early.....	10	15	50
Barr Mammoth. Has very large tender stalks of a very light color.....	10	15	50
Columbian Mammoth White. Choice variety; stalks white, good quality.....	10	20	60
Fine one-year roots of the above four varieties, 60 cts. per 100 \$4.00 per 1000.			
Fine two-year roots of the above four varieties, 75 cts. per 100, \$5.00 per 1000.			

ARTICHOKE

CULTURE—Deep rich sandy loam with plenty of well rotted manure. Sow seeds in April and May, and when large enough transplant into rows three to four feet apart and two feet in the rows. They reach maturity the second year. Cover with litter when cold weather commences, first tying up the leaves so that they will occupy less space, and in spring fork in a dressing of manure. It is an excellent vegetable and easily grown, thriving in any situation, providing the heads are cut off and used as they get ready.

	Per oz.	¼ lb.	Per lb.
French Globe. The standard and best variety.....	\$0 25	\$0 75	\$3 00
	¼ bu.	½ bu.	Per bu.
Jerusalem Artichoke. Tubers only; used for pickling and stock.....	\$0 60	\$1 00	\$2 00

BEET

Ready for table use in 40 to 60 days.

CULTURE—Sow as early in the spring as the ground can be worked, and every two weeks after for a succession up to the first week of July. For general crop sow about the middle of May. The soil should be light sandy loam, well enriched with stable manure and plowed and harrowed until very fine. Sow in drills one foot to fifteen inches apart, and when well up thin to from four to six inches. The young beets pulled out of the rows are excellent used as Spinach.

	Per oz.	¼ lb.	Per lb.
Extra Early Egyptian. Very early and of dark blood color, rather flat in shape.....	\$0 08	\$0 15	\$0 50
Extra Early Eclipse. Very early; round rooted and dark red; one of the very best.....	08	15	50
Lentz Extra Early Turnip. A large small top round beet; fine strain, none better.....	07	15	40
Dewing Early. Of fine form, flavor, and good for market.....	07	15	40
Bastian. A very early light colored turnip beet; fine market variety.....	08	15	50
Edmand Blood Turnip. A market gardner's strain of great regularity in shape; deep blood skin and very dark flesh of best quality.....	07	15	40
Early Turnip Bassano. Grows to a large size; tops large; flesh pink, zoned with white; very sweet.....	07	15	40
Swiss Chard or Silver. Cultivated for its leaves; mid rib stewed and served as asparagus, the rest served as spinach.....	07	15	40
Early Blood Turnip. Dark red and of fine flavor; productive; standard sort.....	07	15	40
Half Long Blood. Fine dark strain; distinct variety; smooth and handsome.....	08	15	50
Long Smooth Blood. A good late variety; dark red; tender and sweet.....	07	15	40

BEETS—MANGEL-WURZEL, SUGAR, ETC.

CULTURE—As all Mangels require a deep soil in order to grow well, plow and sub-soil at least a foot to eighteen inches, and apply plenty of rich stable manure. Sow in May or June, in rows eighteen inches to two feet apart, and thin to eight inches in rows. Young plants may be transplanted to fill up vacancies. Sow in addition, when the plants are three to four inches high, at the rate of 200 pounds. Complete manure, 200 pounds bone flour and 400 pounds salt per acre. As soon as frost occurs, dig the crop. But in order to be well preserved for gradual consumption during the winter, Mangel-Wurzel should be heaped to a height of perhaps six feet, on a dry, sloping situation; cover at first with a piece of canvas, and as the cold increases should be replaced by about six inches of either salt hay, straw, seaweed, or even corn stalks. Lest this covering be displaced by the wind, a light layer of earth is necessary. So soon as this surface soil becomes frozen, about six or eight inches more of earth should be placed over the entire heap. By following up this gradual process of covering, all danger of heating will be obviated, and the roots will keep in perfect order. Sow from four to five pounds per acre.

Mammoth

Long

Red Mangel

Prices for large quantities on application.

	Per oz.	¼ lb.	Per lb.
Mammoth Long Red Mangel-Wurzel. Very large, selected strain. The largest and finest roots. The standard.....	\$0 05	\$0 10	\$0 25
Long Yellow Mangel-Wurzel. A good main crop sort.....	05	10	30
Orange Globe Mangel-Wurzel. Of distinct shape; one of the most productive sort. Hardy, vigorous....	05	10	25
Golden Tankard Mangel-Wurzel. Bright yellow; handsome and sweet, and very productive; tops small roots large.....	05	10	30
Red Globe Mangel-Wurzel. Similar to the Yellow Globe; productive.....	05	10	25
Yellow Globe Mangel-Wurzel. Large and productive; keeps well.....	05	10	25
Lane's Sugar. For sugar making or stock feed.....	05	10	25
White Sugar Beet. Grows to a large size, and is useful for making sugar, as well as for stock feeding.....	05	10	25
Vilmorin Improved Sugar. A much improved strain of the preceding; very valuable as a sugar-producing beet.....	05	10	25
Klein Wanzleben. Larger than Vilmorin. Good sugar beet. Very hardy.....	05	10	25

BEANS

As a farinacious food for man, the bean is considered far superior to any other legume, and next in importance to wheat. The modern varieties leave little to be desired; the great care given to their improvement has resulted in many superior sorts, greatly extending the season of use, as well as varying the quality or flavor. The rearing of a really dwarf form of the Lima Bean is one of the greatest recent advances.

DWARF WAX BEANS Ready for use in 35 to 45 days.

	Per pt.	Per qt.	Per pk.	Per bu.
Davis White Wax. Very hardy, productive long pods, very handsome, rustless, fine shipper, best canner; in all points the best Wax Bean.....	\$0 15	\$0 25	\$1 75	\$6 00
Golden Wax. Best known Wax Bean; very early, fine podded.....	15	25	1 75	6 50
German Black Wax. Has great merit, very tender and best quality.....	15	25	1 75	6 50
Black-Eyed Wax. A cross between Golden and Black Wax; very early and very productive; yellow pods.....	15	25	1 75	6 50
Improved Prolific Black Wax. Very early and prolific. The pods are round, full, stringless, and of fine quality.....	15	25	1 75	6 50
Challenge Black Wax. An extra early strain of the Dwarf Black Wax....	15	25	1 75	6 50
Bismarck Black Wax. Resembling in growth Wardwell Kidney Wax....	15	25	1 75	6 50
Detroit Wax. Very much like Golden Wax, but less liable to rust.....	15	25	1 75	6 50
Flageolet Wax. Flat, yellow, stringless pods of great length and breadth; exceedingly productive.....	15	25	1 75	6 50
Grinnell's Improved Golden Wax. Very early; round, golden pods; Golden-Eyed Wax. Very hardy and prolific, with flat, yellow pods; very early and exceptionally free from rust; a very desirable and popular sort.....	15	25	1 75	6 00
Pink-Eyed Wax. Very fine variety; resembles Golden Wax.....	15	25	1 75	6 50
Currie's Rust Proof Wax. Vigorous and hardy; productive.....	15	25	1 75	6 50
Refugee Wax. A perfect Refugee with long, round, yellow wax pods; suitable for early or late sowing, and an immense yielder.....	15	25	1 75	6 00
Wardwell Kidney Wax. Extra early; purely wax pods, long, flat and remarkably free from rust.....	15	25	2 00	8 00
White Wax. Flat, yellow pods; very handsome, vines small.....	15	25	1 75	6 50
Yosemite Mammoth Wax. The largest pods of all the wax sorts; very productive and of good quality.....	15	25	2 00	7 00
Valentine Wax. One of earliest; pods thick and fleshy; absolutely stringless.....	15	25	2 00	6 50

GOLDEN WAX

DWARF, OR SNAP BEAN—Green Podded—Ready for use in 30 to 40 days.

CULTURE—About the first of May select a warm, dry, sheltered spot; dig and manure slightly; make drills two inches deep and eighteen inches to two feet apart; drop the beans three inches apart in the drills, and cover not more than two inches deep. Hoe well in dry weather to keep down the weeds. Sow every two weeks for a succession.

	Per pt.	Per qt.	Per pk.	Per bu
Burpee's Stringless Green Pod. This new bean produces a vine similar to Red Valentine, but develops pods to edible condition two to three days earlier than Valentine. This advances the Stringless Green Pod to the first rank among table beans. Pods are stringless—absolutely so—the pods breaking as short and free as pipe stems; enormously productive.....	\$o 15	\$o 25	\$1 75	\$5 50
Best of All. Early and superior; round, green, fleshy pods.....	10	20	1 40	4 50
Boston Favorite. (Large Goddard). Red podded Dwarf Horticultural.....	10	20	1 40	4 00
Extra Early Red Valentine. Early strain of this popular round pod bean, nothing superior to this in Snaps among the green podded sorts; many prefer to Wax varieties.....	15	25	1 50	5 00
Early Mohawk. Long, flat and straight pods; very hardy.....	10	20	1 40	4 50
Early China Red Eye. Early and continues long in bearing; fine shell bean.....	10	20	1 40	4 50
Round, Early Yellow Six Weeks. Resembles the Mohawk, save in color; flat pods; a popular variety.....	10	20	1 40	4 50
Long Yellow Six Weeks. Early; the leading market sort; full, flat, green pods; good quality.....	10	20	1 40	4 50
Dwarf Horticultural. Late and productive; fine either shelled or green.....	10	20	1 40	4 50
Low's Champion. A very productive variety, with perfectly stringless, large green flat pods.....	10	20	1 25	4 50
Refugee, or 1,000-to-1. Medium to late; very productive and tender, and largely grown for main crop; round pod.....	10	20	1 40	4 00
Prolific Tree. (Navy). The most prolific bean known; bean not large, but fine shape; cooks easy. (See page 5 for cut of it).....	10	20	1 25	4 00
Mexican. (Navy). Very productive; white sort.....	10	20	1 00	3 00
Boston Small Pea. Small, round and handsome.....	10	20	1 00	3 00
White Navy or Pea Bean. Seed white; nearly round.....	10	20	1 00	3 00
White Kidney or Royal Dwarf. Fine winter shell bean.....	10	20	1 00	3 50
White Valentine. Very early, tender; entirely stringless.....	10	20	1 50	5 00

DWARF LIMAS—Ready for use in 30 to 75 days.

Burpee Bush Lima. A bush form of the large Pole Lima, the beans being large and flat, like those of that variety. It is very productive and its dwarf character is well established.....	20	35	2 00	7 00
Henderson's Bush Lima or Sieva, Productive; very early.....	15	25	1 75	6 00
Jackson's Wonder. Immensely productive; may be used as a shell bean or snap bean; broad, flat pods, variegated bean.....	15	25	1 75	6 00

POLE OR RUNNING LIMAS—Ready for use in 70 to 90 days.

CULTURE—Sow as the soil becomes warm and dry from the first part of May (for all except Limas) to the latter part of May, in hills four feet apart each way. Limas should not be planted until warm weather has fairly set in. One quart of Limas will plant about 100 hills, allowing four or five beans to a hill, and of the smaller sorts about 200 hills. Poles eight or ten feet long should be firmly set in the centre of the hills before putting in the seed.

	Per pt.	Per qt.	Per pk.	Per bu
Large White Lima. Largely grown and highly esteemed.....	\$o 20	\$o 35	\$2 00	\$7 00
King of the Garden Lima, Large in pod and bean; productive.....	20	35	2 00	7 00
Dreer Lima. Thick and of fine quality; early variety.....	20	35	2 00	7 00
Early Jersey Lima, A few days earlier in maturity than the large Lima.....	20	35	2 00	7 00
Horticultural Lima, A cross between the Horticultural and Dreer Lima; it matures much earlier than the Lima.....	20	35	2 00	7 00

PROLIFIC TREE (NAVY).

POLE OR RUNNING BEANS

	Per pt.	Per qt.	Per pk.	Per bu
Horticultural or Speckled Cranberry. Showy; excellent either as snap or shell bean.....	\$0 20	\$0 35	\$2 00	\$7 00
Speckled Cut-Short or Corn Hill. Used for planting among corn, one of the best.....	20	35	2 00	7 00
Dutch Case Knife. Pods long, green and flat; can be either snapped or shelled.....	20	35	2 00	7 00
Southern Prolific. A continuous bearer of good quality.....	20	35	2 00	7 00
Scarlet Runner. A popular English Pole Bean; very ornamental.....	20	35	2 00	7 00
White Crease Back. Long, round, stringless pod; fleshy and tender.....	20	35	2 00	7 00
White Dutch Runner. Same habit as the Scarlet Runner, flowers and beans being white.....	20	35	2 00	7 00
Kentucky Wonder. (Old Homest'd). Pods green, very long, very prolific.....	20	35	2 00	7 00

CLUSTER GOLDEN.

Golden Andalusia, (New). Most productive of all the pole varieties; beans pure white, round.....	20	35	2 00	7 00
Mont d'Or or Golden Cluster, Early, productive; golden wax pods six to eight inches long.....	20	35	2 00	7 00
Tall Sioux. Immensely productive; large, round, beautiful bean; white with yellow spots; one of the very best pole.....	15	25	1 75	6 00
Lazy Wife. Great favorite; pod from four to six inches long, stringless, rich buttery flavor; beans are white and make a fine shell bean; pods remain green and tender long.....	20	35	2 00	7 00

BORAGE

The young leaves of this annual, which smell somewhat like a cucumber, are used as a salad or boiled like spinach. Should be sown at intervals, as the leaves are palatable only when young. Sow in the spring in light soil and transplant in shallow drills, a foot apart, when of about six weeks growth.

Borage	Per oz.	¼ lb.	Per lb.
	\$0 15	\$0 35	\$1 25

BROCCOLI

CULTURE—Sow early sorts as soon as the ground can be worked in the spring, in shallow drills, drawn three or four inches apart. Plant out two feet apart each way when the plants are about four inches high. Cultivate the same as cabbage in rich soil. Use the same remedy for insect attacks as are recommended for cabbage.

	Per oz.	¼ lb.	Per lb.
The following are sorts best adapted to this climate, and the only ones which succeed generally; they are excellent and deserve much wider culture than is usual in this country.			
Early White Cape, Best flavor; very hardy; small.....	\$0 30	\$1 00	\$3 50
Early Walcheren, Late variety.....	40	1 25	4 00
Early Purple Cape, The very best; large.....	30	1 00	3 50

BRUSSELS SPROUTS

CULTURE—Sow in May in the same manner as Cauliflower, and transplant in July, one foot apart in the rows, which should be one and one-half feet apart. In gardens, both large and small, Brussels Sprouts are, without exception, the very best winter vegetable that can be grown. The real sprout is not much larger than a marble, and as firm and hard almost as the stalk itself. These are the sort which cooks prefer. They strip off the outer covering, cook them whole, and serve them up artistically in that fashion. When cooked through and no more, such Sprouts melt in the mouth like the tenderest cauliflower, and are equally as good.

	Per oz.	¼ lb.	Per lb
Improved Half Dwarf. The veay best and surest strain.....	\$0 20	\$0 60	\$2 00
Improved Dwarf. Compact heads of fine quality	20	60	2 00

CARROT

Ready for table in 60 to 80 days.

CULTURE—Sow as early as the ground can be worked; or, for late crop, until latter part of July. For main crop sow from the middle of May to the first of July. Thin out early crop to five inches in row, main crop to six or seven inches; the rows ten inches apart for early crop, fourteen for main crop. Hoe often

and deeply between the rows. Soil light, sandy loam, richly manured and deeply dug. Sow at the rate of two pounds to the acre.

	Per oz.	¼ lb.	Per lb
French Early Forcing. Tender and fine; best for early and late crops and frames	\$0 10	\$0 25	\$0 70
Early Horn. Very early variety; small root; excellent flavor.....	10	25	70
Half-Long Stump Rooted, Chantenay Strain. Style of Nantes, broader shoulder	10	25	70
Half-Long Stump-Rooted, Carentan. Coreless; flesh red, of fine quality.....	10	25	70
Half-Long Danvers. Thick, of good quality and exceedingly productive.....	10	25	70
Imp. Long Orange. Best for stock feeding, but good for late summer or winter use	10	25	70
Oxheart or Half-Long Guerande. This is one of the most valuable of recent introductions either for family or market; most beautiful shape and rich orange color	10	25	70
Large White Belgian. Very large; excellent stock carrot.....	10	20	50
Large Yellow Belgian. Very large; excellent stock carrot	10	20	50

CHERVIL

CULTURE—Cultivate and use the curled variety of Chervil like Parsley. Sow at any time in the spring, in shallow drills, one foot apart, in well prepared ground. The seed of the Tuberous Chervil should be sown in August or September, and treated like the Carrot.

	Per oz.	¼ lb.	Per lb
Curled. The leaves of this are used for flavoring soups and stews, and for garnish- ing, same as parsley	\$0 15	\$0 30	\$1 00

CHICORY

Chicory is cultivated chiefly for its roots, which are dried, and used as a substitute or flavoring ingredien* for coffee. The leaves, when blanched, are also esteemed as a salad. Cultivate as recommended for carrots.

	Per oz.	¼ lb.	Per lb
Long Rooted Madgeburg. Roots are the Chicory of commerce.	\$0 10	\$0 25	\$0 75

CABBAGE

Ready for use in 75 to 120

We carry the finest strains of American Long Island grown cabbage seed. Market gardeners can depend on plants from our seed heading.

CULTURE—Soil for Cabbage should be rich and heavy loam, with good drainage. On such a soil, with an abundance of stable or Thornburn's Complete Manure, excellent crops are sure to be grown. For early spring sow in fall; not too early, or the plants are liable to bolt in the spring instead of heading. In a month the plants will be fit to transplant to cold frames, where they are wintered, taking care, in planting, to set the young plants down to the first leaves. Transplant in spring as soon as the ground can be worked, setting the plants two feet apart one way and from twelve to fifteen inches the other, according to the variety. For late or winter crops the seed is sown in May, and the plants set out in July. In this case they are set in rows two by three feet, so as to work them with a horse and cultivator. To destroy the green worm that is so destructive to the leaves and heads of cabbage and cauliflower an experienced grower says: "Take one ounce of altpetre and dissolve it in twelve quarts of water, then take a short handled whisk broom, dip it in the solution and sprinkle the plants well. One application is sufficient unless the stuff is washed off by heavy rains. The liquid being perfectly clear, never colors the cauliflower or cabbage heads." To prevent the turnip flea from attacking the young plants, sift fine air-slaked lime or tobacco dust over them as soon as they appear above the ground.

PREMIUM LATE FLAT DUTCH.

SURE HEAD.

	Per oz.	1/2 lb.	Per lb
Express. The earliest of all; small, solid heads, fine quality; fine for forcing.....	\$0 15	\$0 40	\$1 50
Etampes. A fine extra early small French sort, with pointed heads; very solid.....	15	40	1 50
Early York. The standard English sort, pointed heads.....	15	40	1 25
Early Jersey Wakefield. Well known and most valuable for early.....	20	50	2 00
Early Winnigstadt. A standard second-early variety; pointed heads.....	15	40	1 50
Early Dwarf Savoy. The earliest Savoy variety; distinct and good.....	20	40	1 50
Early Flat Dutch. A remarkably fine strain; a sure header, the head weighing from ten to twelve pounds; most valuable for market.....	20	50	1 75
Henderson's Early Summer. A superior second-early sort; produces large and solid heads of fine quality.....	20	50	1 75
Selected All Seasons One of the finest for second-early or late, growing to a large size quickly and surely; the true sure header	20	50	1 75
Henderson Succession. An excellent second-early or late sort on the style of All Seasons.....	15	50	1 75
Filder Kraut. Pointed head; fine for kraut.....	15	40	1 50
Fottler Brunswick Good, solid heads, either for second-early or late.....	15	40	1 50
Stonemason Drumhead A standard winter cabbage for main crop.....	15	40	1 50
Premium Late Flat Dutch. Also a valuable main crop sort for market.....	20	50	1 75
Large Luxemburg. Solid head, oval shape, outer leaves tinged red, stem remarkably short; very sweet and tender.....	15	50	1 75
Drumhead Savoy. Very fine strain.....	15	50	1 75
Mam. Rock Red Very large, solid, red heads; the finest strain of Red Cabbage....	15	50	1 75
Red Dutch. For pickling; hard, oblong heads; dark purple.....	15	50	1 75
Hollander. One of the hardest in cultivation, quite a distinct variety; medium size, round, very solid, extra keeper, best of quality—our seed is from a very reliable Danish grower.....	25	75	3 00
Marblehead Mammoth Drumhead. The largest cabbage known, weighing in some instances over fifty pounds; under good cultivation acres have been grown where the heads would average thirty pounds each.....	15	50	1 75
Genuine Sure-Head. Never fails to make a large, fine head with few outer leaves; fine grower; flat drumhead.....	20	50	1 75

CAULIFLOWER

Ready for use in 90 to 120 days

CULTURE--This is the same as for cabbage, except that extra manure and plenty of water will pay upon this. If the soil be dry, water frequently, and if the plants could have a heavy mulch of hay or straw, it would keep the soil moist, and the plants would not suffer from drought. The early kinds should be strong enough to plant out not later than the middle of April; the late kinds may be planted out same time as for cabbage. To destroy the cauliflower maggot, it is recommended to take one ounce of sulphuret of potassium and dissolve it in one gallon of water. Heat the liquid to about 100 degrees, take a large spoon, or something that will hold the 100th part of a gallon, and pour the liquid against the stalk of the plant just above the ground.

EARLY SNOWBALL.

	Per oz.	¼ lb.	Per lb.
Extra Early Dwarf Erfurt. Short stem; very fine	\$0 50	\$1 50	\$ 6 00
Large Early Dwarf Erfurt. Finest strain	1 00	3 00	10 00
Henderson's Early Snowball. Without doubt the best of the cauliflowers; our seed is of the very finest strain, grown specially for us in Denmark, and sure to make a fine solid head; don't buy cheap cauliflower seed; there is no seed in which quality counts so much	2 50	8 00	25 00
Half Early Paris or Nonpareil. Popular early white	75	2 00	7 00

COLLARDS

CULTURE--Sow seed as for cabbage in June, July and August for succession; transplant when one month old in rows a foot apart each way and hoe often.

	Per oz.	¼ lb.	Per lb.
Georgia Grown, or Southern	\$0 10.	\$0 25	\$0 75

CORN SALAD, OR FETTICUS

CULTURE--Sow during August or early in September, in drills a quarter of an inch deep and six inches apart. If the weather is dry when the seed is sown, tread it in slightly to insure germination. Keep down weeds with hoe. Just before winter cover thinly with straw or leaves.

	Per oz.	¼ lb.	Per lb.
Large Seeded. The best variety for family use; makes delicious salad; used during the winter as substitute for lettuce	\$0 10	\$0 20	\$0 60

CRESS

CULTURE--Sow thickly in shallow drills every two or three weeks. It is useful not only for salad, but for the breakfast table and for garnishing. Water Cress should be sown in damp soil, or if a stream of water can be utilized, it would be much finer. It will also thrive in damp hot beds. Rightly managed its culture is very profitable. To obtain early salad, it is a good plan to sow with the Water Cress seed a strip four inches wide on the outer margin of a hot bed, inside the frame (where it is always cool). This will be found a satisfactory method of obtaining it early.

	Per oz.	¼ lb.	Per lb.
Curled or Pepper Grass	\$0 10	\$0 15	\$0 50
Broad Leaved	10	15	50
Broad Leaved Winter	10	20	75
True Water Cress	40	1 25	4 00

CELERY

Ready for use in 100 to 120 days.

CULTURE—Sow the seed in a light, rich, dry border as early as the ground can be worked, in drills eight or ten inches apart, and cover the seeds about a quarter of an inch deep, rolling or treading them in if the ground be dry. When fairly out of the seed leaf, they may be transplanted to another bed, or they may be thinned out to six or eight inches apart, and let grow until wanted to plant out in beds or trenches. The bed should be kept well weeded, and an occasional soaking with water in dry weather will do the plants good. Early in July at the north, a month or six weeks later in the southern states, is the proper time to set the plants out in beds or trenches. Press the soil firmly against the roots. In the garden the better way is to set the plants in shallow trenches—we say shallow, for it is obviously a bad plan to remove all the good soil (as must be done in a deep trench) and put the plants in that which is poor. The plants may be set in a single row in a

WHITE PLUME

narrow trench, or the trench may be made into a bed wide enough to hold two, three or four rows, and in case the plants are in a compact form to be covered for the winter where they grow. This will save much labor where there is no root cellar for storage, as often happens to be the case. When grown in beds this way, the rows should be one foot apart, and the plants about eight inches apart in the rows. The bed should be made very rich with thoroughly decomposed manure. The plants will need to be earthed up two or three times, and in doing this care should be taken not to let the earth get into the heart of the plant. In field culture the plants are set on the surface in rows four feet apart when the celery is to be earthed up in the field for early use, and two feet apart when the plants are to be taken up and blanched in the cellar for winter use. The plants are set six inches apart in rows. If not grown in beds, the best way to store is to dig trenches in a well drained spot in the open ground, one foot wide and of a depth a few inches less than the height of the celery. The plants are then lifted and set close together until the whole quantity is stored. The edges of the trench should be made sloping from the tops of the plants. When severe cold weather comes on, cover gradually with leaves, hay or straw and place boards on top. In such a trench the stalks will blanch perfectly, and may be taken out any time during the winter for use or sale as required.

The turnip rooted or "Knob" celery needs no earthing up, and may be planted in rows one foot apart.

	Per oz.	$\frac{1}{4}$ lb	Per lb
Improved White Plume. Naturally white or light foilage; requires but little banking up to blanch, very early and extensively grown for market. Per pkt. 10c---	\$o 25	\$o 75	\$2 25
Golden Self Blanching. A grand solid variety, on the style of the White Plume, except that it is golden yellow where the Plume is white. Per pkt. 10c-----	30	80	2 50
Giant Pascal. An easily blanched and fine keeping large sort, of excellent flavor, superior for late use-----	20	60	2 00
Large Ribbed Kalamazoo. A good half dwarf white solid celery-----	20	60	2 00
Boston Market. Rather dwarf; has no particular merit-----	20	60	2 00
Crawford Half Dwarf. Of vigorous growth and excellent flavor-----	20	60	2 00
Sandringham Dwarf White. Small, white solid-----	20	50	1 50
Giant White Solid. Large, round, crisp and solid; the old well known variety----	20	50	1 50
Celeriac or Turnip Rooted. Has edible roots which are used for soups and stews	20	50	1 50
Celeriac or Large Smooth Prague. An improved form of rooted celery, roots smooth and round-----	15	50	1 50
Golden Heart Dwarf. A very popular and distinct variety; in habit of growth it resembles the Half Dwarf; white sorts, except that when blanched the heart, which is large and full, is of a waxy golden yellow-----	20	60	2 00
Celery for Flavoring. Per lb 20c; per five lbs 75c.			

FIELD CORNS SWEET

In cataloging this branch of our business, we wish to state to our customers and the trade in general the value and importance of procuring not only good varieties of seed corn, but that which is grown in the very heart of the **Great Corn Belt**, grown in a climate and a soil where it not only develops great vigor of stock, size of ears and richness of kernel, but where there is a climate like ours, which at the right season of the year ripens and preserves it for seed of the highest test.

For a number of years we have given this branch of our business the strictest attention, and by selection year after year of our seed stocks we are able to offer our customers for the coming season varieties of seed corns of the purest strain and truest types that are possible to produce.

Many farmers realize the value of changing seed and securing the best and truest strains and reaping the reward of their wisdom in choice by the yield of their acres. Still there are those who wait for their neighbors to get the seed first, and put off buying good seed until the next year. This plan was all right before the flood when men lived hundreds of years, but **all should** realize that it's too slow for this advanced age. Get good seed this year and improve it still more next. The farmer is the basis of the real wealth of our country. An increase of from one to five bushels of corn per acre means millions in money to the farmers of Iowa and surrounding states.

At the rate of \$2 per bushel for seed corn it costs only about 40c per acre to plant your field with purest strains of good, vital seed.

We do not boast as some people do that to procure pure seed of certain varieties and kinds you must of necessity get it through us, but we do pride ourselves in stating to you that the varieties we have described in this catalogue are not only of the purest strains, the highest developed types, but grow in the finest climate on earth for curing and ripening the corn for seed. What is true of the autumn season for curing field seed is also of still greater value in curing and ripening for seed the different varieties of sweet or sugar corn. The great amount of saccharine matter in this corn makes it often, in damp and foggy climates, hard to cure, even by kiln drying, and then it seldom ever tests over 75 per cent. to grow, whilst here in our rich autumn sunshine, where fogs are seldom or never seen at that season, this corn ripens and cures to perfection and will test as much as 95 per cent. nine times out of ten.

SWEET OR SUGAR CORN

CULTURE—Plant in hills three feet apart each way, and five or six kernels in a hill. Hoe often and draw soil up to the stems; break off side shoots. Make the ground rich with well rotted manure. Sown in drills, a greater yield from a given surface will be obtained. The best fertilizer is Thornburn's Complete Manure. By sowing successive lots and properly selected varieties, the supply of sweet corn can be kept up until hard frosts kill the plants.

Market gardeners and private planters will do well to consider that our northern grown seed will give them earlier corn than will seed of the same varieties grown farther south. Our seed is thoroughly tested before it leaves our hand.

EXTRA EARLEY VARITIES

From 55 to 65 days.

	per pt \$0 15	per qt \$0 25	per pk \$1 00	per bu \$3 50
WHITE MEXICAN. (See next page for this fine variety).....				
Early Cory, Red Cob. A very early variety, with good sized ears and large grains; excellent for market, and has attained wide popularity.....	10	15	90	3 00
White Cob Cory. Resembles the ordinary Cory in size and earliness, but with white cobs; very much better quality.....	10	15	90	3 00
Mammoth White Cory. Largest extra early corn known, fine quality, 12-rowed compact ears.....	10	15	90	3 00
Marblehead. One of the earliest; dwarf, with short thick ears; of good quality for an early sort.....	10	15	90	3 00
Extra Early Adams. Not a sugar corn, but largely grown for early use.....	10	15	90	3 00

SECOND EARLY OR INTERMEDIATE

From 65 to 80 days.

Minnesota. Nearly as early as Marblehead; dwarf growth, standard early...	10	15	90	3 00
Perry Hybrid. Very early and of large size; most valuable for market.....	10	15	90	3 00
Shaker Early. Very large, white grain and quite early.....	10	15	90	3 00
Early Crosby. Matures after the Minnesota; fair sized ears of good quality.....	10	15	90	3 00
Moore Concord. Of strong growth; ears large and well filled.....	10	15	90	3 00
Early Adams. Not a sugar corn, but grown extensively all over the country for market purposes.....	10	15	80	3 00
Early Champion. A new and very desirable sort; ears nearly as large as Evergreen; pure white; only a few days later than Minnesota; very fine for market gardeners.....	10	15	90	3 00
Early Evergreen. By careful selection for a series of years we have produced an early strain of this corn, earlier by six to eight days.....	10	15	1 00	3 50
Early Mammoth. Very large and not very late.....	10	15	90	3 00
Black Mexican. Very sweet and of superior flavor; grains black.....	10	15	90	3 00
Hickox. Earlier than Stowell; large ear, fine quality; plant with Stowell and it will come in ten days earlier.....	10	15	90	3 00

CORN—GENERAL CROP OR LATE VARIETIES

85 to 90 days.

	per pt.	per qt.	per pk.	per bu
Stowell Evergreen. Remains green a long time, and is highly prized; one of the most popular varieties.....	\$o 10	\$o 15	\$o 8o	\$2 75
Ne Plus Ultra. Small but one of the sweetest sorts grown.....	10	15	1 oo	3 25
Late Mammoth. Rank in growth, large ears, rich and sweet.....	10	15	8o	2 75
Egyptian. Large and of superior quality; largely used for canning.....	10	15	8o	2 75
Country Gentleman. Same as Ne Plus Ultra, but with large ears of delicious quality.....	10	15	1 oo	3 25
Sweet Fodder Corn. For soiling and ensilage.....	5	10	6o	2 oo

WHITE MEXICAN

Do you know the marvelous sweetness of the old Black Mexican? You like its taste but dislike its color. Well, we have something finer in every way, **superior in sweetness, a pure ivory white color, large as the Minnesota, earlier than the Cory.** It was ready for table use this year in 55 days. Originated in Ft. Dodge, Ia. Was placed in our hands for trial and development. We know of nothing its equal for the **market gardener.** If you want the finest **market gardener's corn** known, plant **White Mexican.** We control the entire stock. You cannot get it from anyone but us or our dealers.

"I planted the White Mexican Sweet Corn you sent me. I have been planting sweet corn for 25 to 30 years. This White Mexican is superior to any extra early sweet corn I ever saw. Was ready to eat in 58 days from planting." H. B. SMITH, Odebolt, Iowa.

"I planted your White Mexican this season, at the same time I planted extra early sweet corn from an eastern seed house, I found the White Mexican earlier and superior in every way. It's the finest early corn I ever had." DESING BROS., Marshalltown, Iowa.

FIELD CORN

EARLY VARIETIES

	per pk.	½ bu.	per bu
Pride of the North. Ripens in about 85 days, yellow dent; one of the best corns for the Dakotas and for replanting.....	\$o 6o	\$1 oo	\$2 oo
Duly's Hybrid. Ripens in 90 days; (see this page for fuller description).....	6o	1 oo	2 oo
Improved Yellow Flint. Eighty-five day corn; a very good corn for the far north; small cob, good yielder.....	6o	1 oo	2 oo
White Flint. (Old Hominy). Has large silvery white kernels, a very large ear, small cob.....	6o	1 oo	2 oo

LATE VARIETIES

Iowa Gold Mine. Now a well known standard corn and still one of the very best; ripens in about 100 days; grain deep rich yellow dent; very small cob, 70 lbs. of ears will shell out 63 to 64 lbs.....	6o	1 oo	2 oo
Iowa Silver Mine. One of the very choicest white corns for the northwest; large, beautiful ears; good sheller, about 100 days.....	6o	1 oo	2 oo
Leaming. Yellow dent, red cob, deep plump grains, rich golden color; yields 80 to 100 bushels per acre, about 100 days.....	6o	1 oo	2 oo
Champion White Pearl. A very large, beautiful white dent corn, immense yielder; about 100 days.....	6o	1 oo	2 oo
Armstrong's Ea. Rose. Fine yielder, beautiful yellow dent.....	6o	1 oo	2 oo

Farmers, Dairymen, Stock Raisers

Try the Evergreen Sweet Fodder Corn.

The necessity for green fodder is becoming more apparent each year to all dairymen and stock raisers, and the demand for it is increasing in proportion as the ability of our over-taxed lands to supply sufficient pasturage grows less. The best thing for the purpose is our

EVERGREEN SWEET FODDER CORN

This variety is generally acknowledged by our best farmers, dairymen and stock growers, as being better and far superior to what is known as either the brand of ensilage corn, Red Cob Ensilage or Southern White Ensilage, from the fact that it grows to an immense size, making a **large, juicy stock**, that is so **very sweet and nutritious** that cattle will eat every part of the stock and leaves with a relish, clean to the butt.

Evergreen Sweet Fodder Corn also yields an enormous quantity of leaves, and the stocks are rich in **saccharine matter**—more so than any other variety we are acquainted with.

For prices see above.

DULY'S HYBRID (95 DAYS)

We can confidently say that this is without doubt the finest and largest yielding Early corn ever offered in the northwest. Kernels fine golden dent. Yielded with us 75 to 80 bushels per acre. Originated near Sioux City in the Missouri Valley. This may be planted in June and will be out of the way of frost by September 1st. It's yield is sufficiently large to warrant planting for general crop. The man who plants this last of May to first of June will always have **sound corn.** This corn is nearly as early as the Pride of the North and will out yield this sort two to one. Largest and longest eared early corn known.

"I have been planting corn for thirty years. In that time I planted many varieties; for three years I have planted Duly's Hybrid and have found it the best corn I have ever grown. It never gets caught by the frost—always sound and hard and a big yielder. It's the corn sure." A. J. DAVISON.

CUCUMBER

Ready for use in 40 to 60 days.

IMPROVED WHITE SPINE

CULTURE—For very early, sow seed in hot bed on pieces of sod, or in small pots, and they can be readily transplanted with a gain of about six weeks before they can be sown in the open ground. Plant out in rich soil when danger of frost is over, or they may be protected by hand glasses, or even by paper held down at the corners with a handful of earth. For general crops, sow in the open ground as soon as the weather is settled and warm, and again every two weeks for a succession. For pickles, sow from the middle of June to the first week in July. Sod land, turned over in the fall, is the best for them. Plant in hills four feet apart, putting a shovel-ful of well rotted manure in each hill.

	per oz.	¼ lb	per lb
Early Russian. Very early, short; is a valuable variety for small pickles, for which it is often much in demand.....	\$o 15	\$o 5o	\$1 5o
Early Short Green. (Or Early Frame). Good for pickling; productive.....	15	5o	1 5o
Early Green Cluster. Fruit small and in clusters; very prolific.....	15	5o	1 5o
Early White Spine. Early, and good for pickling or table use.....	15	5o	1 55
Improved White Spine. Well flavored and of medium size.....	15	5o	1 5o
Arlington. A selection from the White Spine, being more pointed at each end; the young fruits are unusually crisp and tender, and are of very dark green color, so that the variety is considered by name to be the best for small pickles.....	15	5o	1 5o
Evergreen. Very early and prolific; retains its fine deep green color in all stages of growth.....	15	5o	1 5o
Long Green. Long and crisp; a popular and reliable variety for pickles.....	15	5o	1 5o
Long Green Turkey. Fruit very long and rather slim.....	15	5o	1 5o
Giant Pera. Very long and one of the best for table use.....	15	5o	1 5o
Green Prolific Pickling. One of the best for pickling; dark green, very productive and of uniform small size.....	15	5o	1 5o
Nichol's Medium Green. Most symmetrical, and a very fine table sort.....	15	5o	1 5o
Boston Pickling. A favorite eastern sort, of fine quality.....	15	5o	1 5o
Tailby Hybrid. Very long, and superior for family table use.....	15	5o	1 5o
Small Gherkin. Very small burr; used for pickles.....	15	5o	1 5o
Japan Climbing. Can be grown on trellis.....	15	5o	1 5o
Westfield Chicago Pickling. Very popular in Chicago market. Color deep green, medium size, prominent spines.....	15	5o	1 5o
Serpent or Snake. Cucumbers grow curled up like a snake, four to five feet long; quality fair.....	15	5o	1 5o

DANDELION

CULTURE—The Dandelion is a hardy perennial plant, and one of the most desirable early spring salads. Sow in early spring in drills half an inch deep and eighteen inches apart; thin out the plants to twelve inches. Keep clear of weeds during the summer, and the ensuing spring the leaves will be fit to cut. They are best, however, when blanched, which makes them tender and destroys to some extent their bitter taste without in any way impairing the quality which make them desirable as greens. Per oz. 20c; ¼ lb 75c; per lb \$2.00.

ENDIVE

CULTURE—Sow in June, July and August, cover lightly, when up thin out to eight inches apart and water well afterward, if dry. When the leaves are six or eight inches long, blanch by gathering in the hand and tying together near the top with yarn or bast. This must be done when quite dry, or they will rot. At the approach of winter take up carefully, with a ball of earth to each plant, and place close together in frame or cellar for use. They must be kept dry and have plenty of air, or they will rot.

	per oz.	¼ lb	per lb
Green Curled Winter. Standard sort for fall and winter crop.....	\$o 2o	\$o 5o	\$1 5o
Broad Leaved. A sweet variety, fall and winter.....	2o	5o	1 5o

Fennel, Florence or Naples

CULTURE—Sow in spring in rows sixteen to twenty inches apart. Thin out so as to have the seedlings five or six inches apart, and water as plentifully as possible. The plant is usually eaten boiled. In flavor it resembles celery, but with a sweet taste and a more delicate odor. Per oz. 15c; per ¼ lb 40c; per lb \$1.50.

IMPROVED NEW YORK
PURPLE EGG PLANT

EGG PLANT

CULTURE—Sow in hot beds, very early in spring, and transplant when two inches high into a second bed or into small pots. If that is not done, thin to four inches apart. Do not plant out until the weather becomes perfectly settled and warm. Cool nights or wet weather will check them. Keep some back in frames for a second planting in case of weather changing unexpectedly. Keep plants watered for a few days if the sun is hot when put in. Set out plants three feet by two.

	per oz.	¼ lb	per lb
Early Long Purple. Of distinct shade and fine quality	\$0 20	\$0 50	\$1 75
Round Purple. Medium, pear-shaped, pale purple, good	25	75	2 25
Improved New York Purple. The best; large oval, deep purple; grown more extensively than any other sort	40	1 00	4 00

LETTUCE

Ready for use in 40 to 60 days.

Lettuce thrives best in rich, moist ground. For the principal early crop sow the seed in September in the open ground. Transplant when large enough into cold frames, and protect the plants during the winter in the same manner as early cabbage. Set the plants out early in April, or sow the seeds in hot beds in February or March, and transplant into a sheltering border with a southern exposure. For successive crops sowing may be made in the open ground as early as the spring opens and continuing until July. Always thin out well or the plants will not be strong. When wanted as a cut salad sow the seeds thickly in rows or broadcast.

	per oz.	¼ lb	per lb
Cold Frame White Cabbage. For starting in cold frames and setting out in early spring; extensively used by market gardeners	\$0 10	\$0 20	\$0 75
Early Curled Simpson. A leading early sort; very tender	10	20	75
Black Seeded Simpson. A superior variety; large and of light color	10	20	75

American Gathering. Twisted and curled leaves; fine variety, either for early or late sowing 10 20 75

Early Prize Head. Bright green, tinged with brownish red; tender, crisp large loose head 10 20 75

California Cream Butter. Round, solid heads, medium green, good size, compact; rich but-
tery taste 10 20 75

Early Curled Silesia. An early, erect growing, clustering variety, which may be sown very thick and cut while the plants are very young, at which time they are exceedingly tender, sweet and well flavored; color light green
Tennisball White Seed. A well known forcing variety 10 20 75

Tennisball Black Seed. Forms close, hard heads; good for forcing	10	20	75
White Summer Cabbage Close heads, of good size; fine for summer	10	20	75
Salamander Head. Fine compact heads, which resist summer heat admirably; is very popular in some sections	10	20	75

LETTUCE—CONTINUED

	per oz.	¼ lb	per lb
Grand Rapids Forcing. Large tender heads, one of the best for early forcing ----	\$0 10	\$0 20	\$0 75
Deacon. A large solid Cabbage-Lettuce for summer -----	10	20	75
Improved Hanson. Very large and solid, sweet, crisp and tender; withstands the hot sun well. -----	10	20	75
Denver Market. An early variety for forcing on open ground; large solid head, the leaves are beautifully marked and blistered, very crisp and tender -----	10	20	75
Paris White Cos. Fine if sown very early, requires tying up to blanch -----	10	20	25

KALE OR BORECOLE

CULTURE—Cultivated and grown exactly like cabbage. Sow early in the spring in a hot bed, and when from one to two inches high transplant into a bed or border that has been highly manured and deeply dug. The plants should stand two feet apart, in rows three feet apart. The soil should be kept mellow and free from weeds. Cover with litter or leaves during the winter. Plants started grown this way should be fit to blanch the following spring. The seed may also be sown early, in the open border, and transplanted in rows (as directed above) as soon as out of the seed leaf; but they will need to be a year older than the hot bed plants before being fit to blanch. Sea Kale is not fit to eat till it has been blanched, either under large pots or by banking up with sand. The mid-ribs are the parts eaten. They are cooked like asparagus and usually served with drawn butter

	per oz.	¼ lb	per lb
Ex. Curled Dwarf German Greens. Very dwarf and spreading; best strain ----	\$0 10	\$0 25	\$0 80
Curled Tall Green Scotch. A taller growth of the above; late variety -----	10	20	75

KOHLRABI

CULTURE—This is an excellent vegetable and should be grown in every garden. Sow in spring, in rows eighteen inches apart, afterwards thinning the plants to eight or ten inches. If the weather is suitable the thinnings may be planted, but it is considered difficult to transplant. Keep the weeds down and when the thickened stem above ground is two or three inches through they are fit to eat, and should be used at once; being tough when old. They are cooked the same as turnips, and, when well grown and used at the proper stage, are tender and palatable.

	per oz.	¼ lb	per lb
Early White Vienna. Handsome and delicate; white ball -----	\$0 20	\$0 75	\$2 50
Early Purple Vienna. Very good sort -----	20	95	3 00

LEEK

CULTURE—Sow very early in the spring in drills six inches apart and one inch deep. Thin out to one inch. When about seven inches high transplant them in rows seven inches apart and as deep as possible; but do not cover the young center leaves. Water thoroughly, if dry when planted out. Draw earth up to them as they grow; rich soil is required. Take up and store in earth in a cool cellar before winter weather. The seed may also be sown in September, and the young plants transplanted in spring to where they are to remain.

	per oz.	¼ lb	per lb
Best Large Flag Winter. Hardy and productive -----	\$0 20	\$0 60	\$2 00
Musselburg. A large standard sort; remains long in good condition ---	20	60	2 00
Large Carentan. A superior variety with distinct and dark colored leaves; stout in habit and hardy	20	60	2 00

LEEK

MUSHROOM SPAWN

CULTURE—Mushrooms may be grown in cellars, under benches of green houses or in sheds wherever the temperature of fifty degrees can be kept up through the winter. The beds should be made from November to February, according to the time the Mushrooms are wanted, and it requires about two months for them to begin bearing. Secure fresh horse dung, free from straw and litter, and mix to an equal bulk of loam from an old pasture with it. Keep this under cover, taking care to turn it every day to prevent heating, until the pile is large enough to make a bed the required size. Three or four foot wide, eight inches deep and any length desired, are the proper proportions for a bed; but these may be varied. Prepare the mixture of loam and manure, making the bed in layers and pounding down each with the back of the spade. Leave this to heat through for a few days, and as soon as the heat subsides to ninety degrees make holes in the bed about a foot apart each way, into which put pieces of spawn two or three inches in diameter; fill up the holes with the compost, and at the expiration of a week or ten days the spawn will have thoroughly diffused itself through the bed. Spread a layer of fresh soil over the heap to the depth of two inches, and cover with three or four inches of hay, straw or litter. Examine the bed often to see that it does not get dry. Take special care, however, when water is given that it be at a temperature of about one hundred degrees.

English Spawn ----- 12 cts. per lb., 10 lbs. for \$1.00, 100 lbs. for \$8.00

MELON—MUSK

CULTURE—Select a light, sandy, rich soil, and after all danger of frost is over, and the ground has become warm and dry, plant in hills four to six feet apart each way, six to twelve seeds to the hill. When up, and all danger of insects has passed, pull out all but three plants. Cultivate until the vines cover the ground and pinch the ends of the growing shoots to induce early fruiting. Ashes, lime or even dry road dust is excellent to sift over the young plants when the dew is on to prevent the attacks of insects. A few hills for early use may be had by sowing in hot beds on pieces of sod or in pots. The seed may also be started out of doors under hand frame or glasses. It is quite important that proper soil be selected for growing Musk Melons, as on heavy soil the quality will be poor.

ROCKY FORD

	per oz.	¼ lb	per lb
Golden Netted Gem. Very early, small and of fine flavor; green flesh	\$o 10	\$o 20	\$o 60
The Surprise. Early, oblong with rich orange flesh of good quality	10	20	60
White Japan. Early, with light green flesh and white skin	10	20	60
Jenny Lind. Small but very early and of good quality; green flesh	10	20	60
Green Nutmeg. Named from its shape, green flesh, sweet, good for main crop; early	10	20	60

GREEN NUTMEG

Late Hackensack. Large, round and of good quality; a popular variety	10	20	60
Extra Early Hackensack. Ripens ten days earlier than the Hackensack; very early	10	20	60
Osage. Coconut shaped, yellow flesh, light green, netted skin, good quality; intermediate	10	20	60
Bay View. Very prolific and of great size; oblong, green flesh, late	10	20	60
Skillman Netted. Very early, oval in shape, flesh deep green, sweet and delicious	10	20	60
Orange Christian. One of the finest orange sorts; round, very sweet and very early	10	20	60
The Banquet. Beautifully netted, medium sized flesh rich salmon; fine quality	10	20	60
Delmonico. Oval, deeply netted, large size, orange flesh	10	20	60
Baltimore Market. Oblong; orange flesh, of fine quality, intermediate	10	20	60
Netted Beauty. Extra early, densely netted; flesh pale green	10	20	60
Emerald Gem. Small, extra early; smooth ribbed, dark green skin and orange flesh; quality first rate, very sweet	10	20	60
Green Montreal. Large, round, netted, flesh thick and light green; late	10	20	60
Long Yellow Canteloup. Yellow flesh, well adapted for the north; late	10	20	60
Banana Citron. Cucumber shaped, highly perfumed, of indifferent quality; late	10	20	60
Mango Melon or "Vine Orange." (Also called "Vegetable Peach"), size, shape and color of an orange; thick, meaty flesh; besides its use for preserving or pickling, it can be fried like Egg Plant when partly ripe	10	20	60
Pineapple. Medium sized, oval shaped, tapering to stem; flesh green, very thick; delicate and exceedingly high flavored; intermediate	10	20	60

MELON—MUSK—CONCLUDED

	per oz.	¼ lb	per lb
Shumway's Giant. Very large, cream yellow, very distinct, salmon colored flesh, sweet and luscious.....	\$o 1o	\$o 2o	\$o 6o
Rocky Ford. This is the most popular of the basket melons; oval, light ribbed, densely covered with course netting, flesh thick, green and sweet, highly flavored.....	1o	2o	6o
Paul Rose or Tetofsy. Unsurpassed in quality, unexcelled for shipping, flesh firm, rich orange color, covered with dense netting, not ribbed.....	1o	2o	6o
Princess. Salmon fleshed, very distinct, nearly round, dark green, netted, sweet and luscious.....	1o	2o	6o

MELON—WATER

Ready for use in 60 to 90 days

KOLB'S GEM

CULTURE—Treat the same as Musk Melon, except that they should be planted eight or ten feet apart, according to variety.

THOMAS & HUYETTE, ENG. DETROIT.

	per oz.	¼ lb	per lb
Hungarian Honey. A very early sort from Hungary; fine for northern latitudes, perfectly round, flesh brilliant red, seeds very small.....	\$o 05	\$o 15	\$o 5o
Gray Monarch or Long Light Icing. Largest melon grown; crimson flesh, fine, late.....	05	15	5o
Kolb Gem. Large; bright red flesh, of fine quality and a good shipper, intermediate.....	05	15	5o
Pride of Georgia. Round, large, crisp, bright red flesh, intermediate.....	05	15	5o
Stoke's Extra Early. A distinct melon, earliest of all, nearly round, dark green skinned, delicious sugar flavor, seed small, one of the best for the north.....	05	15	5o
Mountain Sweet. Large oval variety, green rind, flesh scarlet, sweet and delicious fine for home garden.....	05	15	5o
Sweetheart. One of the best early shipping melons; fruit large, oval, mottled, light green, flesh bright red, firm, melting and sweet.....	05	15	5o
Melver's Sugar. Resembles the Rattlesnake but is very much superior, fine shipper.....	05	15	5o
The Boss. Oblong, dark green, flesh deep scarlet, thin rind, intermediate.....	05	15	5o
Dark Icing. Solid, with dark thin green skin; of superior quality, white seed, early.....	05	15	5o
Light Icing. Round; pink flesh, of fine quality.....	05	15	5o
Mammoth Ironclad. Long, very large, late; red flesh, good shipper.....	05	15	5o
Peerless or Ice Cream. Very early; red flesh, good home melon.....	05	15	5o
Phinney's Early. Early and of fine quality; red flesh, fine for the north.....	05	15	5o
Volga. Pale green skin and flesh; late.....	05	15	5o
Dixie. A new melon of excellent quality; very large and solid flesh red, intermediate.....	05	15	5o
Kentucky Wonder. Oblong; dark green skin, scarlet flesh.....	05	15	5o
Seminole. Very large; quality first rate, intermediate.....	05	15	5o
Cuban Queen. Solid and heavy, skin marked regularly; excellent quality, early..	05	15	5o

MELON—WATER—CONCLUDED

	per oz.	1/4 lb	per lb
Black Spanish. Large, roundish, nearly black, dark red flesh; early.....	\$o 05	\$o 15	\$o 40
Sweet Mountain. An old and reliable sort; flesh red, late	05	15	40
Florida Favorite. A superior strain; improvement on Rattlesnake, intermediate	05	15	40
Georgia Rattlesnake. Oblong, dark and Striped; bright red flesh, late	05	15	40
Citron. Round and handsome, for preserving; late	05	15	40
Cole's Early. Very early, very sweet, fine home melon.....	05	15	40
Keeley's Sweet. Oblong, rich dark green, flesh bright scarlet, very sweet.....	05	15	40
Black Boulder. Nearly round, very large, black green, fine shipper.....	05	15	40
Black Diamond. Very fine color, good shipper.....	05	15	50
Jones' Jumbo. Very large, fine green color, meat deep red, fine shipper.....	05	15	40
Duke Jones. Early, large round, fine flavor, fine shipper	05	15	40
Fordhook Early. An extra early, of extra fine flavor, and large size, color a uni- form green; average weight from 30 to 40 pounds.....	05	25	40

MARTYNIA

For Pickles

CULTURE—Sow in May in the open ground, three feet apart in each direction, where the plants are to remain; or the seed may be sown in a hot bed and the seedling afterward transplanted. Both varieties are productive and fine for pickles. Pick when small and tender, and preserve the same as cucumbers.

	per oz	1/4 lb	1 lb
Proboscidea	\$o 25	\$o 75	\$2 50

MUSTARD

CULTURE—Sow thickly during early spring, in shallow drills, and press the earth well down. For fall salad, sow in September, or in frames or boxes during the winter.

	per oz	1/4 lb	1 lb
Black. These seeds form the mustard of commerce	\$o 05	\$o 10	\$o 20
White London. Leaves used for salad while young; grows very rapidly.....	05	10	20
Giant Southern Curled. Very large leaves.....	05	10	30

NASTURTIIUM

CULTURE—Sow as soon as all danger of frost is past, in drills about an inch deep. The tail kinds require fences or poles on which to climb. The seeds are used for flavoring pickles or as a substitute for capers.

	per oz	1/4 lb	1 lb
Tall Mixed	\$o 15	\$o 40	\$1 25
Dwarf Mixed	15	40	1 25

OKRA OR GOMBO

CULTURE—Sow late in the spring, after the ground has become warm, in drills three feet apart, where the plants are to remain. Thin out from nine to twelve inches. They should be well manured. They may also be raised in pots or a hot bed and transplanted.

	per oz	1/4 lb	1 lb
Dwarf Green	\$o 10	\$o 20	\$o 50
Long Green	10	20	50
Early Dwarf	10	20	50

ONION SETS, TOPS, ETC.

CULTURE—Onion sets and tops should be planted near the surface, in drills about twelve inches and four inches in the rows. They must have high culture for the best results. These last are best for early use and where onions from seed cannot be raised the first year, they are essential.

Yellow Onion Sets, Bottom.....	
White Onion Sets, Bottom.....	
Red Onion Sets, Bottom.....	
White Potato Onions.....	
Yellow Potato Onions.....	
Top or Button Onions.....	

Write for
Prices
in February

ONION

Ripens in 65 to 120 days

CULTURE—Sow in rich sandy soil, in drills one foot apart, as soon as the ground can be worked in spring. Thin to three or four inches, using the rake and hoe frequently to keep down the weeds.

Mammoth Silver King. Very large, white skin and flesh, mild flavor, flat shape; frequently weighs three pounds.

Australian Brown.

The Great Set Onion. A grand new onion from Australia. This is a truly remarkable variety, remarkable in three ways: First, they ripen extremely early; second, they keep almost indefinitely, much longer than will any other onion; third, they never make any thick necks or scullions. These points are alone sufficient to insure its popularity, but in addition, the onion is of unusually fine quality and very attractive appearance. This onion has kept perfectly sound till the next crop was grown, so that sound onions grown in two successive seasons have been placed side by side

	1 oz.	¼ lb.	1 lb.
White Barletta. A small white Italian sort; the earliest of all, fine for pickling	\$0 15	\$0 40	\$1 50
New Queen. Very early small white sort, the best pickling	15	40	1 50
Large White Portugal. Standard sort, flat	20	60	2 25
Large White Globe. Large Southport strain	20	60	2 00
Giant White Tripoli. Very large white	15	40	1 50
White Flat Bermuda. Very early	15	40	1 50
Early Red Flat. Color of the Wethersfield; very early	15	40	1 25
Large Red Globe. Southport strain, one of the best reds, good keeper	15	40	1 50
Large Red Wethersfield. Half early, and a good keeper; standard sort	15	30	1 00
Giant Rocco, Light Red. Productive and mild; of very large size	15	40	1 50
Giant Rocco, Yellow. Same as above save in color	15	40	1 50

NEW QUEEN PICKLING

Yellow Danvers. (Flat). A standard sort, rather oval, early, good keeper	15	30	1 00
Yellow Globe Danvers. Of more globular shape; keeps well	15	30	1 00
Large Yellow Globe. Southport strain large, firm, mild, good keeper	15	40	1 50
Yellow Strasburg. Fine keeper, the great set onion	15	30	1 00
Maul's Prizetaker. Very large, beautiful onion, white flesh, skin straw color; sweet, mild, tender; keeps medium	2	40	1 50
Globe Wethersfield. Cross between Red Wethersfield and Large Red Globe; very beautiful onion, fine keeper, excellent flavor, nothing finer for the market gardener	20	40	1 50
Early Red Globe. Fine onion, mild and tender; not good keeper	20	30	1 00

20 50 1 50

15 30 1 00

PEAS

Ready for the Table in 50 to 70 days

CULTURE—A week may be gained in earliness by sowing a quantity in moist sand, placed in a box in the cellar, and planting outside when well sprouted. Light dry soil, not over rich, suits the pea. Sow as early as the ground can be worked, and again every ten days, for succession, up to the first of June, after which there is danger from mildew. Sow in single or double rows, from four to six feet apart, according to the different heights, about an inch apart in the rows (except such sorts as we note to sow thin) and four inches deep. Hoe

often and keep the ground clean and fine. The tall sorts can be made to bear more freely by pinching-in. The dwarf varieties may be grown in beds like Bush Beans, with rows about the same distance apart. The holes which are sometimes found in peas are caused by the Pea Weevil, (*Bruchus pisi*) This insect is a native of this country, but, as usual with such pests, has spread rapidly and is now found nearly all over the world. The

NOTT'S EXCELSIOR
The best Early Wrinkled Pea sold.

beetles lay their eggs on the young pods and the larvæ, as soon as hatched, make their way through the pods into the nearest peas. They do not, as is sometimes supposed, destroy the germ, for peas will grow if they are infested, but the plant is likely to be more feeble, and for this reason will not produce as large a crop as if free from the weevil.

Peas marked thus (*) are wrinkled.

GRADUS

***Gradus.** A new English variety of the wrinkled peas; it is very hardy, so much so that, unlike most of its type, it can be planted extremely early; the vine grows about 2½ feet high, is vigorous and very productive; the pods are large and well filled with good sized peas, seven to nine usually in a pod. The Gradus is the earliest wrinkled pea in cultivation and one of the most delicious in quality.-----

per pt. per qt. ¼ bu. 1 bu.
\$0 30 \$0 50 \$5 00 \$12 00

*NOTT'S EXCELSIOR

The finest Dwarf Wrinkled Extra Early variety

It is the best of recent introductions; vines are larger and more vigorous than the American Wonder, while the pods are fully one-third larger, containing six to eight fine large peas, packed so closely together in the pods that the peas are always more square than round. The pods are always well filled with peas, which in sweetness and quality have no equal, being superior to any other wrinkled sort.

EXTRA EARLY PEAS

	Hght. in ft.	per pt.	per qt.	per pk.	per bu.
* Nott's Excelsior. The finest Dwarf Wrinkled Extra Early variety-----	¾	\$0 20	\$0 30	\$2 25	\$8 00
Rural New Yorker. Very early; prolific and uniform in ripening	2½	15	25	1 50	5 50
First and Best. Early, resembling Early New Yorker-----	2½	15	25	1 50	5 50
Alaska. One of the very earliest blue Peas; quite productive-----	2½	15	25	1 50	5 50
* Alpha. An extra early wrinkled pea; sow thick-----	3	15	30	1 50	5 50
* American Wonder. Nearly as early as Alaska, good yielder, extra quality-----	¾	15	25	2 25	8 00
* Little Gem. McLain's very desirable early pea, great producer, good qu'ty	1¼	15	25	2 00	7 00
* Premium Gem. Earlier than Little Gem, better quality, great producer	1	15	25	2 00	7 00
Extra Early Tom Thumb Well known old variety-----	¾	15	25	1 75	7 00

EARLY AND MEDIUM PEAS

	Hght. in ft.	per pt.	per qt.	per pk.	per bu
* McLain Advancer. A fine standard sort of excellent quality.....	2½	\$o 15	\$o 25	\$1 75	\$6 00
* Horseford Market Garden. On the style of Advancer; very prolific.....	2½	15	25	1 75	6 00
* Everbearing. Long pods and large peas; sow thin.....	2½	15	25	1 75	6 00
* Abundance Bliss. Medium early, very fine.....	1½	15	25	1 75	6 00
* Telephone. Very valuable, vigorous grower, pods large, peas sweet and tender.....	4	15	25	1 50	5 50

LATE PEAS

* Champion of England. A well known standard variety; sow thick..	5	15	25	1 50	5 00
* Heroine. Large full pods, enormously productive.....	2½	15	25	1 75	6 00
* Yorkshire Hero. A spreading variety, very productive; sow thin...	2½	15	25	1 50	5 00
Melting Sugar. One of the best edible pod sorts.....	4	15	25	1 75	7 00
Mammoth Sugar. Gray seed, immense, edible pods.....	5	15	25	1 50	5 00
Tall Sugar. White seed, edible pod.....	5	15	25	1 75	7 00
* Dwarf Wrinkled Sugar. Large well filled pods; very productive..	1½	15	25	1 75	7 00
* Stratagem. The finest second early, vigorous and productive, eight to ten large peas in pod, unsurpassed in quality.....	2 to 3	15	25	1 75	6 00
Marrowfat, Black-Eyed. The best Marrowfat.....	4 to 5	10	20	80	3 00
Marrowfat, White. An old standard sort, quality inferior, great yielder	4 to 5	10	20	80	3 00

PEPPER

CULTURE—Sow in hot beds in March, and when the soil has become warm set in rows two feet apart and eighteen inches in the rows, hoe frequently and keep down all weeds. The plants may also be forwarded in pots.

	per oz.	¼ lb	per lb
Sweet Golden Queen. Very handsome and distinct, and of mild flavor	\$o 20	\$o 60	\$2 25
Ruby King. Beautiful bright red large fruit, mild, one of the best; fine for pickles.....	20	60	2 25
Large Squash. Productive, much used for pickles.....	20	60	2 25
Long Red Cayenne. Bright red, very productive.....	20	60	2 25
Large Bell (or Bull Nose). Large and mild, excellent for pickling.....	20	60	2 25
Procopp Giant. Very large size and brightly colored, fine flavor.....	30	1 00	3 00
Red Cherry. Cherry shaped; for pickles, for which they are largely used.....	25	75	2 50
Red Cluster. A new type of Chili, with upright bright red fruits.....	20	60	2 25
Sweet Mountain. Large, regular and of mild flavor, one of the best for pickling.....	20	60	2 25
Celestial. A Chinese Pepper, at first fruit is yellow, and when fully matured becomes a deep scarlet.....	25	75	2 50

PARSNIP

Ready for use in about 80 days

CULTURE—Sow as early in the spring as the ground can be worked, in rich soil, in drills eighteen inches apart. The ground should be well and deeply dug. Thin to six or eight inches in the rows. Hoe and cultivate often to keep down the weeds.

	per oz.	¼ lb	per lb
Hollow Crown. A market gardener's strain.....	\$o 10	\$o 20	\$o 50
Maltese. One of the best sorts; not quite as long as the Long White.....	10	20	50
Long Smooth White. Long white, smooth, no side roots; tender and excellently flavored.....	10	20	50
Student. A half long variety of delicious flavor.....	10	20	50

PARSLEY

CULTURE—Soak the seeds a few hours in luke warm water, and sow early in spring and until the middle of July, in drills one foot apart. Thin out the plants to four inches. To preserve in winter transplant to a light cellar or cold frame.

	per oz.	¼ lb	per lb
Double Curled. Superior.....	\$o 10	\$o 20	\$o 75
Champion Moss Curled. Very pretty and one of the very best.....	10	20	75
Fern-Leaved. Fine curled.....	10	20	75
Hamburg or Rooted. Edible roots, much like parsnips.....	10	20	75

PUMPKIN

CULTURE—May be planted middle of spring, among corn or in the field or garden, in hills 8 or 10 feet apart each way, 4 seeds in a hill. In other respects are cultivated in the same manner as melons and cucumbers. Avoid planting near other vines.

CONNECTICUT FIELD

	per oz	¼ lb	1 lb
Large Cheese. Flat; one of the best varieties for family use, good keeper	\$0 05	\$0 15	\$0 40
Sweet or Sugar. Fine grained, sweet and prolific, small yellow, best for pies	05	15	40
Quaker Pie. Fine for pies, very prolific and a good keeper	05	20	60
Striped Cushaw. Medium size, crookneck, very productive	05	20	60
Red Etampes. Medium size, flat, fine for cooking	05	30	90
Mammoth Potiron. Grows to an enormous size, 150 to 275 lbs., fine for exhibition	05	15	50
Mammoth Tours. A very large French variety	05	15	50
Tennessee Sweet Potato. Bell shaped; thick, white flesh, fine for pies	05	15	50
Connecticut Field. Grown for stock, very productive		05	20

RHUBARD

CULTURE—Sow seed in a cold frame, in a fine, rich, sandy loam, about the first of March, in drills four inches apart. Keep the frame covered during nights and cold days, so that the soil will not freeze, and in six to eight weeks the plants will be large enough to set in the open ground. Transplant to a rich soil, and set in rows twelve inches apart and twelve inches in the rows. The following spring transplant again to four or five feet apart each way, and the next spring the stalks will be large enough to pull. When roots are set out plant them four or five feet apart each way, and keep the weeds down. If roots are used a crop may be had after one season, which is much better than sowing seeds when only a few plants for family use are needed. In the fall the bed should have a thick dressing of course manure, to be spaded under in spring.

	per oz	¼ lb	1 lb
Mammoth. Very large, but good quality	\$0 20	\$0 40	\$1 25
Linnaeus. The earliest	20	40	1 25
Victoria. Very fine in quality, but small	20	40	1 25

Roots, per doz. 60 cts; per 100 \$4.00.

SALSIFY
MAM. SANDWICH ISLANDS

SALSIFY OR VEGETABLE OYSTER

CULTURE—Sow as early as the ground can be worked in the spring, in drills twelve inches apart, one inch deep, and thin out to six inches in the row. Keep them free from weeds. Cultivate the same as for carrots and parsnips. A part of the crop may be left in the ground till spring, when it will be found fresh and plump. The roots are cut into pieces half an inch long, boiled till tender, and then served with drawn butter, in which way it is a delicious vegetable. They are also mashed and baked like parsnips, and have a sweet, agreeable flavor. Mashed and fried the flavor is much like that of the oyster.

	per oz	¼ lb	1 lb
Long White French	\$0 10	\$0 30	\$1 00
Mammoth Sandwich Island. Large and superior	15	40	1 50

RAPE

DWARF ESSEX

A most profitable forage plant. We can think of no simple change which would do more to increase the profitableness of American farming than a more general use of Dwarf Essex Rape. It is an inexpensive crop, costing but little for seed or cultivation, is very hardy, can be made to take the place of some crop that has failed, and will yield an enormous crop of forage, or it can be sown after harvest as a cover crop, and, when fed off by stock, particularly sheep, will rapidly restore the fertility of exhausted soils. It is important that the true biennial Dwarf Essex Rape should be used, and not the annual sort, which is not only much less valuable as a crop, but which, when once introduced, becomes a pernicious weed very difficult to eradicate.

We handle only one variety of Rape, the Dwarf Essex, which is biennial, and one of the most profitable plants to use for green manuring and pas-

ture. There is no plant which will give as heavy a yield for forage at such a small cost as this, and its general cultivation would add largely to the profits of American farms. When fed off by sheep it will probably do more to restore and make profitable exhausted soils than any other plant. Beware of the worthless annual variety that is often sold and which is worthless for forage.

RAPE in general appearance is much like the Rutabaga—so far as tops are concerned, but there are no tubers. Grows from 2 to 2½ feet high. Sheep, cattle or hogs are turned in it about eight weeks after sowing. The usual precautions should be taken against bloating—putting them on but a short time at first and gradually extending the time until they can remain all the time.

CULTURE—Prepare the ground as for Turnips and sow in June or July, with a Turnip drill, in rows two and one-half feet apart, at the rate of two and one-half pounds per acre. It may be sown broadcast at the rate of five pound per acre.

MANY FARMERS are sowing Dwarf Essex Rape with their wheat or other spring sowing crops, putting it right in the drills with the grains sown. The Rape plants do not develop sufficiently to interfere with the growing grain, but after harvest comes on rapidly. It does well to sow after the corn has been laid by and when the corn has been husked it furnishes the very best pasturage, in connection with the stalks.

SOIL—Does not do well on all kinds of soils. Make the best growth on slough soils, in which there is ample moisture. Makes the least growth on stiff clay soils. On the black soils of the prairies it does exceedingly well.

TIME—In the northwest for pasture purposes it is best to sow it from June 15th to July 25th—about July 1st the best—unless it be sown at the time of putting in oats or spring wheat, in which case it does not develop much until after the crops are cut.

One pound, 12 cts., ten pounds, \$1.00. For larger lots write for prices.

RADISH

Ready for Use from 18 to 25 Days

CULTURE—Sow as soon as the ground is dry in the spring, in light, rich soil, in rows eight to ten inches apart, every week or ten days for a succession up to the middle of June, after which they are but little used, unless a cool northern spot can be had where the ground is shaded during part of the day. Sow also in early fall for late crops and winter use.

Those marked thus (*) are best suited for market gardeners.

	Per oz.	¼ lb	Per lb
Turnip Early Scarlet. Very early, crisp, good forcing	10c	20c	60c
Turnip Early Deep Scarlet. Very early; used for forcing	10c	20c	60c
Turnip Early Scarlet White Tipped. Very early for frames or outdoors. This is one of the best for market gardeners	10c	20c	60c

NON PLUS ULTRA

RADISH—CONCLUDED

Those marked thus (*) are best suited for market gardeners.

	per oz.	¼ lb	per lb
* Rosy Gem. One of the very best for market gardeners; very early, tender, beautiful scarlet, shading off into a white tip.....	\$0 10	\$0 20	\$0 60
* Turnip Early Non Plus Ultra. Extra early scarlet forcing; short leaved	10	20	60
* Turnip Early Deep Blood Red Extra early forcing sort.....	10	20	60
Turnip Early White or Box. Suitable for forcing, flesh pure white and sweet.....	10	20	60
Turnip Yellow Summer. Dull yellow, fine flesh.....	10	20	60
Turnip Golden Summer. Smooth and bright skin.....	10	20	60
Turnip Gray Summer. Good solid summer sort.....	10	20	60
* Olive-Shaped French Breakfast. Pink and white, early; standard sort.....	10	20	60
Olive-Shaped White. Mild and fine for summer.....	10	20	60
* Long Scarlet Short Top Very long and crisp; for frames and open ground....	10	20	60
* Long Brightest Scarlet. White tipped, very bright and beautiful.....	10	20	60
* Long Scarlet Chartier White Tipped. Shades from crimson to white; tender	10	20	60
* Long Wood Early Frame. Long, red, crisp, and good for forcing.....	10	20	60
Long White Vienna or Lady Finger. Crisp and tender in summer; one of the best.....	10	20	60
* The Icicle. A new introduction of the Long White; beautiful ivory white color; fine slender form, quality excellent; very early, a very fine market sort.....	10	20	60
* White Strasburg Summer. Very large; the German's favorite, quality fine....	10	20	60
White Stuttgart Summer. Very early and very large.....	10	20	60
* Winter Rose China. Very handsome and distinct, and keeps well.....	10	20	60
Winter Long Black Spanish. The popular winter sort.....	10	20	60
Winter Round Black Spanish. Fine for winter.....	10	20	60
Winter Large White Spanish. Fine for winter.....	10	20	60
Winter California White Mammoth. A very large white winter variety.....	10	20	60

CHARTIER

SORREL

CULTURE—Sow in spring, in drills eighteen inches apart, in a rich soil, and keep the flower stems cut off as they appear. It remains in the ground year after year and only needs to be taken up and divided once in four or five years. To be cut and cooked precisely like spinach; or it is excellent cooked with it, one-third Sorrel to two-thirds Spinach. Very nice to be eaten after it has become cool. Inasmuch as the hot sun tends to increase its acidity, a northerly exposure is preferable.

	per oz.	¼ lb	per lb
Garden	\$0 15	\$0 40	\$1 25

WHITE STRASBURG SOMMER

SQUASH

Ready for use in 40 to 60 days

CULTURE—Sow in hills in the same manner and at the same time as cucumbers and melons; the bush varieties three to four feet apart, and the running kinds from six to nine feet apart.

GOLDEN SUMMER CROOKNECK

HUBBARD

	per oz.	$\frac{1}{4}$ lb	per lb
Early Golden Bush Scallop. Fine for summer use, not as early as the White---	\$o 10	\$o 20	\$o 60
Early White Scallop Bush. A good early shipping variety, best scallop-----	10	20	60
Golden Summer Crookneck. One of the very best summer squashes-----	10	20	60
Egg Plant Bush Squash. A white fleshed bush variety, oval in shape; suitable for frying like Egg Plant-----	10	20	60
Early Orange Marrow. An improved Boston Marrow; quite distinct, very early, and of most delicious flavor; suitable for fall or winter-----	10	20	60
Boston Marrow. Oval, bright orange, flesh yellow and fine-----	10	20	60
Hubbard. Well known and liked for late use; of superior quality-----	10	25	80
Warty Hubbard. More warty, harder shell, better keeper, true stock-----	10	25	80
Red or Golden Hubbard. Fine reddish or golden color, large size, fine quality---	10	25	80
The Faxon. Medium size, very early and productive; orange flesh of fine quality	10	25	75
Turban. Orange yellow flesh of good flavor-----	10	20	60
Bay State. With hard, blue shell; for fall and winter-----	10	20	60
Pike's Peak or Sibley. Thick, bright orange flesh, fine winter sort-----	10	20	60
Essex Hybrid. A good fall and winter sort-----	10	20	60
Marblehead. Resembling the Hubbard, but has gray skin-----	10	20	60
Perfect Gem. Round, white, fine quality, productive, good either for fall or winter	10	20	60
Fordhook. One of the best winter squashes; fine quality, bright yellow-----	10	20	60
Pineapple. Peculiar shape, white skin and flesh; fine late sort-----	10	20	60
Canada Crookneck. Small, well known winter sort, green skin-----	10	20	60
Mammoth Chili. Grows to an enormous size; rich, orange yellow-----	10	20	60

SPINACH

CULTURE—Sow in early spring, in drills a foot apart, every two weeks for a succession, and as it grows thin out for use. For fall use, sow in August, and for winter crop in September. Cover that which is left out over winter with straw or leaves, after the weather becomes quite cold. Keep clear of weeds. Sow the seed of New Zealand (which must be scalded and soaked in hot water before sowing) in hills three feet apart each way, three or four seeds in a hill. This is fit for cutting all summer.

	per oz.	$\frac{1}{4}$ lb	per lb
Viroflay Thick Leaved. Has very large and thick leaves-----	\$o 10	\$o 15	\$o 35
Lettuce Leaved. Popular French sort-----	05	10	30
Curled-Leaved Savoy or Bloomsdale. Large, tender leaves, fine-----	05	10	30
Long-Standing Round Thick Leaved. dark green, very long standing before running to seed-----	05	10	30
Prickly. Vigorous and hardy-----	05	10	30

TOMATO

Ripening in from 85 to 120 days.

CULTURE—Sow in hot bed in early spring or the seed may be sown in shallow boxes and placed in a window when one does not wish to have the trouble of making a hot bed. Transplant to the open ground when all danger of frost is past, setting the plants three or four feet apart each way. Some support should

always be provided for the vines, to keep the fruit from touching the ground. Fruit may be had several weeks earlier by sowing the seed quite early, and transplanting to small pots: when these are filled with roots shift to a larger size, and transplant to open ground when the weather is warm and settled, shading from the sun for a day or so. As the roots are not disturbed in taking plants from the pots, the plants suffer no check, but grow right on.

	per oz.	1/4 lb	per lb
Matchless. Extra large smooth and handsome; bright red, very solid	\$0 15	\$0 50	\$1 75
Ponderosa. The largest variety in cultivation	25	75	4 00
Ignotum. Very prolific, earliest of the large, deep red, smooth varieties	20	60	2 25
Volunteer. Moderately early; productive and of fair size; bright red	15	60	2 25
Dwarf Champion. Quite distinct in foliage and habit of growth, being compact and upright; fruits early and resembles the Acme in appearance	15	50	1 75
Cardinal. Bright, glossy, smooth and solid; good size	15	50	1 75
Atlantic Prize. The earliest of all; smooth, bright red and solid	15	50	1 75
Perfection. (Livingston). Early, regular and productive; red, heavy cropper	15	50	1 75
Favorite. (Livingston). Large, smooth; productive and a good shipper	15	50	1 75
Beauty. (Livingston). Large, smooth, pinkish red, thick flesh, regular form	15	50	1 75
Stone. (Livingston). Very large, perfectly smooth, fine bright scarlet; best main crop	15	50	1 75
Acme. Medium, red, smooth and good; one of the best earlies	15	50	1 75
Early Advance. Bright red, medium sized, smooth, solid, very early	20	60	2 00
Turner's Hybrid or Mikado. Very large, smooth, solid; skin purplish red	20	60	2 25
Royal Red. A first class main crop variety; skin and flesh intense red color	20	60	2 25
Trophy, Large. Very solid: standard late sort, grown extensively for canning	15	50	1 75
Conquerer. Very early, fruit of medium size	20	60	2 25
Yellow Plum. Round and regular, bright yellow; used for pickles	20	60	2 25
Peach. Resembles a peach; for preserves, pickles and exhibition; quality excellent	20	60	2 25
Yellow Peach. Very handsome in form, and of a beautiful clear yellow color; is useful to contrast with other sorts	25	75	2 50
Red Cherry. Fruit about an inch in diameter, in bunches; used in pickles	25	75	2 50
Yellow Cherry. Similar to preceding, save in color	25	75	2 50
Red Pear-Shaped. Fruit of peculiar shape, handsome and solid	25	75	2 50
Upright Station Tree. The earliest of all to ripen a small part of its fruit: it grows in a compact manner, and is well adapted to pots	25	80	3 00
Ground Cherry. (Husk Tomato). Small and ornamental fruit, used for preserves	25	60	2 25
Golden Queen. Large size handsome, very smooth, good quality	20	60	2 25
Golden Trophy. Similar to the Red Trophy	20	60	2 25
Tree Tomato.	30	1 00	3 50

TURNIP.

Mature in 60 to 90 days.

Culture. For early turnips sow as soon as ground opens in the spring. The Milan and Munich should be sown from any time in July to first of August; but the other kinds for winter use may be sown from middle of July to end of August. Turnips are generally sown broadcast, but much larger crops are obtained (particularly of the Ruta Bagas) by cultivating in drills eighteen inches apart and thinning to six inches in the drill. Sow one pound to the acre.

PURPLE-TOP STRAP LEAF.

	Per oz.	$\frac{1}{4}$ lb.	Per lb
Early Milan. Earliest of all; with purple top	\$0 05	\$0 20	\$0 60
Purple Top Munich. One of the earliest	05	20	60
White [Egg. Cval. hand- some and sweet	05	15	45
Early [Dutch. Rather flat; good white early sort	05	15	45
Cow Horn. Early and good; shaped like a Nantes carrot ..	05	15	45
Red or Purple Top Strap Leaf. The popular flat fall sort; sweet, firm and mild	05	15	45
Purple Top White Globe. A standard sort in the New York market; nothing better,	05	15	45
White Norfolk. Globular, late, solid, very large, fine for stock	05	15	45
White Strap Leaf Flat. A good early white flat sort	05	15	45
White Globe. Good either for table or stock; one of the best	05	15	45

	Per oz.	$\frac{1}{4}$ lb.	Per lb.
Yellow Globe. Good and sweet; keeps fairly well	\$0 05	\$0 15	\$0 40
Yellow Stone. Fine hard winter sort	05	15	40
Golden Ball or Orange Jelly. Very hand- some; keeps fairly well	05	15	40
Sweet German. White, hard, firm, sweet; must be sown early; partakes of the nature of Ruta Baga	05	15	40
Yellow Aberdeen. Hardy, productive and a good keeper	05	15	40

RUTA BAGA OR SWEDISH TURNIP.

	Per oz.	$\frac{1}{4}$ lb.	Per lb.
Monarch. Distinct in form; a grand good variety; very large yielder; grows mostly above ground; flesh rich yellow	\$0 05	\$0 15	\$0 45
Improved American Purple Top. Very hardy variety, flesh yellow, sweet and well fla- vored; deep purple; has but little neck	05	15	45
Carter's Imperial Hardy. A purple topped variety, growing to a large size; single top root; good flavor	05	15	45
White Swede or Russian. Excellent va- riety for either table or stock; white flesh; fine flavor, good keeper	05	15	45

MONARCH.

AROMATIC, MEDICINAL AND POT HERBS.

GENERAL CULTURAL DIRECTIONS.

MOST of the varieties thrive best on rich sandy soil, which should be carefully prepared and well cultivated, as the young plants are for the most part delicate and easily choked out by weeds. Sow as early as the ground can be made ready, in drills sixteen to eighteen inches apart, taking pains that the soil is fine and pressed firmly over the seed, or they may be planted as a second crop, the seeds sown in beds in April and the plants set out in June. Most of them should be cut when in bloom, wilted in the sun and thoroughly dried in the shade.

Anise. A well known annual herb whose seeds, which have an agreeable aromatic odor and taste, are used for dyspepsia and colic and as a corrective of griping and unpleasant medicines. Sow early and thin to three inches apart in the row. Oz. 10c, $\frac{1}{4}$ lb. 30c, lb \$1.00.

Balm. A perennial herb, easily propagated by division of the root or from seed. The leaves have a fragrant odor, similar to lemons, and are used for making balm tea for use in fevers and a pleasant beverage called balm wine. Plant early and thin to ten inches apart. Oz. 25c, $\frac{1}{4}$ lb. 75c, lb. \$2.50.

Basil, Sweet. A hardy annual from the East Indies. The seeds and stems have the flavor of cloves and are used for flavoring soups and sauces. Oz. 15c $\frac{1}{4}$ lb. 40c, lb. \$1.50.

Caraway. Cultivated for its seed, which is used in confectionery, cakes, etc. The leaves are sometimes used in soups. If sown early in August the plants will give a fair crop of seed the next season, but when sown in the spring will not seed until the next year. Plant in drills two or three feet apart and thin to six inches apart in the row. Oz. 10c, $\frac{1}{4}$ lb. 25c, lb. 75c.

Caraway for Flavoring. Oz. 10c, 2 oz. 15c, $\frac{1}{4}$ lb. 20c, lb 50c.

Cat Mint, or Catnip. A hardy perennial, well known as a valuable mild nervine for infants. The plants should be pulled up by the roots when in full flower and dried in the shade. The seed may be sown either in the fall or early spring, in drills twenty inches apart. Oz. 30c, $\frac{1}{4}$ lb \$1.00, lb \$3.00.

Coriander. A hardy annual, cultivated for its seed, which has an agreeable taste, and is used in confectionery and to disguise the taste of medicine. Sow early in the spring and gather on a dry day, bruising the stems and leaves as little as possible. Oz. 10c, $\frac{1}{4}$ lb. 25c, lb 75c.

Coriander for Flavoring. Oz. 10c, 2 oz. 15c $\frac{1}{4}$ lb. 20c, lb. 75c.

Dill. An annual, cultivated for its seed, which has an aromatic odor and a warm, pungent taste. It is good for flatulence and colic in infants and is some-

times added to pickled cucumbers to heighten the flavor. Sow early in spring and keep clear of weeds. Oz. 10c, $\frac{1}{4}$ lb. 20c, lb 60c.

Marjoram, Sweet. A perennial plant, but not hardy enough to endure the winter of the North. The young tender tops are used green for flavoring, or they may be dried for winter use. Sow in drills as early as possible, and thin out the plants to ten inches apart. Oz. 15c, $\frac{1}{4}$ lb 40c, lb \$1.25.

Rosemary. A hardy perennial, with fragrant odor, and a warm, bitter, aromatic taste. May easily be raised from seed, but does not reach a size fit for use until the second season. The dry leaves deteriorate rapidly with age. Oz. 40c, $\frac{1}{4}$ lb \$1.25, lb \$4.00.

Rue. A hardy perennial with a peculiar smell. The leaves are bitter and so acrid as to blister the skin. It is a stimulant and anti-spasmodic, but must be used with great caution, as its use sometimes results in serious injury. It must not be suffered to run to seed, and does best on poor soil. Oz. 15c. $\frac{1}{4}$ lb 40c, lb \$1.50.

Saffron. A hardy annual from Egypt that has become naturalized in many parts of the country; cultivated for its flowers, which are used in dyeing and to make the cosmetic powder called *rouge*. Oz. 20c, $\frac{1}{4}$ lb 60c, lb \$2.00.

Sage. A hardy perennial possessing some medicinal properties, but cultivated principally for use as a condiment, it being used more extensively than any other herb for flavoring and dressing. Sow early in spring (four to five pounds per acre in drills) on very rich ground; cultivate often and thin the plants to sixteen inches apart. Oz. 15c, $\frac{1}{4}$ lb 40c, lb \$1.25.

Summer Savory. A hardy annual, the dried stems, leaves, and flowers of which are extensively used for flavoring, particularly in dressings and soups. Culture the same as that of Sweet Marjoram. Oz. 10c, $\frac{1}{4}$ lb 30c, lb \$1.00.

Thyme. This herb is perennial and is both a medicinal and culinary plant. The young leaves and tops are used for soups, dressing and sauce; a tea is made from the leaves, which is a great remedy in nervous headache. Sow as early as the ground will permit. Oz. 20c, $\frac{1}{4}$ lb 60c, lb \$2.00.

SWEET PEAS

Our Sweet Peas are unsurpassed for purity of strain, nothing better in the U. S. They have given wonderful satisfaction the past year. If you buy ours you buy the best.

The following varieties are selected with a view to please the most critical, and we think are the CREAM OF THE LIST of Sweet Peas.

LIGHT SHADES OF PINK.

Duchess of York. Standard and wings large and of fine form. White overlaid with a lacing of exceedingly delicate pale pink.

Eliza Eckford. Large flower of rosy pink over white, giving an exceedingly delicate and beautiful effect.

Katharine Tracy. The color is soft but brilliant pink, of the same shade in wings.

Lovely. A delicate shell pink tinged with yellow, producing a very warm, soft color of exceeding beauty.

Prima Donna. The stems bear three or four very large perfect flowers, of a brilliant, yet soft shade of pink.

Ramona. Large, finely formed flower; standard and wings white, but nearly covered with a very warm pink in small dots and shades.

Venus. Standard large, of fine form and substance; a brilliant but delicate and soft shade of warm rose-pink and buff.

DARKER SHADES OF PINK.

Apple Blossom. Standard rose-pink, lighter at the edges; wings lighter than standard.

Her Majesty. The flowers are very large, a delicate rose-pink color.

Lady Mary Currie. A large, well-formed flower of brilliant orange-pink color.

Ovid. A good sized, hooded flower of bright pink overlaid with a darker shade.

Lady Penzance. A large and striking flower of a peculiar and beautiful shade of rose-pink, with a slight tinge of orange.

Peach Blossom. A very large flower, having a warm yellowish-pink standard and wings of a lighter, softer shade.

Royal Rose. One of the largest and finest formed flowers yet produced. Standard a deep rose pink.

Red or rose standards with lighter wings.

SHADES OF RED.

Blanche Ferry. Standard medium sized, but of fine form and bright pink color; wings large, rounded and nearly white.

Brilliant. Flower of good size and substance, color very brilliant rich red.

Firefly. Very bright, and intense crimson scarlet, of good size and form.

Mrs. Dugdale. A large, finely formed flower of a peculiar shade of primrose overlaid with crimson rose.

Salopian. One of the most brilliant and most richly colored sorts yet introduced.

CLARET AND MAROON.

Duke of Clarence. A fine flower, with large standard and wings of uniform shade of dark claret.

Monarch. Standard large, fine form, violet maroon, wings very large and expanded.

Shahzada. This has a very rich, dark maroon standard and deep violet wings; one of the finest dark sorts.

LAVENDER AND LIGHT BLUE.

Countess of Radnor. Self colored in a very distinct and beautiful shade of lavender.

Dorothy Tennant. Flowers warm violet or mauve, very large and finely formed.

Lady Grisel Hamilton. A large flower similar in color to Countess of Radnor, but nearly blue.

Lottie Eckford. Standard a peculiar and delicate shade of magenta blue.

Maid of Honor. Medium sized flower, nearly white, having a distinct edging of blue.

BLUE AND PURPLE.

Black Knight. The darkest variety.

Countess of Cadogan. A variety having very long stems each bearing three or four flowers.

Captain of the Blues. Standard large, broad, bright purple blue; wings expanded, lighter and brighter blue than standard.

Navy Blue. A true blue, quite distinct.

WHITE.

Blanche Burpee. A splendid pure white variety. While not so profuse a bloomer or as hardy a plant as the Emily Henderson, the individual flowers are so fine as to make it a most desirable sort.

Emily Henderson. A bold, well formed, clear white flower. Wings broad and well expanded. An early and wonderfully free and persistent bloomer.

The Bride. The flowers are practically the same as the Blanche Burpee, but the stems are more slender.

LIGHT YELLOW.

Primrose. Standard medium sized, rather long, yellowish white in front, and pronounced primrose-yellow on the back.

Stella Morse. The large flowers of this variety are of the finest form and a peculiar warm salmon-pink.

Coquette. Large, finely formed flower. Standard warm primrose with a shade of purple.

Oriental. The large, finely formed flowers are a distinct bright orange of a very brilliant and striking shade.

STRIPED OR VARIEGATED.

America. White, nearly covered with splashes, stripes and dots of exceedingly bright carmine; the most brilliant of the red striped sorts.

Aurora. The standard and wings are striped and flaked with delicate orange-salmon, pink over white.

Gray Friar. Very large, finely shaped flowers of delicate heliotrope color, peculiarly tinged, marbled and dotted with darker shade.

Juanita. Large and splendidly formed; white, with stripes and dashes of delicate lavender.

SWEET PEAS—CONCLUDED

Mrs. Joseph Chamberlain. Very large and perfect shaped flowers; white, striped with bright rose carmine.

Princess of Wales. Standard broad, flat, striped purple on nearly white ground; wings very large and lighter than standard.

Mixtures of Sweet Peas

CHOICE MIXED. One of the most satisfactory ways of growing sweet peas is in a mixed row. Many new combinations are obtained by cross-fertilization and if good varieties are planted the result is sure to be satisfactory. Our Choice Mixture has no superior; it is not composed of refuse stocks but contains the finest known American kinds.

Eckford's Hybrids, Mixed. This is made up of the best of Eckford's large flowering sorts carefully proportioned. As only Eckford's varieties are used in this mixture, some of our very best sorts are necessarily excluded; but it will give large, finely formed flowers in a great variety of beautiful colors.

Cupid Sweet Peas

Alice Eckford Cupid. This is a distinct Cupid or dwarf variety; the flowers have a peculiarly delicate beauty.

Beauty Cupid. An exceedingly large and perfectly formed flower of a beautiful rose color shaded with carmine.

Pink Cupid or Dwarf Blanche Ferry. This sort originated as a direct sport from the unrivaled Blanche Ferry and has inherited all the good qualities which make that sort so deservedly popular. The seeds are dark, and of much stronger vitality than those of the White Cupid so that every one can succeed with it.

Primrose Cupid. Very similar in size and form of plant and flower to the original White Cupid.

White Cupid. The flowers of this variety are large, clear white and of fine form.

Borcatton Cupid. A dark and rich colored maroon.

Firefly Cupid. Very bright, and intense crimson scarlet
Cupid Mixed. This mixture is composed of choice shades of white, yellow and reds, from light rose to deep scarlet and maroon.

PRICES ON SWEET PEAS

	per oz	1/4 lb	per lb
Named Varieties. As above.....	\$0 10	\$0 15	\$0 45
Fancy Mixed. Made up by us from the above fifty-three varieties.....	10	15	45
Finest Mixed. As grown in the field.....	8	10	40
Eckford's Hybrids, Mixed.....	10	15	45
Cupid Sweet Peas, Mixed.....	10	15	45

The Fancy Mixed that we make up from the fifty-three varieties, as described above, is something superb and charming, and will please the most fastidious.

MILLET

We are headquarters for Millets of all kinds and grades. We carry the largest stock in the northwest. Our facilities for recleaning are unsurpassed.

TENNESSEE GERMAN

Every year we bring the purest strains of German Millet from Tennessee. Farmers who wish to sow Millet for seed to sell should use only this pure Tennessee German. It's worth from 40 to 50 cents per 100 pounds more on the market than seed from northern Millet.

RED-SEEDED GERMAN

If you want Millet for home use, either for forage or to feed the seed there is no Millet equal to the **Red-Seeded German**. It is a species of the German Millet brought a few years ago into the northwest under the name of Siberian.

It not only possesses all the good qualities of the ordinary white seeded German variety of Millet, but is in almost every particular, its superior. In the height of growth it is about the same and heads out exactly the same head that the other does, but owing to the dense growth of leaves on the stalk, out-yields the white seeded variety in tons of better quality hay to the acre.

Cattle and Horses fed on it thrive and grow fat, and are never troubled with the kidney affection so often caused by feeding other sorts of Millet hay. Farmers and stock men who have fed the seed of this red seeded variety of German Millet to their horses, cattle, hogs and fowls for several years claim positively that it is almost the equal to corn in its fattening qualities.

Milch Cows when fed on the ground feed of the seed give both a better quality and larger quantity of milk than from ordinary ground feed without this seed.

Hogs—Some time ago there was shipped to the St. Paul stock yards a car of hogs from North Dakota that were raised, fed and fattened on seed of this red-seeded variety of German Millet, and had never been fed any other grain. This load of hogs was pronounced the finest that had ever reached that market, and took the **top price**.

Chickens raised and fed on it thrive and keep well, and diseases like cholera never devastates the farm yard of the fowls where this seed is fed.

We are always in the Market for Millet, Clover, Timoty, etc., etc.

If you have any to offer please mail us a good sized sample and we will make you a price.

Grass and Field Seed Department

BLUE GRASS

WE do not deem it necessary to enter into an extended description of this branch of our business. In brief we only wish to say that at all seasons of the year we are prepared to furnish as choice a line of *Grass Seeds and Field Seeds* as any market in the west. With our superior milling facilities we are prepared to reclean and grade all classes of seeds and put them on the market in the very best shape.

BROMUS INERMIS

There are no Seeds offered that are freer from foul seeds than ours

Our prices will be found as low as any in the northwest

Don't fail to read page 32 on the wonderful new variety of Millet

Have your Grass and Field Seed merchant write for our prices

RED TOP

WE CARRY

Clovers, Alfalfa, Alsike,
Timothy, Blue Grass,
Red Top,
Bromus Inermis,
Orchard Grass,
all kinds Millet,
Etc. Etc.

WE WANT TO BUY anything in the above line you have to offer,
Send us a good sized sample by mail and we will make you the highest market price.

LAWN GRASS

Emerald Green Grass Mixture

60 pounds seed to the acre

For Parks, Golf, Croquet and Tennis Grounds, Cricket and Athletic Fields

Our Lawn Grass Mixture which we offer should not be compared with the cheaper preparations advertised. Our prescription is of the best chosen varieties as respects color, texture and permanency, and will be found clear of weed seeds. Anyone who purchases cheap, badly mixed lawn grass seed will soon realize that it was a poor investment, as the error will stand out for years in glaring ugliness.

FORMATION OF LAWNS FROM SEED

In the first place, see that your ground is thoroughly drained and well prepared, sowing *at least* three bushels of seed to the acre.

Perhaps the best description of soil for lawn is the stiff loam or clayey soils which predominate in so many districts. This ought not to be by any means too rich, as a rapid growth is not wanted in the grasses of a lawn, but in preparing it for laying down let the surface be as much alike in quality as possible, and do not stint the quantity of seed.

If your ground is in condition to raise a good crop of potatoes it will make a good lawn; add about half a ton of bone dust to the acre, harrowing it before sowing the seed. The success of establishing a good lawn depends much on the season and the condition of the ground at the time of growing. A very slight raking-in will protect the seeds much, or a sowing of wood ashes will render them distasteful to birds. Rolling, however, is at all times indispensable.

The best time to sow lawn grass seed is early in the spring, say February or March, or about the latter part of August. We prefer the early spring.

It is proper here to observe that no lawn can be maintained long in good order without successive rollings. Mowing alone will not secure a good bottom without that compression which the roller tends to give. The rolling should be done in the spring before the ground becomes dry.

TO GRASS A BANK OR TERRACE

For each square rod take a pound of lawn grass seed and mix it thoroughly with six cubic feet of good, dry garden loam. Place in a tub and add liquid manure, diluted with about two-thirds of water, so as to bring the whole to the consistency of mortar. The slope must be made perfectly smooth and then well watered, after which the paste should be applied and made as even and as thin as possible.

VALUABLE TABLES

CENTAL SYSTEM TABLE

Some few years ago the seed merchants of the United States and Canada adopted the system of selling and buying grass and many kinds of field seeds by the 100 pounds instead of by the bushel weight. For the convenience of customers we give the following table, showing the number of standard bushels in 100 pounds.

Standard Weights of Various Articles

	lbs. per bu.	bus. lbs.		lbs. per bu.	bus. lbs.
Barley	48	10 lbs. =2 4	Johnson Grass	25	100 lbs. =4 —
Beans	60	" =1 40	Millet	50	" =2 —
Buckwheat	48	" =2 4	Malt	38	" =2 24
Broomcorn	46	" =2 8	Oats	32	" =3 4
Blue Grass, Kentucky	14	" =7 2	Osage Orange	33	" =3 1
Blue Grass, English	24	" =4 4	Orchard Grass	14	" =7 2
Cane Seed	50	" =2 —	Onions	54	" =1 46
Canary Seed	60	" =1 40	Peas, wrinkled	56	" =1 44
Castor Beans	46	" =2 8	Peas, smooth	60	" =1 40
Clover	60	" =1 40	Rape	50	" =2 —
Corn, shelled	56	" =1 44	Rye	56	" =1 44
Corn, on ear	70	" =1 30	Red Top	14	" =7 2
Corn, sweet	46 to 48	" =2 4	Sweet Potatoes	56	" =1 44
Corn, meal	50	" =2 —	Timothy Seed	45	" =2 10
Cranberries	40	" =2 20	Turnips	58	" =1 42
Flax Seed	56	" =1 44	Wheat	60	" =1 40
Hemp Seed	44	" =2 12	Tall Meadow Oat Grass	12	" =8 4
Hungarian	48	" =2 4	Lawn Grass	14	" =7 2
Irish Potatoes	60	" =1 40	Pasture Grass Mixture	14	" =7 2

Quantity of Seed Usually Sown Per Acre

Amber Sugar Cane	12 qts.	Grass, Mixed Lawn	3 bu.
Ash	6 to 8 lbs.	Mustard, broadcast	½ bu.
Barley, broadcast	2 to 3 bu.	Melon, Musk, in hills	2 to 3 lbs.
Beans, dwarf, in drills	1½ bu.	Melon, Water, in hills	4 to 5 lbs.
Beans, pole, in hills	10 to 12 qts	Millet, broadcast	1 bu.
Beets, in drills	5 to 6 lbs.	Oats, broadcast	2 to 3 bu.
Box Elder	6 to 8 lbs.	Onion, in drills	5 to 6 lbs.
Black Walnuts	3 bu.	Onion, for sets, in drills	30 lbs.
Broom Corn, in hills	8 to 10 qts.	Onion sets, in drills	6 to 12 bu.
Buckwheat	1 bu.	Parsnips, in drills	4 to 6 lbs.
Cabbage, in beds to transplant	¼ lb.	Peas, in drills	1½ bu.
Carrots, in drills	3 to 4 lbs.	Peas, broadcast	3 bu.
Clover, Red, alone	8 to 10 lbs.	Potatoes (cut tubers)	10 bu.
Clover, White, alone	6 to 8 lbs.	Pumpkin, in drills	4 to 6 lbs.
Clover, Alsike, alone	6 to 8 lbs.	Radish, in drills	8 to 10 lbs.
Clover, Lucerne or Alfalfa	20 lbs.	Rye, broadcast	1½ to 2 bu.
Corn, in hills	8 to 10 qts.	Sage, in drills	8 to 10 lbs.
Corn, for soiling	3 bu.	Salsify, in drills	8 to 10 lbs.
Cucumbers, in hills	2 lbs.	Spinach, in drills	10 to 12 lbs.
Flax, broadcast	1½ bu.	Squash (bush sorts), in hills	4 to 6 lbs.
Hemp	1½ bu.	Squash (running sorts), in hills	3 to 4 lbs.
Grass, Kentucky Blue	2 to 3 bu.	Tomato, to transplant	¼ lb.
Grass, Orchard	3 bu.	Turnip, in drills	1½ to 2 lbs.
Grass, English Rye	2 bu.	Turnip, broadcast	3 to 4 lbs.
Grass, Fowl Meadow	2 bu.	Timothy, alone	½ bu.
Grass, Red Top	2 to 3 bu.	Vetches, broadcast	2 to 3 bu.
Grass, Timothy	½ bu.	Wheat, broadcast	1½ to 2 bu.
Grass, Hungarian	1 bu.		

Quantity of Seed Required for a Given Number of Plants, Number of Hills, or Length of Drills

Asparagus	1 oz. to 60 feet of drill	Melon, Musk	1 oz. to 60 hills
Beet	1 oz. to 50 feet of drill	Okra	1 oz. to 40 feet of drill
Beans, dwarf	1 qt. to 100 feet of drill	Onion	1 oz. to 100 feet of drill
Beans, pole	1 qt. to 150 hills	Onion sets, small	1 qt. to 40 feet of drill
Carrot	1 oz. to 150 feet of drill	Parsley	1 oz. to 150 feet of drill
Cabbage	1 oz. to 2,000 plants	Parsnips	1 oz. to 200 feet of drill
Cauliflower	1 oz. to 2,000 plants	Peas	1 qt. to 100 feet of drill
Celery	1 oz. to 3,000 plants	Pepper	1 oz. to 1,000 plants
Cucumber	1 oz. to 50 hills	Pumpkin	1 oz. to 40 hills
Corn	1 qt. to 200 hills	Radish	1 oz. to 160 feet of drill
Dandelion	1 oz. to 200 feet of drill	Salsify	1 oz. to 70 feet of drill
Egg Plant	1 oz. to 1,000 plants	Spinach	1 oz. to 100 feet of drill
Endive	1 oz. to 150 feet of drill	Squash, early	1 oz. to 50 hills
Leek	1 oz. to 100 feet of drill	Squash, Marrow	1 oz. to 16 hills
Lettuce	1 oz. to 3,000 plants	Tomato	1 oz. to 1,500 plants
Melon, Water	1 oz. to 30 hills	Turnip	1 oz. to 160 feet of drill

Maturity Table

	days		days
Beans—Dwarf Green, podded, table use	30 to 50	Corn—Sweet, early varieties, for table	55 to 65
Beans—Dwarf Wax, table use	35 to 50	Corn—Sweet, late varieties, for table	70 to 80
Beans—pole or running, table use	45 to 90	Cucumber—for table	40 to 60
Beets—garden varieties, table use	35 to 50	Lettuce—for table	40 to 50
Beets—Mangles, for harvesting	90 to 100	Melon—Musk, for table	60 to 85
Beets—Sugars, for harvesting	65 to 70	Melon—Water, for table	65 to 85
Cabbage—early varieties, for cutting	65 to 80	Onion—for storage	65 to 120
Cabbage—late varieties, for cutting	100 to 120	Peas—for table	50 to 70
Carrot—for table	60 to 70	Pumpkin—ripened	75 to 100
Celery—for table	120 to 140	Radish—for table	20 to 50
Corn—field, early varieties, ripened	85 to 95	Tomato—for table	90 to 100
Corn—field, late varieties, ripened	100 to 120	Turnip—for storage	60 to 90

THREE VALUABLE FORAGE PLANTS

BEARDLESS BROME GRASS

(*Bromus Inermis*)

The Great Drought-Resisting Grass

The introduction of Beardless Brome Grass into the arid and semi-arid regions of the west and north-west has given the people of those states a pasture and meadow grass of great promise. It has already been proved that it will succeed under conditions that prove fatal to Timothy, Orchard Grass or Alfalfa. The area planted is constantly increasing, and the demand promises to be greater this spring than ever before. It is desired therefore, to call attention to this very valuable grass.

Smooth Brome Grass is a native of Europe and Asia, ranging from France eastward into Siberia, growing along roadsides, river banks, borders of fields and woods, and upon sterile hillsides and pastures. It is a vigorous, hardy perennial with strong creeping rootstocks, smooth, upright, leafy stems, one to four feet high, and loose open panicles, or "seed heads," four to eight inches long. In a few years it forms a very tough sod, soon crowding out other grasses, clovers and weeds. Its remarkable drought-resisting qualities have proved it to be the most valuable grass for dry regions where other grasses could hardly exist.

As it is thoroughly permanent and grows with wonderful rapidity, producing heavy crops and luxuriant pasture, its value to the farmers of dry regions cannot be over estimated. It is very hardy and cannot be injured by severe spring and fall frosts when once established. As it starts to grow very early in the spring, before any of the grasses upon the native prairies show any signs of life, and remains green and succulent far into November, it will supply the long-felt want of early spring and late fall pastures.

HARDINESS. Smooth Brome Grass will withstand extreme changes in the temperature without injury. Its ability to produce good pasture during long periods of drought far exceeds that of any other cultivated variety. In Canada, where it has been exposed to a temperature of several degrees below zero and not covered by snow, it was entirely uninjured.

VALUE FOR PASTURE. Smooth Brome Grass is essentially an early spring and late fall pasture grass. After the hay crop has been taken off a heavy growth of aftermath or second growth springs up. After it has produced several crops of hay it thickens up forming a very compact sod and a heavy growth of leaves. If one desires to use it for pasture at once it will be better to seed it thickly at the rate of about twenty-five pounds per acre.

COW or FIELD PEAS

The Great Soil Improver the Great Economy Crop for Farmers

Makes good land more productive. Makes poor land rich. Dispenses with clover and commercial fertilizers. For pasture and hay of inestimable value. More nutritious than clover. More fattening than corn. Roots penetrate deep in the soil. Grow on

poor soil and rapidly enrich it. Positively the more of these peas you grow the richer your ground becomes, even when you remove the crops.

COW PEAS are not a new crop. They have been grown in the southern states of our country for many years; but even there their worth was not generally recognized until very recently, and now they are almost universally grown, and the most remarkable benefits have resulted in improvements of the soil and increased capacity of the farms.

FERTILIZER. Where Cow Peas are generally grown the use of commercial fertilizers almost ceases.

FOR HAY. Sow early in spring on ground as prepared for oats or corn, 1 to 1½ bushels per acre, broadcast and harrow in, or drill with grain drill. Cut when peas are forming and cure as clover. If the ground is not wanted for a different crop don't disturb it. Then the roots will throw up another crop which may be pastured or turned under in the fall for fertilizer.

FOR PASTURE. Sow any time from early spring until July. Turn stock on after the peas are nearly matured. Stock, particularly hogs, will derive full benefit from the crop, and fatten quicker and yield a better quality of pork than if fed on corn.

FOR ENSILAGE Cow Peas surpass green corn and other crops used for this purpose. Mixed with sorghum or Katfir corn, to hold them up, I believe they will make the perfect ensilage crop. All the Cow or Stock Peas are good for table use.

Prices per bushel will be quoted on application, as they are liable to change.

SOJA or SOYA BEANS

Sometimes Called Soy Beans, Coffee Beans and Japanese Coffee Berry

Annual; stem stout, erect, branching but little; 2 to 4 feet; leaflets 3 flowers in axillary clusters; pods short, 2 to 4 seeded whole plant rough-hairy. One of the staple crops of Japan, which attracted little attention in this country until about ten years ago, but is now becoming quite common. The crop is cultivated like corn, the seed being planted in drills at the rate of half a bushel per acre. The stems alone are too coarse to make good hay, but are covered with such a dense growth of leaves, and are so prolific in fruit that the hay is prized highly, especially for milch cows and for fattening animals. The yield of green forage is very heavy when grown on good soil and the yield of beans is from 20 to 30 bushels per acre. Those who have had most experience with this crop find that the best way to handle it is to cut or pull the plants when the first pods begin to open, and thresh as soon as dry enough. In this way the coarse stalks are so broken in pieces and mixed with the leaves and immature fruit that nearly all will be eaten. It is doubtless the best of the legumes for the silo.

The Soy Bean is an annual, belongs to the leguminous family, and is grown for the same purpose as cow peas and clover. As a soil renovator, as a hay and as ensilage, it is nearly the equal in every respect of red clover.

DWARF ESSEX SOWING RAPE

3 to 4 lbs. per acre in drills; 4 to 6 lbs. broadcast.

Don't run any chances when buying your Rape Seed. Make sure that you get the genuine English Sowing Rape, commonly called **Dwarf Essex**.

There are several varieties of the Rape plant which have proved a bitter disappointment and loss to the farmer. Price, per lb. 10 cts; 25 lbs. 8 cts; 100 lbs. \$7.00.

OTTUMWA SEED CO., OTTUMWA, IA.