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# Descriptive Seed Book



**THE MANGELSDORF BROS. CO**

EXCLUSIVELY WHOLESALE—ORDER FROM YOUR LOCAL DEALER

ESTABLISHED 1875

**ATCHISON, KANSAS**

# The Mangelsdorf Bros. Co.

## EXCLUSIVELY WHOLESALE

We sell to dealers only. Our Wholesale business has grown to such enormous proportions that we have been compelled to discontinue our retail Mail Order business. Therefore please do not send in orders to us, but buy direct from your local dealer. We believe this method to be the most satisfactory and economical for all concerned—ourselves, the local dealer and the purchaser. You are saved the expense of postage, express or freight charges, which amount to considerable.

If your dealer does not handle our seeds or the varieties you want, please notify us.

## “STANDARD BRAND” SEEDS

Represent the best quality obtainable. We give particular attention to the selection and testing of our stocks of Garden, Flower, and Grass Seeds, Seed Corn, and Field Seeds. Our prices are as low as good seeds can be sold for. Cheap seeds are dear at any price.

## RELIABILITY

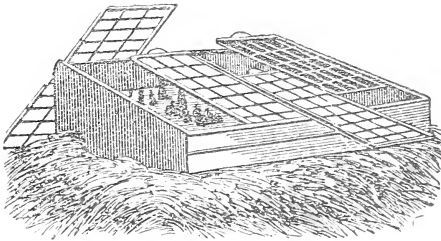
The fact that each successive year in business has shown a steady growth and substantial increase of business is in itself absolute proof of the merits of our seeds.

## NON-WARRANTY

All our seeds are selected with great care and we make every effort to have them just as represented. An absolute infallibility, however, is impossible, and the best of seeds sometimes fail through causes over which we have no control. It must be distinctly understood that we do not in any way warrant our seeds, and will not be responsible for the crop. Nevertheless, we are always ready to consider any well founded complaints, and should any seeds, through fault of ours, fail to give entire satisfaction, we stand ready to refund the price paid for them.

# HOW TO MAKE AND CARE FOR A HOT-BED

## MAKING THE FRAME



provides sufficient slope to shed rain, and secure<sup>s</sup> full benefit of the sun.

If it can be done, the hot-bed should be given a southern exposure so that all the sunlight possible may be obtained. This is important, as plant growth depends as much on sunlight as on heat or moisture. The frame can be made to any required size, but one 3x6 feet will generally be sufficiently large to grow all the plants needed for a family garden. The sash or glass cover may be made to order by any carpenter or ordinary window sash, which can be purchased at any lumber yard, may be used. Having secured the sash, construct the frame accordingly. It can be made in a short time and at small cost. It is simply a wooden box made of one-inch boards placed on edge and on which the sash is fitted snugly; no bottom is necessary. The front, or south side, of the frame should be made of boards eight inches wide and the back, or north side, at least four inches higher. This

## PREPARING THE MANURE

FRESH horse manure containing a good part of straw or hay bedding is the best heating material; it should not be over six weeks old and should be forked over several times and shaken apart and re-stacked, the object being to get the entire pile into a uniform heat. If dry, it must be watered to start fermentation. When the manure is ready for use, spread it over the ground making the bed two feet larger each way than the size of the frame. Shake out each forkfull carefully and tramp it down solid until the bed of manure is about two feet high, solid and compact; now put on the frame and cover the manure with a layer of three inches of rich, fine, moist soil, spreading it even and level and bank up the outside with earth to within six inches of the top on all sides. In a few days the bed will become very hot and the temperature will run up to 110 or 120 degrees, but in a few days more will fall to 90 degrees and is then ready to receive the seed. If the seed is sown before the intense heat and steam have passed off, it will surely be spoiled and fail to grow; great care should be used regarding this.

## CARE OF THE BED

In very cold weather the sash may be covered with an old carpet or mats to keep out the cold, which should be removed every morning to admit the sunlight. Admit air to the bed every bright, warm day; this can easily be done by raising one end of the sash and placing a block under it. The air should be closed off as soon as it becomes the least bit chilly. Water when the soil becomes dry, every day if necessary. Close up the bed early in the evening to retain the heat. As the weather becomes warmer, remove the sash entirely during the middle of the day. The object is to obtain strong, stocky plants with healthy, dark green leaves. If air is not given regularly, the plants will grow rank, weak and thin and usually die when set out.

## TRANSPLANTING

The best time for setting out plants is in the evening. In removing them from the seed bed, great care should be used to avoid injuring the roots, and it is best to water the beds thoroughly just before pulling the plants. Set the plants carefully and press the soil about the roots firmly. Water well, and after watering cover the surface with dry soil to prevent evaporation. If the sun becomes hot enough to burn or wither the plants, they should be shaded a few days, until the roots take a firm hold in the soil and begin to grow. In setting out plants, be sure to make holes sufficiently large and spread the roots carefully. Do not double up the roots in a small space and expect them to grow.



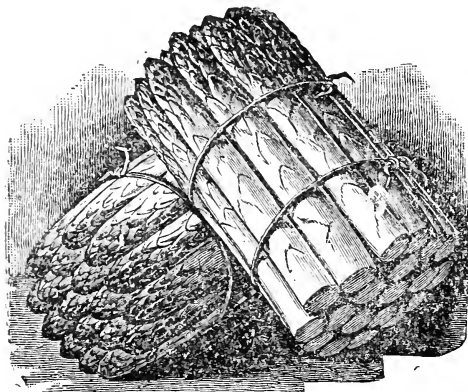
# VEGETABLE SEEDS

## General List of Well Known Standard Varieties

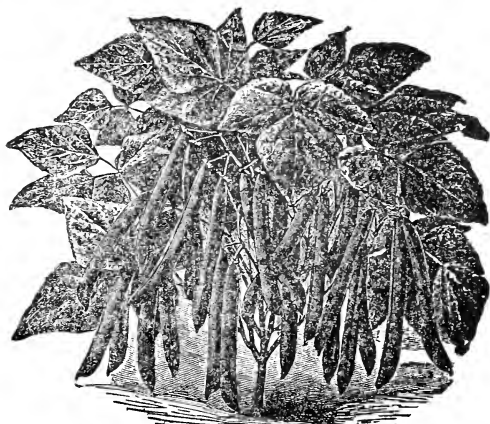
### Our List of Vegetable Seeds

embraces all the well known standard varieties, and such of the newer sorts as have proven of value.

There are an endless number of new varieties introduced each year, and it is impossible for any one seedsman to give each a place in his catalogue. In the following pages we have listed only varieties as are the best types of the class they represent and have proven satisfactory in our soils and climate.



*Conover's Colossal.*



*Improved Early Red Valentine*

## ASPARAGUS (1 oz. will produce 500 plants)

**Conover's Colossal**—The standard variety. Very productive. Shoots of largest size and excellent quality.

**Columbian Mammoth White**—A new sort, producing very large, thick, white shoots, free from any green color. A pure white asparagus of largest size

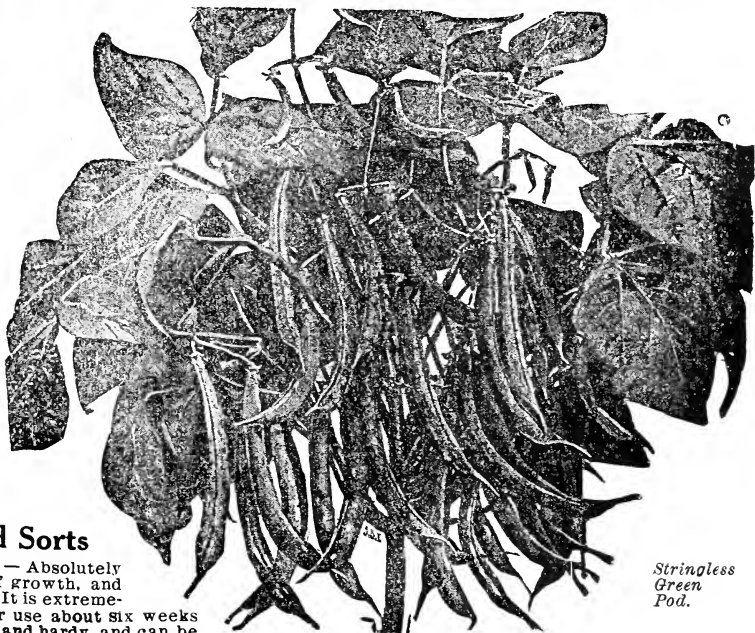
## BEANS. Dwarf or Bush (1 qt. to 100 feet of row)

**CULTURE**—For the best crops, beans require good, rich soil and frequent hoeing. The young plants are very tender and cannot withstand even slight frost. The seed should not be planted until the soil has become well warmed and all danger of frost is over. Spade or plow deeply and plant in rows two feet apart, scattering the seed about three inches apart in the row and cover two inches deep. Hoe frequently, but never when the foliage is damp from dew or rain. Hoeing should be done shallow, so that the roots are not injured.

The hardier green podded sorts as: *Stringless Green Pod*, *Early Valentine*, are the first to be planted, followed by the *Black Wax*, *Improved Golden Wax*, *Davis' Kidney Wax*, *Wardwell's Kidney Wax*.

### Green-Podded Sorts

**Stringless Green Pod**—Absolutely stringless at all stages of growth, and we recommend it highly. It is extremely early, becoming fit for use about six weeks from planting; is vigorous and hardy, and can be planted early. The pods are long, straight, fleshy and thick, of superior quality.



*Stringless Green Pod.*



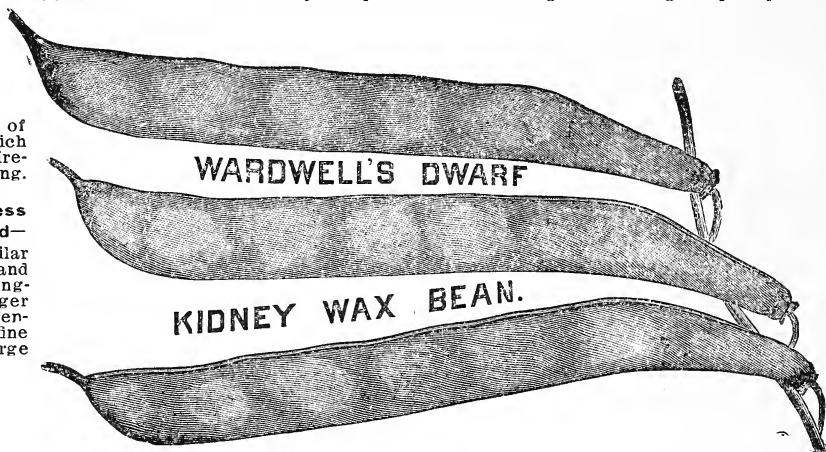
## BEANS. Dwarf or Bush

**Improved Red Valentine**—One of the best, and the standard green-podded sort. Very productive and one of the earliest.

**Long Yellow Six Weeks**—An old favorite. Early and productive. Pods long, flat and of good quality.

**Bountiful**—very hardy and prolific and continues in bearing for several weeks. The pods are of immense size, rich tender and entirely free from string.

**Giant Stringless Green Pod**—Somewhat similar to Valentine and Burpee's Stringless, but larger than either. Tender, stringless, fine quality and large size.



### Shell or Navy Beans

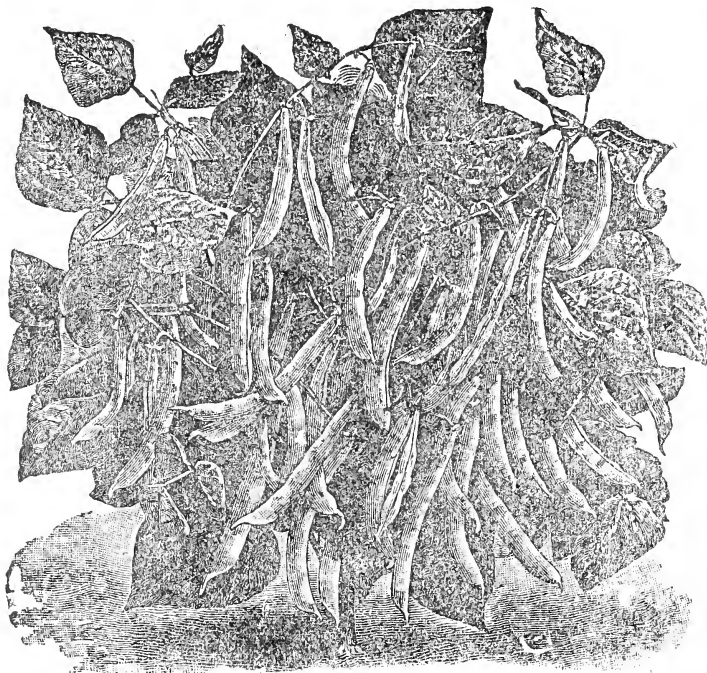
**Prolific Tree**—Enormously productive; will yield fifty bushels of shelled beans per acre. The dry beans have the appearance of the common *White Navy*. The plant forms a strong upright tree, about twenty inches high, bearing the pods well up so that they do not touch the ground.

### Wax or Yellow-Podded Sorts

**Prolific or Black Wax**—An improvement on the old *Black Wax*; very early and productive. Pods of a rich, waxy color, tender and of excellent quality.

**Improved Rust-Proof Golden Wax**—The standard variety for general use. Long, straight pods of a clear yellow color.

**Davis' Kidney Wax**—Hardy, productive and free from rust. Pods long, flat, straight and handsome; a valuable variety for the market gardener and canner; a good shipper.



*Improved Rust Proof Golden Wax.*

**Wardwell's Kidney Wax**—

The largest wax variety and one of the best. A strong grower; the long handsome pods are stringless, brittle, and of finest flavor. A heavy cropper.

**Valentine Wax**—The earliest of all wax beans. Similar in shape and form of growth to the *Green Valentine*, but the color is a rich, waxy yellow. Pods are round, meaty and almost stringless.

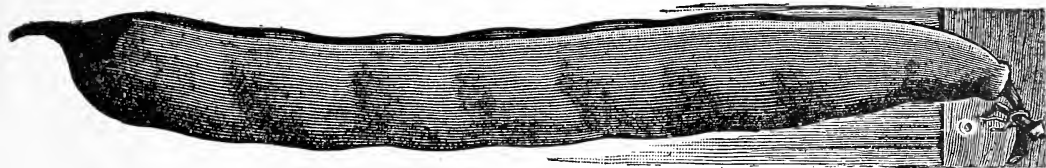
**Pencil Pod Black Wax**—The pods are of a light golden yellow color, almost round, very thick and meaty, and deeply ridged or saddle-backed; quite stringless and of fine flavor.

**Curries' Rustless Golden Wax**—A black seeded sort of extreme earliness and great productiveness. Pods of moderate size, flat in shape, but of fine flavor.

**Brittle Wax**—Very early and exceedingly prolific of superior quality and beautiful appearance. The pods are very long, straight, quite round, very meaty and extremely stringless. In color they are a rich, waxy yellow.



# BEANS. Pole or Running (1 qt. to 200 hills)



**Cut Short or Corn Hill**—An old popular sort for planting among corn.

**Kentucky Wonder Wax**—The merits of the old Kentucky Wonder Pole Bean are well known, and in saying that this yellow-podded sort is even more prolific than its green-podded namesake, we give it a high recommendation indeed. It commences to bear when scarcely higher than the average bush variety and keeps on producing until killed by frost. The pods are long and thick and fleshy; meaty, entirely stringless, and when cooked, of a delicious, rich, buttery flavor.

*Kentucky Wonder.*

**Kentucky Wonder or Old Homestead**—Green podded, early and productive. Pods grow in large clusters and are very rich and tender, almost round, and sometimes nine and ten inches long. Excellent for snap beans.

**Lazy Wife**—This variety has become immensely popular in all sections of the country. It is the best green podded pole bean.

**Horticultural or Speckled Cranberry**—Short, broad green pods, which become streaked with red when nearly ripe. As a shell bean, either green or dry, it cannot be surpassed in quality. The beans are large and easily shelled.

## Pole or Dwarf Limas



**Burpee's Bush Lima**—Grows eighteen to twenty inches high, forming a strong and vigorous bush, on which large pods are produced in great numbers. Beans very large, easily shelled, and of very finest quality.

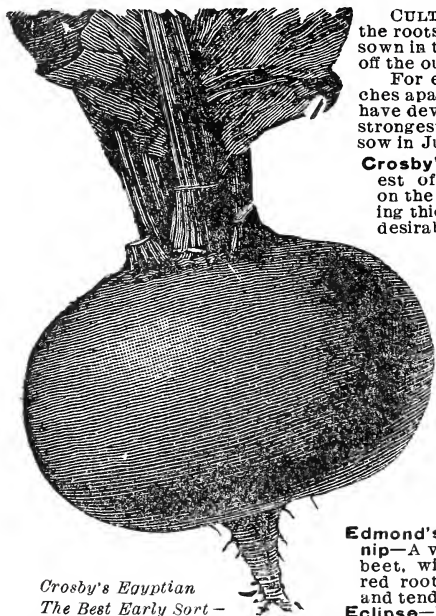
**King of the Garden Pole Lima**—The favorite tall growing sort. A vigorous grower; pods large and well filled with beans of rich flavor; a favorite with gardeners.

**Henderson's Bush Lima**—Of true bush form. Enormously productive. Beans small, but of excellent flavor.

**Ford's Mammoth Pole Lima**—The pods are extra large, averaging about eight inches in length; completely filled with large, tender beans of finest quality and flavor. Enormously productive. Pods set early and continue in full bearing until cut down by frost.



# BEETS. Table Sorts (1 oz. to 50 ft. of drill.)



*Crosby's Egyptian*  
The Best Early Sort -

shaped, tops small, dark red flesh. When young, crisp, tender and sweet.  
**Extra Early Egyptian**-Of flattened shape and dark red color, not large but extremely early. Of good quality when young and tender.  
**Early Blood Turnip**-The old standard. A good summer and winter variety

**CULTURE**-The beet thrives best in deep, rich, sandy soil; one which the roots can penetrate easily. For extra early use the seed may be sown in the hot bed and the young plants set out in the open, trimming off the outer leaves; they can be transplanted easily in moist weather.

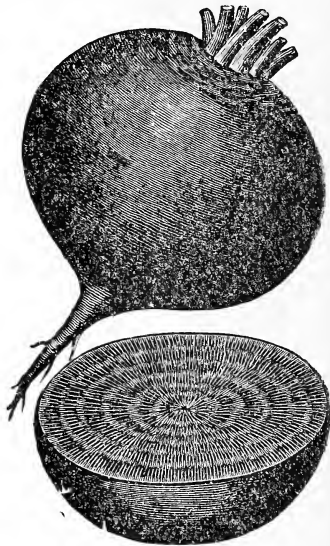
For early use spade or plow deeply, sow seeds in rows eighteen inches apart, covering one-half inch deep. When three or four leaves have developed thin out to four inches apart in the row, allowing the strongest to remain. For main crop sow end of April. For winter use sow in June.

**Crosby's Egyptian**-The earliest of all. An improvement on the old *Early Egyptian*, being thick and having a more desirable shape. Deep red color; small tops; flesh crisp and tender. A leading market variety for extra early use.

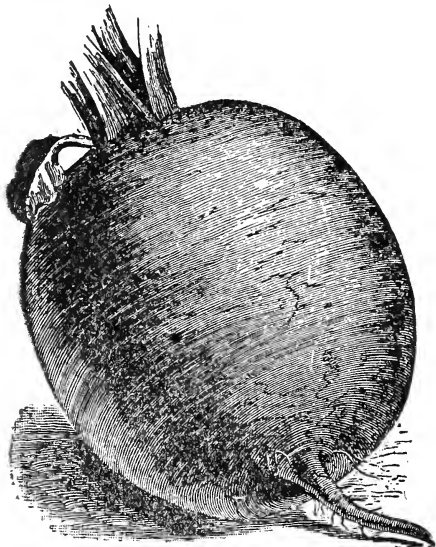
**Detroit Dark Red**-A first class early sort for market or home use. Tops very small and will admit of close planting. The roots are round, smooth and of the deepest red color. Comes extra early, and is one of the best of all turnip beets.

**Edmond's Improved Blood Turnip**-A very fine strain of turnip beet, with small tops and dark red roots. It is always sweet and tender and a good keeper.

**Eclipse**-Very early, globe shaped, tops small, dark red flesh. When young, crisp, tender and sweet.

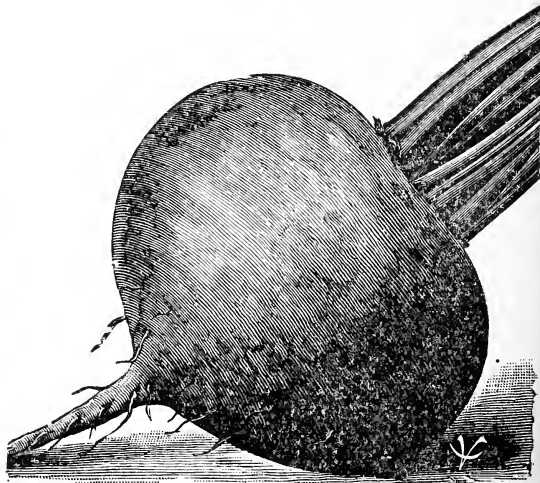


*Early Blood Turnip.*



*Crimson Globe*

**Crimson Globe**-An extremely handsome, second early or main crop beet, quite distinct. The beets are of medium size, about three inches in diameter, handsome form, with a smooth, clean skin and small tap root. The leaves are small with very slender stems. The shape is always remarkable regular and uniform, so that when washed and bunched for market they are of very attractive appearance. The flesh is a deep purplish crimson; sweet and tender and entirely free from stringiness.



*Edmond's Improved Blood Turnip.*

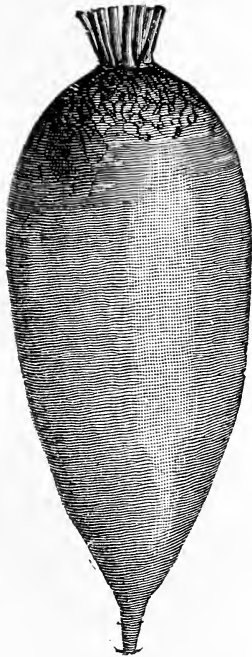
**Half Long Blood**-An excellent sort for winter use. Roots not as long as the *Long Dark Blood Red*, but considerably thicker; always smooth and handsome. Flesh sweet, tender, and of a dark red color. An excellent keeper.

**Long Dark Red Blood**-A good variety for keeping over winter. Flesh dark red, tender and sweet.



# BEET. For Sugar and Stock Feeding

(1 oz. to 100 ft. of drill; 76 lbs. per acre)



*Great Dane Half Sugar*

**Vilmorin's Improved Sugar Beet**—Roots grow below the surface. Very rich in sugar; will yield from ten to sixteen tons of roots per acre.

**Kleine Wansleben**—Larger than *Vilmorin's*; exceedingly rich in sugar, hardy and a good yielder. Easy to dig.

## Mangel Wurzel

**Mammoth Long Red**—Enormously productive and yields from fifty to seventy tons to the acre. The roots grow well above the ground and are easily dug.

**Golden Tankard**—The leading yellow fleshed variety. Sweet and greedily eaten by all kinds of stock. Hardy and a good cropper.

**Great Dane Half Sugar Mangel**—This sort has been carefully selected by years of experience, as the best variety in all respects. It is a cross between one of the hardy Mangel Wurzels and a rich sort of sugar beet. It not only retains the hardy and yielding qualities of the Mangels, but contains a high percentage of sugar, making a very palatable and nutritious feed. It will easily yield twenty-five tons per acre. A splendid sort for cattle and poultry feed.



*Mammoth Long Red.*

# CABBAGE (1 oz. will produce 4000 plants)

**CULTURE**—Cabbage requires a rich, moist, heavy soil, and deep and frequent cultivation. For extra early use the seed may be sown in the fall during September, and young plants protected through the winter in cold frames, or sow the seed during January or February, very thinly and shallow in hot-beds. When the young plants have reached sufficient size, gradually harden them off by admitting air freely. Transplant to the open ground as soon as the ground works up well. Plant one by two feet and cultivate every two weeks. For late use sow the seed in fine soil during May or June. Sow the seed very thinly and not over one-fourth inch deep. Another easy method is to plant five or six seeds in a hill then pull out all but the strongest plant. When insects appear dust with *Slug Shot* or similar preparation.

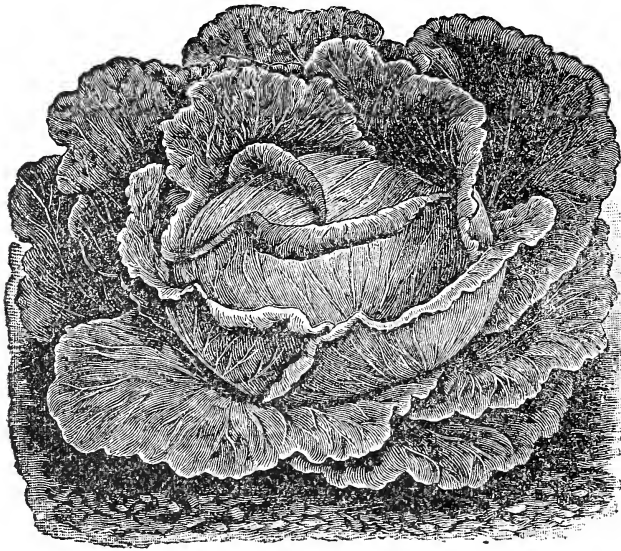


*Early Jersey Wakefield.*



*Early Flat Dutch.*

# CABBAGE



*Cabbage. All Seasons*

## Second Early or Summer Sorts

**Henderson's Early Summer**—A favorite variety for family and market. Very early, large flat heads.

**Allhead Early**—Fully one-third larger than any other early sort. The deep, flat heads are remarkably solid and uniform in shape, size and color; compact and of very best quality.

**All Seasons**—An excellent summer cabbage for general cultivation. Very popular in the eastern markets; stands dry weather and the hot suns to a remarkable degree. Extra large, round, solid heads of first-class quality; good keeper.

**Early Flat Dutch**—This well known and popular variety is considered by many to be the best second early sort; large, flat, solid heads of excellent quality; does not burst easily.



*Early Spring.*

## Extra Early Sorts

**Early Jersey Wakefield**—The best extra early variety; heads solid and of excellent quality. The standard early market garden variety. Pointed head.

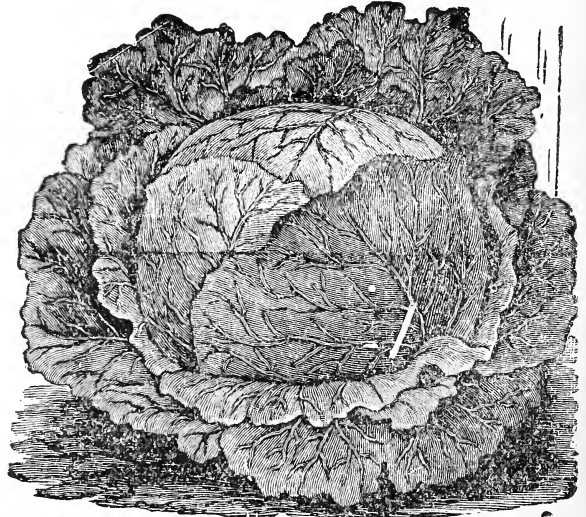
**Extra Early Express**—The earliest of all cabbage; heads fair sized and with few outside leaves, admitting of very close planting. Pointed head.

**Early Dwarf York**—Very early; heads are small and heart shaped; firm and tender; its dwarf habit admits close planting.

**Charleston or Large Wakefield**—Only a few days later than the *Jersey Wakefield*; much larger and not so pointed. Uniformly large and solid. A great favorite with gardeners because of its large size and fine quality.

**Early Winningstadt**—An excellent variety for general use; very hardy and a sure header; the heads are hard, conical shape, and keep well summer or winter; it will succeed where most varieties would fail.

**Early Spring**—As early as the earliest; fine, large, flat heads. It has a short stem and but few outside leaves, admitting of very close planting, solid heads, of finest quality.



*Hollander or Dutch Winter.*

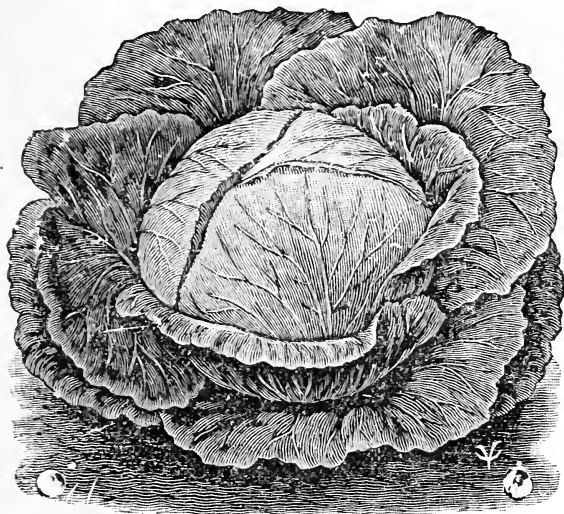
## Red Cabbages

**Early Dutch Dark Red**—Largely used for pickling. Early and hard and a good keeper.

**Mammoth Red Rock**—Best variety of late red cabbage. It is sure heading, of large size and deep red color,



# CABBAGE. Late or Winter Varieties



*Premium Flat Dutch*

**Premium Flat Dutch**—The standard variety, a sure header and a good keeper. Many gardeners depend entirely on this variety for winter cabbage.

**Sure Head**—A popular sort for main crop, never fails to form uniformly large, solid heads, which are tender and of fine sweet flavor.

**Hollander or Dutch Winter**—Hard and solid as a rock; stands cold and drouth that would destroy other sorts. The best variety to keep over winter for spring sales.

**Large Late Drumhead**—Enormous heads, solid and of good quality.

**St. Louis Late Market**—The heads are large and unusually solid and heavy. Good sized heads can be cut as early as any main crop sort, but one of its chief merits is that it continues to grow long after other sorts have matured. It gets bigger and better the longer it stands.

# CARROT (1 oz. will sow 100 ft. of drill. 3 or 4 lbs. per acre.)

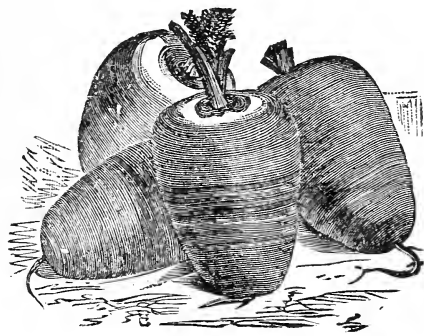
**CULTURE**—The carrot will do well in any good, well-worked soil. For early use, sow the seed when the apple is in bloom, in rows fifteen inches apart, and when two inches high thin out so that the plants stand four inches apart in the row. For fall and winter use sow the seed from the 1st to the 15th of June. The roots may be stored in cellar or pit, covered with dry sand, where they will keep solid until late in the spring.



*Danver's Half Long.*

**Long Orange**—An old standard for general use. A sure and heavy cropper. Roots long, tapering and of deep orange color.

**Early Scarlet Horn**—A small, extra early sort suitable for forcing or first early planting out of doors. They grow to length of about two inches and almost as thick. When young quite tender and fine grained.



*Early Oxheart.*

**Danver's Half Long**—Very productive and will thrive in all classes of soil. Deep orange color, first-class keeper. Best quality.

**Oxheart or Guerande**—Roots short but very thick, smooth and handsome; flesh fine grained, tender and sweet. A fine variety for early market, color orange yellow.

# CORN SALAD

**Large Leaved**—Also called Fetticus or Lambs' Lettuce. A small, refreshing salad, used as a substitute for lettuce during the winter and spring months. For winter months sow shallow in rows, one foot apart, during August or September. When winter approaches, put on a very light covering of hay or straw. The plants are hardy and will remain green and fit for use all winter. Theseed may also be sown early in spring

# CAULIFLOWER

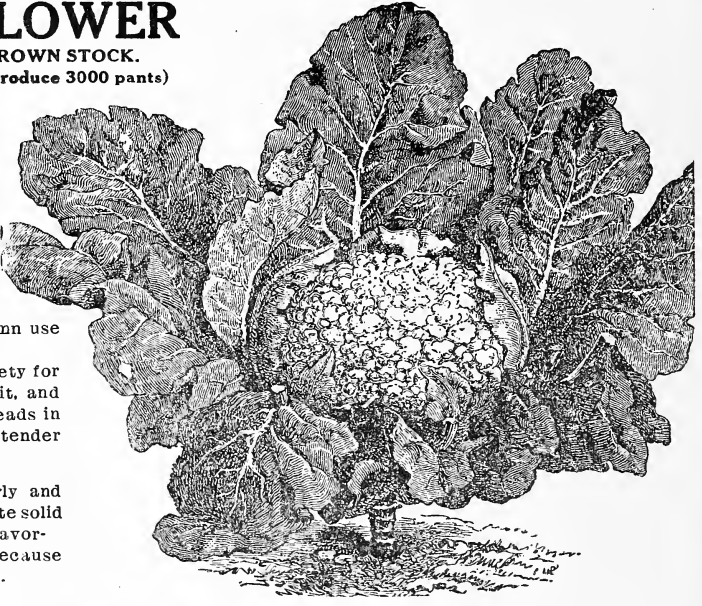
FINE DANISH GROWN STOCK.

(1 oz. of seed Will produce 3000 plants)

**CULTURE**—The cauliflower requires cool, moist weather for its development; it will not head in hot weather. Sow in hot-bed very early during January or February. Transplant into deep, rich, moist, well worked soil as soon as frost ceases, one foot apart in rows two feet apart. Cultivate very frequently. They should be kept growing rapidly. When the flower begins to form draw the leaves over and pin or tie them together to protect the heads from the sun. For autumn use sow in June.

**Early Snowball**—The best variety for general use. Of dwarf habit, and produces fine, large, white heads in a very short time. Always tender and sweet.

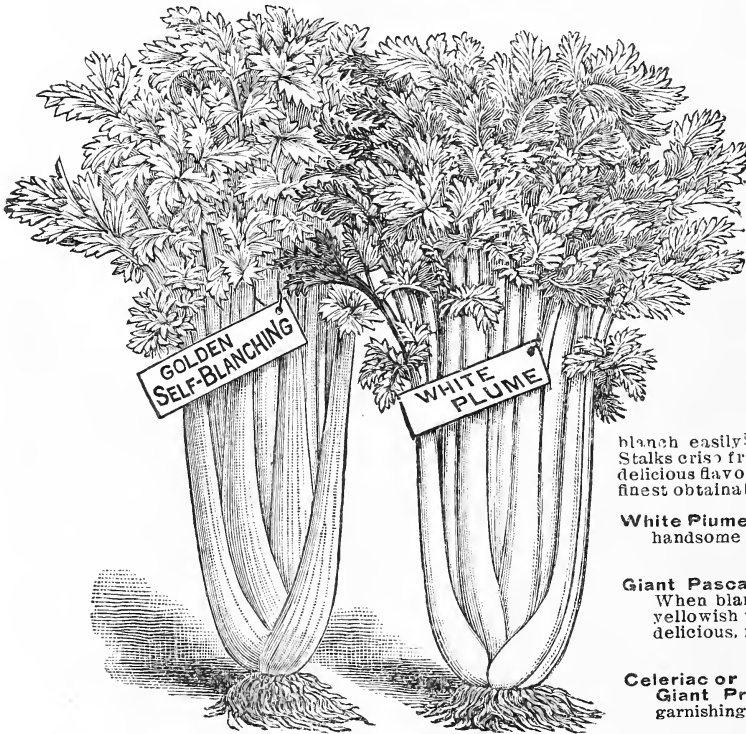
**Extra Early Paris**—Very early and reliable header. A large white solid heads, of excellent flavor, favorite with market gardeners because of its earliness and large size.



*Extra Early Paris.*

# CELERY

(1 oz. of seed will produce 6000 plants)



**CULTURE**—Sow thinly and cover very lightly; a little sprinkling of earth is all that is necessary. Select a moist place and water if the bed becomes dry. When the plants have reached a height of about four inches, lay off shallow trenches about two feet apart and set out portion of the plants in good, rich, well manured soil, ten inches apart, cutting off the tops. Water during dry weather and keep them growing. Hoe frequently and gradually draw the soil up about the plants as they grow.

### Golden Self-Blanching

—The standard and best early sort. Of dwarf, compact habit, with thick solid stalks which blanch easily to a clear, waxy yellow. Stalks crisp, free from stringiness and of delicious flavor. Our stock of seed is the finest obtainable.

**White Plume**—A well known sort; early, handsome and blanches easily.

**Giant Pascal**—The very best keeper. When blanched it is of a beautiful yellowish white; crisp, solid, and of a delicious, nutty flavor.

**Celeriac or Turuip Rooted Celery**—**Giant Prague**—For seasoning and garnishing.

# CRESS, OR PEPPER GRASS

**Dwarf Fine Curled**—A small pungent salad of easiest culture. The seed should be sown early, in rows about fifteen inches apart and covered lightly; when two or three inches high it is ready for use. It is often mixed with lettuce and imparts a warm, agreeable taste to the salad.



# SWEET CORN

(1 qt. of seed to 300 ft. of row. 8 to 10 qts. per acre.)

**CULTURE**—Beginning with *Extra Early Adams* as soon as danger from frost is over, small plantings should be made every week to provide a constant supply of sweet tender ears. The early sorts may be planted up to within eight weeks of frost. *Early Minnesota*, *Mammoth White Cory*, etc., are early sorts. For main crop *Stowell's Evergreen* is the standard and best paying sort. *Country Gentleman* is excellently sweet and fine flavored. *Late Mammoth* is the largest and latest of all.

**Early Evergreen**—It is earlier than *Stowell's* by considerable, resembles it very closely in size and shape, has the same fine, sweet flavor, and besides is more uniform and remains in condition fit for use longer.

**New White Evergreen**—A high-bred and selected strain of *Stowell's Evergreen*, so long and favorably known for its large size and excellent quality; it is identical with its parent in every way except that it is pure white.

**Country Gentleman**—Certainly a fine sort. Ears average nine or ten inches in length, but what it lacks in size is more than equaled in superior quality and productiveness. It sometimes yields as many as five or six ears to the stalk. Deep grained and exceedingly sweet and juicy.

**Extra Early Adams**—While not properly a sweet corn, it is used as such because of its very early and hardy nature. Market gardeners depend on this sort for their first "roasting ears." It can be planted long before it is safe to plant other varieties.

**Mammoth White Cory**—A new extra early variety and a great improvement on the old *Cory*. The ears are handsome, even, broad grained and very large for such an early sort. They are borne two or three on a stalk.

**Early Minnesota**—An old favorite. One of the best early varieties.

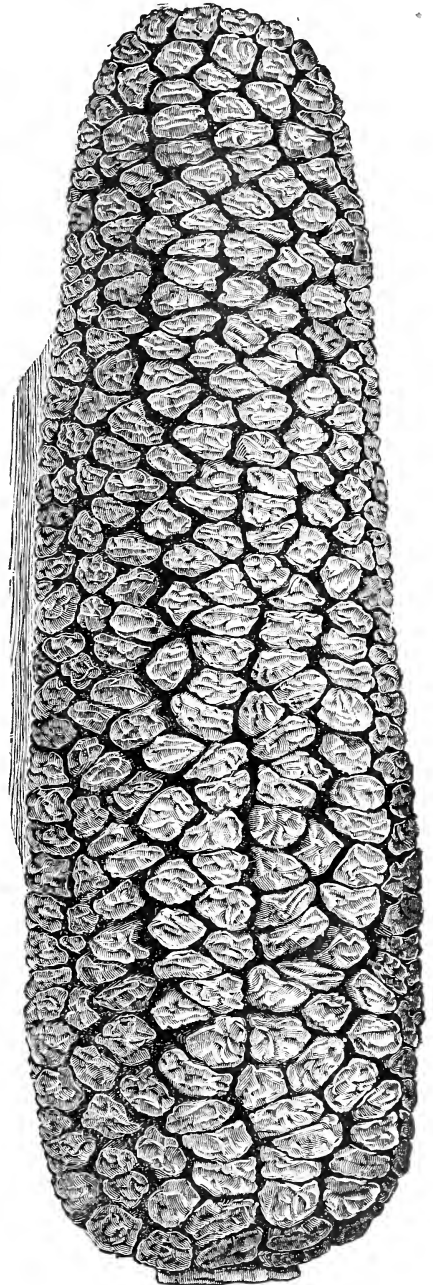
**Late Mammoth**—The largest of all sweet corn. Immense ears of excellent quality, sweet and tender. Very late.

**Early Champion**—The earliest large sweet corn. Produces ears a foot long in two months. Yields two and three ears to the stalk. Very sweet and juicy.

**Stowell's Evergreen**—The standard main crop variety. Large well formed ears, deep grained, very sweet and sugary. It is hardy and productive and altogether the best kind for general use.

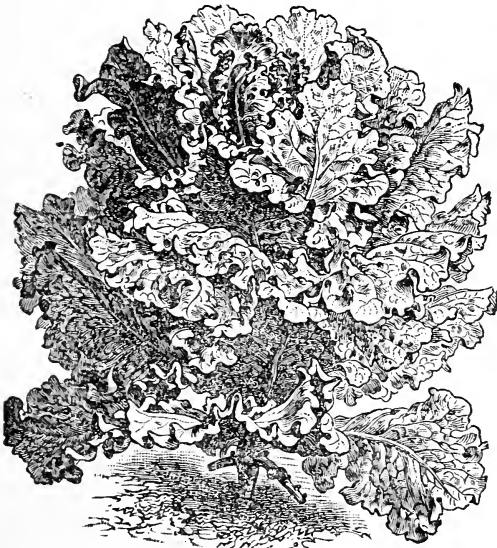
**Black Mexican**—One of the sweetest and most delicious of the sugar corns. Of quick maturity.

**Golden Bantam**—Very sweet and luscious. It is very hardy, which permits of early planting. The stalks average about 3 feet in height; the ears are 5 to 7 inches in length; the grain is a rich, golden yellow. Unrivalled in quality.



Corn. *Country Gentleman*.

## COLLARDS



Collards. *Southern Giant*.

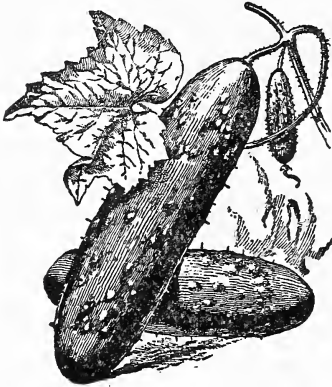
A plant resembling kale or a large loose headed, leafy cabbage, extensively used as greens. It is cultivated in the same way as cabbage; set out in rows when a few inches high.

**Southern Giant**—The best sort.

# CUCUMBER

(1 oz. will plant 50 hills.  
2 lbs. per acre.)

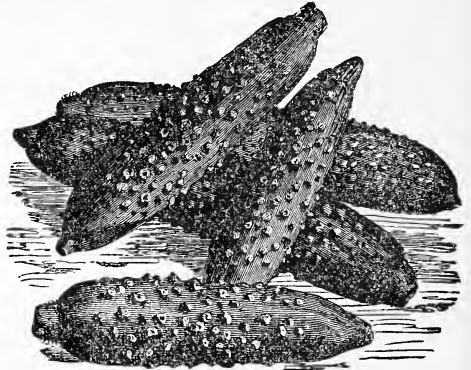
**CULTURE**—Newly-broken prairie or rich sandy bottom is the soil best suited for cucumbers. The first planting out of doors may be made in a sunny situation at about the time cherry trees are in bloom. Plant in hills 4x4 feet, dropping five or six seeds in a hill. For main crop sow the seed thickly in rows four to five feet apart at corn-planting time. For pickles plant in middle summer.



*Boston Pickle.*

**Boston Pickle or Green Prolific**—A favorite pickling sort and very productive. A dark green, crisp and tender.

**Early Frame**—Is very early and productive. The fruits straight and tapering at the end and of a bright green.



*Early Frame.*

**Emerald**—This is one of the finest early varieties that has been introduced in years. Excellent for slicing or pickling, and as a market sort unequalled.

**Arlington**—A strain of White Spine and very popular with market gardeners. It is very early, of a fine salable shape and a rich dark green color.

**Improved White Spine**—An excellent variety for slicing. Is early and prolific, handsome and straight dark green fruits. Flesh tender and of the highest quality.

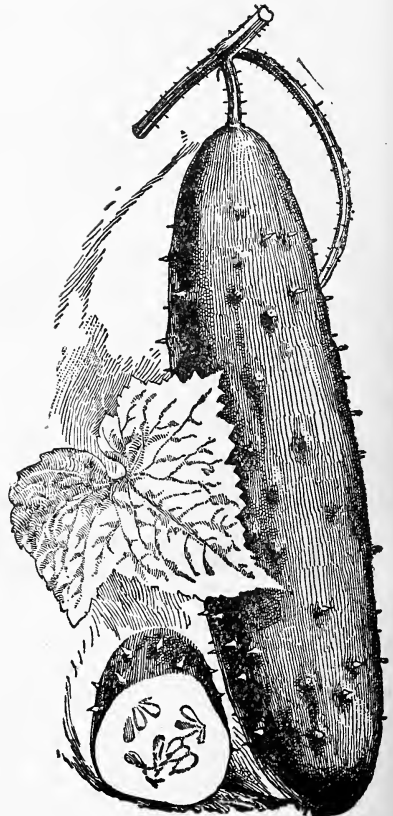
**Chicago Pickling**—A small pickling sort, very popular with Chicago market gardeners and large pickling houses. It is immensely productive and of a good shape and color.

**Early Cluster**—The short, thick fruit is produced in clusters close to the stem. Early and productive.



*Everbearing.*

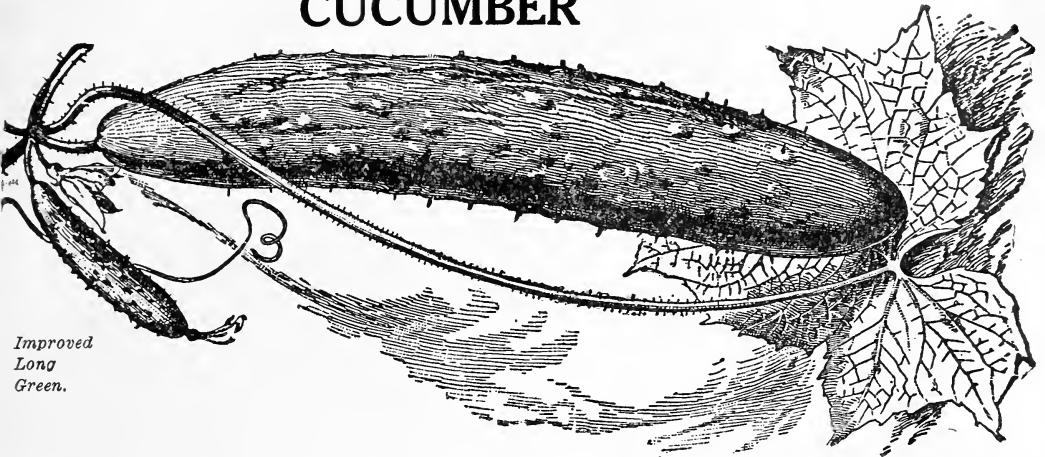
**Everbearing**—Wonderfully prolific and bears continually the entire season; the blossoms and cucumbers at all stages of growth are found on the same vine. If the fruits are gathered as they become fit for use, the vines will go right ahead blooming and bearing all season. It is one of the earliest sorts and a heavy cropper. The cucumbers will average about five inches in length and are of good form and color.



*Chicago Pickling.*



# CUCUMBER

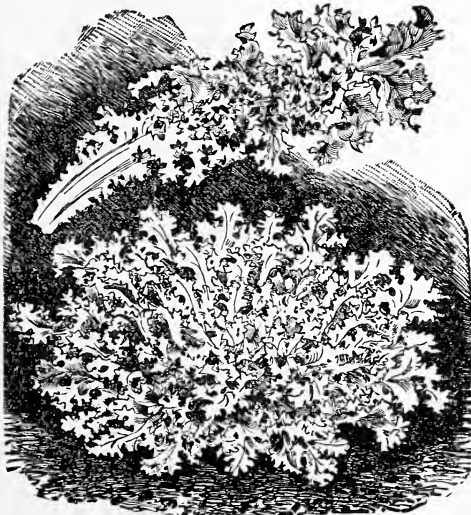


*Improved  
Long  
Green.*

**Improved Long Green**—An old and popular variety, valuable alike for pickling or slicing. Quality unsurpassed.  
**Klondike**—Unequaled in quality, shape and color. The color is a glossy green, shape slim and symmetrical, with an average length of 10 to 12 inches. It is as early as White Spine.  
**Davis Perfect**—One of the greatest cucumbers introduced in many years. Of the Long White Spine type. It has grown so in popularity that it is regarded as the leader of its type. This long dark green sort produces wonderfully, besides resisting the blight better than most varieties.

# ENDIVE

(1 oz. to 300 ft. of row)



*Endive—White Curled.*

**CULTURE**—Sow the seed in the open ground when the earth is free from frost; for a succession, sow any time up until the first of August. When the plants are large enough thin out to ten inches apart. When the outside leaves have reached a length of about six inches, they are ready for blanching; select a dry day for this work; bring the outside leaves together over the top of the plant and tie them up closely to prevent rain from coming through.

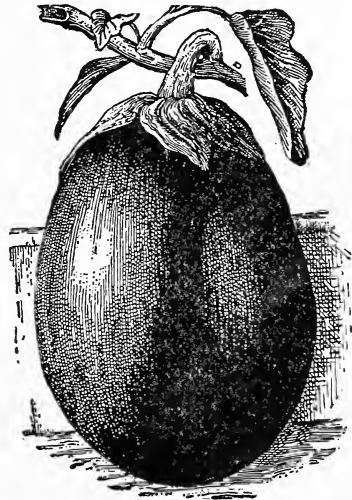
**Green Curled**—A very large variety; leaves deep green, beautifully curled and of fine flavor.

**White Curled**—Leaves light green and blanches easily to a clear waxy white, finely cut and curled.

# EGG PLANT

(1 oz. will produce 1500 plants)

**CULTURE**—The seed of the Egg Plant is cult to germinate; repeated sowings are of sary. The seed requires heat and should be sown early in the spring under glass in a hot bed. After all danger of frost is past and the ground has become thoroughly warm, transplant in the open. The soil should be thoroughly enriched with well rotted manure.



*Black Beauty Egg Plant.*

**Black Beauty**—The earliest of all large-fruited Egg Plant, ten days to two weeks earlier than the *New York Purple*. The color is a rich shiny purplish black. It is entirely free from spines.

**New York Purple Improved**—The standard and by far the best variety for home or market. It is of large size, very productive, and of a rich purple color.

## Kale or Borecole

(1 oz. will produce 4000 plants)

**CULTURE**—In early spring sow the seed in rows two feet apart and thin out to six inches between the plants. For fall and winter use sow early in September. The quality is much improved by freezing and the plants may be gathered any time during the winter. If gathered in a frozen condition they should be thawed out by placing them in cold water.



**Curled Mosbach**—Of half dwarf, compact bushy growth; a vast improvement over the straggling tall-growing varieties. The leaves are large, of handsome light green color, curled densely.

**Siberian**—A valuable sort, which furnishes an abundance of "greens" equal to the best spinach during the fall and winter. Beautifully curled, crimped and of fine flavor.

## Lettuce (1 oz. will produce 1000 plants)

**CULTURE**—For early crops, seed may be sown the previous autumn and plants protected through the winter in cold frames. Or, may be sown in hot-beds in February and transplanted to the open ground as soon as ground can be worked. For ordinary private use the simplest way is to sow in the open ground early in spring. Head Lettuce should be transplanted and hoed frequently to reach full development quickly.

**Grand Rapids Forcing**—A favorite sort for growing in hot-beds or green houses and a fine sort, also for out-door sowing. It grows very rapidly, forming large, loose-curved bunches. The coloring is yellowish green. The leaves are crisp, tender, fine flavored.

**Prize Head**—We highly recommend this sort for the family garden. It is early, of fine quality and remains fit for use a long time before running to seed. It does not head up solid, but forms large loose bunches. The leaves are nicely curled and very tender and sweet; bright green in color, edged with brownish red.

**Simpson's Black Seeded**—Forms large, loose, beautiful heads of light yellowish green color; very tender and of best quality. A fine variety for forcing, and stands the heat of summer well.

**Simpson's Early Curled**—Fine, loose curled heads, light green in color. Very sweet and tender.

**Iceberg**—A very hardy heading and beautiful sort, excellent for summer use. Inner leaves finely blanched, crisp and brittle; of sweet and refreshing flavor.



Prize Head.

## Kohl Rabi

(1 oz. will produce 3000 plants)

**CULTURE**—Kohl Rabi requires exactly the same treatment as cabbage. For early use sow the seed thinly in hot-bed and transplant to open ground when frost has left the soil. The bulbs should be used before they reach their full size and while the skin is still tender.

**Early White Vienna**  
—Very early; small tops and of a fine delicate flavor.

**Early Purple Vienna**  
—Identical with the above except color, which in this sort is a rich purple.



Early White Vienna

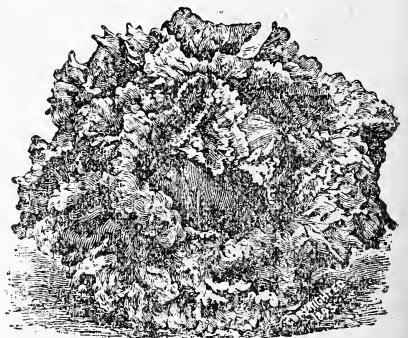
## Leek



Monstrous Carentan.

**CULTURE**—Sow the seed early in the spring, in rows where they are to remain and thin out to four inches apart. Keep well hoed during the summer, gradually drawing the soil up about the plants to blanch them. The flavor is improved by freezing.

**Monstrous Carentan**—A giant variety, often three inches in diameter. Very white and tender.



Iceberg.

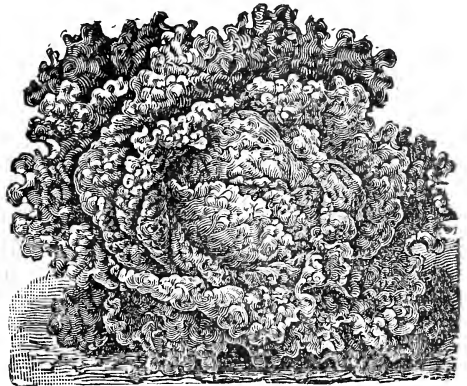


# LETTUCE. Heading Sorts.



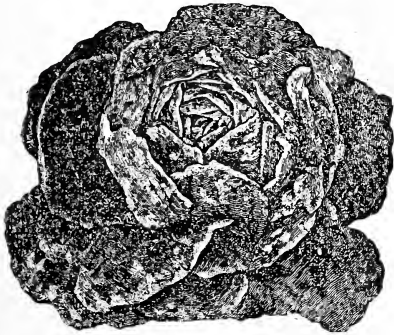
*Hanson.*

**Hanson**—One of the best of all varieties; forms a large, flat, solid head, the inner leaves blanching to a beautiful white. Always crisp and tender, even in the hottest weather of summer.



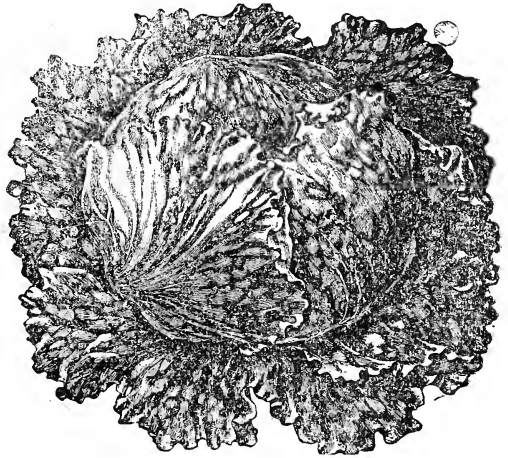
*Denver Market*

**Denver Market**—Large, solid heads; the leaves are crimped and blistered like a *Savoy* cabbage. An excellent sort.



*Deacon.*

**Deacon**—Fine for summer use. Stands a long time before running to seed. Forms a solid head of excellent flavor.



*Philadelphia Butter.*

**Philadelphia Butter**—Round, thick leaves of very dark green color; rich flavor.



*Big Boston.*

**Big Boston**—Excellent for forcing or out-door culture; very hardy and vigorous; large heads of a beautiful shade of green.

**Black Seeded Tennisball**—Very hardy; valuable for forcing or early planting out of doors. Forms a solid head; the bright green outer leaves are very thick, crisp and tender and fine flavored.

**May King**—The heads of "May King" are uniformly large, of globular shape, hard and solid. The leaves are light green, with delicate ribs; the inner leaves are of a clear yellow color, very tender and of fine mild flavor. It will prove an indispensable sort for both the private garden or for market.

# MUSK MELONS

(1 oz. to 50 hills,  
2 to 3 lbs. per acre.)

**CULTURE**—Musk Melons do best on newly broken sod or prairie land, or on soil prepared by plowing under a crop of rye or wheat in the spring. The seed should not be planted until the soil has become thoroughly warmed. Plant five or six seeds to the hill, in hills four to six feet apart. Rich soil or well rotted manure should be used in the hills. When the plants are of sufficient size thin out to three vines to the hill.



*Hoodoo.*

**Hoodoo**—The flesh is of fine grain and of sweetest flavor. The color is a deep orange and the flesh extremely thick. As a shipper it is unexcelled.

**Rocky Ford**—Of a handsome, oval shape and of a convenient size for packing in boxes or crates. The flesh is thick and of a light green color; deliciously sweet and fine flavored. It is, without doubt, the most popular melon grown.

**Banana**—A very long melon of easy culture. The flesh rather coarse grained, but of good flavor; light orange in color.

**Paul Rose**—The melons grow uniform in shape and size. The flesh is remarkably thick, making the melon very solid and heavy, and is of a beautiful salmon or orange color; deliciously sweet and melting.

**Large Yellow Cantaloupe**—A large variety, deeply ribbed; flesh thick and of a light salmon color.

**Osage**—A fine, yellow fleshed variety of good size, the flesh is very thick and of a beautiful salmon color; very sweet and melting.

**Netted Gem**—One of the earliest and one of the most profitable small basket melons. Very uniform of desirable shape and size. Flesh light green and of very fine flavor.

**Tip Top**—A yellow fleshed melon of highest quality. It is always sweet, juicy and fine flavored, firm fleshed and edible to the outside coating. An excellent market variety.

**Burrell Gem**—It has a tough, thin rind, and the blossom end is protected with a well developed button. Meat is of a reddish orange, very thick, fine grained and spicy, not containing too much water or acid. Seed cavity small and triangular.



*Bay View.*

**Early Green Nutmeg**—A favorite for the home or market. Medium size and of first class quality.

**Bay View**—A long, green fleshed melon of largest size, often reaching a weight of twenty pounds.

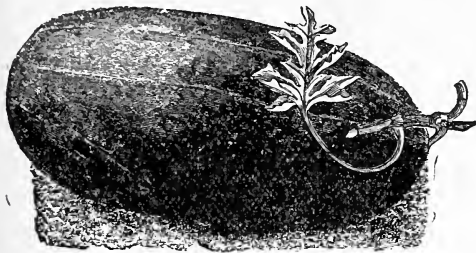
**Extra Early Hackensack**—A selection from the old Hackensack, but is about ten days earlier. The melons are of good size and flavor.



# WATER MELONS

(1 oz. to 30 hills, 4  
to 5 lbs. per acre.)

**CULTURE**—Water Melons do best on newly-broken sod or prairie land, or on soil prepared by plowing under a crop of wheat or rye in the spring. The seed should not be planted until the soil has become thoroughly warmed, about corn planting time. Plant five or six seeds in hills eight or ten feet apart each way. The soil in the hills should be made very rich by mixing in a few shovelfuls of well-rotted manure. When the plants are well established, thin out to one or two strong plants. When insects molest the vines dust with *Slug Shot*, or similar preparation.

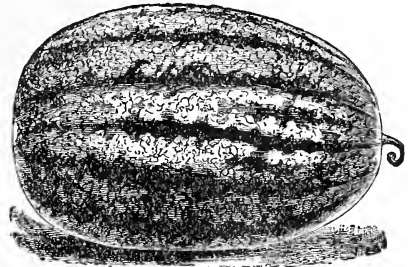


*Halbert Honey*

**Halbert Honey**—A new exceedingly sweet and deliciously flavored melon, similar in size and shape to *Kleckley's Sweets*. It is of handsome, long, oval shape. The skin is an attractive, very dark green; the flesh is of a beautiful bright red, extending almost to the outer rind, is very tender and melting, and entirely free from stringiness.

**Koib's Gem**—The old popular market and shipping variety. It is still one of the leaders.

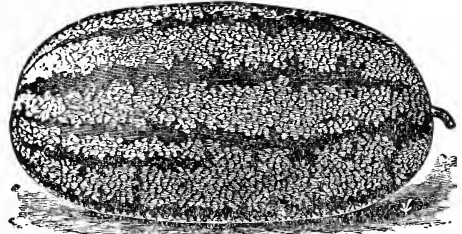
**Iceberg**—The melons grow uniformly large, and are of thick, oval shape. The skin is a rich, dark green, almost black, faintly striped with narrow bands of lighter green. The melons can safely be shipped long distances without the least damage in transit. The meat is fine.



*Cuban Queen.*

**Cuban Queen**—An old favorite. A good shipper. Has bright red flesh.

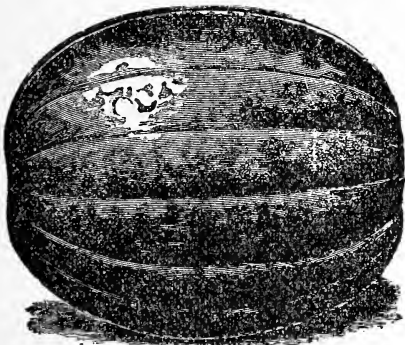
**Alabama Sweets**—A valuable shipping melon. Its chief merit lies in its extreme earliness and delicious quality so rarely found in an early shipping melon. They sell readily at good prices. Shape long, of good size, uniformly striped light and dark green; very sweet and luscious.



*Dixie.*

**Dixie**—Oblong shape, light and dark green striped. Flesh scarlet, very sweet and sugary; rind tough, making it an excellent shipper.

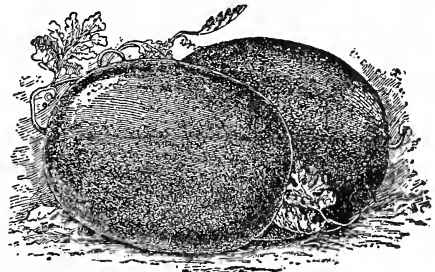
**Phinney's Early**—The earliest variety. Small, but very hardy. Bright red flesh.



*New Triumph.*

**New Triumph**—(Mammoth sort from Florida)—An enormous melon, reaching in good soil and under good cultivation a weight of one hundred pounds. It is a first class shipper. The skin is a rich, dark green, and the bright red flesh is surpassed by no other melon in fine sweet flavor.

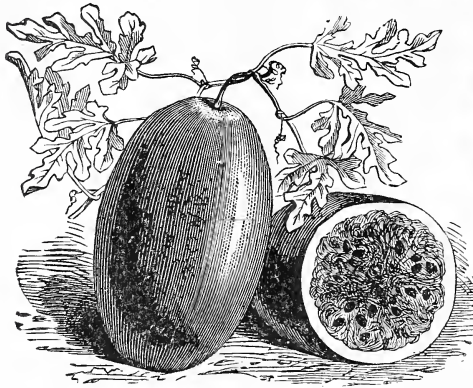
**Florida Favorite**—Oblong; striped; early. Sweet and fine flavored.



*Sweetheart.*

**Sweetheart**—They are easily distinguished by their beautiful mottled light green skin. The rind is very thin but tough and leathery, making it an excellent sort for shipping. Flesh bright red; very sweet, sugary; large size.

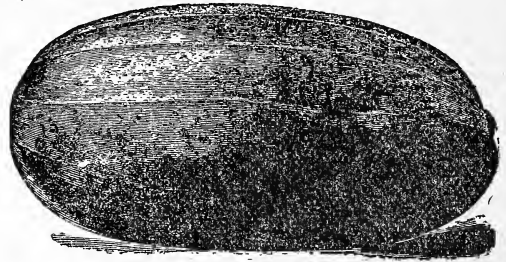
## WATER MELONS



*Ice Cream or Peerless.*

**Ice Cream**—Medium size; oblong shape; thin rind and bright red flesh; sweet and luscious. Excellent for home or market.

**Gypsy, or Georgia Rattlesnake**—A very large melon and a good shipper. The skin is striped light and dark green. The flesh is bright scarlet, deliciously sweet and sugary. The variety is very popular in the South for shipping.



*Kleckley's Sweets.*

**Kleckley's Sweets**—One of the finest melons for home use in cultivation. It is of medium size and oblong shape. The skin is a handsome dark green. The bright red flesh is exceedingly sweet and melting. The rind is so thin that there is practically no waste.

**Mountain Sweet**—An old standard. Flesh red and of good quality.

**Mclver's Wonderful Sugar**—It has proven to be one of the best flavored, sweetest melons ever introduced. The melons are of an oblong shape, uniformly large and of handsome appearance. Flesh of a light pink color.

## MUSTARD

(1 ounce to 100 ft. of drill)

**CULTURE**—Mustard should be sown on good rich soil, so as to cause a quick, tender growth. As soon as the ground can be worked, prepare the soil finely, and sow in rows about twelve inches apart. For succession, sow at any time during the spring.

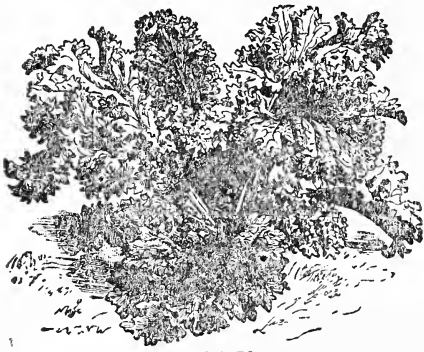
**White or English**—For salads or flavoring.

**Ostrich Plume**—An improved strain of Southern Giant Curled, but immensely superior to that sort, both in appearance and delicate flavor. The leaves are finely cut and densely curled.

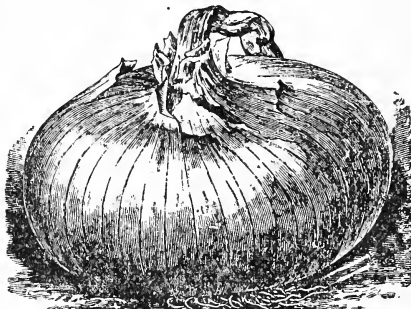
**Southern Giant Curled**—The true curled leaf sort. Very popular in the South for sowing in the fall for early spring salads or greens.

## ONIONS (1 oz. to 200 ft. of drill. 4 to 5 lbs. per acre.)

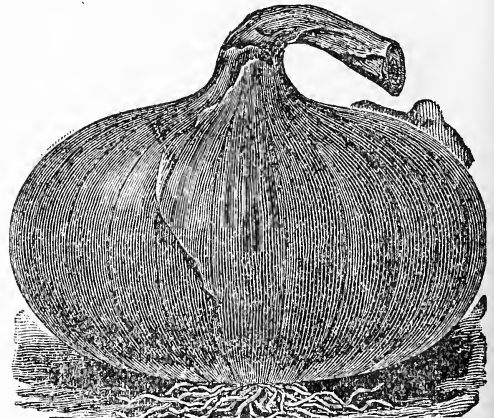
**CULTURE**—Any good soil will grow onions, but for the largest crops the soil must be heavily manured. Select a clean piece of ground, as free from weeds as possible. Very early in the spring plow or spade deeply and in straight rows one foot apart, covering one-fourth inch deep and press the soil about the seed with roller or back of spade. Hoe lightly as soon as up; keep free from weeds; when three inches high, thin out to two inches apart in the row.



*Ostrich Plume.*



*White Portugal or Silver Skin.*



*Large Red Withersfield.*



## ONIONS. Red Sorts.

- Southport Red Globe**—The *Globe* onions, because of their handsome shape, always bring a higher price on the market than the flat varieties. The *Red Globe* is of good size, a beautiful shining, dark red color and excellent flavor and keeping qualities. Those who grow onions for the market will find this a paying sort.
- Large Red Wethersfield**—This onion is still the leading red sort for main crop. It is grown more extensively in the West than any other variety. The bulbs are somewhat flat and under good cultivation will grow six inches in diameter. Enormously productive and a first class keeper.
- Extra Early Red Flat**—An extra early, medium sized, flat onion. It is of a dark red color. Excellent for early market.



## YELLOW SORTS

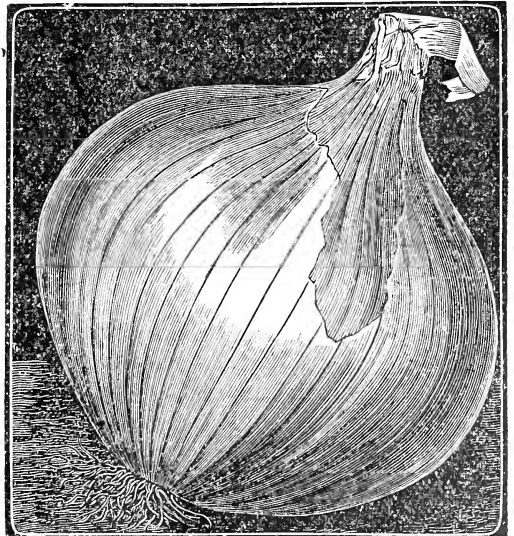
- Prizetaker**—The American Prizetaker grows uniform in size. It is of handsome globe shape. Skin a bright straw color. Of immense size, often measuring eighteen inches in circumference. It ripens up well and is remarkably mild and fine flavored; yields immense crops.
- Danver's Yellow Globe**—The standard yellow variety. Globe shape; color a light golden yellow. Flesh pure white and mild in flavor. A good yielder and keeper.

## BROWN SORT

- Australian Brown**—The color is a beautiful dark brown. Its greatest feature, however, is its wonderful keeping quality. Onions of this sort have been kept in perfect, sound condition for a year or over. Remarkably fine grained and mild flavored.

## WHITE SORTS

- Southport White Globe**—One of the most handsome onions grown. It is large, of fine globe shape, pure white color and mild flavor. An abundant yielder and excellent keeper.
- Earliest White Queen**—(Pickling.) A beautiful, white skinned, little onion. Very early and of mild flavor. Just the right size for pickling.
- White Portugal or Silver Skin**—An early, large, mild flavored onion; skin a beautiful silvery white; a good keeper.



*Danver's Yellow Globe,*



# OKRA OR GUMBO

(1 oz. to 100 ft. of drill.)

**CULTURE**—The seed should not be planted until the ground has become well warmed, at about corn planting time. It will always rot if the soil is cold and damp. In late spring plant seed about four inches apart in rows two feet apart. When the plants come up thin out to a foot apart in the row. The pods should be used when young and tender.

**Mammoth Green Pod**—A dwarf variety. The long, slender, deep green pods are produced in great abundance.

**Dwarf Green**—A fine new sort of dwarf bushy growth, much better suited to the family garden than the tall, straggling sorts. The pods are short and thick and of best quality, being tender and fine flavored when young. Exceedingly productive.

**White Velvet**—Of tall growth; pods long, smooth, and of velvety color.



*White Velvet*

tapering gradually to a point. Roots are clean white, straight, and free from small side roots. Very tender, sweet and fine flavored. An immense cropper and a perfect keeper.

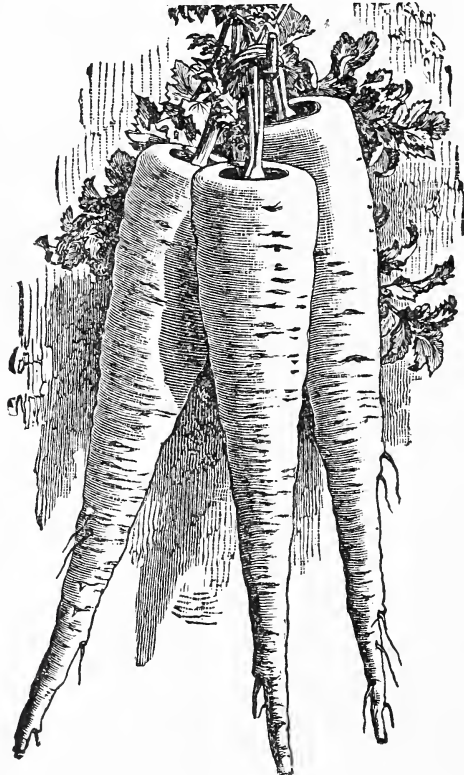
# PARSNIP

(1-2 oz. to 100 ft. of drill.)

**CULTURE**—Parsnip germinates slowly. Sow the seed as early in the spring as possible, in any deep, rich soil. Dig or plow the soil deeply and sow the seed thickly in shallow drills or rows, covering it lightly. When the plants are two or three inches high thin out to four inches apart. Parsnips may be left in the ground all winter, the quality is improved by freezing; or they may be dug in the fall and stored in the cellar.

**Long Smooth**—A heavy cropper; very tender and sweet.

**Hollow Crown**—The finest strain of parsnip in existence. A uniform, smooth root, with thick shoulder,



*Hollow Crown.*

# PARSLEY

(1-2 oz. to 100 ft of drill)

**CULTURE**—Parsley does best in good, rich, mellow soil. The seed germinates very slowly, often requiring four to five weeks before it comes up. Sow seed very early in spring, in rows one foot apart; sow thickly and shallow.

**Emerald**—Color intense dark green. Leaves densely curled and mossy. Makes a fine, large bush, very ornamental and attractive. Of rapid growth and the finest strain of parsley in cultivation.

**Dark Moss Curled**—A beautiful full sort; leaves very dark green and densely curled. Very productive and compact in growth.

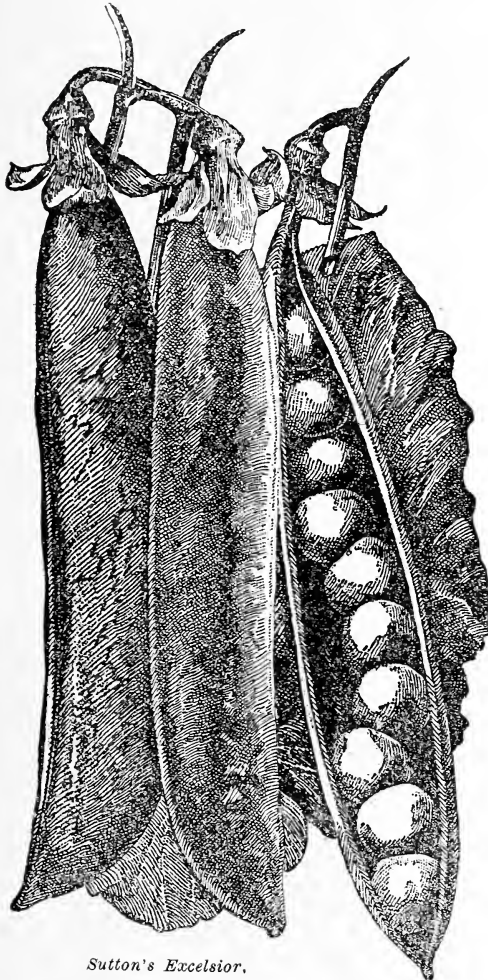


*Dark Moss Curled.*



# PEAS (1 qt. to 100 ft. of drill. 2-3 bu. per acre.)

**CULTURE**—The hardy, round-seeded sorts, such as *First and Best* and *Alaska* may be planted the previous autumn or very early in the spring, as soon as it is possible to prepare the ground. Plant in rows three feet apart, scattering the seed about two inches apart in the row and cover it two inches deep. The wrinkled sorts are more tender and should not be planted until the ground becomes warmer. *Nott's Excelsior*, *American Wonder* and *Premium Gem* are dwarf growing sorts requiring no support; they are early and can be planted closely and are recommended for the family garden. *Telephone*, *Stratagem* and *Bliss' Everbearing* are taller and later sorts, producing very broad pods and fine peas. *Large White Marrowfat* and *Champion of England* are larger sorts and grow about six feet high.



*Sutton's Excelsior.*

**Bliss' Everbearing**—"W"—A second early sort, continuing a long time in bearing. Vines vigorous and branching and grow about two feet high.

**Bliss' Abundance**—"W"—Vigorous in growth, producing pods in the greatest abundance—hence its name. Height twenty inches; peas of good quality.

**Melting Sugar**—"S"—(Edible Pod.) In this variety, which is the best of its class, the entire pod is cooked in the same way as string beans. The pods are of large size, flat, very tender and brittle, and fine flavored when cooked; the vines attain a height of four feet and are very productive.

**Champion of England**—"W"—An old and favorite sort with all those who are fond of a large, tender, luscious pea, reaching a height of four or five feet and is fairly productive.

## EXTRA EARLY SORTS

Seeds marked "W" are Wrinkled Peas. "S" denotes Smooth, Round-Seeded Sorts.

**First and Best**—"S"—A very popular extra early pea; height 2½ feet; seed round, smooth, cream colored.

**Alaska**—"S"—As early as the earliest; the finest extra early pea known; pods of a rich, dark green color. It grows 2½ feet high and matures all the crop at once, making it a valuable variety for the market gardener.

## EXTRA EARLY WRINKLED PEAS

**New Dwarf Pea**—"Sutton's Excelsior"—"W"—Its great merit lies in the fact that in this we have an early dwarf wrinkled pea in the front rank for earliness, with much larger and handsomer pods than any dwarf early wrinkled pea yet introduced. Pods long, broad, straight. Height twelve inches.

**Gradus**—"W"—As early as the extra earlies and immense pods and double the size of *First and Best*. The pods are well shaped and filled with large, luscious peas of the very finest quality; height three feet.

**Thomas Laxton**—"W"—Closely resembling *Gradus* in habit and rapidity of growth and earliness. The pod is not so large, being short and instead of being rounded at the point it is square and blunt. Seed large, wrinkled, cream color tinged with green; height three feet.

## EARLY DWARF SORTS

**Carter's Premium Gem**—"W"—A deservedly popular dwarf growing sort, growing about fourteen inches high. It is hardier and can be planted earlier than most wrinkled peas; very prolific. The pods are large and contain six to nine peas of first class quality.

**Tom Thumb**—"S"—An old sort; early and prolific; height ten inches.

**Nott's Excelsior**—"W"—The best dwarf variety for the home garden. Grows a foot high and is wonderfully productive. The peas are tender and of delicate flavor. An excellent sort, growing more in popular favor every year.

**American Wonder**—"W"—A desirable dwarf variety growing only nine inches high; very early. Peas are wrinkled, very sweet and high flavored.

## MEDIUM AND LATE SORTS

**Telephone**—"W"—Height 3½ feet; vines and leaves large and coarse. The extra large light green pods are produced in the greatest profusion and are filled with immense peas which are sweet, tender and of delicious flavor.

**Horsford's Market Garden**—"W"—This somewhat resembles in habit of growth *Premium Gem*, but it is one-third taller and ten days later. Pods are produced in pairs in great profusion. Seed green, wrinkled; height twenty inches.

**Improved Stratagem**—"W"—Of vigorous habit and a heavy cropper; height two feet; large seed, green, wrinkled. Popular with gardeners everywhere. The large, attractive pods, combined with the excellent quality of the peas, make it a very desirable and paying variety.

**Large White Marrowfat**—"S"—A good summer pea. Grows five feet high, is productive and of fair quality.

# PEPPER (1oz. will produce 1000 plants.)

**CULTURE**—Pepper seed requires heat for germination. The seed should be sown early in hot beds or small boxes in the window, or may be sown in the open ground about the middle of spring. When two inches high set in rich soil two feet apart in rows two and one-half feet apart. Hoe often. The yield can be greatly increased by trowing manure from the hen house into the soil about the plants when they are about six inches high.



*Ruby King.*

**Ruby King**—A mild flavored pepper of large size, from four to six inches long by three and one-half to four inches thick; the plant is sturdy, bushy habit, and each produces from six to twelve large, handsome fruits; when ripe they are of a beautiful, bright ruby red color and always remarkably mild and pleasant.

**Long Red Cayenne**—A long slender red pepper, very hot and pungent.

**Sweet Mountain**—A strong grower and very productive. The young peppers are of a bright green color, turning to a rich red when ripe. Very large, sweet and mild.

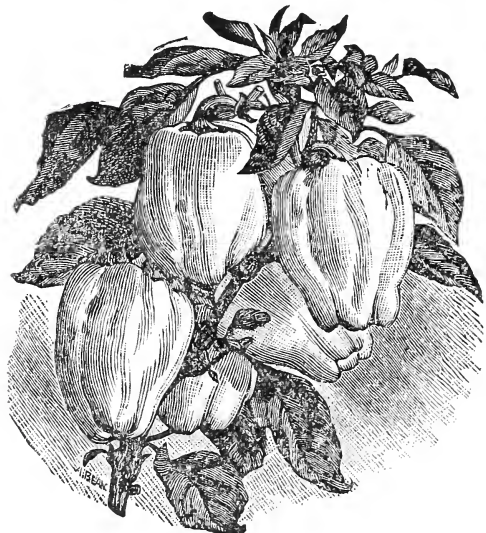
**Bell or Bull Nose**—A very large and mild glossy red variety.



*Long Red Cayenne*

## CHINESE GIANT

Monstrous New Pepper. Fully twice the size of Ruby King



*Golden Dawn.*

**Golden Dawn**—The plants do not grow large, but are rather dwarf and compact. They are very prolific, however, and as the plants can be set close together it is fully as productive as any. The fruit is of good size, thick at the shoulder and tapering to a blunt point. Color is a rich golden yellow, very attractive. The flesh is thick, sweet and mild flavored.



*Chinese Giant.*

This splendid new pepper has created quite a sensation among gardeners who have grown it for market. It is the earliest, largest and best of all the large red peppers grown—fully double size of the *Ruby King*, which has heretofore been the leading sort. Its enormous size, beautiful shining red color and mild flavor causes it to sell readily, and gardeners will find it the most profitable sort that can be handled.

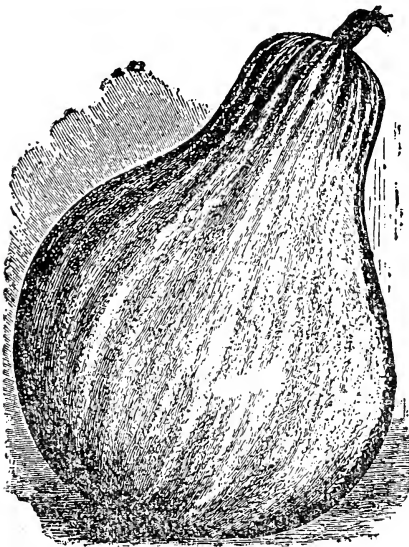


**PUMPKIN** (1-2 lb. will plant 100 hills.  
3 to 4 lbs. per acre)

**CULTURE**—The pumpkin does best on newly broken sod or prairie land, or on land formed by plowing under a crop of rye or wheat in the spring, but will do well on almost any soil. The seed is usually planted among corn in hills eight by eight feet. Plant any time during May. When the frost has killed the vines cut off the stems a few inches from the fruit and store in a dry place, using care not to bruise them in handling.



*A big crop of Connecticut Field Pumpkins. From a Photograph.*



*Tennessee Sweet Potato*

**Connecticut Field**—The common yellow variety. Very prolific.  
**Large Cheese**—A large, flat sort, productive and of good quality.

**Tennessee Sweet Potato**—Medium sized, pear shaped, striped white and green; thick flesh and of good flavor.

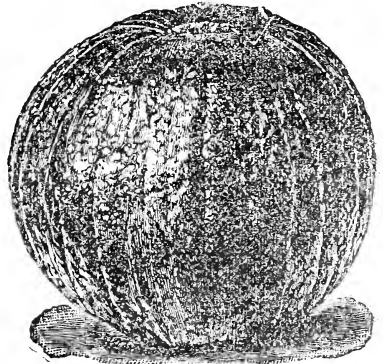
**Cushaw or Crookneck**—Light cream color; productive.

**Small Sugar**—Similar to *Winter Luxury*; very sweet and keeps well; quality excellent

**Winter Luxury**—A small, sweet golden yellow variety; a fine winter keeper and unequalled for cooking.

**King of the Mammoth**—This is a giant among pumpkins, often reaching a weight of over a hundred pounds. The skin is salmon colored, flesh bright yellow and fine grained and good quality.

**Quaker Pie**—Oval in shape, tapering to the stem end; flesh and skin of a creamy yellow color; fine for pies, being fine grained and rich flavored.

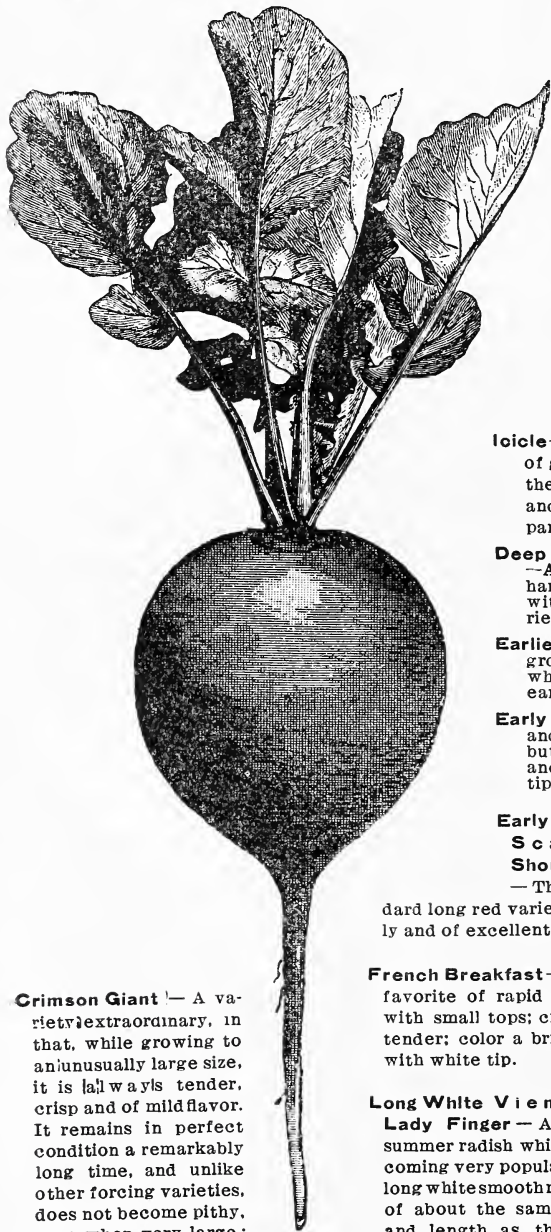


*Small Sugar*

# RADISH (1 oz. to 100 ft. of drill.)

**EXTRA EARLY SORTS**—Suitable for Forcing in Hot-Beds or Early Sowing Out of Doors

**CULTURE**—For early use the seed may be sown in hot-beds in light sandy soil. The first sowing out of doors should be made as early as the ground is fit to work. For a constant supply sow every ten days until the middle of summer. Seed may be sown broadcast or in rows. The tenderness of the radish depends on a quick, continuous growth. A rich sandy soil is best. For extra early use, sow the small round sorts, follow with the half-long and long varieties, and for summer use the later sorts. *White Strasburg* is best as it does not become tough and pithy so easily during the hot weather.



*Crimson Giant*

**Crimson Giant**—A variety extraordinary, in that, while growing to an unusually large size, it is always tender, crisp and of mild flavor. It remains in perfect condition a remarkably long time, and unlike other forcing varieties, does not become pithy, even when very large; color a beautiful crimson-carmine, flesh firm, crisp and tender.



*French Breakfast*

**Iceberg**—The earliest long sort. Although a long radish of good size, it becomes fit for use almost as early as the small round sorts. The roots are straight, smooth and pure white in color. The flesh is almost transparent and brittle as glass.

**Deep Scarlet White Tipped Forcing or Rosy Gem**—An excellent extra early or twenty-day radish of handsome globe shape. Its beautiful dark red color with white tip makes it one of the most salable varieties for early market.

**Earliest White Olive or Rocket**—A remarkably quick growing radish of handsome oval shape and of pure white color. Excellent for forcing in hot-beds or early sowing out of door.

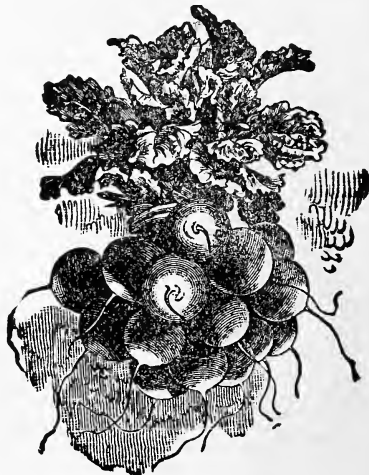
**Early Scarlet Turnip White Tipped**—This sort in shape and size closely resembles the *Early Scarlet Turnip*, but is a little earlier and of more attractive appearance. Color handsome bright scarlet, with white tips.

**Early Long Scarlet Short Top**

—The standard long red variety. Early and of excellent quality.

**French Breakfast**—An old favorite of rapid growth with small tops; crisp and tender; color a bright red with white tip.

**Long White Vienna or Lady Finger**—An early summer radish which is becoming very popular. The long white smooth roots are of about the same shape and length as the *Long Scarlet*, and always brittle and mild flavored. An excellent sort.



*Early Scarlet Turnip White Tip.*



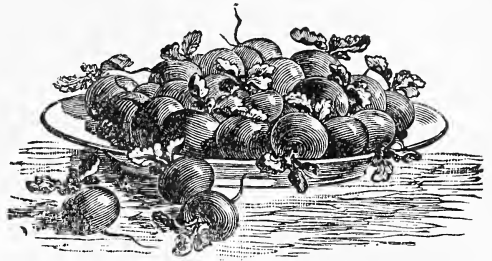
# RADISH

## EXTRA EARLY SORTS



*Early White Turnip Forcing*

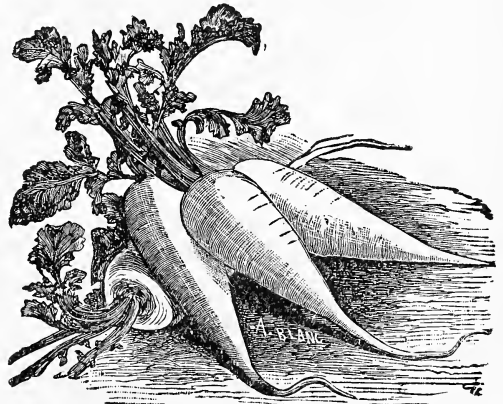
**Early White Turnip Forcing**—The earliest white radish in cultivation. Good sized radishes can be pulled in twenty days after sowing the seed. Of fine round shape, flesh and skin pure white.



**Early Scarlet Turnip**—The standard small round red. **Long Brightest Scarlet**—Undoubtedly the brightest and most attractive long radish grown. Is very early and quick growing. The color is a rich red, while the tips are pure white; flesh white and very tender.



*Long Brightest Scarlet.*



*White Strasburg.*

## LATER SORTS

**White Strasburg**—One of the best of all the summer radishes.

Of good quality at all stages of its growth, when fully grown the roots are about five inches long and very thick at the shoulder. It never becomes tough or pithy, even in the hottest weather.

**Early White Summer Turnip**—An exceedingly tender round white radish. It remains fit for use a long time. Especially valuable for summer sowing.

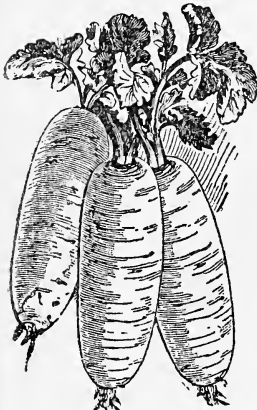
**Chartier**—A fine American variety; excellent for summer use. The roots are about an inch in diameter and six inches long. Color a bright red, shading to white tip; flesh remarkably crisp and mild.

## WINTER SORTS

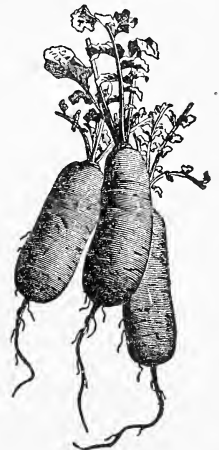
**Black Spanish**—A late and hardy variety of large size. Skin a very dark brown or black. Keeps well during the winter.

**Rose China Winter**—Of excellent quality; a good keeper. Skin a bright rose color; flesh very crisp and brittle.

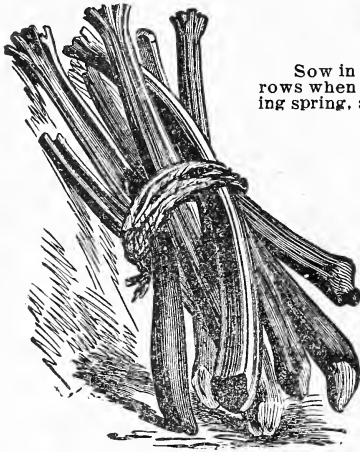
**Chinese White or Celestial**—Often grows fifteen inches long and five inches in diameter. The skin is pure white and the flesh is crisp, tender and mild.



*Chinese White or Celestial.*



*Rose China Winter*

*Myatt's Victoria*

## RHUBARB

(1 oz. will produce  
800 plants)

Sow in drills 1 foot apart, thinning out to about the same distance apart in the rows when a few inches high. Transplant into deep, rich soil in fall or the following spring, about three feet apart each way.

*Spinach. Bloomsdale.*

## SPINACH

(1 oz. of seed to 100 ft. of  
drill. 10 to 12 lbs. per acre)

**CULTURE**—A rich black soil is best for spinach; in this it will grow quickly, and is most tender and succulent. For main crop the seed is usually sown the previous fall during September and protected through the winter by a covering of leaves or straw, which should be raked off early in the spring. Beginning early in the spring, as soon as the ground can be worked, it may be sown at any time during the season. Rake the soil fine and sow broadcast, covering one-half inch deep.

**Victoria**—The foliage is heavy and of true *Savoy* appearance. The fact that it remains in condition longer than any other variety, makes it unequalled for spring planting.

**Monstrous Viroflay or Improved Thick Leaved**—A large, crimped, fleshy leaved variety.

**Long Standing**—Excellent for spring planting. The leaves are large, thick, fleshy and crumpled.

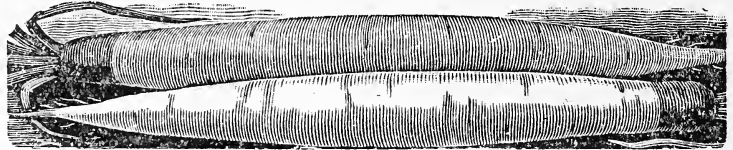
**Bloomsdale or Savoy Leaved**—The numerous large leaves are curled, wrinkled and blistered. The best for fall or early spring sowing, or for shipping to market.

## SALSIFY OR VEGETABLE OYSTER

(1 oz. to 50 ft. of drill.)

**CULTURE**—Salsify requires a light, rich, sandy soil. As soon as the ground can be prepared in the spring, sow the seed one and one-half inches deep in rows one and one-half feet apart. When the plants are a few feet high, thin out to four inches apart in the row. The roots are not injured by freezing, and may be left in the ground all winter; this improves the flavor. Or they may be lifted and stored in cellar.

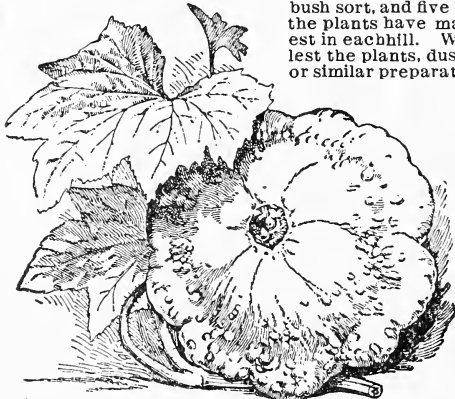
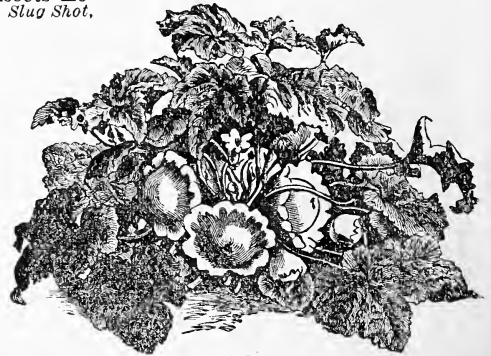
**Mammoth Sandwich Island**—The best variety.



## SQUASH

(1 oz. of seed for 25 hills.  
3 to 4 lbs. per acre)

**CULTURE**—The squash does best in good rich soil. When the ground has become well warmed—after corn planting time—plant six or eight seeds in hills three by three feet apart for the bush sort, and five by five feet apart for the long running winter sorts. When the plants have made three or four leaves, thin out all but the three strongest in each hill. When insects molest the plants, dust with *Slug Shot*, or similar preparation.

*Mammoth White Bush**Golden Custard*



# SQUASH

## SUMMER SORTS

**Mammoth White Bush**—An improved strain of the well known *White Bush* or *Patty Pan*, but twice as large. The color is a beautiful white; they ripen early and are wonderfully productive.

**Golden Custard or Mammoth Yellow Bush**—Similar to *Mammoth White Bush*, but of a beautiful golden yellow color.

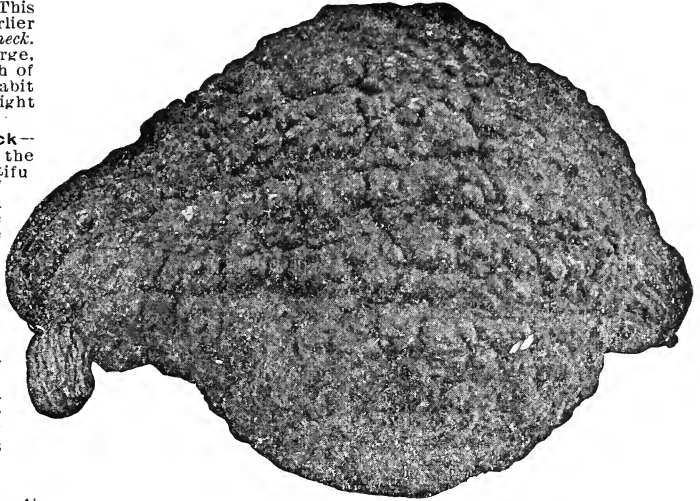
**Giant Summer Crookneck**—This new squash is not only earlier than the old *Summer Crookneck*, but grows nearly twice as large, sometimes reaching a length of two feet. It is of true bush habit and of fine quality; color a bright yellow.

**White Summer Crookneck**—Similar in size and shape to the old *Crookneck*, but of a beautiful ivory white color. It is of fine quality, productive, and its attractive appearance makes it a very desirable sort to grow for market.

## FALL AND WINTER SORTS

**Hubbard**—The old winter variety. Still a favorite.

**The Delicious**—A greenish-bronze, medium sized fall or winter sort of particularly fine quality. The shell is



*Chicago Warty Hubbard.*

hard, but very thin. The color of the flesh is a deep orange yellow. It is remarkably fine grained, sweet and well flavored.

**Chicago Warty Hubbard**—The ideal Hubbard for home or winter market. Very large and uniform in size. Has a rich dark green skin, which is rough and heavily warted.

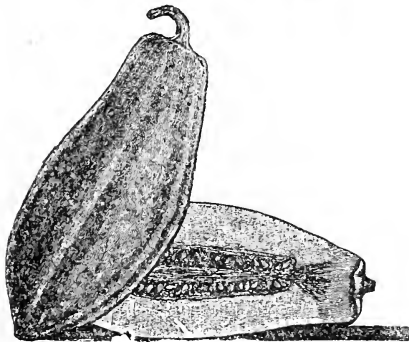
**New Red or Golden Hubbard**—A perfect type of the *Green Hubbard* except in color, which is a bright, deep orange yellow. It is very attractive and a ready seller.

**Mammoth Chili**—The giant among squashes. Shape round, flattened at the ends. Color orange yellow. Flesh very thick and good quality. good winter keeper.

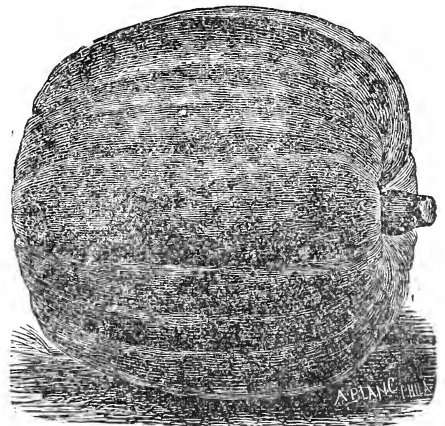
**Fordhook**—Can be used at all stages of growth; keeping quality unsurpassed.



*White Summer Crookneck*



*Fordhook.*



*Mammoth Chili.*

# TOMATO

(1 oz. of seed will produce 3000 plants)

**CULTURE**—The best crops are grown in warm light soil. For extra early fruit the seed should be sown in a hot-bed about the first week in March. Sow seed in rows four inches apart and cover one-half inch deep. When the weather becomes warm out of doors, gradually harden them by exposing them to the air. When all danger of frost is past set out in the open and water until the plants are established. For later use the seed may be sown out of doors. An easy method is to plant five or six seeds in hills three feet apart, and when a few inches high pull out all but the strongest plant; when large enough the plants should be trained to stakes or trellis.

## "SPARK'S EARLIANA"

Remarkably early. Wonderfully prolific. Of late years big profits have been made in growing extra early tomatoes, and many new sorts have been introduced with extravagant praise and claim for earliness. Of these new sorts we think Spark's Earliana easily has the lead, both in earliness and productiveness. It is a wonderful yielder—remarkable not only for its earliness, but also for its large size, fine shape and beautiful red color.

**Magnus**—It is thicker, heavier and more solid than Acme or Beauty making it easily the most handsome sort in cultivation.

**Dwarf Champion**—Of dwarf, upright and compact habit forming a small tree which requires no staking or other support. The fruit is uniform in shape; color a purplish red; very early and wonderfully productive.

**Livingston's Beauty**—The smoothest and best of the large purple sorts. Very productive and used largely for canning. Fine quality.

**Improved Trophy**—The improved strain is fully equal to any of the modern sorts in quality and productiveness and is used by some of the largest canners to the exclusion of all other sorts. The fruits are very large, smooth, solid and heavy; color bright red.

**The Stone**—This variety has attained great favor with market gardeners and canners everywhere. Its solidity and bearing qualities are remarkable; its color is a beautiful red; in shape it is perfectly smooth and thick from stem to blossom end, making it very handsome and salable.

**New Dwarf Stone**—A new dwarf or tree tomato similar in growth to *Dwarf Champion*. It is of a stiff, straight upright habit, requiring no stakes or other support, even when loaded with fruit. Has healthy dark green foliage, peculiarly curled and crumpled, much like *Dwarf Champion*. It excels that variety, however, both in productiveness and in size and beauty of the fruit. The color is a bright scarlet. They are very solid and heavy, and of an exceptionally fine sweet taste.

**Chalk's Early Jewel**—The largest, smoothest and fine flavored, extra early bright red tomato. About ten days later than *Spark's Earliana*. It is even a heavier cropper, with tomatoes of larger size and sweeter flavor, produced throughout the season.

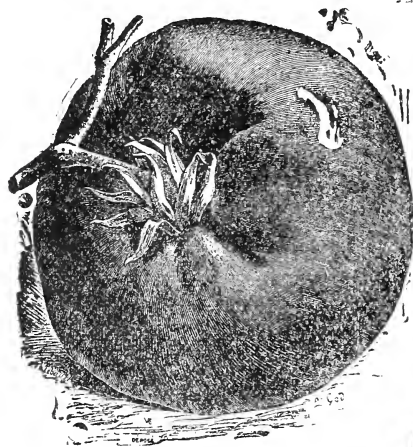
**Pear Shaped Red and Yellow**—Small fruits, growing in clusters. Exceedingly productive. Much used for preserving. Each, red or yellow.

**Acme**—Hardy and productive; the first fruits ripen very early, and it continues in bearing until cut down by frost. Fruit round, smooth and of good size; solid and of fine flavor.

**Ponderosa**—Splendid in every way, of very large size, often



*Spark's Earliana.*

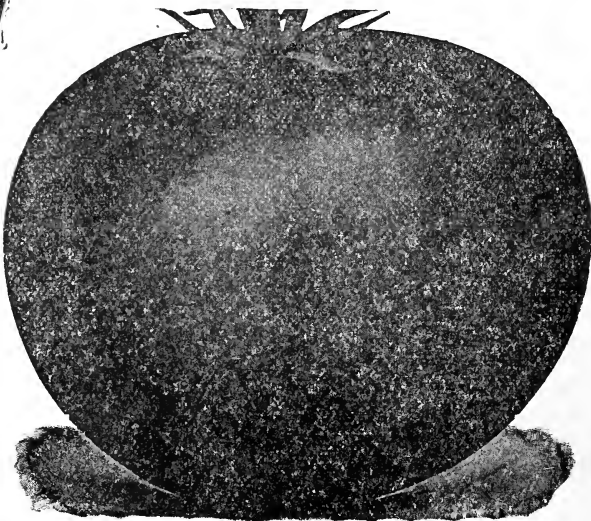


*Improved Trophy.*

reaching a weight of three pounds each; perfect in form and color, as solid as beefsteak and of finest quality and flavor.

**Matchless**—A standard large fruited main crop sort, of bright red color. The fruits are always of a uniform shape, heavy and meaty; very handsome in appearance and of superior flavor.

**Livingston's Coreless**—The most perfect shaped variety; almost round. It is immensely productive; producing clusters of from four to seven fruits, all of marketable size; always free from green core; ripens all over and through and right up under the stem all at once. A grand slicing variety on account of the bright red, solid, meaty and delicious flesh.

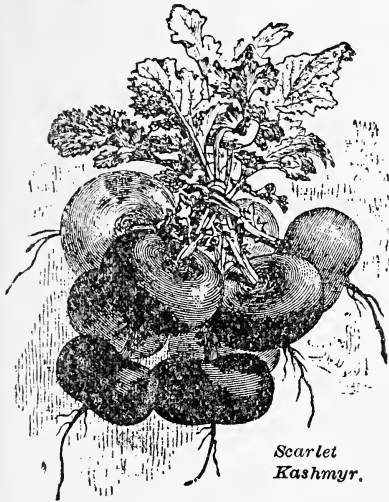


*Livingston's Beauty.*



# TURNIP (1 oz. to 200 ft. of drill. 2 lbs. per acre.)

**CULTURE**—Turnip is one of the first seeds to be sown in the spring. As soon as the ground can be worked, spade or plow deeply and prepare the surface finely, raking off all clods and stones. Sow the seeds at once in the freshly dug soil; sow very thinly and rake the seed into the soil one-half inch deep; when up thin out to six inches apart. Turnips become tough and strong during the hot summer weather, and the sowings should be so regulated that they will become fit for use either in early summer or late autumn. For winter use, sow from the middle of July to the end of August.



*Scarlet  
Kashmyr.*



*White  
Egg.*



*Purple Top Strap Leaved.*

**Extra Early Purple Top Milan**—Few and short leaves, mild flavor.

**Extra Early White Milan**—Identical with the above, except pure white.

**White Egg**—Perfectly smooth, grows quickly, tender and mild, unequalled table sort.

**Early White Flat Dutch or Spring** Good size, fine quality.

**Purple Top White Globe**—Large size, perfect globe shape.

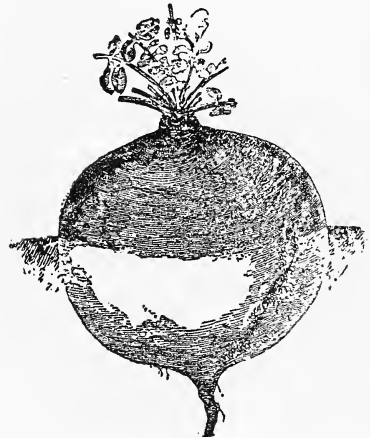
**Purple Top Strap Leaved**—The standard main crop sort; heavy yielder.

**Golden Ball or Orange Jelly** — Medium size, yellow skin and flesh, mild and fine flavor.

**Scarlet Kashmyr**—Distinct sort, color bright red, attractive, early.

**Long White Cow Horn**—Especially recommended for feeding; roots very long, heavy cropper.

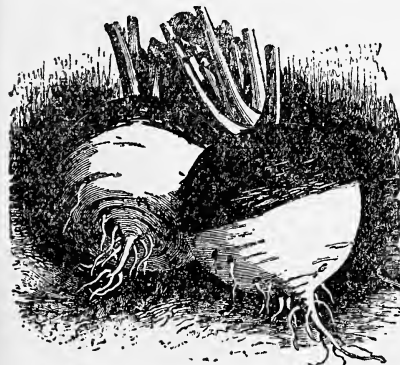
**Amber Globe**—The best yellow field sort, heavy cropper, large size and keeps well.



*Rutabaga—Long Island*

## RUTABAGA

**Long Island Purple Top**—An American yellow fleshed sort, large size, best keeper.



*Turnip—Purple Top White Globe*



*Turnip—Early White Flat Dutch*

# FLOWER SEEDS

As our catalogue space is limited we can not give a detailed description of the sorts listed. The varieties we handle are well known, popular sorts, selected from the finest European grown stocks. If your seed dealer does not carry our flower seeds in stock, he will order for you.

## Alyssum, Sweet

**Tom Thumb**—Height six inches.

**Little Gem**—A fine dwarf sort.

## Aquilegia (Columbine)

**Double**—Finest mixed.

**Single**—Finest mixed.

## Asters

**Paeony Flowered Perfection**—Incurved variety.

**Victoria**—Enormous flowers, very double.

**Comet**—Large, loose shaggy blossoms.

**Crown Asters**—A flat petaled variety.

**Improved Branching**—Large flowers; excellent for cutting.



*Cockscomb—Empress*

## Ageratum

**Dwarf Imperial Blue**—Blooms profusely.

## Balsams (Lady's Slipper)

**Improved Camelia, Flowered, White.**

**Double. Mixed**—All colors and shades.

## Calendula (Pot Marigold)

**Double Mixed**—Flowers very large and double.

## Calliopsis

**Grandiflora**—Showy and beautiful.

## Canterbury Bells Mixed

**Giant Cup and Saucer**—A fine variety.

## Canary Bird Flower

**Climber**, with charming canary-colored blossoms.

## Candytuft

**Hyacinth**—Flowered, pure white.

**Mixed Colors.**

## Canna

**Cozy's Mixed**—A select mixture.

## Carnations

**Chabaud's Earliest Perpetuals**—Large, double sweet scented.

## Centaurea Cyannis or Corn Flower

**Blue**; a favorite every where, fine for cut flowers.

## Celosia or Cockscomb

**Empress**—Immense dark red combs.

**Feathered Cockscomb**—Color brilliant crimson.

**Dwarf Mixed.**

## Cobea Scandens

**Climber**, bell-shaped purple flowers.

## Cosmos

**Dwarf Early Flowering Dawn**—A beautiful white sort.

**Giant Flowered Mixed.**

## Cypress Vine

**Mixed Colors.**

## Dahlias

**Large Flowering Single**—Mixed colors.

## Dianthus or Pinks



*China or Indian Pink*

**Double**—Annual. Mixed.

**China or Indian Pinks**—Fine double.

**Double Imperial**—Variegated colors.

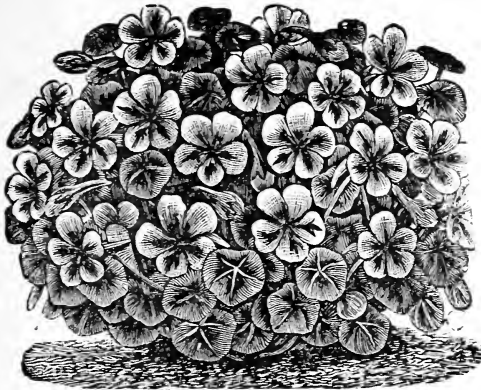
**Single Heddwigi**—Large, single, white.

## Escholtiza—(California Poppy)

**Mixed Colors.**



# FLOWER SEEDS



*Nasturtium—Dwarf Mixed*

## Fox Glove—(Digitalis)

Highly ornamental, large, cup-shaped flower.

## Four O'Clock. Mixed Colors.

## Double Daisy—(Dwarf)

Giant Mixed—Colors, red, pink and white.

## Forget-Me-Not

Bright blue star-shaped flowers.

## Globe Amaranth

Everlasting flower, also called Bachelor's Button.

## Gourds. Ornamental; mixed sorts.

## Heliotrope. Lemoine's Giant—Mixed colors.

## Hibiscus

*Africanus*—A new Japanese variety of rare beauty; plants reach a height of two feet from seed sown early in the spring, and bloom profusely from August until frost. The large saucer-shaped flowers are of a creamy white color.

## Hollyhock. Chaters—Double Mixed.

## Japanese Variegated Hop

Mottled with silvery white.

## Larkspur

Giant Hyacinth—Flowered—Mixed colors.

## Lobelia. Crystal Palace—The finest blue.

## Marigold

*African*—Large yellow and orange flowers.

*French*—Dwarf habit; flowers large and double.

## Morning Glories

*New Japanese*—Handsome new sort.

*Tall Climbing*—Mixed.

*Dwarf or Bedding Morning Glory*—Height one foot.

## Nasturtiums

*Tall Mixed*—All colors and shades.

*Dwarf Mixed*—All colors and shades.

## Moon Vine. Night blooming climber.

## Momordica (Balsam Apple)

A good climber with curious ornamental fruit.

## Mesembryanthemum Tri-Color

Dwarf trailing plants of great beauty.

## Mignonette

*Paris Market*—Giant spikes of fragrant flowers

*Grandiflora*—The common sort.

## Pansies

*Fine Mixed*—All shades and colors.

*Giant Mixed—Superb Strain*—Largest flowers; of beautiful colors. Mixed.

*Black Prince*—Rich, velvety black.

*Lord Beaconsfield*—A bright purple.

*Mahogany*—Peculiar brown red.

*Light Blue*—Lovely, nearly sky blue.

*Yellow Gem*—Beautiful golden yellow.

*Snow Flake*—Pure white.

*Madame Perret*—Beautiful wine shades.

## Poppies

*Shirley*—Single or semi-double, of rich and varied colors.

*Tulip, Flowered*—A magnificent single flower.

*Peony Flowered Double Mixed*.

## Ricinus Zanzibarensis

*Giant Castor Bean*—A giant ornamental sort.

## Salvia

*Free Flowering Scarlet*—Intensely scarlet flowers bloom until frost.

## Stocks

*Large Flowering Double Ten-Weeks-Stock*.

## Sweet William. All Colors, Mixed.

## Violet. The Czar—Sweet scented.

## Verbenas

*New Mammoth*—Mixed colors.

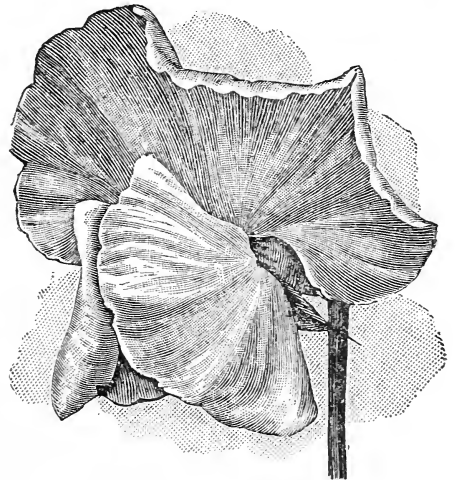
*Defiance*—Intense bright scarlet.

## Vinca or Periwinkle

*Mixed*—Large single flowers and glossy foliage.

## Zinnia

*Tom Thumb or Double Miniature*—The popular dwarf sort.



*Sweet Pea—Primrose Spencer*

## Sweet Peas

*Best Large Flowering Mixed*—Prepared from a carefully studied and well arranged formula and contains over sixty of the new and very best varieties.

*Named Varieties*—In separate color.

# SELECTED SEED CORN

## Carefully Sorted, Perfectly Cured and Tested for Growth

All our Corn is grown especially for Seed purpose from pure, high-bred stocks and in isolated fields to prevent mixing. Every ear is carefully inspected and the tips and butts are removed before shelling. Our Seed Corn warehouse is equipped with improved machinery for putting the stock in the finest possible condition and at a minimum expense, so that we can offer it at moderate prices.

**Golden Beauty—120 Days**—For general planting in this section we know of no corn that will give better satisfaction than the big, handsome Golden Beauty. It is the largest grained and finest corn in appearance we have ever seen.

**Ninety Day Yellow—90 Days**—A thoroughbred yellow corn selected through many years not only for early maturity but for high-yielding qualities as well. The yield per acre has been steadily increased until it is not unusual for it to produce 75 to 80 bushels per acre, under favorable circumstances. It is specially recommended for planting in districts where the seasons are short or for late planting in wet seasons.

**Reid's Yellow Dent—110 Days**—The most popular yellow corn throughout the corn belt. It is, perhaps, more widely grown than any other variety. A thoroughbred of the highest type; always a prize winner at the fairs and other corn shows. A remarkably uniform sort. The ears are 10 to 12 inches long, of perfect shape with well-filled butts and tips.

**Improved Leaming—100 Days**—Of a rich brownish yellow color, a deep and somewhat rough kernel. Excellent yielder, ears average 10 inches long and weigh three-fourths to one pound each.

**Improved Calico—110 to 115 Days**—An improved strain of the old *Calico* or *Speckled Corn*, still a favorite, large main crop sort with many farmers and feeders. The Improved Calico produces a large ear and often two good ears to the stalk, the ears running from 10 to 12 inches in length, and having from twelve to fourteen rows of large deep grains.

**Ninety Day Red or Bloody Butcher—90 Days**—Very early, hardy and prolific variety especially valuable for early feeding and late planting. It may be planted end of June and still matures ahead of frost.

**Blue and White Squaw**—Hard flinty grains; slim ears speckled blue and white. An extremely early and hardy sort. Withstands drouth. Recommended for Western Kansas and Oklahoma or as a sort for early feed.

**90 Day White**—Originated with the Wisconsin Agricultural College and widely distributed over the Northwest. It is the largest extra early white corn grown; has deep kernels, Heavy yielder. Ripens perfectly in 90 days.

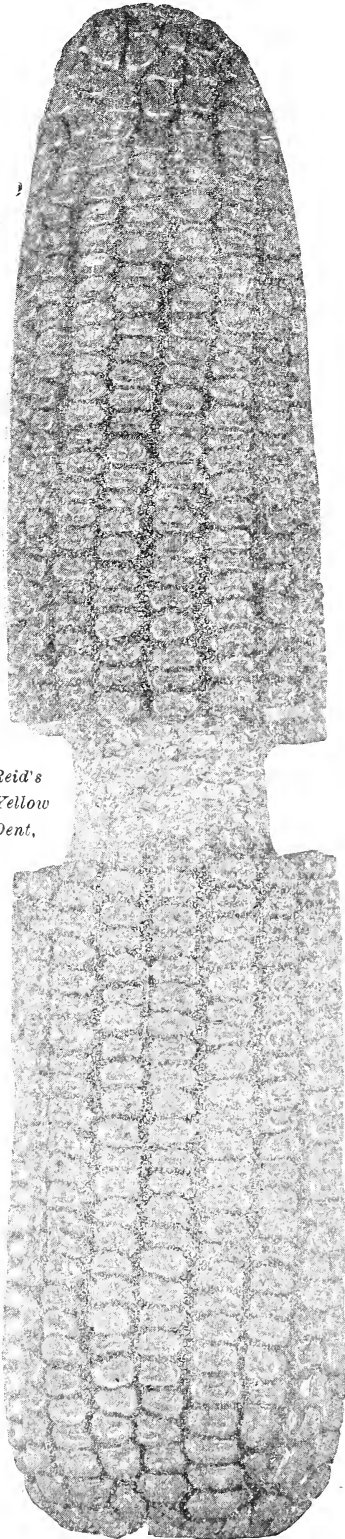
**St. Charles White**—Main crop. A pure white corn with red cob. Large ears; a good yielder. Especially recommended as an ensilage corn.

**Extra Early Adams—80 Days**—The earliest white corn in cultivation. The ears average about eight inches in length, with ten to twelve rows of short, broad grains. It is a fair yielder, but its greatest value lies in its extreme earliness.

**Iowa Silver Mine—110 Days**—The ears are long and uniform, often ten to twelve inches in length, with usually eighteen rows of deep, pure white grain. The cob is small and well filled out at the end. It is a remarkably heavy cropper.

**Boone County White—120 Days**—A pure bred white corn of very large size and high fattening and milling qualities. Tips and butts that are exceptionally well filled out. A white cob of only medium size, which, together with its depth of grain, gives it a remarkably high shelling percentage. Kernels of ideal shape, creamy white color, moderately rough, with large germ. Boone County White represents the latest improvements developed by intelligent and scientific corn breeding.

Reid's  
Yellow  
Dent.





# Our STANDARD BRAND Grass and Clover Seeds

ARE SPECIALLY SELECTED FOR HIGH  
PURITY AND STRONG GROWTH.

**H**ANDLING AND CLEANING, as we do, great quantities of Grass and Clover Seeds annually, we have excellent opportunities for selecting the finest and purest grades. All seeds offered under our trade mark are carefully tested for purity and germination, and are quite free from dangerous weeds. BUYERS MAY RELY UPON THESE FACTS WITH ABSOLUTE CERTAINTY.

## Awnless or Hungarian Brome Grass

Stands excessive drought or extreme cold without injury. The grass that has made good in the dry sections of the West.

This extensively advertised grass was introduced from Russia. It is a vigorous, hardy perennial, with strong, creeping root stalks; smooth, upright leafy stems, one to four inches high and loose, open 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.

## Meadow Fescue or English Blue Grass (*Festuca pratensis*)

The name *English Blue Grass* commonly applied to this grass is sometimes confusing, as there is little similarity between it and the common Kentucky Blue Grass. *Meadow Fescue* grows much taller and is not injured by wet weather; is easy to get a stand and will furnish a large amount of pasture and hay; neither does it seem to be injured by close cropping or tramping.



Red Clover.

## Timothy

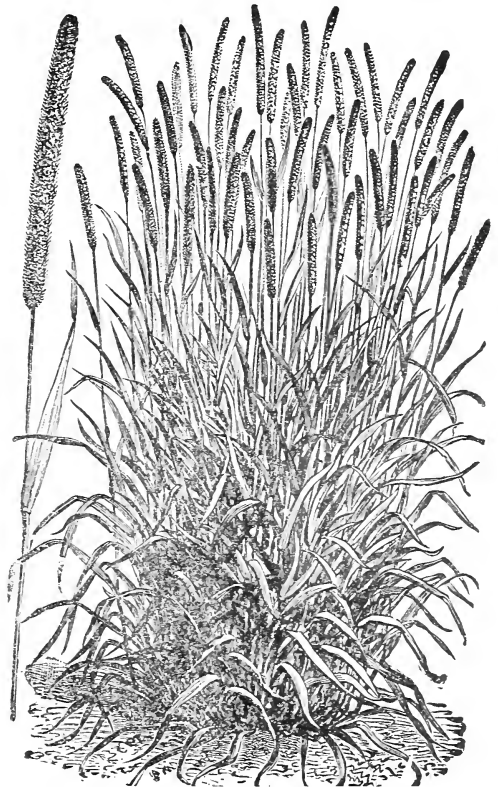
The best known grass in the United States and makes the standard hay of commerce. It succeeds best on rich, moist soil; satisfactory crops cannot be grown on high, dry, sandy soil.

## Red Top or Herds Grass

Grows well on all soils, whether sandy, thin dry lands or rich heavy or wet soils; it is one of the most satisfactory grasses that can be grown; a fine pasture grass and also well suited for meadows.

## Orchard Grass

One of the best grasses for pasture or meadow. It is a hardy, vigorous grower, and succeeds in the shade as well as in the sunshine. Especially valuable for sowing in orchard or woodland. It grows well on all soils except on stiff, heavy clay or wet land.



Timothy.

# GRASSES AND FIELD SEEDS

## Kentucky Blue Grass

The most widely known and best of all pasture grasses. It starts early in the spring and furnishes an immense amount of grazing throughout the season. The ideal grass to produce a nice velvety lawn.

## Bermuda Grass

A southern grass of great value for pasture, hay or lawn. It succeeds on all soils, throwing out long creeping runners which take a root at every joint, forming a tough thick sod, binding the loosest soils or land damaged by washing.

## Tall Meadow Oat Grass

This grass is increasing in favor wherever grown. It is without doubt one of our most valuable grasses, either for hay or pasture. It makes more grazing than Orchard Grass and yields about twice as much as Timothy. It may be cut twice in a season.



*Alfalfa*

## English or Perennial Rye Grass

A low growing grass of little value for meadows but very desirable for pastures or lawns. Like Kentucky Blue Grass, it forms a dense, even sod and grows so quickly that by its use a fine lawn may be had in six weeks from sowing.

## Italian or Annual Rye Grass

A most valuable grass for all sections. Sown in the fall from August to October it comes up very quickly, forming a thick, even growth and provides fine grazing during the winter and spring.

## Johnson Grass

A perennial grass resembling sorghum or corn in its growth. Withstands the winters as far north as Oklahoma and Southern Kansas. It grows about 5 feet high and will succeed on any soil that will grow corn. It yields an immense quantity of forage which when properly cured is relished by all kinds of stock.

## Alfalfa

The most valuable forage plant in cultivation, and has always proven highly profitable wherever grown. We handle annually many cars of high-grade Alfalfa seed. The seed we offer is especially selected for purity and germinating qualities.

## CLOVERS

**Alsike or Swedish Clover**—A very hardy and vigorous sort which does well on all soils, but particularly on those inclined to be wet and sandy.

**Mammoth Clover**—Grows four to six feet high. The variety best adapted for plowing under as green manure on account of the enormous mass of tops and roots which it produces.

**Red Clover**—The most important of all forage plants. Where Red Clover can be successfully grown it takes the lead over all other forage crops.



*White Clover*

**White Clover**—A dwarf, low growing sort of great value for pasture; succeeds on all soils and under all conditions.

## WE ARE HEADQUARTERS FOR THE FOLLOWING FIELD SEEDS:

DWARF ESSEX RAPE

CANADA FIELD PEAS

SOY BEANS or SOJA BEANS

SOUTHERN COW PEAS

New Era  
Whip-Poor-Will

FLAX

KAFFIR CORN

Red Kaffir Corn  
White Kaffir Corn

MILLET

True Round Seeded German Millet  
Common Millet  
Siberian or Russian Millet.  
Hungarian Millet  
Hog or Broom Corn Millet  
Japanese Barnyard Millet  
Pearl or Cat Tail Millet

SORGHUM or SUGAR CANE

Early Amber  
Early Orange  
Sumac or Red Top Cane

BROOM CORN

Improved Evergreen  
California Golden  
Oklahoma Dwarf

SUNFLOWER

Mammoth Russian

MILO MAIZE

FETERITA

JERUSALEM CORN

HAIRY or WINTER VETCH  
RUSSIAN SPELTZ or EMMER  
JAPANESE BUCKWHEAT  
SOUDAN GRASS



# REFERENCE TABLES

Legal and customary weights per bushel and quantities usually sown per acre.

	Quantity Per Acre	Lbs. Per Bu.		Quantity Per Acre	Lbs. Per Bu.
Alfalfa	15 to 20 lbs.	60	Millet—German and Common	½ to 1 bu.	50
Aarley	2½ bu.	48	Millet—Siberian	¾ to ½ bu.	50
Buckwheat	30 to 60 lbs.	50	Millet—Japanese Barnyard	8 to 12 lbs.	30
Bluegrass—Kentucky	2 to 3 bu.	14	Millet—Pearl or Cat-tail	10 to 12 lbs.	56
Bluegrass—English	1 to 1½ bu.	24	Mustard	10 to 12 lbs.	56
Beans—Garden	1 bu.	60	Milo Maize—In Drills	8 to 12 lbs.	56
Beans—Soja	½ to 1 bu.	60	Onions	2 to 3 bu.	32
Beans—Castor	4 to 5 lbs.	48	Onion Sets—Bottom	7 to 8 bu.	32
Beans—Lima	40 to 60 lbs.	56	Onion Sets—Top	5 to 6 bu.	32
Beans—Navy	½ bu.	60	Orchard Grass	2 to 3 bu.	14
Bermuda Grass	5 lbs.	30	Osage Orange	—	33
Bromus Inermis	15 to 20 lbs.	14	Peas—Field, Broadcast	2 to 3 bu.	60
Broom Corn	8 to 12 lbs.	46	Peas—Garden, Smooth Seeded	3 bu.	60
Clover—White	8 to 5 lbs.	60	Peas—Garden, Wrinkled Seeded	3 bu.	56
Clover—Red	8 to 12 lbs.	60	Peanuts	1 peck	22
Clover—Alsike	8 to 10 lbs.	60	Potatoes—White or Irish	8 to 12 bu.	60
Clover—Crimson	10 to 15 lbs.	60	Potatoes—Sweet	10,000 to 15,000 plants	50
Clover—Mammoth	8 to 12 lbs.	60	Red Top—Fancy solid seed	10 to 12 lbs.	14
Cow Peas	¾ to 1 bu.	60	—“Chaff”	30 to 40 lbs.	14
Corn—On Ear	—	70	Rape—Dwarf Essex, Broadcast	5 lbs.	50
Corn—Shelled	½ bu.	56	Rye	1½ to 2 bu.	56
Corn—Pop.	6 to 8 lbs.	—	Ryegrass—English or Perennial	30 to 40 lbs.	24
Cane or Sorghum	Drills 1 to 12 lbs.	50	Ryegrass—Italian	30 to 40 lbs.	24
	Broadcast 1 to 2 bu.	50	Rice—Rough	—	45
Cotton Seed	—	30	Sorghum—In drills	8 to 12 lbs.	56
Flax	1 to 1½ bu.	56	—Broadcast	1 to 2 bu.	56
Fescue—Meadow	1 to 1½ bu.	24	Speltz	2½ bu.	40
Hemp	¾ to 1 bu.	44	Sweet Corn	6 qts. meas.	—
Hungarian Millet	¾ to 1 bu.	48	Sunflower—Russian	8 lbs.	24
Janjara Grass	1 bu.	25	Timothy	12 to 20 lbs.	45
Jerusalem Corn—In Drills	8 to 12 lbs.	56	Tall Meadow Oat Grass	20 to 30 lbs.	14
Kaffir Corn—In Drills	8 to 12 lbs.	56	Vetches or Tares	2 bu.	60
—“ —Broadcast	1 to 2 bu.	56	Wheat	1½ to 2 bu.	60
Lawn Grass	1 lb. to 200 sq. ft.	—			

Quantity of seed required to produce a given number of plants, giving length of rows and number of hills.

	Quantity Per Acre		Quantity Per Acre
Asparagus, 1 oz. to 500 plants	—	Melon, Water, 1 oz. to 30 hills	4 to 5 lbs.
Beans, Dwarf, 1 qt. to 100 feet of row	1 bu.	Mustard, 1 oz. to 100 ft. of row	8 lbs.
Beans, Pole, 1 pt. to 100 hills	½ bu.	Okra, 1 oz. to 100 ft. of row	4 to 5 lbs.
Beets, Garden, 1 oz. to 50 ft. of row	7 to 8 lbs.	Onion Seed, ½ oz. to 100 ft. of row	70 to 80 lbs.
Beets, Mangel or Stock, 1 oz. to 100 ft. of row	5 to 6 lbs.	Onion Sets, bottom, 1 qt. to 30 ft. of row	7 to 8 bu.
Cabbage, 1 oz. to 4000 plants	—	Onion Sets, top, 1 qt. to 40 ft. of row	5 to 6 bu.
Carrot, 1 oz. to 100 feet of row	3 to 4 lbs.	Parsnips, ½ oz. to 100 ft. of row	3 to 4 lbs.
Cauliflower, 1 oz. to 3000 to 4000 plants	—	Parsley, ½ oz. to 100 ft. of row	3 to 4 lbs.
Celery, 1 oz. to 6000 to 5000 plants	—	Peas, garden, 1 qt. to 100 ft. of row	3 bu.
Collards, 1 oz. to 5000 plants	—	Peas, field, broadcast	3 bu.
Corn, Sweet, 1 pt. to 100 hills	8 to 9 qts.	Pepper, 1 oz. to 1000 plants	—
Cucumber, 1 oz. to 50 hills	2 to 3 lbs.	Pumpkin, ½ lb. to 100 hills	3 to 4 lbs.
Egg Plant, 1 oz. to 1500 plants	—	Radish, 1 oz. to 100 ft. of row	10 to 12 lbs.
Endive, ½ oz. to 100 ft. of row	4½ lbs.	Salsify, 1 oz. to 50 ft. of row	—
Horse Radish Roots	10,000 to 15,000 plants	Spinach, 1 oz. to 50 ft. of row	10 to 12 lbs.
Kale, 1 oz. to 4000 plants	—	Squash, 1 oz. to 35 hills	3 to 4 lbs.
Kohl Rabi, 1 oz. to 3000 plants	—	Tomato, 1 oz. to 3000 plants	—
Leek, ½ oz. to 100 ft. of drill	4 lbs.	Tobacco, 1 oz. to 4500 plants	—
Lettuce, 1 oz. to 2000 plants	4 lbs.	Turnip, 1 oz. to 200 ft. of row	2 lbs.
Melon, Mask, 1 oz. to 50 hills	2 to 3 lbs.		

Number of plants to the acre at given distances,

Dis. apart	No. plants	Dis. apart	No. plants
12x 1 Inches	522,720	36x36 Inches	4,840
12x 3	174,240	42x12	12,446
12x12	49,560	42x24	6,223
16x 1	392,040	42x36	4,148
18x 1	348,480	48x12	10,890
18x 3	116,160	48x18	7,790
18x12	29,040	48x24	5,445
18x18	19,380	48x30	4,356
20x 1	313,635	48x36	3,630
20x20	15,651	48x48	2,723
24x 1	261,360	60x36	2,901
24x18	15,520	60x48	2,178
24x24	10,890	60x60	1,743
30x 1	209,088	8x 1 foot	5,445
30x 6	34,848	8x 3	1,815
30x12	17,424	8x 8	680
30x16	13,068	10x 1	4,356
30x20	10,454	10x 6	726
30x24	8,712	10x10	435
30x30	6,970	12x 1	3,630
36x 3	58,080	12x 5	736
36x12	14,520	12x12	302
36x18	9,680	16x 1	2,722
38x24	7,260	16x18	170

# THE MANGELSDORF BROS. CO.

DEALERS, GROWERS, IMPORTERS



STECHER CO. ROCHESTER, N.Y.

## FIELD, GARDEN AND FLOWER SEEDS